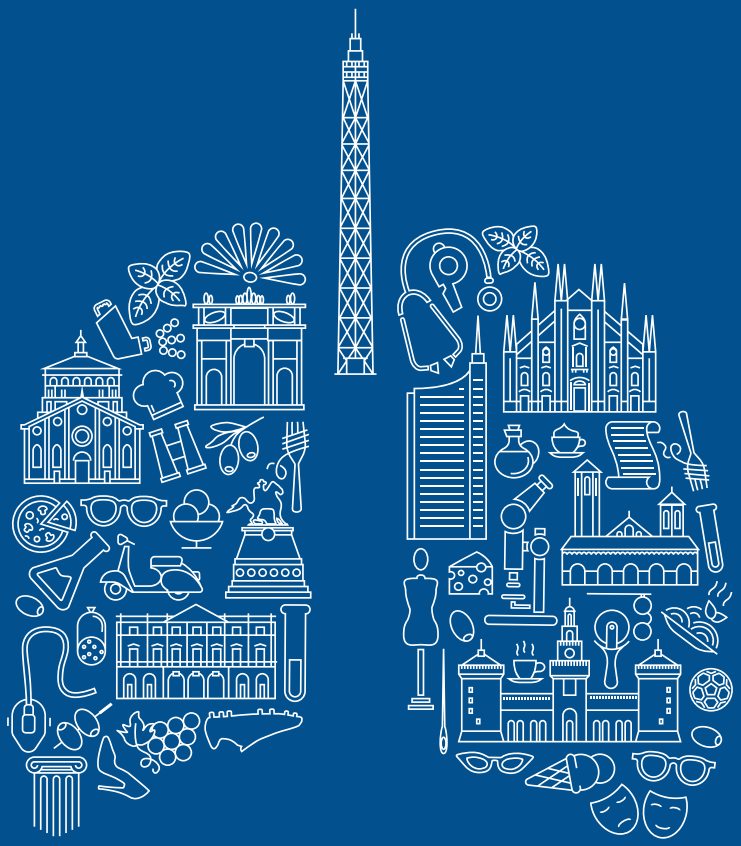
ERS



INTERNATIONAL CONGRESS 2023

MILAN Italy, 9-13 September

PROGRAMME

No Room — Session 2 — 09:30 - 11:00

Public: Opening press conference for Breathe Clean Air Milan

No Room — Session 3 — 11:00 - 19:00

Public: Healthy Lungs for Life: Clean Air Milan

Aims : To promote the importance of clean air for lung health, and offer spirometry to the public.

Silver — Session 4 — 08:00 - 19:30

OSCE examination : Thoracic ultrasound training programme Part 3 - OSCE examination - by invitation only

OSCE

Aims : By invitation ONLY

Tag(s) : Clinical

Chairs : Christian B. Laursen (Odense, Denmark), Najib M. Rahman (ABINGDON, United Kingdom), Jouke T. Annema (Amsterdam, Netherlands), Rahul Bhatnagar (Bristol, United Kingdom), Pia Iben Pietersen (Odense C, Denmark), Laurence M.M.J. Crombag (Amsterdam, Netherlands), Lars Konge (Virum, Denmark), Nick Maskell (Bristol (Avon), United Kingdom), Illaa Smesseim (Hoofddorp, Netherlands)

08:00	**TUS Part 3 OSCE examination : Round 1** Jouke T. Annema (Amsterdam, Netherlands), Najib M. Rahman (ABINGDON, United Kingdom), Pia Iben Pietersen (Odense C, Denmark), Dinesh Addala (Oxford, United Kingdom), Radhika Banka (Mumbai (Maharashtra), India), Lars Konge (Virum, Denmark)	**1**
09:05	**TUS Part 3 OSCE examination : Round 2** Jouke T. Annema (Amsterdam, Netherlands), Najib M. Rahman (ABINGDON, United Kingdom), Lars Konge (Virum, Denmark), Pia Iben Pietersen (Odense C, Denmark), Radhika Banka (Mumbai (Maharashtra), India), Dinesh Addala (Oxford, United Kingdom)	**2**
10:10	**TUS Part 3 OSCE examination : Round 3** Jouke T. Annema (Amsterdam, Netherlands), Najib M. Rahman (ABINGDON, United Kingdom), Nick Maskell (Bristol (Avon), United Kingdom), Dinesh Addala (Oxford, United Kingdom), Steven Walker (Bristol (Avon), United Kingdom), Eihab Bedawi (Sheffield, United Kingdom)	**3**
11:15	**TUS Part 3 OSCE examination : Round 4** Najib M. Rahman (ABINGDON, United Kingdom), Nick Maskell (Bristol (Avon), United Kingdom), Dinesh Addala (Oxford, United Kingdom), Jouke T. Annema (Amsterdam, Netherlands), Steven Walker (Bristol (Avon), United Kingdom), Eihab Bedawi (Sheffield, United Kingdom)	**4**
12:20	**TUS Part 3 OSCE examination : Round 5** Jouke T. Annema (Amsterdam, Netherlands), Najib M. Rahman (ABINGDON, United Kingdom), Nick Maskell (Bristol (Avon), United Kingdom), Anders Bo Nielsen (Odense C, Denmark), Beenish Iqbal (Oxford, United Kingdom)	**5**
13:40	**TUS Part 3 OSCE examination : Round 6** Rahul Bhatnagar (Bristol, United Kingdom), Laurence M.M.J. Crombag (Amsterdam, Netherlands), Casper Falster (Odense, Denmark), Nick Maskell (Bristol (Avon), United Kingdom), Lars Konge (Virum, Denmark), Anders Bo Nielsen (Odense C, Denmark)	**6**
14:50	**TUS Part 3 OSCE examination : Round 7** Rahul Bhatnagar (Bristol, United Kingdom), Laurence M.M.J. Crombag (Amsterdam, Netherlands), Jesper Rømhild Davidsen (Odense C, Denmark), Radhika Banka (Mumbai (Maharashtra), India), Casper Falster (Odense, Denmark), Lars Konge (Virum, Denmark)	**7**
16:00	**TUS Part 3 OSCE examination : Round 8** Rahul Bhatnagar (Bristol, United Kingdom), Laurence M.M.J. Crombag (Amsterdam, Netherlands), Radhika Banka (Mumbai (Maharashtra), India), Jesper Rømhild Davidsen (Odense C, Denmark), Casper Falster (Odense, Denmark), Eihab Bedawi (Sheffield, United Kingdom)	**8**
17:10	**TUS Part 3 OSCE examination : Round 9** Laurence M.M.J. Crombag (Amsterdam, Netherlands), Pia Iben Pietersen (Odense C, Denmark), Søren Helbo Skaarup (Aarhus C, Denmark), Lars Konge (Virum, Denmark), Radhika Banka (Mumbai (Maharashtra), India), Rahul Bhatnagar (Bristol, United Kingdom)	**9**
18:20	**TUS Part 3 OSCE examination : Round 10** Laurence M.M.J. Crombag (Amsterdam, Netherlands), Pia Iben Pietersen (Odense C, Denmark), Radhika Banka (Mumbai (Maharashtra), India), Søren Helbo Skaarup (Aarhus C, Denmark), Lars Konge (Virum, Denmark), Rahul Bhatnagar (Bristol, United Kingdom)	**10**

Purple — Session 5 — 08:00 - 18:00

NEXT: Networking Excellence Training Programme (NEXT) - by invitation only

Aims : By invitation only - The ERS NEXT programme provides a comprehensive training programme for ERS early career abstract presenters

Chairs : Sara Cuevas Ocaña (Nottingham, United Kingdom), Thomas Gille (Bobigny, France)

09:00	**Welcome and overview of the day** Sara Cuevas Ocaña (Nottingham, United Kingdom), Thomas Gille (Bobigny, France), Carlos Robalo Cordeiro (Coimbra, Portugal)	**11**
09:15	**Ice-breaker - ECMC** All Speakers	**12**
09:30	**Presentation skills - Ubik media** All Speakers	**13**
10:00	**Presentations skills - Breakout** Maria Joana Pereira Catarata (Porto, Portugal), Susanne Vijverberg (Amsterdam, Netherlands), Holly R. Keir (Dundee (Angus), United Kingdom), Mona Lichtblau (Zürich, Switzerland), Dorina Rama Esendagli (Ankara, Turkey), Matteo Bradicich (Zollikerberg, Switzerland), Orianne Dumas (Villejuif, France), Joana Cruz (Leiria, Portugal)	**14**
11:20	**Coffee Break**	**15**
11:45	**Moderating sessions - Ubik Media** All Speakers	**16**
13:00	**Mentoring lunch** All Speakers	**17**
14:30	**Keynote: Manuscript writing and publishing** James D. Chalmers (Dundee (Angus), United Kingdom)	**18**
14:50	**Manuscript writing/publishing - Breakout** Thomas Gille (Bobigny, France), Karen Moor (Rotterdam, Netherlands), Orianne Dumas (Villejuif, France), Carolina Gotera (Madrid, Spain), Sara Cuevas Ocaña (Nottingham, United Kingdom)	**19**
15:30	**Panel discussion: Time management and work/life balance** Sejal Saglani (London, United Kingdom), Sara Cuevas Ocaña (Nottingham, United Kingdom), Lieuwe D.J. Bos (Amsterdam, Netherlands), Thomas Gille (Bobigny, France), Joana Cruz (Leiria, Portugal), Speaker to be confirmed	**20**
16:30	**Coffee break**	**21**
16:45	**Leadership in respiratory medicine** Mina Gaga (Athens, Greece)	**22**
17:15	**Feedback and key take-home messages** Sara Cuevas Ocaña (Nottingham, United Kingdom), Thomas Gille (Bobigny, France)	**23**

Studio (White) Session 6 08:30 - 08:45

News from the studio: Welcome from chairs

Chairs : Nicolas Roche (Paris, France), Richard Costello (Dublin 9, Ireland)

08:30	**Discussion and Q&A** All Speakers	**24**

Blue 1+2 Session 7 09:00 - 11:10

Postgraduate course: PG1 Thoracic Ultrasound: Session I

Expanding your ultrasound skills beyond the pleura and lungs

Disease(s) : Thoracic oncology Interstitial lung diseases

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Respiratory critical care physician, Radiologist, Thoracic surgeon, Physician in Pulmonary Training

Chairs : Illaa Smesseim (Hoofddorp, Netherlands), Rahul Bhatnagar (Bristol, United Kingdom)

09:00	**Welcome and introduction** All Speakers	**25**
09:10	**Focused cardiac ultrasound (FoCUS)** Casper Falster (Odense, Denmark)	**26**
09:40	**Limited compression ultrasonography (LCU) of the deep veins for DVT assessment** Casper Falster (Odense, Denmark)	**27**

10:10	**Coffee break**	**28**
10:20	**US assessment of the diaphragm** Søren Helbo Skaarup (Aarhus C, Denmark)	**29**
10:50	**Interactive case discussion session I** All Speakers	**30**

Amber 3+4 — Session 9 — 09:00 - 10:00

Case-based skills workshop: Academy of paediatric respiratory medicine - Round 1 workshops

Tag(s) : Clinical

Chairs : Ernst Eber (Graz, Austria), Fabio Midulla (Roma (RM), Italy)

09:00	**Introduction to the workshops** All Speakers, Speaker to be confirmed	**35**
09:15	**Endoscopy** Ernst Eber (Graz, Austria), Fabio Midulla (Roma (RM), Italy)	**36**
09:15	**Lung function tests** Nicolas Regamey (Lucerne, Switzerland), Angela Zacharasiewicz (Wien, Austria)	**37**
09:15	**Imaging and ultrasound** Meinrad Beer (Ulm, Germany), Carolina Casini (Roma (RM), Italy)	**38**

No Room — Session 10 — 09:00 - 18:00

Public: Healthy Lungs for Life: Clean Air Milan

Healhty Lungs for Life

Aims : To build awareness of the importance of clean air for good lung health

Studio (White) — Session 11 — 09:15 - 10:45

Language session: Chinese Programme 2023

ERS/CTS joint session

Aims : to present an overview of hot respiratory disease topics in Europe and China

Disease(s) : Airway diseases, Respiratory infections

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Respiratory critical care physician, Paediatrician, Pathologist, Patient, Physician in Pulmonary Training, Physiologist, Radiologist, Respiratory physiotherapist, Scientist (basic, translational), Thoracic oncologist, Thoracic surgeon, Respiratory therapist

Chairs : Jieming Qu (Shanghai, China), Anita Simonds (London, United Kingdom)

09:15	**Vaccination and its protective role in COVID-19** Jieming Qu (Shanghai, China)	**39**
09:30	**Lung cancer screening** Torsten Gerriet Blum (Berlin, Germany)	**40**
09:45	**COPD Management in China: the current status, advance and challenge** Fuqiang Wen (Chengdu, China)	**41**
10:00	**Tele-health in COPD management** Rebecca Disler (Melbourne, Australia)	**42**
10:15	**Discussion and Q&A** All Speakers	**43**

Coral 4+5 — Session 12 — 09:30 - 11:00

Primary care session: Working against tobacco and air pollution, the other big pandemic

Primary care in the best position to treat tobacco addiction and other negative environmental changes for respiratory health

Aims : to present some strategies for fighting tobacco addiction and negative environmental changes affecting respiratory health from different perspectives related to primary health care.

Disease(s) : Airway diseases

Method(s) : Epidemiology General respiratory patient care Public health

Target audience : Adult pulmonologist/Clinician, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Patient, Physician in Pulmonary Training, Respiratory physiotherapist

Chairs : Hilary Pinnock (Edinburgh (Edinburgh), United Kingdom), Miguel Román Rodriguez (Palma De Mallorca, Spain)

09:30	**Not just a clinical problem. The role of public health departments and politicians** Joan B Soriano (Madrid, Spain)	**44**
09:45	**Not only tobacco but biomass burning, pollution or carbon print** Sundeep Santosh Salvi (Pune (Maharashtra), India)	**45**
10:00	**Is vaping an effective (and safe) aid for quitting smoking?** Peter Hajek (London, United Kingdom)	**46**
10:15	**Consequences to lung health of extreme environmental events** Speaker to be confirmed	**47**
10:30	**Discussion and Q&A** All Speakers	**48**

Red 1+2 Session 13 09:30 - 13:00

Postgraduate course: PG6 Mediastinal staging: The what and the how

Aims : mediastinal lymph node staging is part of the daily routine endoscopic care provided by pulmonologists and is one of the cornerstones of lung cancer diagnostics, helping to make decisions about subsequent therapies and prognosis. Currently, diagnostic and therapeutic algorithms for early and locoregional nonsmall cell lung cancer are largely being redefined, including the broader introduction of sublobar resections and systemic neoadjuvant therapies. At the same time, there have been substantial advances in the field of mediastinal staging. This postgraduate course will not only provide thorough and comprehensive updates on mediastinal staging from different disciplines but will also bring together these perspectives, resulting in meaningful diagnostic and therapeutic algorithms, and enable fruitful clinical discussion between experts and participants.

Disease(s) : Thoracic oncology

Method(s) : Endoscopy and interventional pulmonology Imaging Surgery

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Pathologist, Physician in Pulmonary Training, Radiologist, Respiratory physiotherapist, Thoracic oncologist, Thoracic surgeon, Respiratory therapist

Chairs : Georgia Hardavella (Athens, Greece), Ales Rozman (Golnik, Slovenia)

09:30	**Pathophysiology and molecular biology in the formation of locoregional lymph node metastases** Speaker to be confirmed	**49**
09:50	**Case discussion: pathophysiology and molecular biology in the formation of locoregional lymph node metastases** Speaker to be confirmed	**50**
10:10	**Novel imaging and sampling techniques** Georgia Hardavella (Athens, Greece)	**51**
10:30	**Case discussion: novel imaging and sampling techniques** Georgia Hardavella (Athens, Greece)	**52**
10:50	**Break**	**53**
11:20	**Optimal mediastinal staging algorithms according to clinical stages and subsequent to neoadjuvant systemic therapies** Torsten Gerriet Blum (Berlin, Germany)	**54**
11:40	**Case discussion: optimal mediastinal staging algorithms according to clinical stages and subsequent to neoadjuvant systemic therapies** Torsten Gerriet Blum (Berlin, Germany)	**55**
12:00	**Single and multistation N2 disease: the thoracic surgeon's view** Stefano Elia (Roma (RM), Italy)	**56**
12:15	**Single and multistation N2 disease: the radiotherapist/clinical oncologist's view** Sara Ramella (Roma (RM), Italy)	**57**

12:30	**Single and multistation N2 disease: the thoracic oncologist's view** Thierry Berghmans (Bruxelles, Belgium)	**58**
12:45	**Discussion and Q&A** All Speakers	**59**

Coral 3 — Session 14 — 09:30 - 13:00

Postgraduate course: PG4 Masterclass in asthma

Aims : to describe methods of diagnosing and managing patients with asthma; to present methods of assessing and treating patients with different asthma phenotypes and monitoring the effects of treatment of asthma based on recent updates.

Disease(s) : Airway diseases

Method(s) : General respiratory patient care Physiology Public health

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Patient, Physician in Pulmonary Training, Physiologist, Scientist (basic, translational), Respiratory therapist

Chairs : Omar S. Usmani (London, United Kingdom), Augusta Beech (Manchester, United Kingdom), Matteo Bonini (Rome, Italy)

09:30	**Diagnosis of asthma** Renaud Louis (Liège, Belgium)	**60**
09:50	**Discussion and Q&A** All Speakers	**61**
10:00	**Assessing and monitoring asthma and its phenotypes** Stylianos Loukides (Athens, Greece)	**62**
10:20	**Discussion and Q&A** All Speakers	**63**
10:30	**Pharmacological treatment and current controversies** Mona Al-Ahmad (Kuwait, Kuwait)	**64**
10:50	**Discussion and Q&A** All Speakers	**65**
11:00	**Comorbidities in asthma** Florence Schleich (Liège, Belgium)	**66**
11:20	**Discussion and Q&A** All Speakers	**67**
11:30	**Break**	**68**
12:00	**Interactive cases by early career members** Augusta Beech (Manchester, United Kingdom), Renaud Louis (Liège, Belgium), Stylianos Loukides (Athens, Greece), Florence Schleich (Liège, Belgium), Mona Al-Ahmad (Kuwait, Kuwait)	**69**

Brown 3 — Session 15 — 09:30 - 13:00

Postgraduate course: PG5 The use of lung function in early detection of disease

Advances in lung function testing and the role for Artificial Intelligence

Aims : to give an overview of the lung function tests available for early detection of lung disease and how they are applied; to explain in which direction current research is leading us and highlight that the future might be quite different in diagnostics; to explain how these technologies can be applied in clinical practice and to provide patient examples and other examples from clinical practice; to explain the possibilities of artificial intelligence to dig deeper in data and identify patterns earlier; to explain the influence of policymakers in early detection of disease.

Disease(s) : Airway diseases Paediatric respiratory diseases

Method(s) : Epidemiology General respiratory patient care Pulmonary function testing

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Paediatrician, Patient, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist, Scientist (basic, translational), Respiratory therapist, Journalist

Chairs : Frits M.E. Franssen (Horn, Netherlands), Jellien Makonga-Braaksma (Woudenberg, Netherlands)

09:30	**The e-nose: screening the future?** Karen Moor (Rotterdam, Netherlands)	**70**
09:50	**The E-nose: group assignment** Karen Moor (Rotterdam, Netherlands)	**71**
10:15	**Forced oscillation in telemonitoring: early detection of acute exacerbation of chronic obstructive pulmonary disease** Sabine Zimmermann (München, Germany)	**72**
10:35	**Forced oscillation in telemonitoring: group assignment** Sabine Zimmermann (München, Germany)	**73**
11:00	**Break**	**74**
11:30	**Spirometry in atrial fibrillation: what's the catch?** Jennifer Quint (Wimbledon, United Kingdom)	**75**
11:50	**Spirometry in Atrial Fibrillation: group assignment** Jennifer Quint (Wimbledon, United Kingdom)	**76**
12:15	**Artificial intelligence: early recognition of disease patterns** Wim Janssens (Leuven, Belgium)	**77**
12:35	**Artificial Intelligence: group assignment** Wim Janssens (Leuven, Belgium)	**78**

Brown 1+2 Session 16 09:30 - 13:00

Postgraduate course: PG2 Lung ageing in health and disease: From molecular mechanisms to (patho)physiological alterations

Aims : to provide an overview of the physiological alterations and molecular mechanisms underlying normal lung ageing (hallmarks of ageing), and their involvement in age-related lung diseases including chronic obstructive pulmonary disease (COPD) and idiopathic pulmonary fibrosis; to explain important hallmarks, including cellular senescence, telomere attrition, epigenetic alterations and genomic instability, in more detail and thereby identify and describe biomarkers of biological ageing; to contrast processes driving accelerated (lung) ageing with drivers of successful ageing and thereby provide insight into interventions to promote health span and delay disease onset or progression; to explain ageing of the immune system in order to identify mechanisms underlying the increased mortality from acute respiratory infections in the elderly and their contribution to chronic lung diseases; to relate the occurrence of comorbidities to COPD using various mechanisms of ageing.

Disease(s) : Airway diseases | Interstitial lung diseases | Respiratory infections

Method(s) : Cell and molecular biology

Tag(s) : Basic science, Translational

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Medical Student, Respiratory critical care physician, Paediatrician, Pathologist, Physician in Pulmonary Training, Physiologist, Scientist (basic, translational), Thoracic oncologist

Chairs : Mareike Lehmann (Marburg, Germany), Corry-Anke Brandsma (Groningen, Netherlands)

09:30	**Overview of lung aging** Silke Meiners (Sülfeld, Germany)	**79**
09:45	**Discussion and Q&A** All Speakers	**80**
09:55	**The pros and cons of cellular senescence** Serge Adnot (Creteil, France)	**81**
10:10	**Discussion and Q&A** All Speakers	**82**
10:20	**The epigenetic clock: a reprogrammable biomarker of ageing** Ken Raj (, United Kingdom)	**83**
10:35	**Discussion and Q&A** All Speakers	**84**
10:45	**Telomeres and DNA damage** Jonathan Baker (London, United Kingdom)	**85**

11:00	**Discussion and Q&A** All Speakers	**86**
11:10	**Break**	**87**
11:40	**Aging of the immune system** Christina Brandenberger (Hannover, Germany)	**88**
11:55	**Discussion and Q&A** All Speakers	**89**
12:05	**Common drivers of ageing in COPD and comorbidities** Niki L. Reynaert (Maastricht, Netherlands)	**90**
12:20	**Discussion and Q&A** All Speakers	**91**
12:30	**Group assignment: Pro/Con debate on Lung aging in health and disease** Silke Meiners (Sülfeld, Germany), Serge Adnot (Creteil, France), Niki L. Reynaert (Maastricht, Netherlands), Ken Raj (, United Kingdom), Christina Brandenberger (Hannover, Germany), Jonathan Baker (London, United Kingdom)	**92**

Yellow 1+2+3 Session 17 09:30 - 13:00

Postgraduate course: PG7 Pulmonary embolism. A practical approach to update risk stratification and treatment decisions based on the guidelines

Aims : management of pulmonary embolism (PE) may cover many different aspects and involves many specialties and subspecialties of respiratory medicine. For this reason, we propose four different scenarios based on clinical cases. This approach will allow attendees to review and address the most relevant aspects of different clinical scenarios, allowing them to identify the strengths and pitfalls of the clinical guidelines. The aims of the session are as follows: Low-risk PE. What is the best score? Outpatient management vs. short hospitalisation? Different thrombus recanalisation strategies in patients with intermediate-high-risk or high-risk PE? Long-term anticoagulation in patients with cancer-associated thrombosis. When is enough? When can we stop? Do all patients with cancer thrombosis have the same risk of bleeding and recurrence? Particularities of lung cancer.

Disease(s) : Pulmonary vascular diseases | Respiratory critical care | Thoracic oncology

Method(s) : General respiratory patient care | Imaging | Respiratory intensive care

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Respiratory critical care physician, Respiratory therapist

Chairs : Luis Jara-Palomares (Sevilla, Spain), Marija M. Zdraveska (Skopje, North Macedonia)

09:30	**Low-risk PE. What is the best score? Outpatient management vs. short hospitalisation?** Fida Charif (Beirut, Lebanon)	**93**
09:50	**Discussion and Q&A** All Speakers	**94**
10:00	**Different thrombus recanalisation strategies in patients with intermediate-high-risk or high-risk PE?** David Jiménez Castro (Madrid, Spain)	**95**
10:20	**Discussion and Q&A** All Speakers	**96**
10:30	**Long-term anticoagulation in patients with cancer-associated thrombosis. When is enough? When can we stop?** Anna Falanga (Bergamo, Italy)	**97**
10:50	**Discussion and Q&A** All Speakers	**98**
11:00	**Do all patients with cancer thrombosis have the same risk of bleeding and recurrence? Particularities of lung cancer** Laurent Bertoletti (Saint Etienne Cedex, France)	**99**
11:20	**Discussion and Q&A** All Speakers	**100**
11:30	**Break**	**101**

12:00	**Group assignment** Fida Charif (Beirut, Lebanon), David Jiménez Castro (Madrid, Spain), Laurent Bertoletti (Saint Etienne Cedex, France), Anna Falanga (Bergamo, Italy)	**102**

Coral 2 — Session 18 — 09:30 - 13:00

Postgraduate course: PG3 Clinical challenges in sleep-disordered breathing diagnosis and treatment

Aims : to demonstrate how to select the appropriate tools in order to evaluate and manage residual sleepiness in sleep-disordered breathing (SDB) patients; to explain the importance of diagnosing SDB in patients with other respiratory diseases and cancer; to describe the current evidence of the role of telemedicine for diagnosis, treatment and follow-up of SDB.

Disease(s) : Sleep and breathing disorders

Method(s) : Epidemiology Physiology Public health

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Respiratory critical care physician, Physician in Pulmonary Training, Respiratory physiotherapist, Scientist (basic, translational), Respiratory therapist

Chairs : Dries Testelmans (Leuven, Belgium), Esther Irene Schwarz (Zürich, Switzerland)

09:30	**Residual sleepiness in continuous positive airway pressure-treated patients: a clinical approach** Esther Irene Schwarz (Zürich, Switzerland)	**103**
09:50	**Discussion and Q&A** All Speakers	**104**
10:00	**Sleep-disordered breathing in respiratory diseases: an update on clinical importance** Sophia E. Schiza (Heraklion, Greece)	**105**
10:20	**Discussion and Q&A** All Speakers	**106**
10:30	**Sleep-disordered breathing and cancer: impact on treatment decision?** Manuel Sanchez De La Torre (Lleida, Spain)	**107**
10:50	**Discussion and Q&A** All Speakers	**108**
11:00	**Telemedicine for SDB diagnosis, treatment and follow-up** Johan Verbraecken (Edegem (Antwerp), Belgium)	**109**
11:20	**Discussion and Q&A** All Speakers	**110**
11:30	**Break**	**111**
12:00	**Group assignment** Sophia E. Schiza (Heraklion, Greece), Manuel Sanchez De La Torre (Lleida, Spain), Johan Verbraecken (Edegem (Antwerp), Belgium), Esther Irene Schwarz (Zürich, Switzerland)	**112**

Amber 3+4 — Session 20 — 10:00 - 10:45

Case-based skills workshop: Academy of paediatric respiratory medicine - Round 2 workshops

Tag(s) : Clinical

Chairs : Ernst Eber (Graz, Austria), Fabio Midulla (Roma (RM), Italy)

10:00	**Endoscopy** Ernst Eber (Graz, Austria), Fabio Midulla (Roma (RM), Italy)	**117**
10:00	**Lung function tests** Nicolas Regamey (Lucerne, Switzerland), Angela Zacharasiewicz (Wien, Austria)	**118**
10:00	**Imaging and ultrasound** Meinrad Beer (Ulm, Germany), Carolina Casini (Roma (RM), Italy)	**119**

Coral 1 — Session 21 — 10:45 - 16:30

Patient: ELF Patient Organisation Networking Day - by invitation only

Aims : By invitation only

Target audience : Patient

Chairs : Kjeld Hansen (Oslo, Norway), Mikaela Odemyr (Järved, Sweden), Liam Galvin (Thurles, Ireland), Hilde de Keyser (Brussels, Belgium)

10:45	**Welcome** Kjeld Hansen (Oslo, Norway), Hilde de Keyser (Brussels, Belgium)	**120**
10:55	**ERS President Address** Carlos Robalo Cordeiro (Coimbra, Portugal), Monika Gappa (Düsseldorf, Germany)	**121**
11:05	**Introduction to session: Patient and public involvement in research** Hilde de Keyser (Brussels, Belgium)	**122**
11:10	**Keynote: Patient involvement in setting research priorities – the European Multicentre Bronchiectasis Audit and Research Collaboration experience** Michal Shteinberg (Haifa, Israel)	**123**
11:30	**Patient involvement in setting research priorities using a patient journey approach** Anke Widenmann (Stuttgart, Germany)	**124**
11:40	**Co-design of a secondary prevention and research project for Sleep Apnoea with input from patients, health associations and health professionals** Luca Roberti (Rome, Italy)	**125**
11:50	**Panel discussion and question and answer** All Speakers	**126**
12:10	**Interactive breakout group discussion** Kjeld Hansen (Oslo, Norway)	**127**
13:00	**Plenary** Kjeld Hansen (Oslo, Norway), Hilde de Keyser (Brussels, Belgium)	**128**
13:20	**Lunch break** All Speakers	**129**
14:05	**Introduction to session: Mental health and lung disease** Liam Galvin (Thurles, Ireland)	**130**
14:10	**Keynote: Mental Health and Respiratory Disease: Chronic Obstructive Pulmonary Disease as prime example** Andreas Von Leupoldt (Leuven, Belgium)	**131**
14:30	**Living with pulmonary arterial hypertension: navigating challenges and promoting adjustment** Natalia Maeva (Sofia, Bulgaria)	**132**
14:40	**Breathing together: an online support group for people with bronchiectasis** Francesco Pagnini (, Italy)	**133**
14:50	**Panel discussion and question and answer** All Speakers	**134**
15:10	**Interactive breakout group discussion** Mikaela Odemyr (Järved, Sweden)	**135**
16:00	**Plenary** Mikaela Odemyr (Järved, Sweden), Liam Galvin (Thurles, Ireland)	**136**
16:25	**Welcome to ELF Chair Elect and closing words** Kjeld Hansen (Oslo, Norway), Dimitris Kontopidis (, Greece)	**137**

Amber 3+4 Session 23 11:00 - 11:45

Case-based skills workshop: Academy of paediatric respiratory medicine - Round 3 workshops

Tag(s) : Clinical

Chairs : Ernst Eber (Graz, Austria), Fabio Midulla (Roma (RM), Italy)

11:00	**Endoscopy** Ernst Eber (Graz, Austria), Fabio Midulla (Roma (RM), Italy)	**141**
11:00	**Lung function tests** Nicolas Regamey (Lucerne, Switzerland), Angela Zacharasiewicz (Wien, Austria)	**142**
11:00	**Imaging and ultrasound** Meinrad Beer (Ulm, Germany), Carolina Casini (Roma (RM), Italy)	**143**

Blue 1+2 — Session 24 — 11:10 - 13:40

Postgraduate course: PG1 Thoracic Ultrasound: Session II

Thoracic ultrasound in specific clinical settings

Disease(s) : Interstitial lung diseases, Thoracic oncology

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Respiratory critical care physician, Radiologist, Thoracic surgeon, Physician in Pulmonary Training

Chairs : Søren Helbo Skaarup (Aarhus C, Denmark), Radhika Banka (Mumbai (Maharashtra), India)

11:10	**Use of thoracic ultrasound in an intensive care unit** Silvia Mongodi (Pavia, Italy)	**144**
11:40	**Use of thoracic ultrasound in an interstitial lung disease clinic** Jesper Rømhild Davidsen (Odense C, Denmark)	**145**
12:10	**Lunch break**	**146**
12:40	**Use of evidence-based training principles in thoracic ultrasound in a department** Pia Iben Pietersen (Odense C, Denmark)	**147**
13:10	**Interactive case discussion session II** All Speakers	**148**
13:30	**Coffee break**	**149**

Coral 4+5 — Session 25 — 11:15 - 12:45

Primary care session: Conditions we are just dealing with the tip of the iceberg in primary care

Frequently mismanaged conditions in primary health care

Aims : to discuss possible actions to improve management of frequently forbidden conditions in primary health care; to provide general practitioners and primary care professionals with easy tools and strategies to diagnose and manage sleep apnoea, chronic cough and interstitial lung diseases; to reduce the burden of antibiotic resistance.

Disease(s) : Interstitial lung diseases, Respiratory infections, Sleep and breathing disorders

Method(s) : General respiratory patient care

Target audience : Adult pulmonologist/Clinician, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Patient, Physician in Pulmonary Training, Journalist

Chairs : Hilary Pinnock (Edinburgh (Edinburgh), United Kingdom), Miguel Román Rodriguez (Palma De Mallorca, Spain)

11:15	**Obstructive sleep apnoea. Easy to identify and diagnose in primary care settings** Cláudia Sofia De Almeida Vicente Ferreira (Coimbra, Portugal)	**150**
11:30	**Chronic cough. New algorithms to deal with this common condition** Imran Satia (Hamilton, Canada)	**151**
11:45	**The importance of primary care in curbing antibiotic resistance** Oliver Van Hecke (Oxford, United Kingdom)	**152**
12:00	**Interstitial lung disease. Never forget to think about it in primary care** Maria Molina Molina (Barcelona, Spain)	**153**
12:15	**Discussion and Q&A** All Speakers	**154**

Studio (White) — Session 26 — 11:15 - 12:45

Language session: French programme 2023

A joint ERS/SPLF session

Aims : This session will be delivered in French and translated in English.

Disease(s) : Respiratory infections | Thoracic oncology

Target audience : Adult pulmonologist/Clinician, General practitioner, Medical Student, Respiratory critical care physician, Physiologist, Scientist (basic, translational), Thoracic oncologist

Chairs : Jesus Gonzalez Bermejo (Montlignon, France), Thomas Gille (Bobigny, France)

11:15	**Comité d'Orientation Stratégique et d'Engagement (COSE) de la SPLF / SPLF Strategic Orientation and Commitment Committee (COSE)** Chantal Raherison-Semjen (Pointe-à-Pitre (Guadeloupe), France)	**155**
11:25	**Diagnostic de l'hypertension pulmonaire: quoi de neuf dans les recommandations ERS/ESC 2022 / Diagnosis of pulmonary hypertension: what's new in the European Respiratory Society/European Society of Cardiology recommendations 2022** Marc Humbert (Le Kremlin-Bicêtre, France)	**156**
11:35	**Médecine collaborative: diagnostic et traitement de l'EP durjoinant la grossesse / Collaborative medicine: diagnosis and treatment of pulmonary embolism during pregnancy** Cécile Tromeur (Brest, France)	**157**
11:45	**Lieux de soins: PEC ambulatoire de l'embolie pulmonaire / Care: management of pulmonary embolism** Olivier Sanchez (Paris, France)	**158**
11:55	**Discussion and Q&A** All Speakers	**159**
12:10	**One Health – Exposome: nouveaux paradigmes en pneumologie? / Exposome: new paradigms in pulmonology?** Claire Andrejak (Amiens, France)	**160**
12:20	**Pollution et Cancer bronchique / Pollution and lung cancer** Lucile Sese (Paris, France)	**161**
12:30	**Discussion and Q&A** All Speakers	**162**

Amber 3+4 — Session 28 — 13:00 - 13:45

Case-based skills workshop: Academy of paediatric respiratory medicine - Round 4 workshops

Tag(s) : Clinical

Chairs : Ernst Eber (Graz, Austria), Fabio Midulla (Roma (RM), Italy), Marielle W.H. Pijnenburg (Rotterdam, Netherlands)

13:00	**Bronchial asthma and wheezing disorders** Marielle W.H. Pijnenburg (Rotterdam, Netherlands), Louise Fleming (London, United Kingdom)	**166**
13:00	**Non-CF bronchiectasis** Ernst Eber (Graz, Austria), Fabio Midulla (Roma (RM), Italy)	**167**
13:00	**Sleep disorders** Refika Hamutcu Ersu (Ottawa, Canada), Athanasios G. Kaditis (Athens, Greece)	**168**

Coral 4+5 — Session 30 — 13:15 - 14:45

Language session: Italian programme 2023

Terapia e procedure in pneumologia: up to date / Therapy and procedures in pulmonology: up to date.

Aims : to provide updates on therapeutic novelties in the field of chronic obstructive pulmonary diseases and fibrotic lung diseases; to discuss environmental and occupational risk factors in the pathogenesis of fibrotic lung diseases and the usefulness of disposable devices in interventional pulmonology, with particular focus on the possible environmental impact that single-use devices can have. Scopo della sessione è fare il punto sulle novità terapeutiche nel campo delle patologie polmonari croniche ostruttive e delle patologie fibrosanti. Inoltre due letture saranno dedicate ai fattori di rischio ambientali e professionali nella patogenesi delle patologie fibrosanti del polmone e sull'utilità dei dispositivi monouso in pneumologia interventistica, con particolare riguardo al possibile impatto ambientale che tali dispositivi possono avere.

Disease(s) : Airway diseases | Interstitial lung diseases

Method(s) : Endoscopy and interventional pulmonology | Epidemiology | General respiratory patient care

Target audience : Adult pulmonologist/Clinician, General practitioner, Physician in Pulmonary Training

Chairs : Mauro Carone (Bari, Italy), Carlo Vancheri (Catania (CT), Italy), Maria Rosaria Bonsignore (Palermo, Italy), Sergio Alfonso Harari (Milano (MI), Italy)

13:15	**Fattori di rischio ambientali e professionali nella patogenesi delle patologie fibrosanti del polmone / Environmental and professional risk factors for development of fibrotic lung diseases** Elena Bargagli (Siena, Italy)	**169**
13:30	**Nuove terapie delle patologie polmonari fibrosanti / New therapies for fibrotic lung diseases** Luca Richeldi (Roma, Italy)	**170**
13:45	**Nuove terapie delle patologie polmonari croniche ostruttive / New therapies for chronic obstructive lung diseases** Claudio Micheletto (S.Giovanni Lupatoto, Italy)	**171**
14:00	**Utilita' e impatto ambientale dei dispositivi monouso in pneumologia interventistica / Utility and environmental impact of single-use devices in interventional pulmonology** Lina Zuccatosta (Torrette (AN), Italy)	**172**
14:15	**Discussion and Q&A** All Speakers	**173**

Blue 1+2 — Session 31 — 13:40 - 15:10

Postgraduate course: PG1 Thoracic Ultrasound: Session III

Advanced thoracic ultrasound

Disease(s) : Thoracic oncology | Interstitial lung diseases

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Respiratory critical care physician, Physician in Pulmonary Training, Radiologist, Thoracic surgeon

Chairs : Jouke T. Annema (Amsterdam, Netherlands), Anand Sundaralingam (Oxford, United Kingdom)

13:40	**Advanced TUS for assessment of the patient with pleural disease** Eihab Bedawi (Sheffield, United Kingdom)	**174**
14:10	**Advanced TUS for the assessment of the patient with a chest opacity** Christian B. Laursen (Odense, Denmark)	**175**
14:40	**Interactive case discussion session III** All Speakers	**176**
15:00	**Coffee break**	**177**

Amber 3+4 — Session 33 — 13:45 - 14:30

Case-based skills workshop: Academy of paediatric respiratory medicine - Round 5 workshops

Tag(s) : Clinical

Chairs : Ernst Eber (Graz, Austria), Fabio Midulla (Roma (RM), Italy), Marielle W.H. Pijnenburg (Rotterdam, Netherlands)

13:45	**Bronchial asthma and wheezing disorders** Marielle W.H. Pijnenburg (Rotterdam, Netherlands), Louise Fleming (London, United Kingdom)	**182**
13:45	**Non-CF bronchiectasis** Ernst Eber (Graz, Austria), Fabio Midulla (Roma (RM), Italy)	**183**
13:45	**Sleep disorders** Refika Hamutcu Ersu (Ottawa, Canada), Athanasios G. Kaditis (Athens, Greece)	**184**

Red 1+2 — Session 34 — 14:00 - 17:30

Postgraduate course: PG9 How to improve the success of noninvasive respiratory support therapies

Aims : to discuss the best practices in noninvasive respiratory support therapies for patients with acute and chronic respiratory failure; to review new developments in noninvasive respiratory support therapies (from high-flow nasal oxygen therapy to noninvasive ventilation)

Disease(s) : Airway diseases | Respiratory critical care | Sleep and breathing disorders

Method(s) : General respiratory patient care | Pulmonary rehabilitation | Respiratory intensive care

Target audience : Adult pulmonologist/Clinician, Nurse, Respiratory critical care physician, Respiratory physiotherapist, Respiratory therapist

Chairs : João Carlos Winck (Vila Nova de Gaia, Portugal), Claudia Crimi (Catania (CT), Italy)

14:00	**Noninvasive respiratory support therapies in the acute setting: how to improve the success rate in acute hypoxemic respiratory failure** Alexandre Demoule (Paris, France)	**185**
14:20	**Discussion and Q&A** All Speakers	**186**
14:30	**Noninvasive respiratory support therapies in the acute setting: how to improve the success rate in weaning** Martin Dres (Paris, France)	**187**
14:50	**Discussion and Q&A** All Speakers	**188**
15:00	**Noninvasive respiratory support therapies in the chronic setting: how to improve the success rate in neuromuscular disorders** Michelle Chatwin (London, United Kingdom)	**189**
15:20	**Discussion and Q&A** All Speakers	**190**
15:30	**Noninvasive respiratory support therapies in the chronic setting: how to optimise the patient-ventilator interaction** Annalisa Carlucci (San Donato Milanese (MI), Italy)	**191**
15:50	**Discussion and Q&A** All Speakers	**192**
16:00	**Break**	**193**
16:30	**Group assignment: How to improve the success of noninvasive respiratory support therapies** Martin Dres (Paris, France), Annalisa Carlucci (San Donato Milanese (MI), Italy), Alexandre Demoule (Paris, France), Michelle Chatwin (London, United Kingdom)	**194**

Coral 3 Session 35 14:00 - 17:30

Postgraduate course: PG10 Masterclass in chronic obstructive pulmonary disease

Aims : to describe methods for diagnosing, assessing and managing patients with chronic obstructive pulmonary disease (COPD); to present methods for assessing and treating patients with different COPD phenotypes and monitoring the effects of treatment of COPD based on recent updates.

Disease(s) : Airway diseases

Method(s) : Cell and molecular biology General respiratory patient care Physiology

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Patient, Physician in Pulmonary Training, Physiologist, Scientist (basic, translational), Respiratory therapist

Chairs : Apostolos Bossios (Stockholm, Sweden), Vanessa M. McDonald (Newcastle (NSW), Australia), Alexander Mathioudakis (Stockport, United Kingdom)

14:00	**Diagnosis of COPD** Daiana Stolz (Freiburg, Germany)	**195**
14:20	**Discussion and Q&A** All Speakers	**196**
14:30	**Assessing and monitoring COPD and its phenotypes** MeiLan K. Han (Ann Arbor, United States)	**197**
14:50	**Discussion and Q&A** All Speakers	**198**
15:00	**Pharmacological treatment and current controversies** Konstantinos Kostikas (Ioannina, Greece)	**199**
15:20	**Discussion and Q&A** All Speakers	**200**

15:30	**Comorbidities in COPD** Elizabeth Sapey (Birmingham (West Midlands), United Kingdom)	**201**
15:50	**Discussion and Q&A** All Speakers	**202**
16:00	**Break**	**203**
16:30	**Interactive cases by early career members** Alexander Mathioudakis (Stockport, United Kingdom)	**204**

Brown 3 Session 36 14:00 - 17:30

Postgraduate course: PG12 How to get a successful European project on respiratory infections
The lesson of the European Clinical Research Alliance on Infectious Diseases (ECRAID)

Aims : to inform about the ECRAID project and how it achieved to be successfully approved and supported by the European Union; to present some of the most relevant workpackages focussed on respiratory infections (infections in primary care, community acquired and nosocomoial infections) in order to provide useful examples for research and future projects.

Disease(s) : Paediatric respiratory diseases | Respiratory critical care | Respiratory infections

Method(s) : General respiratory patient care | Public health | Respiratory intensive care

Tag(s) : Translational

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Respiratory critical care physician, Physician in Pulmonary Training, Respiratory physiotherapist, Scientist (basic, translational), Respiratory therapist

Chairs : Eva Polverino (Barcelona, Spain), Maurizio Sanguinetti (Rome, Italy)

14:00	**Introduction** All Speakers	**205**
14:10	**The Randomized, Embedded, Multifactorial Adaptive Platform trial for Community-Acquired Pneumonia (REMAP-CAP)** Lennie P. G. Derde (Utrecht, Netherlands)	**206**
14:30	**Discussion and Q&A** All Speakers	**207**
14:35	**POS-VAP: implementation of clinical trials on VAP through an appropriate and flexible infrastructure** Ana Catalina Hernandez Padilla (Limoges , France)	**208**
14:55	**Discussion and Q&A** All Speakers	**209**
15:00	**The management of respiratory infections in primary care: POS-ARI-PC** Christopher Butler (Oxford (Oxfordshire), United Kingdom)	**210**
15:20	**Discussion and Q&A** All Speakers	**211**
15:25	**The lessons lerned from COVID-19 pandemic: how to get prepared for the future** Herman Goossens (Edegem (Antwerp), Belgium)	**212**
15:45	**Discussion and Q&A** All Speakers	**213**
15:50	**Break**	**214**
16:20	**Group assignment: How to get a successful European project on respiratory infections** Lennie P. G. Derde (Utrecht, Netherlands), Christopher Butler (Oxford (Oxfordshire), United Kingdom), Herman Goossens (Edegem (Antwerp), Belgium), Ana Catalina Hernandez Padilla (Limoges , France)	**215**

Brown 1+2 Session 37 14:00 - 17:30

Postgraduate course: PG11 Cryotherapy in the paediatric airway
Indication and application of cryo-probes in the paediatric airway

Aims : Cryotherapy using cryocatheters is an established procedure in adult pulmonology for performing a biopsy, restoring airway patency or removing foreign bodies. In the paediatric lung, this procedure is new because catheters measuring 1.1 mm allow the application of ultrathin bronchoscopes. However, the use of this technique requires its intensive study as well as a special setting (see technical standards for cryobiopsies by the European Respiratory Society). This course is aimed at all endoscopists who want to familiarise themselves with this topic and acquire theoretical knowledge as well as practical skills.

Disease(s) : Paediatric respiratory diseases

Method(s) : Endoscopy and interventional pulmonology

Target audience : Adult pulmonologist/Clinician, Respiratory critical care physician, Paediatrician, Thoracic surgeon

Chairs : Alfin Vicencio (New York, United States), Dirk Schramm (Düsseldorf, Germany)

14:00	**New advantages in paediatric interventional bronchoscopy: cryotherapy** Alfin Vicencio (New York, United States)	**216**
14:20	**Foreign body removal by means of cryocatheters** Rhia Shah (New York City, United States)	**217**
14:40	**Restoration of airway patency: indication and technique** Erik B. Hysinger (Cincinnati, United States)	**218**
15:00	**Navigation of the probe: differences due to different probe sizes** Sarabon Tahura (Dhaka, Bangladesh)	**219**
15:20	**Break**	**220**
15:50	**Group assignment: Cryotherapy in paediatric airway** Alfin Vicencio (New York, United States), Sarabon Tahura (Dhaka, Bangladesh), Rhia Shah (New York City, United States), Erik B. Hysinger (Cincinnati, United States)	**221**

Yellow 1+2+3 Session 38 14:00 - 17:30

Postgraduate course: PG8 Advanced cardiopulmonary exercise testing

CPET in health and cardio-respiratory disease

Aims : to explain the physiological constraints of exercise tolerance and its application in clinical practice; to explain the optimal methods for testing lung mechanics and evaluating exertional dyspnoea; to explain the different formats of exercise tests, their advantages and disadvantages and their different prognostic values in adults and children; to explain the usefulness of exercise testing for assessing the exercise response and exercise rehabilitation in clinical practice.

Disease(s) : Airway diseases Interstitial lung diseases Pulmonary vascular diseases

Method(s) : Physiology Pulmonary function testing Pulmonary rehabilitation

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Medical Student, Nurse, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist

Chairs : Pierantonio Laveneziana (Paris, France), William Stringer (Long Beach, United States)

14:00	**The pulmonary gas exchange response to exercise in health and disease** Paolo Palange (Rome, Italy)	**222**
14:20	**Discussion and Q&A** All Speakers	**223**
14:30	**Respiratory mechanics and exertional dyspnoea in health and disease** Michele Schaeffer (Leuven, Belgium)	**224**
14:50	**Discussion and Q&A** All Speakers	**225**
15:00	**Group assignment: Advanced cardiopulmonary exercise testing** Paolo Palange (Rome, Italy), Michele Schaeffer (Leuven, Belgium), Pierantonio Laveneziana (Paris, France)	**226**
15:30	**Break**	**227**
16:00	**Modalities available for assessing the exercise response and exercise rehabilitation** Sally J. Singh (Leicester (Leicestershire), United Kingdom)	**228**
16:20	**Discussion and Q&A** All Speakers	**229**

16:30	**Exercise testing in children with respiratory diseases** Erik H. J. Hulzebos (Utrecht, Netherlands)	**230**
16:50	**Discussion and Q&A** All Speakers	**231**
17:00	**Group assignment: Advanced cardiopulmonary exercise testing** Sally J. Singh (Leicester (Leicestershire), United Kingdom), Erik H. J. Hulzebos (Utrecht, Netherlands), Pierantonio Laveneziana (Paris, France)	**232**

Coral 2 Session 39 14:00 - 17:30

Postgraduate course: PG13 The joy and challenges of diagnosing interstitial lung diseases
ILD diagnosis 2023

Aims : to improve understanding of the current status of the multidisciplinary diagnosis of interstitial lung diseases (ILDs) and its challenges and pitfalls; to provide insight into future diagnostic modalities; to conduct interactive case discussions

Disease(s) : Interstitial lung diseases

Method(s) : Endoscopy and interventional pulmonology Pulmonary function testing

Target audience : General practitioner, Nurse, Radiologist, Physician in Pulmonary Training, Adult pulmonologist/Clinician

Chairs : Michael Kreuter (Heidelberg, Germany), Marlies S. Wijsenbeek (Rotterdam, Netherlands)

14:00	**The clinical approach to ILD** Julia Wälscher (Essen, Germany)	**233**
14:20	**How to read a high-resolution computed tomography scan?** Nicola Sverzellati (Parma (PR), Italy)	**234**
14:50	**The practice of cryobiopsy** Lauren Troy (Camperdown (NSW), Australia)	**235**
15:10	**New techniques in the diagnosis of ILDs** Marlies S. Wijsenbeek (Rotterdam, Netherlands)	**236**
15:40	**Pitfalls in the diagnosis of ILDs** Michael Kreuter (Heidelberg, Germany)	**237**
16:00	**Break**	**238**
16:15	**The challenges to diagnose: cystic lung disease** Vincent Cottin (Lyon, France)	**239**
16:30	**The challenges to diagnose: drug-induced lung disease** Lauren Troy (Camperdown (NSW), Australia)	**240**
16:45	**The challenges to diagnose: progressive pulmonary fibrosis** Vincent Cottin (Lyon, France)	**241**
17:00	**The grand finale: Multidisciplinary case discussions** Michael Kreuter (Heidelberg, Germany), Marlies S. Wijsenbeek (Rotterdam, Netherlands), Vincent Cottin (Lyon, France), Lauren Troy (Camperdown (NSW), Australia), Julia Wälscher (Essen, Germany), Nicola Sverzellati (Parma (PR), Italy)	**242**

Amber 3+4 Session 41 14:45 - 15:30

Case-based skills workshop: Academy of paediatric respiratory medicine - Round 6 workshops

Tag(s) : Clinical

Chairs : Ernst Eber (Graz, Austria), Fabio Midulla (Roma (RM), Italy), Marielle W.H. Pijnenburg (Rotterdam, Netherlands)

14:45	**Bronchial asthma and wheezing disorders** Marielle W.H. Pijnenburg (Rotterdam, Netherlands), Louise Fleming (London, United Kingdom)	**246**
14:45	**Non-CF bronchiectasis** Ernst Eber (Graz, Austria), Fabio Midulla (Roma (RM), Italy)	**247**
14:45	**Sleep disorders** Refika Hamutcu Ersu (Ottawa, Canada), Athanasios G. Kaditis (Athens, Greece)	**248**

Blue 1+2 Session 42 15:10 - 17:00

Postgraduate course: PG1 Thoracic Ultrasound: Session IV

Advanced ultrasound guided procedures

Disease(s) : Interstitial lung diseases, Thoracic oncology

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Respiratory critical care physician, Physician in Pulmonary Training, Radiologist, Thoracic oncologist, Thoracic surgeon

Chairs : Najib M. Rahman (ABINGDON, United Kingdom), Christian B. Laursen (Odense, Denmark)

15:10	**Ultrasound guided biopsy of the pleura** Dinesh Addala (Oxford, United Kingdom)	**249**
15:35	**Ultrasound guided biopsy of lymph nodes** Anand Sundaralingam (Oxford, United Kingdom)	**250**
16:00	**Break**	**251**
16:10	**Ultrasound guided biopsy of the lung**	**252**
16:35	**TUS for advanced procedure guidance** Steven Walker (Bristol (Avon), United Kingdom)	**253**

Studio (White) Session 43 15:15 - 16:45

Language session: Spanish/Portuguese programme 2023

Biological therapy in respiratory diseases. A joint ERS/ALAT/SBPT/SEPAR/SPP session

Aims : to provide an update on the usefulness of biological therapies for the main noninfectious respiratory diseases.

Disease(s) : Airway diseases, Interstitial lung diseases, Thoracic oncology

Method(s) : General respiratory patient care

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Nurse, Respiratory critical care physician, Pathologist, Radiologist, Thoracic oncologist

Chairs : Carlos Robalo Cordeiro (Coimbra, Portugal), Francisco Arancibia Hernandez (Santiago de Chile, Chile), Margareth Maria Pretti Dalcolmo (Rio De Janeiro (RJ), Brazil), Francisco Garcia Rio (Madrid, Spain)

15:15	**Biological therapy for severe asthma** Ignacio Zabert (Neuquén, Argentina)	**254**
15:30	**Lung cancer: recent therapeutic advances** Margarida Carmo de Pinho Dias (Vila Nova de Gaia, Portugal)	**255**
15:45	**Role of biological therapy for chronic obstructive pulmonary disease** Fco.De Borja Garcia-Cosio Piqueras (Palma de Mallorca, Spain)	**256**
16:00	**Biologic treatments for interstitial lung diseases** Bruno Guedes Baldi (São Paulo (SP), Brazil)	**257**
16:15	**Discussion and Q&A** All Speakers	**258**

07:15-08:15
INDUSTRY EARLY MORNING SYMPOSIUM SEE PAGE 1

08:00-08:45
INDUSTRY SKILLS LAB WORKSHOP SEE PAGE 1

Amber 1+2 Session 50 08:00 - 10:20

Skills workshop: SW1 Pulmonary rehabilitation: extending practice to improve health outcomes
A personalised medicine approach

Aims : to describe diagnostic methods and interventions that enable phenotyping of individuals based on the clinical problems experienced and tailoring of the content of pulmonary rehabilitation programmes to deliver a personalised approach; to describe methods for assessing the physical activity level and promoting physical activity; to assess patients who may benefit from neuromuscular electrical stimulation and to explain how to apply and progress the treatment; to describe and evaluate the incorporation of mindfulness-based interventions into pulmonary rehabilitation and their outcomes.

Disease(s) : Airway diseases | Interstitial lung diseases | Pulmonary vascular diseases

Method(s) : General respiratory patient care | Physiology | Pulmonary rehabilitation

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist, Respiratory therapist

Chairs : Rainer Gloeckl (Schoenau am Koenigssee, Germany)

08:00	**Introduction** All Speakers	**273**
08:00	**Physical activity assessment and intervention** Heleen Demeyer (Leuven, Belgium)	**274**
08:00	**Neuromuscular electrical stimulation: in who and how?** Lorna Latimer (Rugby (Warwickshire), United Kingdom)	**275**
08:00	**How to improve balance and reduce falls in people undergoing pulmonary rehabilitation** Marla Beauchamp (Hamilton, Canada)	**276**
08:00	**Implementing mindfulness interventions into pulmonary rehabilitation** Ingeborg Farver-Vestergaard (Vejle, Denmark)	**277**

Amber 3+4 Session 51 08:00 - 10:20

Skills workshop: SW16 Cardiac ultrasound in the management of pulmonary disease

Aims : Develop a rigorous and systematic approach in performing and analyzing cardiac ultrasound parameters in respiratory disease.
Explain systolic function, diastolic function, right heart dysfunction during COPD patients , the management of pulmonary embolism.
Explain the hemodynamic consequences of non-invasive ventilation and propose an echocardiographic monitoring for the best settings of non-invasive ventilation
Develop knowledge and understanding of echocardiographic parameters in patients with COPD, pumonary embolism or requiring non invasive ventilation.

Disease(s) : Pulmonary vascular diseases | Respiratory critical care

Method(s) : Imaging | Physiology

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Respiratory critical care physician, Pathologist, Physician in Pulmonary Training, Physiologist, Radiologist

Chairs : Bouchra Lamia (Le Havre, France)

08:00	**Introduction** All Speakers	**278**
08:00	**Assessment of diastolic function in COPD patients** Valentina Mercurio (Napoli, Italy)	**279**
08:00	**Cardiac ultrasound assessment of right heart function** Paul M. Hassoun (Baltimore, United States)	**280**

08:00	**Cardiac ultrasound for the management of pulmonary embolism** Mario Gerges (Vienna, Austria)	**281**
08:00	**Hemodynamic consequences of non-invasive ventilation** Bouchra Lamia (Le Havre, France)	**282**

PS-1 in poster area Session 52 08:00 - 09:30

Poster session: Emerging evidence in COVID-19

Disease(s) : Interstitial lung diseases | Airway diseases | Respiratory critical care | Pulmonary vascular diseases

Method(s) : Public health | Imaging | Physiology | Pulmonary function testing | General respiratory patient care | Pulmonary rehabilitation | Cell and molecular biology | Epidemiology

Tag(s) : Clinical

Chairs : Chair to be confirmed

PA283	**COVID-19 and pregnancy: experience of observations in the city perinatal center in 2021-2022 years** Nataliia Kravchenko (Dnipro, Ukraine), Hanna Harahulia, Olha Cherkasova, Ludmila Havrysh, Kateryna Kaira	
PA284	**Improved dyspnea, fatigue, respiratory and peripheral muscle strength, exercise capacity, and quality of life after exercise training in post-COVID-19** Deniz Inal-Ince (Ankara, Turkey), UKBE SIRAYDER, Busra Kepenek-Varol, Cihangir Acık	
PA285	**COVID 19 pneumonia in young subject: what's special?** Sabrine Majdoub Fehri (Nabeul, Tunisia), Imen ketata, Wafa Medi, Rahma Sellami, Racem Ammar, Hamida Kwas	
PA286	**Correlation of clinical, radiological outcomes and novel KL-6 biomarker levels in COVID-19 survivors one year post-ICU** Nathalie De Vos (Bruxelles, Belgium), Marie Bruyneel, Audrey Chirumberro, Stephanie Andre, Alain Roman, Marc Claus, Anne-Violette Bruyneel, Stephane Alard, Frederic Cotton	
PA287	**Follow-up of COVID 19 survivors: 3 years after** NADA Boutbagha (Agadir, Morocco), Abdelkarim Khannous, Fatiha Bounoua, Sofia Farhat, Hannane Ikrou, Younes Essaid, Aboubaker Imzil, Oussama Halloumi, Khadija Aitnasser, Abdelmajid Oulahbib, Houssame Ennaceri, Houda Moubachir, Hind Serhane	
PA288	**Impact of hospitalization for COVID-19 on attitude toward vaccination: Experience of a French hospital** Geoffroy Mery (Grenoble, France), Anne Conrad, Amandine Viccica, Marie Simon, Pierre Pradat, Jean-Christophe Richard, Florence Ader, Gilles Devouassoux	
PA289	**Small airways obstruction is present in Covid-19 pneumonia's acute period.** Immanuels Taivans (Riga, Latvia), Gunta Strazda, Normunds Jurka, Valentina Gordjushina	
PA290	**Attitude And Behavior Of Healthcare Workers And General Public Towards SARS-CoV-2 Vaccination After The Rollout Of COVID-19 Vaccines** Raza Ullah (Peshawar, Pakistan), Shahida Naz, Haleem Gul Janan	
PA291	**Oxygenation Parameters as Predictors of Clinical Outcomes in Moderate Covid-19 Infection: A Retrospective Cohort Study** Eliezer James Aguila (Pasig, Philippines), Tim Trinidad	
PA292	**Two years mortality in patients with impaired glucose tolerance after COVID-19 pneumonia** Nikolay Kyuchukov (Pleven, Bulgaria), Zlatina Ivanova, Yavor Ivanov	
PA293	**Factors associated with poor prognosis and increased costs in COVID-19 pneumonia** Nikolay Kyuchukov (Pleven, Bulgaria), Zlatina Ivanova, Yavor Ivanov	
PA294	**SARS-CoV-2 pneumonia: contribution of the PSI score in the prediction of hospital mortality** Hend Ouertani (Tunis, Tunisia), Haifa Zaibi, Khouloud Chaabi, Emna Ben Jemia, Jihen Ben Amar, Wafa Aissi, Hichem Aouina	
PA295	**Development of vanishing lung syndrome in patients with COVID-19 pneumonia** Galyna Gumeniuk (Kyiv, Ukraine), Yurii Feshchenko, Mykola Gumeniuk, Viktoria Ignatieva, Maryna Polianska, Mykola Lynnyk, Svitlana Opimakh, Inna Zvol, Oleh Yakovenko	
PA296	**Formerly hospitalized patients treated with remdesivir presented less respiratory post-COVID symptoms** Enikő Bárczi (Budapest, Hungary), Lőrinc Polivka, Alexandra Nagy, Gábor Horváth, Veronika Müller	

PA297	**Predicting clinical worsening among hospitalized patients with COVID-19** Lancelot Pinto (Mumbai (Maharashtra), India), Pb Aswin, Ananya Prabhughate, Aditi Erande, Zarir Udwadia, Jai Mullerpattan, Ayesha Sunavala, Radhika Banka, Pooja Mirchandani, Manali Kamble
PA298	**Neutrophil/lymphocyte ratio and mortality of hospitalized COVID-19 patients: a cohort study** Robson Prudente (Botucatu (SP), Brazil), Estefânia Franco, Luiz Machado, Luís Brizola, Maércio Santos, Edris Savadkouhi, Camila Colombo, Mariana Dorna, Suzana Tanni
PA299	**Small airways disease and lung parenchyma post COVID-19: 9 month follow up** Katarzyna Plewka-Barcik (Warsaw, Poland), Krzysztof Klos, Renata Rozynska, Ewa Pietruszka, Magdalena Zabicka, Marta Kania-Pudlo, Artur Maliborski, Karina Jahnz-Rozyk, Andrzej Chcialowski
PA300	**Contribution of chest tomography (CT) in the evaluation of post- covid-19 sequelae** Selsabil Daboussi (Tunis, Tunisia), Ameni Naaroura, Samira Mhamedi, Safa Marzouki, Houda Snoussi, Chiraz Aichaouia, Zied Moetemri
PA301	**The rs16969968 tobacco smoking-related single-nucleotide variant is associated with clinical markers in patients with severe COVID-19** Gloria Pérez Rubio (México, Mexico), Ramcés Falfán-Valencia, Daniela Valencia-Pérez Rea, Ingrid Fricke-Galindo, Ivette Buendía-Roldán, Leslie Chávez-Galán, Karol Nava-Quiroz, Jesús Alanis-Ponce
PA302	**Diagnostic performance of D-dimer in pulmonary embolism in patients with COVID19** Haifa Zaibi (Tunis, Tunisia), Khouloud Chaabi, Hend Ouertani, Safia Othmani, Emna Ben Jemia, Jihen Ben Amar, Hana Hedhli, Hichem Aouina

PS-10 in poster area — Session 53 — 08:00 - 09:30

Poster session: Determinants of lung health

Disease(s) : Airway diseases | Interstitial lung diseases | Pulmonary vascular diseases

Method(s) : Epidemiology | Public health | Pulmonary function testing | Endoscopy and interventional pulmonology

Tag(s) : Translational

Chairs : Abigail Whitehouse (London, United Kingdom), Francisco-Javier Gonzalez Barcala (Santiago de Compostela, Spain)

PA303	**Asthma in a region with high exposure to agricultural products** YOUNESS ESSAID (Agadir, Morocco), Houda Moubachir, Hind Serhane
PA304	**Short-term association of environmental exposures with nitric oxide concentration in exhaled air** Lorena Torroni (Verona, Italy), Francesca Locatelli, Pierpaolo Marchetti, Sandra Baldacci, Claudio Gariazzo, Sara Maio, Mario Olivieri, Gianluca Spiteri, Massimo Stafoggia, Camillo Silibello, Giovanni Viegi, Giuseppe Verlato, Alessandro Marcon
PA305	**Long-term exposure to air pollution and risk of acute lower respiratory infections: evidence from the Danish Nurse Cohort** Jiawei ZHANG (Copenhagen, Denmark), Youn-Hee Lim, Rina So, Laust H. Mortensen, George Maria Napolitano, Thomas Cole-Hunter, Stéphane Tuffier, Marie Bergmann, Matija Maric, Seyed Mahmood Taghavi Shahri, Jørgen Brandt, Matthias Ketzel, Steffen Loft, Zorana Jovanovic Andersen
PA306	**Green Areas and PM2,5 exposure could be associated with Asthma and COPD?** Francine Maria Almeida (São Paulo (SP), Brazil), Tiana Carla Lopes Moreira, Lucas Miranda Oliveira, Renato Fraga Righetti, Fernanda Degobbi Tenorio Quirino Santos Lopes, Airlane P Alencar, Nelson Gouveia, Thais Mauad, Paulo A Lotufo, Isabela Bensenor, Itamar Souza Santos, Iolanda Fátima Lopes Calvo Tibério
PA307	**The gender-specific associations between greenness, air pollution and lung function in asthmatic patients** Tsu-Nai Wang, Fang-Yu Kuo, Pei-Shih Chen, Yuan-Chung Lin
PA308	**Global prevalence and determinants of chronic cough** Hazim Abozid (Wien, Austria), Jaymini Patel, Sylvia Hartl, Robab Breyer- Kohansal, Marie-Kathrin Breyer, Otto C Burghuber, Emiel Fm Wouters, Andre F.S. Amaral
PA309	**Effects of COVID-19 preventive measures on indoor air quality** Kimberly J. Linde (Utrecht, Netherlands), L Jonker, P C J L Bruijning-Verhagen, J Spithoven, M H G Tersteeg-Zijderveld, P Scherpenisse, D J J Heederik, W Dohmen, I M Wouters
PA310	**Air pollution and ethnicity associated with prevalence of small airways obstruction in a Caucasian population-based study** Brice Touilloux (Fribourg, Switzerland), Alessio Casutt, Cedric Bongard, Benoit Lechartier, Minh Khoa Truong, Christophe Von Garnier

PA311	**Preconception air pollution/greenness exposure and pregnancy outcomes:The Life-GAP Project** Robin Mzati Sinsamala (Bergen, Norway), Alessandro Marcon, Randi Bertelsen, Christer Janson, Mathias Holm, Lars Modig, Thorarinn Gislason, Torben Sigsgaard, Hans Orru, Camilla Geels, Lise Marie Frohn, Jørgen Brandt, Francisco Gomez Real, Simone Accordini, Iana Markevych, Cecilie Svanes, Ane Johannessen
PA312	**Obesity and asthma incidence in individuals exposed to agricultural spaces** Ilaria Stanisci (Pisa, Italy), Anna Angino, Sofia Tagliaferro, Giuseppe Sarno, Giovanni Viegi, Sara Maio, Patrizia Silvi, Stefania La Grutta, Salvatore Fasola, Velia Malizia, Isabella Annesi-Maesano, Sandra Baldacci
PA313	**Pollen exposures in pregnancy and early life are associated with childhood asthma** Rajesh Melaram (Southaven, United States), James Adefisoye, Donald Warden, Stephen Potter, Hasan Arshad, Hongmei Zhang
PA314	**Air quality may affect emergency department workload: The effect of air pollution on acute exacerbation of chronic obstructive pulmonary disease in Zagreb, Croatia** Marko Banić (Zagreb, Croatia), Lorna Corak, Dora Darapi, Robert Likić, Denis Baričević, Miroslav Samaržija, Andrea Vukić Dugac
PA315	**Education and income may be important predictors for digital health adoption in asthma** Daniela Tellez (San Diego, United States), Elroy Boers, Leanne Kaye, Vy Vuong, Meredith Barrett
PA316	**USE OF ELECTRONIC CIGARETTES AND HOOKAH IN BRAZIL: A NEW AND EMERGING LANDSCAPE.** Ana Maria Baptista Menezes (Pelotas (RS), Brazil), Fernando C Wehrmeister, Luciana M V Sardinha, Pedro B De Paula, Taina De A Costa, Pedro A Crespo, Pedro C Hallal
PA317	**Epidemiology of PH-LD and PH-ILD in France: a real-world evidence study** Olivier Sitbon (Le Kremlin-Bicêtre, France), Vincent Cottin, Maria Pini, Catia C Proenca, Miriam Fernández Delgado, Gabriela Bacchini Jeanneret
PA318	**A systematic review of Theory of planned Behaviour interventions for chronic diseases in low health-literacy settings** BISWAJIT PAUL (Vellore, India), Rita Isaac, Marshall Dozier, Liz Grant, David Weller
PA319	**Comorbidities in patients with severe COPD reduce quality of life, but do not affect survival** Else-Anna-Maria-Dorothee ter Haar (Groningen, Netherlands), Dirk-Jan Slebos, Karin Klooster, Simon D. Pouwels, Jorine E. Hartman
PA320	**Dyspnoea in the multinational Burden of Obstructive Lung Disease (BOLD) study** Alexander Müller (Wien, Austria), Emiel Wouters, Sylvia Hartl, Daisy Janssen, André Amaral
PA321	**UNCOVER – a non-interventional study to investigate undiagnosed severe asthma in Austria** Katharina Marth (Wien, Austria), Karin Patocka, Andreas Renner, Ingrid Stelzmüller, Slagjana Stoshikj, Marco Idzko, Beata Morajda, Robab Breyer-Kohansal, Wolfgang Pohl
PA322	**Differences in educational level and drinking habits in women with and without COPD in a Danish rural population** Line Bjerrehave Nielsen (Aalborg, Denmark), Signe Juul Riddersholm, Ulla Møller Weinreich

PS-11 in poster area — Session 54 — 08:00 - 09:30

Poster session: Thoracic surgery: a multifaceted subject

Disease(s) : Thoracic oncology | Interstitial lung diseases | Airway diseases | Sleep and breathing disorders

Method(s) : Surgery | Epidemiology | Imaging | Pulmonary function testing | Endoscopy and interventional pulmonology | Respiratory intensive care

Tag(s) : Clinical

Chairs : Kalliopi Athanassiadi (Athens, Greece), Marcello Migliore (Riyadh, Saudi Arabia)

PA323	**Curative surgical resection of lung cancer in octogenarian in tunisian center** mahdi Abdennadher (Ariana, Tunisia), Wassim Chaieb, Hazem Zribi, Amina Abdelkebir, Mouna Mlika, Sonia Ouerghi, Sarra Zairi, Marghli Adel
PA324	**Quantitative CT imaging to predict postoperative pulmonary function in patients undergoing lung resection surgery: pilot study** Alessandro Molani (Milano, Italy), Francesca Pennati, Rosaria Carrinola, Alessandro Palleschi, Andrea Aliverti
PA325	**Interstitial lung disease and operable lung cancer - a center experience** Francisco Neri Gomes (Lisboa, Portugal), Zenito Cruz, Catarina Figueiredo, Tamiris Mogne, Bruno Mendes, Mariana Cabral, Paulo Calvinho
PA326	**The clinicopathological study on the cause of high postoperative recurrence for catamenial pneumothorax** Masatoshi Kurihara (Tokyo, Japan), Kenji Tsuboshima, Takahiro Ochi

PA327	**Patient reported outcome measures (PROMS) following multidisciplinary enhanced recovery protocol pathway (ERPP) in lung cancer surgery.** Ioannis Karampinis (Athens, Greece), Georgia Hardavella, Ioannis Kyritsis, Elli Keramida, Elena Bellou, Fotis Kyriakou, Nikolaos Anastasiou
PA328	**Complications of transbronchial lung cryobiopsy: correlation with radiological pattern and PAPs** Marta Plana Pes (Cardedeu, Spain), Marta Díez-Ferrer, Pere Trias-Sabrià, Salud Santos Pérez, Guadalupe Bermudo Peloche, Vanesa Vicens Zygmunt, Maria Molina Molina, Rosa López-Lisbona
PA329	**Acquired Tracheo-esophageal Fistula: surgical management** selma madhi (Ariana, Tunisia), Mahdi Abdennadher, Hazem Zribi, Amina Abdelkebir, Soumaya Ben Saad, Ayda Kkaddour Ayedi, Sarra Zairi, Adel Margheli
PA330	**PROGNOSTIC FACTORS IN OPERATED THYMOMA.** Feriel Souissi (Tunis, Tunisia), Taieb Chrif, Mahdi Adbennadher, Mohamed Chokri Kortas, Sofiene Jerbi
PA331	**Surgical management of neurogenic chest tumor** Kaouther Ben Amara (Ariana, Tunisia), Kaouther Ben Amara, Amina Abdelkebir, Habib Bessrour, Mahdi Abdennadher, Sarra Zairi, Hazem Zribi, Adel Marghli
PA332	**Diaphragm plications: trends and outcomes.** Masooma Ali (Nottingham, United Kingdom), Mohammad Hawari, Abed-Elfattah Atieh, Milind Sovani
PA333	**Does oxidized regenerated cellulose reinforcement for the entire pulmonary lobe during video-assisted thoracoscopic blebectomy reduce postoperative recurrent pneumothorax?** Masao Naruke (Tokyo, Japan), Ikuo Kamiyama, Takashi Ohtsuka
PA334	**Lung cancer surgery with curative intent in elderly patients; Friend or foe?** Ioannis Karampinis (Athens, Greece), Georgia Hardavella, Elissavet Babaliari, Elli Keramida, Fotis Kyriakou, Panagiotis Demertzis, Konstantinos Potaris
PA335	**Surgery of Giant Bullous Emphysema: Report of 60 patients** Elyes Khlas (tunis, Tunisia), Mahdi Abdennadher, Abdelkebir Amina, Hazem Zribi, Henda Neji, Hanen Smadhi, Sarra Zairi, Adel Marghli
PA336	**Lung cancer screening "through" the COVID19 pandemic. A retrospective study.** Mariem Hadj Dahmane (Argenteuil, France), Abdou Rabi Richard, Bassel Dakhil, Patrick Bagan, Rym Zaimi, Hanifa Boukhiar
PA337	**Hybrid surgical treatment of a complicated intralobar sequestration in a young adult.** Dimitris Lioumpas (Athens, Greece), Evdokia Tzatzadaki, Stylianos Michelis, Anna Theodorou, Georgios Gkantinas, Evangelos Fergadis, Maria Trimandili, Theodoros Fachouridis, Efstathios Metaxas, Ioannis Stamatatos, Georgios Benakis, Ilias Samiotis, Antonios Katsantonis, Kiknadze Theoni, Antonios Antoniadis, Stylianos Zaragkas, Nikolaos Tzatzadakis
PA338	**Non-small cell lung cancer with chest wall involvement: peculiarities of management** Habib Bessrour (Ariana, Tunisia), Sarra Zairi, Nidhal Balloumi, Mehdi Abdennadher, Hazem Zribi, Mariem Affes, Aida Ayedi, Sonia Ouerghi, Adel Marghli
PA339	**A rare case of Pulmonary Lymphangioma** Shivalingaswamy Salimath (Bangalore (Karnataka), India), Harish G M, Sathish C, Anjali Parvathy, Nithin S Lal, Sanjai Narayanasamy
PA340	**Surgery for primary mediastinal seminoma after chemotherapy: report of 3 cases** Kaouther Ben Amara (Ariana, Tunisia), Mahdi Abdennadher, Hazem Zribi, Sarra Zairi, Amina Abdelkebir, Ameni Ben Mansour, Emna Braham, Adel Marghli
PA341	**Enlarged pneumonectomy for non-small cell lung cancer: 10-year experience** Asma Saad (Ariana , Tunisia), Mahdi Abdennadher, Takwa Abdelfatah, Hazem Zribi, Amani Ben Mansour, Aida Ayadi-Kaddour, Sarra Zairi, Adel Marghli
PA342	**Sterno-clavicular joint infection: presentation and management** Sarra Zairi (Tunis, Tunisia), Chiraz Albouzidi, Mahdi Abdennadher, Emna Brahem, Nizar Fitouhi, Mariem Affes, Amina Abdelkabir, Hazem Zribi, Sonia Ouerghi, Saoussen Hantous, Tahar Mestiri, Adel Marghli

PS-12 in poster area — Session 55 — 08:00 - 09:30

Poster session: Best posters in respiratory physiotherapy

Disease(s) : Respiratory critical care | Interstitial lung diseases | Airway diseases | Thoracic oncology

Method(s) : Pulmonary rehabilitation | General respiratory patient care | Public health | Pulmonary function testing | Transplantation | Physiology

Tag(s) : Clinical

Chairs : Andre Nyberg (Umeå, Sweden), Melda Saglam (Ankara, Turkey)

PA343	**Effects of pulmonary rehabilitation on cough-related quality of life in people with chronic respiratory disease** Ana Sofia Brites Grave (Alcobaça, Portugal), Maria Aurora Mendes, Dina Brooks, Alda Marques, Ana Oliveira
PA344	**Can we use creative dance as exercise training for chronic obstructive pulmonary disease? A randomized controlled trial** Meltem Kaya (İstanbul, Turkey), Hulya Nilgun Gurses, Fatmanur Okyaltirik
PA345	**Effects of pulmonary rehabilitation in hematopoietic stem cell transplantation recipients: A randomized controlled study** Meral Bosnak Guclu (Ankara, Turkey), Selin Bayram, Gülşah Bargı, Zeliha Çelik
PA346	**Effects of self-management interventions in people with interstitial lung disease - systematic review and meta-analysis** Ana Oliveira (Aveiro, Portugal), Steve Freitas Dos Santos, Alda Marques, Patrícia Rebelo, Dina Brooks, Adam Benoit
PA347	**Effectiveness of inspiratory muscle training in chronic respiratory diseases: an overview of systematic reviews of clinical randomised trials** Elena Gimeno-Santos (Barcelona, Spain), Rodrigo Torres-Castro, Saul Caicedo-Trujillo, Ruvistay Gutierrez-Arias, Xavier Alsina-Restoy, Luis Vasconcello-Castillo, Agustin R. Garcia, Pamela Seron, Martijn Spruit, Isabel Blanco, Jordi Vilaro
PA348	**The effect of incentive spirometry in addition to comprehensive chest physiotherapy on length of hospital stay and hemodynamic responses in patients with COPD exacerbation** Hilal Denizoglu Külli (Istanbul, Turkey), Melten Kaya, Hikmet Ucgun, Melih Zeren, Fatmanur Okyaltırık, Hulya Nilgun Gurses
PA349	**Effects of non-invasive ventilation on exercise performance in heart failure patients: a double blind, randomized cross-over trial** Rodrigo Torres Castro (Barcelona, Spain), Guillermo Mazzucco, Leonardo Intelangelo, Ana Lista-Paz, Nicola Chichizola, Juan Pablo Escalante, Gonzalo Veiga, Leire Mendiluce-Ochandorena, Ane Arbillaga Etxarri
PA350	**Efficacy of community long-term ventilation for obstructive lung disease associated with chronic hypercapnic respiratory failure: a service evaluation** Bethan Clayton (Manchester, United Kingdom), Verity Ford, Aashish Vyas
PA351	**Self-selected music listening during pulmonary rehabilitation in people with COPD: a multi-centre, randomised controlled trial.** Annemarie Lee (Melbourne (VIC), Australia), Stacey Butler, Peter Jung, Jeanette Tamplin, Imogen Clark, Roger Goldstein, Dina Brooks
PA352	**Characteristics and benefits of responders to a behavioral intervention to increase physical activity in asthma: preliminary data from a pragmatic study** Fabiano de Lima (São Paulo, Brazil), Adriana Lunardi, David Pinheiro, João Victor De Souza, Rafael Stelmach, Rosana Agondi, Pedro Giavina-bianchi, Regina Carvalho-Pinto, Celso Carvalho
PA353	**EFFECTS OF EXPİRATORY MUSCLE TRAİNİNG İN PATİENTS WİTH BRONCHİECTASİS** Ayşenur Yilmaz (Denizli, Turkey), Orçin Telli Atalay, Göksel Altinişik
PA354	**Comparison of the Effects of Video Game-Based Breathing Exercises and Conventional Breathing Exercises in Children and Adolescents with Non-Cystic Bronchiectasis** Hikmet Uçgun (Istanbul, Turkey), Hulya Nilgun Gurses, Erkan Cakir
PA355	**Physical activity on physiotherapy days versus non-physiotherapy days after an AECOPD** Marieke Wuyts (Laeken, Belgium), Fien Hermans, Sofie Breuls, Stephanie Everaerts, Eric Derom, Wim Janssens, Heleen Demeyer, Thierry Troosters
PA356	**The Borg Cycle Strength Test (BCST) for prescribing supramaximal high-intensity interval training (HIIT) in COPD** Jana De Brandt (Umeå, Sweden), Johan Jakobsson, Mattias Hedlund, Anna-Clara Rullander, Thomas Sandström, André Nyberg
PA357	**A comparison of upper extremity functional capacity in lung transplant recipients and healthy controls** Ebru Calik Kutukcu (Ankara, Turkey), Ulas Ar, Erdal Yekeler

PA358	**Upper extremity exercise capacity, physical activity levels and quality of life in patients with lung cancer underwent pneumonectomy** Gülsüm Serttaş Güven (Burdur, Turkey), Meral Boşnak Güçlü, Nur Dilvin Özkan Koyuncuoğlu, Ismail Cüneyt Kurul, Ali Çelik
PA359	**Comorbidities and physical activity in patients after lung transplantation** Sofie Breuls (Leuven, Belgium), Astrid Blondeel, Marieke Wuyts, Wim Janssens, Robin Vos, Thierry Troosters, Heleen Demeyer
PA360	**Validation of walking trails for people with COPD** Nicola Sante Diciolla (Madrid, Spain), Alda Marques, Ana Sofia Grave, Cíntia Dias, Guilherme Rodrigues, Maria Gomes, E. Samuel Santos, Zulmira Pereira, Luisa Pereira, Patricia Rebelo
PA361	**Validity of the Fitbit Charge 4 to measure daily steps, oxygen saturation and resting heart rate in patients with COPD** Fien Hermans (Gent, Belgium), Astrid Blondeel, Eva Arents, Patrick Calders, Thierry Troosters, Eric Derom, Heleen Demeyer
PA362	**Cut-off of the chester step test to detect functional impairment and mortality risk according to the 6MWT in ILD** Cátia Paixão (Aveiro, Portugal), Ana Alves, Ana Sofia Grave, Pedro G Ferreira, Francisca Teixeira Lopes, M Aurora Mendes, José Coutinho Costa, Dina Brooks, Alda Marques

PS-13 in poster area — Session 56 — 08:00 - 09:30

Poster session: Contemporary nursing

Disease(s) : Airway diseases | Interstitial lung diseases | Sleep and breathing disorders | Thoracic oncology

Method(s) : Pulmonary function testing | General respiratory patient care | Public health | Epidemiology | Palliative care | Surgery | Pulmonary rehabilitation

Tag(s) : Clinical

Chairs : Andreja Sajnic (Zagreb, Croatia), Chair to be confirmed

PA363	**Multiple manifestations of uncontrolled asthma increase the risk of severe COVID-19** Stina Selberg (Luleå, Sweden), Johanna Karlsson Sundbaum, Jon R Konradsen, Helena Backman, Linnea Hedman, Anne Lindberg, Caroline Stridsman
PA364	**Activity levels and quality of life of Long COVID-19 patients 2 years post-infection** Andrés Calvache Mateo (Granada, Spain), Sofía Hernández Hernández, Julia Raya Benítez, Laura López López, María Granados Santiago, Geraldine Valenza Peña, Marie Carmen Valenza
PA365	**Pain related clinical profile of Long COVID-19 patients 2 years post-infection** Andrés Calvache Mateo (Granada, Spain), Sofía Hernández Hernández, Julia Raya Benítez, Alejandro Heredia Ciuró, Javier Martín Núñez, Izarbe Ríos Asín, Marie Carmen Valenza
PA366	**Impact of the COVID-19 pandemic on specialized rehabilitation nursing care in respiratory field.** Barbara Pires (Ede Gld, Netherlands), Rui Silva, José Padilha
PA367	**A systematic review of factors that determine COVID-19 vaccine uptake amongst underserved populations considering social norms and health beliefs** Tahreem Chaudhry (London, United Kingdom), Patricia Tum, Dominik Zenner
PA368	**Interstitial Lung Disease (ILD): Longitudinal exploration of patient experiences of home spirometry** Jessica Mandizha (Exeter, United Kingdom), Joseph Lanario, Anna Duckworth, Sarah Lines, Ana Rita Paiva, Victoria Elworthy, Veena Muraleedharan, Graham Brown, Maureen Cosby, Adam Russell, Alexander Berry, Michael Gibbons, Chris Scotton, Anne-Marie Russell
PA369	**Integrated Sleep Service Model (ISSM) implementation to improve the care of patients with Sleep-Breathing Disorder(SBD)** Maggie, Pik Kee Lit (Kowloon, Hong Kong), Kuen Han Lee, Chun Kong Ng, Wing Hing O, Pui Shan Chow, Yuen Hin Wong, Fung Ting Mak, Yiu Hei Chan, Wan Man Johnny Chan
PA370	**The effectiveness of the Intensive Tobacco Cessation Programme: a multi-professional approach** Lucía Méndez González (Santa Maria da Feira, Portugal), Cristina Leite, Francisca Teixeira Lopes, Catia Caneiras, Jorge Ferreira
PA371	**Sind Post-COVID: Impact on Physical and Functional Respiratory Capacity** Lucía Méndez González (Santa Maria da Feira, Portugal), Susana Pereira, Cristina Alves, Catia Caneiras, Filipa Ferreira, Jorge Ferreira

PA372	**Impact and clinical benefit of nebulized antibiotics in patients with chronic bronchial infection without cystic fibrosis** Sally Santisteve Lostes (lleida, Spain), Marcela Suarez, Esther Gracia-Lavedan, Alfredo Jover Saenz, Maria Zuil, Juan A. Schoenenberger Arnaiz, Arturo Morales Portillo, Ferran Barbé, Jessica González
PA373	**Octreotide as a Therapeutic Option for Refractory Chronic Cough: A Retrospective Case Series** Kayleigh Brindle (Cottingham, United Kingdom), Mengru Zhang, Natalie Carter, Alyn Morice
PA374	**Self-assessment of health in adult patients with cystic fibrosis after the introduction of triple CFTR modulator therapy** Tihana Odobasic Palkovic (Zagreb, Croatia), Ivana Lalic Cickovic, Tomislava Milinkovic, Dolores Bzik, Gorana Levacic, Andreja Sajnic, Irena Godic, Andrea Vukic Dugac
PA375	**Transthoracic biopsy - importance and complications** Ivana Lukić Franolić (Zagreb, Croatia), Sandra Karabatić, Andreja Šajnić
PA376	**Developing an audit tool for assessing suitability for self-administration of asthma biologic therapies.** Paula Hallahan (Dublin 7, Ireland), Claire Sheridan
PA377	**Efficacy of respiratory training in pulmonary function of idiopathic pulmonary fibrosis: a Meta-analyses** Javier Martín Núñez (Granada, Spain), Alba Navas Otero, Sofía Hernández Hernández, Alejandro Heredia Ciuró, Andrés Calvache Mateo, Geraldine Valenza Peña, Marie Carmen Valenza
PA378	**The "vicious circle" of chronic cough. The patient experience – A qualitative synthesis.** Kayleigh Brindle (Cottingham, United Kingdom), Alyn Morice, Carter Natalie, Dominic Sykes, Mengru Zhang, Andrea Hilton
PA379	**Endobronchial valve (EBV) treatment for emphysema: a qualitative study of patients' expectations** Camilla Askov Mousing (Randers SØ, Denmark), Ingeborg Farver-Vestergaard, Anders Løkke, Kathrine Bock, Thomas Decker Christensen, Morten Bendixen, Elisabeth Bendstrup, Lotte Hasling Kodbøl Jørgensen, Karoline Litrup King
PA380	**Evaluation of outpatient clinic for non-malignant respiratory palliation - An interdisciplinary collaboration** Stephanie Paag Svane (Odense C, Denmark), Sofie Lock Johansson, Ingrid Louise Titlestad, Mette Barlebo Froesig, Siri Stistrup Rasmussen, Sabine Gill, Helle Marie Christensen

PS-14 in poster area — Session 57 — 08:00 - 09:30

Poster session: Bronchiectasis registries, cohorts and subgroups

Disease(s) : Airway diseases Respiratory critical care

Method(s) : Cell and molecular biology Imaging Pulmonary function testing Pulmonary rehabilitation Epidemiology General respiratory patient care Physiology Public health

Tag(s) : Clinical

Chairs : Felix C. Ringshausen (Hannover, Germany), Beatriz Herrero Cortina (Zaragoza, Spain)

PA381	**The microbiology of bronchiectasis in Europe: Data from the European Bronchiectasis Registry (EMBARC)** James D. Chalmers (Dundee (Angus), United Kingdom), Eva Polverino, Megan Crichton, Felix Ringshausen, Anthony De Soyza, Montserrat Vendrell, Pierre Regis Burgel, Charles Haworth, Michael Loebinger, Katerina Dimakou, Marlene Murris, Robert Wilson, Adam Hill, Rosario Menendez, Antoni Torres, Tobias Welte, Francesco Blasi, Josje Altenburg, Michal Shteinberg, Wim Boersma, Stuart Elborn, Pieter Goeminne, Stefano Aliberti
PA382	**The airway microbiome in Bronchiectasis-COPD overlap: data from the EMBARC-BRIDGE study** Holly R. Keir (Dundee (Angus), United Kingdom), Alison J. Dicker, Hollian Richardson, Ellie Kewin, Lidia Perea Soriano, Jennifer Pollock, Yan H Giam, Megan Crichton, Hayoung Choi, Erin Cant, Simon Finch, Christopher J. Fong, Francesco Blasi, Amelia Shoemark, Oriol Sibila, Stefano Aliberti, James D Chalmers
PA383	**Inflammatory Endotypes, Microbiome and Exacerbation Risk in Bronchiectasis: A European Multicentre Study** Amelia Shoemark (Dundee (Angus), United Kingdom), Hayoung Choi, Soorack Ryu, Holly Keir, Yan Hui Giam, Alison Dicker, Lidia Perea, Hollian Richardson, Jeffrey Huang, Erin Cant, Francesco Blasi, Jennifer Pollock, Michal Shteinberg, Simon Finch, Stefano Aliberti, Oriol Sibila, James Chalmers
PA384	**The bronchiectasis exacerbation definition in a real-world setting: data from the EMBARC registry** Mattia Nigro (Opera (MI), Italy), Megan Crichton, Pieter C. Goeminne, Natalie Lorent, Katerina Dimakou, Oriol Sibila, Rosario Menendez, Michal Shteinberg, Francesco Blasi, Tobias Welte, Eva Polverino, James D. Chalmers, Stefano Aliberti
PA385	**International validation of the Bronchiectasis Health Questionnaire (BHQ): data from the EMBARC-BRIDGE study** Arietta Spinou (London, United Kingdom), Megan L Crichton, Amelia Shoemark, Stefano Aliberti, Josje Altenburg, Francesco Blasi, Clare Clarke, Sanjay H Chotirmall, Raja Dhar, Pieter Goeminne, Charles Haworth, Michael Loebinger, Natalie Lorent, Eva Polverino, Felix Ringshausen, Michal Shteinberg, Oriol Sibila, Tobias Welte, James D Chalmers

PA386	**Alpha-1 antitrypsin deficiency genotypes in a large international cohort study of bronchiectasis (EMBARC BRIDGE)** Felix C. Ringshausen (Hannover, Germany), Natalie Lorent, Anthony De Soyza, Oriol Sibila, Eva Polverino, Josje Altenburg, Megan L. Crichton, Michal Shteinberg, Pieter C. Goeminne, Francesco Blasi, Tobias Welte, Stefano Aliberti, Amelia Shoemark, James D. Chalmers
PA387	**Bronchiectasis in Patients with Chronic Lymphocytic Leukemia** Ori Wand (Kfar Sava, Israel), Dovev Cohen, Alexandra Osadchy, Lilach Israeli-Shani, Keren Cohen-Hagai, David Shitrit
PA388	**Clinical phenotypes of bronchiectasis exacerbation: data from the EMBARC exacerbation substudy** Mattia Nigro (Opera (MI), Italy), Megan Crichton, Pieter C. Goeminne, Natalie Lorent, Katerina Dimakou, Oriol Sibila, Rosario Menendez, Michal Shteinberg, Francesco Blasi, Tobias Welte, Eva Polverino, James D. Chalmers, Stefano Aliberti
PA389	**Bronchiectasis as a prognostic factor in patients with alpha 1 antitrypsin deficiency?** Maria Beatriz Dias Ferraz (Porto, Portugal), Tiago Oliveira, Bárbara Ramos, Maria Sucena, Inês Sanches, Catarina Lacerda, Raquel Marçoa, Ivone Pascoal
PA390	**Alpha1antitrypsine (AAT) in sputum: is it a useful biomarker in Bronchiectasis (BE)?** Letizia Traversi (Cittiglio, Italy), Ianire Gallego, Javier Perez-Miranda, Almudena Felipe, Antonio Alvarez, David Clofent, Mario Culebras, Maria Luiza De Souza Galvão, Karina Loor, Eva Polverino
PA391	**A cohort series; referral bias and unmet needs in inflammatory bowel disease associated bronchiectasis** Georgia Tindle (Newcastle Upon Tyne, United Kingdom), Paul Mccallion, John Davison, Katy Hester, Anthony De Soyza
PA392	**Identification of a subgroup of non cystic fibrosis (CF) bronchiectasis patients with asthmatic traits** Roberta Pancani (PISA, Italy), Valerie Wandael, Giulia Lenzini, Davide Chimera, Francesco Pistelli, Federico Lorenzo Dente, Laura Carrozzi
PA393	**A complete test panel avoids missed PCD diagnosis in adults with mild clinical phenotype** Doriane Calmés (Liège, Belgium), Noémie Bricmont, Bonhiver Romane, Guissard Françoise, Pauly Clara, Hougrand Olivier, Benchimol Lionel, Poirrier Anne-Lise, Docampo Martinez Elisa, Harvengt Julie, Jacquinet Adeline, Seghaye Marie-Christine, Louis Renaud, Kempeneers Céline
PA394	**What are the radiological, microbiological and biochemical characteristics of bronchiectasis in alpha-1 antitrypsin deficiency? A systematic review** Joshua De Soyza (Birmingham, United Kingdom), Anita Pye, Daniella A. Spittle, Alice M. Turner
PA395	**Evaluation of the quality of life in patients followed for bronchial dilatation at the Hassan II Hospital in Agadir** Khadija Ait nasser (Agadir, Morocco), Houda Moubachir, Hind Serhane
PA396	**The Royal Brompton hospital adult primary ciliary dyskinesia (PCD) service: 2 years on** Stevie Peake (London, United Kingdom), Andrew Jones, Ricardo Jose, Elaine Shattock, Michael Loebinger
PA397	**Sputum colour assessment and clinical outcomes in bronchiectasis: data from the EMBARC Registry** Megan Crichton (Dundee (Angus), United Kingdom), Eva Polverino, Felix Ringshausen, Anthony De Soyza, Montserrat Vendrell, Pierre Regis Burgel, Charles Haworth, Michael Loebinger, Katerina Dinamku, Marlene Murris, Robert Wilson, Adam Hill, Rosario Menendes, Antoni Torres, Tobias Welte, Francesco Blasi, Josje Altenburg, Michal Shteinberg, Wim Boersma, Stuart Elborn, Pieter Goeminne, Stefano Aliberti, James Chalmers
PA398	**Mannitol vs Hypertonic saline in non-CF bronchiectasis, a systematic review, pairwise, and network meta-analysis of randomized control trials.** Mohamed H. Fathy (New Cairo, Egypt), Mahmoud A. Elnagar, Merihan A. Elbadawy, Ahmed K. Awad
PA399	**Bronchiectasis associated to connective tissue diseases: a single-center experience** Anna Stainer (Vigevano, Italy), Andrea Gramegna, Edoardo Simonetta, Mattia Nigro, Marco Mantero, Margherita Ori, Francesco Amati, Stefano Aliberti, Francesco Blasi
PA400	**Phenotypes in adult patients with bronchiectasis: a cluster analysis** Oxana Munteanu (Chișinău (Chișinău), Republic of Moldova), Doina Rusu, Aliona David, Leonid Onea, Victor Botnaru

PS-15 in poster area — Session 58 — 08:00 - 09:30

Poster session: New strategies for therapeutic management of interstitial lung disease of known cause

Disease(s) : Interstitial lung diseases Airway diseases

Method(s) : Epidemiology General respiratory patient care Respiratory intensive care Pulmonary function testing Palliative care Cell and molecular biology Imaging Endoscopy and interventional pulmonology

Tag(s) : Clinical

Chairs : George Margaritopoulos (London, United Kingdom)

PA401	**Early intervention of antifibrotics along with anti-inflammatory treatment in rapidly progressive interstitial lung disease (RP-ILD) with anti-MDA5 antibody-positive dermatomyositis (MDA5-DM)** Tomohiro Bando (Seto, Japan), Yasuhiko Yamano, Reoto Takei, Hajime Sasano, Jun Fukihara, Toshiki Yokoyama, Toshiaki Matsuda, Kensuke Kataoka, Tomoki Kimura, Takeshi Johkoh, Junya Fukuoka, Yasuhiro Kondoh
PA402	**Real-life multicentric national observational study of the use of nintedanib in systemic sclerosis-associated interstitial lung disease** Vincent Koether (Lille, France), David Launay, Martine Reynaud Gaubert, Grégoire Prévot, Luc Mouthon, Raphael Borie, Kinan El Husseini, Paul Decker, Stéphanie Dirou, Elodie Blanchart, Amélie Leurs, Sabine Berthier, Xavier Delbrel, Marie Durel, Christian Agard, Eric Hachulla, Ana Nieves, Denise Aydindag, Snfmi Snfmi, Gfrs Gfrs, Orphalung Orphalung, Vincent Cottin, Yurdagul Uzunhan
PA403	**Sustained-release morphine for breathlessness in interstitial lung disease - a crossover study** Diana Ferreira (Adelaide (SA), Australia), Magnus Ekstrom, Vanessa Brunelli, Sabrina Bajwah, David Currow
PA404	**Real-world data from 24 UK centres for the use of nintedanib for progressive fibrosing interstitial lung disease** Samuel Hague (Bristol, United Kingdom), Giles Dixon, Sarah Mulholland, Aye Myat Noe Khin, Hannah Thould, Roisin Connon, Paul Minnis, Eoin Murtagh, Fasihul Khan, Sameen Toor, Alexandra Lawrence, Marium Naqvi, Alex West, Robina Coker, Katie Ward, Leda Yazbeck, Simon Hart, Theresa Garfoot, Kate Newman, Pilar Rivera-Ortega, Lachlan Stranks, Paul Beirne, Jessica Bradley, Catherine Rowan, Sarah Agnew, Mahin Ahmad, Lisa G Spencer, Joshua Aigbirior, Ahmed Fahim, Andrew M Wilson, Elizabeth Butcher, Sy Giin Chong, Gauri Saini, Sabrina Zulfikar, Felix Chua, Peter M George, Maria Kokosi, Vasileios Kouranos, Philip Molyneaux, Elisabetta Renzoni, Benedetta Vitri, Athol U Wells, Lisa M Nicol, Stephen Bianchi, Raman Kular, Huajian Liu, Alexander John, Sarah Barth, Melissa Wickremasinghe, Ian A Forrest, Ian Grimes, A. John Simpson, Sophie V Fletcher, Mark G Jones, Emma Kinsella, Jennifer Naftel, Nicola Wood, Jodie Chalmers, Anjali Crawshaw, Louise E Crowley, Davinder Dosanjh, Christopher C Huntley, Gareth I Walters, Timothy Gatheral, Catherine Plum, Shiva Bikmalla, Raja Muthusami, Helen Stone, Jonathan C L Rodrigues, Krasimira Tsaneva-Atanasova, Chris J Scotton, Michael A Gibbons*, Shaney L Barratt*
PA405	**Nebulised pirfenidone in non-idiopathic pulmonary fibrosis (IPF) progressive pulmonary fibrosis (PPF): first look at FVC data** Alex West (London, United Kingdom), Alexandra Lawrence, Hao Bao, Deepthi Nair, Courtney Thompson, Felix Woodhead
PA406	**Outcomes in real-life nintedanib treatment of progressive fibrosing interstitial lung disease.** Adriana Callari (, Italy), Elisa Calzolari, Lavinia Martino, Nicola Lanzarone, Vitale Miceli, Patrizio Vitulo
PA407	**Role of nintedanib in the treatment of progressive pulmonary fibrosis (PPF) in daily clinical practice.** Fatima Andres Franch (Sueca (Valencia), Spain), Ignacio Salvador Alvarez Martínez, Mario Andújar Llamazares, Daniel Segura Ayala, Elsie Daviana Meneses Petersen, Luis Cabanes López, Laura Novella Sánchez, Jose Ramon Ferrando Gabarda, Maria Meseguer Sisternes, Inmaculada Lluch Tortajada, Elsa Naval Sendra
PA408	**Real-world of Nintedanib in a Spanish non-IPF progressive pulmonary fibrosis cohort** Vanesa Vicens Zygmunt (Castelldefels (Barcelona), Spain), Jaume Bordas-Martínez, Miriam Muñoz-Bolaño, João Carmezim-Correia, Ana Belén Llanos-González, Adrià Domingo-Carnice, Dolores Rodríguez-Cumplido, Guadalupe Bermudo-Peloche, Cristian Tebé-Cordomí, Roser Llop-Rius, Maria Molina-Molina
PA409	**Impact of oxygenation strategies on outcome in acute exacerbation of interstitial lung disease : A multicenter restrospective study** Robin Thévenin (Rouen, France), André Gillibert, Nicolas Dognon, Mélanie Drucbert, Laurie Lagache, Mathieu Salaün, Antoine Cuvelier, Christophe Girault, Élise Artaud-Macari
PA410	**Efficacy of mycophenolate mofetil in fibrotic hypersensitivity pneumonitis treatment** Ana Filipa Torres Silva (Raimonda, Portugal), Ana Cláudia Pimenta, Margarida Melo Cruz, Natália Melo, Patrícia Caetano Mota, André Terras Alexandre, Hélder Novais Bastos, Oksana Sokhatska, Susana Guimarães, Conceição Souto Moura, André Carvalho, Filipa Aguiar, Vanessa Santos, António Morais
PA411	**Progression and tolerance of patients with connective tissue disease-related interstitial lung disease (CTD-ILD) on rituximab treatment** Ana Belén Llanos Gonzalez (La Orotava, Spain), José Carlos García Hernández, Sara García Gil, Elisa Trujillo Martín, Verónica Saray Hernández García, Paula Pérez De Armas, Nelson Mesa León, Juan Alfonso Bonilla Arjona, Marta Elena Gómez Gil, María García González, María Vanesa Hernández Hernández, José Federico Díaz González, Orlando Acosta Fernández
PA412	**Whole Lung Lavage for Pulmonary Alveolar Proteinosis: A Retrospective Analysis of 33 Cases** Philippe Colares (São Paulo (SP), Brazil), Ana Avila, Paula D'Ambrosio, Roberta Sales, Helio Minamoto, Paulo Pêgo-Fernandes

PA413 **Clinical, demographic and functional evaluation of patients with hypersensitivity pneumonitis and their comparison based on current diagnostic criteria**
Guilherme Das Posses Bridi (São Paulo (SP), Brazil), Bianca Freire Da Silva, Marieta Cabral Amaral Da Cunha, Douglas Silva Queiroz, José Leônidas Alves-Jr, João Marcos Salge, Celso R F De Carvalho, Ronaldo Adib Kairalla, Rogerio De Souza, Bruno Guedes Baldi

PA414 **Effect of vasodilator therapy on clinical and hemodynamics of patients with pulmonary arterial hypertension, connective tissue disease related pulmonary fibrosis**
Sumaiya Hafiz (Abu Dhabi, United Arab Emirates), Naureen Khan, Hosam Alazazzi, Stuti Mulls, Hamdan Alawadhi, Jihad Mallat, Hani Sabbour, Khaled Saleh

PA415 **Online Mindfulness-Based Interventions (MBI) for palliative care: reducing dyspnea, depression, anxiety, and stress in patients with interstitial lung disease assisted at the UFMG University Hospital**
Eliane Viana Mancuzo (Belo Horizonte (MG), Brazil), Siliana Maria Duarte Miranda, Gabriela Patrus Ananias De Assis Pires, Andrew Nogueira Albuquerque Leal, Luiz Fernando Ferreira Pereira, Sara Pinho Cunha Paiva

PA416 **Treatment and clinical course of hypersensitive pneumonitis – single center experience**
Goran Glodić (Zagreb, Croatia), Martina Batarilo Hadar, Dina Rnjak, Mateja Janković Makek, Dina Mihelčić Korte, Feđa Džubur, Dubravka Pelicarić, Andreja Moćan, Tea Lovrić, Lorna Ćorak, Marko Banić, Miroslav Samaržija, Ana Hećimović

PA417 **Nintedanib for patients with CTD related pulmonary fibrosis: real-life data.**
Eirini Vasarmidi (Heraklion (Crete), Greece), Pierre-Antoine Juge, Eleni Bibaki, Nikolaos Tzanakis, Raphael Borie, Philippe Dieude, Bruno Crestani, Katerina Antoniou

PA418 **Real-life analysis of adherence to antifibrotic treatment in patients with progressive pulmonary fibrosis in Romania – a specialized center-based cohort study**
Flavia-Gabriela Martis (Arad (Arad), Romania), Daniel Traila, Ovidiu Fira Mladinescu

PA419 **Efzofitimod: a novel therapeutic candidate for SSc-ILD**
Zhiwen Xu (San Diego, United States), David Siefker, Michaela Ferrer, Elizabeth Yu, Lauren Guy, Kaitlyn Rauch, Sofia Klopp-Savino, Leslie Nangle

PS-16 in poster area Session 59 08:00 - 09:30

Poster session: Clinical problems in rare interstitial lung diseases

Disease(s) : Interstitial lung diseases Airway diseases Thoracic oncology

Method(s) : Epidemiology General respiratory patient care Imaging Public health Endoscopy and interventional pulmonology Cell and molecular biology Pulmonary function testing Transplantation

Tag(s) : Clinical

Chairs : Clairelyne Dupin (Paris, France), Francesco Bonella (Düsseldorf, Germany)

PA420 **Epidemiology of diffuse interstitial lung disease in children in France: The RespiRare cohort**
Nadia Nathan (Paris, France), CAMILLE FLETCHER, Alice Hadchouel Duvergne, Caroline Thumerelle, Manon Fleury, Nouha Jedidi, Myriam Benhamida, Katia Bessaci, Raphael Borie, Tiphaine Bilhouee, Jacques Brouard, Aurelie Cantais, Annick Clément, Laurianne Coutier, Pierrick Cros, Marie Laure Dalphin, Christophe Delacourt, Ralph Epaud, Eric Deneuville, Antoine Deschildre, Jean-Christophe Dubus, Carole Egron, Michael Fayon, Agnes Fina, Aude Forgeron, Elsa Gachelin, François Galode, Isabelle Gibertini, Lisa Giovannini-Chami, Tamazoust Guiddir, Audrey Herzog, Veronique Houdouin, Eglantine Hullo, Pierre-Henri Jarreau, Geraldine Labouret, Alice Ladaurade, Laurence Le Clainche Viala, Christophe Marguet, Alexandra Masson-Rouchaud, Julie Mazenq, Caroline Perisson, Cinthia Rames, Philippe Reix, Marie-Catherine Renoux, Léa Roditis, Cyril Schweitzer, Aurélie Tatopoulos, Pascale Trioche-Eberschweiler, Françoise Troussier, Clementine Vigier, Laurence Weiss, Marie Legendre, Camille Louvrier, Alix De Becdelievre, Aurore Coulomb, Chiara Siléo, Hubert Ducou Le Pointe, Laureline Bertheloot, Celine Delestrain, CAMILLE FLETCHER

PA421 **Is it possible to predict multisystem Langerhans cell histiocytosis with lung involvement based on radiological findings detected by computed tomography?**
Elżbieta Radzikowska (Warszawa, Poland), Maria Jeskiewicz, Katarzyna Blasinska, Jacek Wakulinski, Malgorzata Sobiecka, Elzbieta Wiatr, Monika Załęska, Renata Langfort, Iwona Bestry

PA422 **Drug-induced interstitial lung disease: insights from a referral center**
Vasilina Sotiropoulou (Patras, Greece), Panagiota Tsiri, Theodoros Karampitsakos, Matthaios Katsaras, Ourania Papaioannou, Tsirikos Georgios, Electra Koulousousa, Eva Theochari, Ioannis Christopoulos, Dimitrios Komninos, Elli Malakounidou, Eirini Zarkadi, Fotios Sampsonas, Argyrios Tzouvelekis

PA423	**Phenotype-genotype correlations of pediatric patients with biallelic mutations in ABCA3 and SFTPB surfactant-related genes** Manon Fleury (Paris, France), Alice Hadchouel, Julie Mazenq, Nouha Jedidi, Camille Fletcher, Myriam Benhamida, Pierrick Cros, Christophe Delacourt, Jean-Christophe Dubus, Carole Egron, Ralph Epaud, Michael Fayon, Aude Forgeron, Lisa Giovanni-Chami, Caroline Perisson, Hortense Petat, Marie-Catherine Renoux, Léa Roditis, Caroline Thumerelle, Clémentine Vigier, Aurore Couloumb, Laureline Berteloot, Chiara Sileo, Alix De Becdelièvre, Pascale Fanen, Marie Legendre, Camille Louvrier, Nadia Nathan
PA424	**Health related quality of life in childhood interstitial lung disease – an ERS Clinical Research Collaboration** Elias Seidl (München, Germany), Mandy Niemitz, Sarah Stöhr, Nicolaus Schwerk, Martin Wetzke, Julia Carlens, Joanna Lange, Katarzyna Krenke, Nagehan Emiralioglu, Nural Kiper, Matthias Griese
PA425	**Natural history and outcome of lymphangioleiomyomatosis in Ireland** Evelyn Lynn (Blackrock (Co. Dublin), Ireland), Helen O'Brien, Yasuhito Sekimoto, Amina Jouida, Michael Keane, Cormac Mccarthy
PA426	**The value of multidisciplinary team meetings in the diagnosis and management of childhood interstitial lung disease among the RespiRare network** Julie Cassibba (Paris, France), Lauren Bitton, Camille Fletcher, Manon Fleury, Céline Lustremant, Meryem Sari Hassoun, Sabrina Aberbache, Laureline Berteloot, Chiara Sileo, Marie Legendre, Camille Louvrier, Alix De Becdelièvre, Alice Hadchouel, Ralph Epaud, Nadia Nathan
PA427	**Lower respiratory tract involvement in recurrent respiratory papillomatosis in a multicentric cohort study** Thomas Maitre (Paris, France), Romy Ratsihorimanana, Mathieu Dusselier, Gilles Mangiapan, Minh Triet Ngo, Nicolas Guibert, Clément Fournier, M Matar, Stephane Jouneau, Arnaud Bourdin, Thomas Egenod, Delphine Wermert, Nicolas Favrolt, Olivia Freynet, Valérie Gounand, Raphael Borie, Raffaele Caliandro, Jean François Boitiaux, Julie Mankikian, Juliette Camuset, Marc Fortin, Vincent Cottin, Jean Michel Vergnon, Jacques Cadranel
PA428	**Clinical characteristics of diffuse cystic lung diseases at a national referral centre** Helen O'Brien (Ratoath, Ireland), Cara Gill, Marissa O'Callaghan, Evelyn Lynn, Fiona Hickey, Jehangir Khan, Alessandro Franciosi, Michael P Keane, Cormac Mc Carthy
PA429	**The European ILD Registry algorithm of self assessment (eurILDreg-ASA): pilot study data on prospective, patient-centered capture of symptom burden, quality of life, spirometry, oximetry and exercise capacity** Ekaterina Krauss (Giessen, Germany), Laurenz H. Claas, Karen Moor, Maria Molina-Molina, Keerthana Siebert, Silke Tello, Rebecca Borton, Marlies Wijsenbeek-Lourens, Bruno Crestani, Andreas Guenther
PA430	**The diagnostic role of transbronchial lung cryobiopsy (TBLC) in Granulomatous-Lymphocytic Interstitial Lung Disease (GLILD) associated to Common Variable Immunodeficiency (CVID)** Ilaria Menichini (Roma (RM), Italy), Claudia Ravaglia, Sara Piciucchi, Alessandra Dubini, Venerino Poletti
PA431	**Radiological and genetic diversity of inherited ILDs revealed within a regional familial pulmonary fibrosis service** Jennifer Dickens (Cambridge (Cambridgeshire), United Kingdom), Helen Parfrey, Mostin Hu, Christine Fiddler, Eamonn Maher
PA432	**Analysis of Clinical Characteristics of Connective Tissue Disease-Associated Interstitial Lung Disease in 225 Patients: A Prospective Study** Ketfi Abdelbassat (Alger, Algeria), Rama Touahri, Cherifa Djouadi
PA433	**Lung Transplant in hypersensitivity pneumonitis patients.** Carolina Santamaría Valencia (Maspalomas, Spain), Iovanna Socorro Ávila, Cristina Ayuela Lacaba, Myriam Aguilar Perez, Christian García Fadul, Rosalía Laporta Hernandez
PA434	**Diagnostic Criteria Arrangement in Nationwide All ILD Registry with Central MDD in Japan; PROMISE study** Yasuhiro Kondoh (Seto (Aichi), Japan), Taiki Furukawa, Ryo Teramachi, Hironao Hozumi, Takafumi Suda, Tomoyuki Fujisawa, Ryoko Egashira, Takeshi Johkoh, Junya Fukuoka, Masataka Kuwana, Takashi Ogura, Yasunari Miyazaki, Masashi Bando, Yoshikazu Inoue, Hiromi Tomioka, Yasuhiko Nishioka, Hirofumi Chiba, Masahito Ebina, Kazuya Ichikado, Naozumi Hashimoto, Makoto Ishii
PA435	**Clinical and radiologic differences between patients with combined pulmonary fibrosis and emphysema and a matched emphysema cohort** Tal Ardon (Tel Aviv, Israel), Omer Kersh, Ophir Freund, Tamar Shalmon, Tzlil Hershko, Amir Bar-Shai, Galit Aviram, Avraham Unterman
PA436	**Diagnostic testing for GLILD in Common Variable Immunodeficiency: A Systematic Review** Heba M Bintalib (London, United Kingdom), Annick A J M Van De Ven, Joseph Jacob, Jesper R. Davidsen, Børre Fevanga, Leif G Hanitsch, John Routes, Marion Malphettes, Joris Van Montfrans, Paul J. Maglioned, Cinzia Milito, Klaus Warnatz, John R Hurst
PA437	**Prevalence of lung cysts – are we missing incidental cystic lung disease?** Saher Sultan (Nottingham, United Kingdom), Michael Avoseh, Dominic Shaw, Simon Johnson

PA438	**Level of information of patients with lymphangioleiomyomatosis – room for improvement!** Finn Wilkens (Heidelberg, Germany), Claudia Ganter, Catrin Ender, Heinrike Wilkens, Nicolas Kahn, Katharina Buschulte, Katharina Kriegsmann, Michael Kreuter
PA439	**Primary myoepithelioma of the lungs: a case report** Mila Rose Gonzalez (Dumaguete, Philippines), Caesar Antonio Ligo, Dehuel Cuyacot, John Anthony Tindoc

PS-17 in poster area Session 60 08:00 - 09:30

Poster session: Basic mechanism in pulmonary hypertension

Disease(s) : Pulmonary vascular diseases

Method(s) : Cell and molecular biology Physiology

Tag(s) : Basic science

Chairs : Frances S. de Man (Amsterdam, Netherlands), Chair to be confirmed

PA440	**Size does matter: a simple swine model of chronic pulmonary hypertension** Liliana Moreira-Costa (Porto, Portugal), André M Leite-Moreira, Rui Adão, Isabel Miranda, Rui Cerqueira, Frederic Perros, Adelino F Leite-Moreira, André P Lourenço, Pedro Mendes-Ferreira
PA441	**Targeting ATP Citrate Lyase to mitigate Vascular Remodeling Pathogenesis.** Yann Grobs (quebec, Canada), Charlotte Romanet, Alice Bourgeois, Sarah-Eve Lemay, Tsukasa Shimauchi, Sandra Breuils-Bonnet, Mabrouka Salem, Francois Potus, Steeve Provencher, Pierre Voisine, Olivier Boucherat, Sebastien Bonnet
PA442	**Proteomic profiling of pulmonary hypertension associated with respiratory disease** Adelaida Bosacoma (Barcelona, Spain), Agustin Garcia, Juan José Lozano, Julia Sidorova, Isabel Blanco, Clara Martin, Olga Tura-Ceide, Victor Ivo Peinado, Diego Rodríguez, Manuel López-Meseguer, Fernanda Hernández-González, Jesús Ribas, Xavier Pomares, Salud Santos, Maria Molina-Molina, Jacobo Sellarés, Joan Albert Barberà
PA443	**Role of Bone Morphogenetic Protein-9 in the development of Hepatopulmonary Syndrome** Fabien Robert (Le Kremlin Bicêtre, France), Ly Tu, Marie Caroline Certain, Raphael Thuillet, Mina Ottaviani, Audrey Baron, Agnes Castan, Sabine Bailly, Marc Humbert, Olivier Sitbon, Christophe Guignabert, Laurent Savale
PA444	**The role of miR-146a in the pathophysiology of pulmonary arterial hypertension** Joana Gomes (Porto, Portugal), Pedro Ferreira, Rui Adão, Carolina Rocha, Inês Vasconcelos, Adelino Moreira, Carmen Silva
PA445	**Selective inhibition of Histone deacetylases reverses vascular remodeling and improves right ventricle function in pulmonary hypertension** Konda Babu Kurakula (Amsterdam, Netherlands), Xiao-Qing Sun, Sebastien Bonnet, Rolf Mf Berger, Harm Jan Bogaard, Marie-José Goumans
PA446	**The role of BMP9-induced Sema3G in pulmonary vascular stability** Sarah Mirza (Cambridge, United Kingdom), Benjamin Dunmore, Nicholas Morrell
PA447	**Cannabidiol alleviates cardiac fibrosis probably through inhibiting endothelial-to-mesenchymal transition in rat model of pulmonary hypertension** Anna Krzyżewska (Białystok, Poland), Marta Baranowska-Kuczko, Irena Kasacka, Hanna Kozłowska
PA448	**Osteopontin in experimental right ventricular remodeling** Argen Mamazhakypov (Bishkek, Kyrgyzstan), Norbert Weissmann, Ardeschir Ghofrani, Ralph Schermuly, Akylbek Sydykov
PA449	**Targeting DHPS-mediated hypusination of eIF5A improves vascular remodeling in PAH** Sarah-Eve Lemay (Quebec, Canada), Yann Grobs, Sandra Martineau, Mabrouka Salem, Tsukasa Shimauchi, Alice Bourgeois, Sandra Breuils-Bonnet, François Potus, Steeve Provencher, Sébastien Bonnet, Olivier Boucherat
PA450	**HS135, A Novel Activin and GDF Trap, is Highly Efficacious in Models of Group 1 and Group 2 Pulmonary Hypertension (PH)** Gauthier Schang (Montreal, Canada), Mathilde Poujol De Molliens, Emilie Brûlé, Ariane Sours, Cristina Chauvet, Jean-François Denis, Vannakambadi Ganesh, Gilles Tremblay, Julia Schoelermann, Maureen O'Connor-Mccourt
PA451	**Empagliflozin improves mitochondrial biogenesis and ameliorates vascular remodeling in experimental pulmonary arterial hypertension** Erik Duijvelaar (Amsterdam, Netherlands), Keimei Yoshida, Xiao-Qing Sun, Beau Neep, Xiaoke Pan, Takayuki Jujo, Yu Yoshida, Jurjan Aman, Frances Sarah Handoko-De Man, Harm Jan Bogaard
PA452	**Differential responses of pulmonary vascular cells from PAH patients and controls to TNFα and the effect of the BET inhibitor JQ1.** Ian M. Adcock (London, United Kingdom), Sharon Mumby, Stephen Wort, Fred Perros, Marc Humbert, Gaetano Caramori

PA453	**The Fibronectin-Binding Integrins System as a Contributor to PAH Pathogenesis** Sarah-Eve Lemay (Quebec, Canada), Mónica S Montesinos, Yann Grobs, Tetsuro Yokokawa, Tsukasa Shimauchi, Sandra Breuils-Bonnet, Sandra Martineau, Alice Bourgeois, Mabrouka Salem, Charlie Théberge, Reem El Kabbout, Charlotte Romanet, Min Lu, Xinqiang Huang, James E Dowling, Adrian S Ray, François Potus, Steeve Provencher, Olivier Boucherat, Sébastien Bonnet
PA454	**SMAD5 as a novel gene for familial pulmonary arterial hypertension** Ding Cao (Heidelberg, Germany), Yuriy Sirenko, Ganna Radchenko, Henning Gall, Ayat Ahmed, Susanne Theiß, Simon Haas, Memoona Shaukat, Zoe Saßmannshausen, Nicola Benjamin, Panagiota Xanthouli, Satenik Harutyunova, Benjamin Egenlauf, Katrin Hinderhofer, Ekkehard Grünig, Magdalena Laugsch, Christina Eichstaedt
PA455	**Alpha-B crystallin regulates apoptosis in idiopathic pulmonary arterial hypertensive smooth muscle cells** DONGQI XING (Birmingham, United States), R. Chad Wade, Jacelyn E Peabody Lever, Teodora Nicola, Vivian Y Lin, Yixin Wu, Gregory A Payne, Jarrod W Barnes, J. Michael Wells
PA456	**The matrikine Ac-PGP mediates the pathogenesis of pulmonary hypertension** Xin Xu (Birmingham, United States), Mojtaba Abdul Roda, Dongqi Xing, Jindong Li, Carmel Mcnicholas-Bevensee, Gregory A Payne, Liliana Viera, Rakesh Patel, J. Michael Wells, Gert Folkerts, J. Edwin Blalock, Amit Gaggar
PA457	**Synthesis of CeO2@BSA Nanoclusters for Inhibition of Pulmonary microvascular endothelial Cell Dysfunction and Improvement of Rat Vascular Reconstitution** Ping Yuan (Shanghai, China), Hui Zhao, Wenhui Wu, Yuqing Miao
PA458	**Role of histone acetyltransferases P300/CBP in pulmonary arterial hypertension and right heart failure** Alice Bourgeois (Québec, Canada), Sarah-Eve Lemay, Yann Grobs, Charlotte Romanet, Sandra Breuils-Bonnet, Mabrouka Salem, Sandra Martineau, François Potus, Steeve Provencher, Olivier Boucherat, Sébastien Bonnet
PA459	**Remodeling of pulmonary arterial (PA) endothelial basement membrane (BM) triggers smooth muscle cell (SMC) hyperplasia in pulmonary hypertension due to left heart disease (PH-LHD)** Mariya Kucherenko (Berlin, Germany), Netra Nambiar Veetil, Tara Gransar, Shao-Fei Liu, Robert Szulcek, Volkmar Falk, Christoph Knosalla, Wolfgang M. Kuebler

PS-18 in poster area — Session 61 — 08:00 - 09:30

Poster session: Interventional bronchoscopy: advances in probes, needles and more

Disease(s) : Thoracic oncology | Airway diseases | Interstitial lung diseases

Method(s) : Endoscopy and interventional pulmonology

Tag(s) : Clinical

Chairs : Peter I. Bonta (Amsterdam, Netherlands), Konstantina Kontogianni (Heidelberg, Germany)

PA460	**Endoscopic aspergilloma management for non-surgical patients** Elaine Dumoulin (Calgary (AB), Canada), Christina Thornton, Chrystal Chan, Paul Maceachern, Christopher Mody
PA461	**Bronchial rheoplasty for chronic bronchitis – a national case series.** Kristine Jensen (Hundested, Denmark), Hans Henrik Schultz, Erik Lilja Secher, Anna Kalhauge, Thomas Kromann Lund, Jann Mortensen, Michael Perch
PA462	**Does stent shape affect results in Post-Intubation Tracheal Stenosis?** Hanna Dawood (Athens, Greece), Nektarios Anagnostopoulos, Evangelia Koukaki, Andriana Papaioannou, Grigoris Stratakos
PA463	**Prognostic factors after airway stenting for malignant tracheo- or broncho-oesophageal fistulas.** Juliette Edme (Toulouse, France), Clément Fournier, Claudia Zea Obando, Laurent Cellerin, Frederic Wallyn, Samy Lachkar, Thomas Egenod, Christophe Gut Gobert, Loic Perrot, Christine Lorut, Jean Michel Vergnon, Valerian Bourinet, Julien Legodec, Benoit Lepage, Herve Dutau, Nicolas Guibert
PA464	**Diagnostic yield and safety of Trans-Bronchial Cryo-Biopsy from right upper lobe** Elad Guber (Kfar saba, Israel), Ayal Romem, Hadas Gilboa, David Shitrit
PA465	**Endobronchial cryobiopsy shortens the time to cancer diagnosis.** Kristian Brat (Brno, Czech Republic), Nela Stastna, Michaela Heroutova, Ivan Cundrle Jr
PA466	**Utility of cryobiopsy in peripheral pulmonary lesions for next-generation sequencing** Yuji Matsumoto (Tokyo, Japan), Hideaki Furuse, Tatsuya Imabayashi, Keigo Uchimura, Takaaki Tsuchida
PA467	**The ThinICE protocol: the combination of cryobiopsy and ultraThin bronchoscopy for the peripheral lung nodule.** Leonardo Giuntoli (montecatini terme, Italy), Luca Ciani, Valentina Luzzi, Marco Trigiani, Gori Leonardo, Lorenzo Corbetta, Alessandra Sorano, Alessandro Fusco, Giorgio Vitale, Valeria Pasini, Elisabetta Rosi, Federico Lavorini, Camilla Comin, Sara Tomassetti

PA468	**Diagnostic utility and safety of non-intubated cryobiopsy using a 1.1-mm cryoprobe for peripheral pulmonary lesions** Toshiyuki Nakai (Osaka, Japan), Tetsuya Watanabe, Kazuhiro Yamada, Misako Nishimura, Atsushi Miyamoto, Yoshiya Matsumoto, Kenji Sawa, Kanako Sato, Kazuhisa Asai, Yuji Matsumoto, Yu Mikami, Tomoya Kawaguchi
PA469	**A randomised trial of transbronchial mediastinal cryobiopsy versus forceps biopsy for the diagnosis of mediastinal lesion** Felix J.F. Herth (Heidelberg, Germany), Ye Fan, Wan-Lei Fu, Zan-Sheng Huang, Jing Wang
PA470	**The diagnostic yield of aspirated material in EBUS-TNBA suction syringe: a prospective single center study.** Ayal Romem (Jerusalem, Israel), Elad Guber, David Shitrit
PA471	**Identification of EGFR mutations in transbronchial cryobiopsies** Sergio Alejandro Menchaca (TLALPAN, Mexico), Olivia Sanchez Cabral, Cira Santillan Diaz
PA472	**Prevalence of Immune-mediated Inflammatory Diseases in Patients with Lung Cancer** Anna Casartelli (Maslianico, Italy), Marina Saad, Francesca Mandurino Mirizzi, Debora Maria Spitaleri, Lisa Milani, Giuseppe Croce, Giada Lazzaroni, Dejan Radovanovic, Pierachille Santus
PA473	**The safety and practices of performing endobronchial ultrasound transbronchial needle aspiration (EBUS-TBNA) without an anesthesiology team: experience from a tertiary centre** Grgur Salai (Zagreb, Croatia), Robert Gecevic, Ivona Kovacevic, Ivan Marasovic, Darjan Ranilovic, Tajana Stoos Veic, Divo Ljubicic
PA474	**Endobronchial ultrasound guided transvascular needle aspiration for lung tumor diagnosis** Maciej Gnass (Myślenice, Poland), Piotr Gniady, Agnieszka Knapczyk, Damian Czyżewski, Piotr Krudys, Alina Szymczyk, Piotr Kocoń, Artur Bartczak, Artur Szlubowski
PA475	**High flow nasal cannula (HFNC) during EBUS TBNA – enough evidence so far? A real world study.** Sonja Badovinac (Zagreb, Croatia), Goran Glodic, Stela Majetić, Denis Baričević, Dražena Srdić, Filip Popović, Feđa Džubur, Marta Koršić, Miroslav Samaržija
PA476	**Evaluation of tissue adequacy in patients with malignant intrathoracic lymphadenopathy undergoing endobronchial ultrasound-guided miniforceps biopsy (EBUS-MFB) added on EBUS-TBNA compared to EBUS-TBNA alone** Pipu Tavornshevin (Bangkok, Thailand), Vorawut Thanthitaweewat, Thitiwat Sriprasart, Virissorn Wongsrichanalai, Poonchavist Chantranuwatana, Nophol Leelayuwatanakul
PA477	**Tissue coagulum clot cellblock from EBUS-TBNA for the diagnosis of necrotic lung and mediastinal lesions.** Chun Ian Soo, Leng Cheng Sia, Vijayan Munusamy, Nur Husna Ibrahim, Ka Kiat Chin, Thian Chee Loh, Juinn Liang Tan, Sook Ling Low, Mau Ern Poh, Chee Kuan Wong, Yong Kek Pang, Chong Kin Liam
PA478	**Endobronchial ultrasound guided transbronchial lymph node cryobiopsy (EBUS-TBLNC): a new approach to mediastinal pathology.** Alessandro Fusco (Latina, Italy), Luca Ciani, Marco Trigiani, Valentina Luzzi, Leonardo Giuntoli, Leonardo Gori, Federico Lavorini, Sara Tomassetti
PA479	**Multicentric retrospective study on the implementation of CryoEBUS for the study of mediastinal lymphadenopathy.** Pere Trias Sabria (Barcelona, Spain), Virginia Pajares, Marta Plana, Marta Díez-Ferrer, Lara Pijuan, Núria Baixeras, Pere Serra, Laura López Vilaró, Eduard Barrio, Carmen Centeno Clemente, Rachid Tazi-Mezalek, Felipe Andreo, Antoni Rosell Gratacós, Alfons Torrego, Salud Santos Pérez, Rosa López-Lisbona

PS-19 in poster area — Session 62 — 08:00 - 09:30

Poster session: Seeing is believing: new interventions in respiratory education

Disease(s) : Airway diseases | Respiratory critical care | Interstitial lung diseases | Thoracic oncology

Method(s) : General respiratory patient care | Respiratory intensive care | Endoscopy and interventional pulmonology | Public health | Cell and molecular biology | Epidemiology | Imaging | Surgery | Palliative care

Tag(s) : Clinical

PA480	**High-Fidelity Simulation Enhances Trainee Confidence in Lung Cancer Multidisciplinary Team Meetings** Colette Davidson (Dundee (Angus), United Kingdom), Jessica Little*, Kishen Patel, Ewan Mackay, Karen Tipples, Adam Januszewski, William Ricketts
PA481	**Radial EBUS Service Evaluation Audit in a U.K University Hospital** Aanchal Mehta (Liverpool, United Kingdom), James Ayathamattam, Suman Paul
PA482	**The impact of pre-testing on post-test bronchoscopy competence in a simulation setting.** Eveline Gerretsen (Maastricht, Netherlands), Marleen Groenier, Erik Van Der Heijden, Walther Van Mook, Jouke Annema, Frank Smeenk

PA483	**Patient-Derived iPSC Models of Interstitial Lung Disease: An Evaluation of the Open-ILD COST Innovator Grant Training School** Anja Schweikert (Dublin, Ireland), Sarah Kenny, Irene Oglesby, Arlene Glasgow, Chiara De Santi, Ingrid Gensch, Nico Lachmann, Tifenn Desroziers, Camille Fletcher, Deborah Snijders, Nadia Nathan, Killian Hurley
PA484	**Flexible bronchoscopy course with simulation improves confidence for junior medical trainees** Harry Mitchell (London, United Kingdom), Rahul Mogal, Andrew Barlow
PA485	**E-Learning as an interventional element to improve weaning expertise as part of the PRiVENT (prevention of invasive ventilation) project** Julia Dorothea Michels (Heidelberg, Germany), Janina Schubert-Haack, Benjamin Neetz, Katrin Tanck, Gabriele Iberl, Axel Kempa, Claus Neurohr, Alessandro Ghiani, Christoph Andritschky, Armin Schneider, Patrick Gehrig, Simone Britsch, Mascha O. Fiedler, Joachim Szecsenyi, Felix J.F. Herth
PA486	**The use of social media to raise public awareness for long-term invasive mechanical ventilation: First results of the public relations campaign as part of the PRiVENT project** Franziska Trudzinski (Heiderberg, Germany), Nicola Litke, Olaf Buntemeyer, Simone Janssen, Axel Kempa, Claus Neurohr, Armin Schneider, Joachim Szecsenyi, Elena Biehler, Thomas Fleischauer, Felix Jf Herth, Julia D. Michels
PA487	**The optimal inpatient chronic obstructive pulmonary disease algorithm** Farah Madhani-Lovely (Reno, United States), Jason Farnsworth, Charlene Blumethal, Amber Beck, John Lynn
PA488	**Co-creation of a self-learning programme for patients with asthma: patients' and health professionals' perspectives on the relevant topics** Ana Sá-Sousa (Vila Nova de Gaia, Portugal), Cristina Jácome, Nancy Fonseca, Tânia Rodrigues, Silvana Fernandes, Emília Dias Da Costa, Rita Amaral, Paula Matos, Margarida Areia, Liliana Dias, Marisa Vilaverde, Cláudia Chaves Loureiro, José Laerte Boechat, Daniela Figueiredo, Ana Luisa Neves, Pedro Simões, Luís Taborda Barata, João Almeida Fonseca
PA489	**Mobile application for asthma patients: is there an interest?** sofia Farhat (agadir, Morocco), Nada Boutbagha, Hanane Ikrou, Houssame Ennaceri, Abdelmajid Oulahbib, Younes Essaid, Oussama Halloumi, Aboubakr Imzil, Abdelkarim Khannous, Khadija Ait Nacer, Fatiha Bounoua, Hind Serhane, Houda Moubachir
PA490	**Inhaler technique in a pediatric emergency department: Impact of an educational intervention among healthcare professionals in Greece** Elpis Hatziagorou (Panorama, Thessaloniki, Greece), Athina Karageorgiou, Fotios Kyrvasillis, Elissavet-Anna Chrysochoou, John Tsanakas
PA491	**An assessment of the information and educational needs of patients and caregivers of people with primary ciliary dyskinesia: an ERS clinical research collaboration** Jobst Röhmel (Berlin, Germany), Laura Behan, Myrofora Goutaki, Amelia Shoemark, Jeanette Boyd
PA492	**Assessment of thoracic ultrasound skills in immersive virtual reality** Anders Bo Nielsen (Odense C, Denmark), Niels Jacobsen, Christian Laursen, Lars Konge, Pia Iben Pietersen
PA493	**Application of big data analysis and telemedicine technology to screening and treatment in COVID-19** Hung-Chueh Peng (Douliou, Taiwan), Chung-Yu Chen, Matthew Huei-Ming Ma, Juey-Jen Hwang
PA494	**Management of breathlessness: an ERS early career members online survey** Inès Zitouni (Cergy, France), Maria Joana Pereira Catarata, Carolina Gotera, Niki Ubags, Thomas Gille, Hilario Nunes, Anne Claire Toffart, Maxime Patout, Boris Duchemann
PA495	**The impact of COVID-19 on early career members (ECMs): an ERS ECM survey** Thomas Gille (Bobigny, France), Maxime Patout, Niki Ubags, Sheila Ramjug, Jana De Brandt, Tiago Alfaro, Merel Hellemons, Lowie E G W Vanfleteren, Joana Cruz, Catharina C. Moor, Carolina Gotera, Orianne Dumas, Marc Humbert, Anita Simonds
PA496	**Respiratory education in Germany - an online-based survey of final-year medical students and chief physicians** Erik Büscher (Düsseldorf, Germany), Espen E. Groth, Julia Wälscher, Thomas Bahmer, Matthias Raspe, Nina Sicker, Christoph Fisser
PA497	**Impact of an international medical education collaboration between industry and medical associations** Ebru YILDIZ (Istanbul, Turkey), Bhumika Aggarwal, Sudeep Acharya, Gur Levy
PA498	**Internationally use of objective structured clinical examination (OSCEs) in respiratory training: an ERS early career member survey** Etienne-Marie Jutant (Paris, France), Lucile Sese, Maeva Zysman, Thomas Gille, Jonathan Messika, Bernard Maître, Maxime Patout

PS-2 in poster area Session 63 08:00 - 09:30

Poster session: Pulmonary physiology: implications for pulmonary rehabilitation

Disease(s) : Airway diseases Interstitial lung diseases Respiratory critical care

Method(s) : Epidemiology Physiology General respiratory patient care Pulmonary rehabilitation Cell and molecular biology Respiratory intensive care Pulmonary function testing

Tag(s) : Clinical

Chairs : Audrey Borghi Silva (São Carlos (SP), Brazil), Ernesto Crisafulli (Modena (MO), Italy)

PA499	**CPET in Long COVID (LC) patients (pts) with dyspnea and fatigue** Paraskevi Katsaounou (Athens, Greece), Archodoula Adonoglou, Adreas Asimakos, Stavroula Spetsioti, Pandelis Gounopoulos, Eleni Kostantinidou, Dimitris Spagoulakis, Stavros Patrinos, Adonis Kodaxakis, Aspasia Mavronassou, Martha-Spyridoula Katsarou
PA500	**Combined Respiratory Muscle Training improves Long Covid symptoms - results from the Covid Virtual Recovery Study** Nina Bausek (Gloggnitz, Austria), Meredith, G Shea, Courtney, M Wheatley-Guy, Bruce Johnson
PA501	**Effects of manuel therapy and inspiratory muscle training on respirotary functions, fatigue and activities in children with muscular disease** Burcu Işıkcı (ZEYTİNBURNU, Turkey), Ahu Gizem Akkuş, Yasemin Buran Çırak, Gül Deniz Yılmaz Yelvar, Nurgül Dürüstkan Elbaşı, Yunus Emre Tütüneken, Kübra Kardeş
PA502	**Physiological effects of nasal high flow therapy in people with chronic obstructive pulmonary disease during exercise.** Tristan Bonnevie (Saint Léger Du Bourg Denis, France), Francis-Edouard Gravier, Pauline Smondack, Helena Brunel, Yann Combret, Clément Médrinal, Guillaume Prieur, Fairuz Boujibar, Thomas Similowski, Jean-François Muir, Antoine Cuvelier, Maxime Patout
PA503	**Clinical assessment of endothelial function in patients with chronic obstructive pulmonary disease undergoning pulmonary rehabilitation** Claudio Candia (Naples, Italy), Pasquale Ambrosino, Giuseppina Marcuccio, Silvestro Ennio D'Anna, Salvatore Fuschillo, Roberto Formisano, Lucia Abagnale, Anna Lanzillo, Antonio Molino, Mauro Maniscalco
PA504	**Effectiveness assessment of oscillating positive expiratory pressure (OPEP) devices: Using a clinically relevant laboratory measure** Jason Suggett (London (ON), Canada), Rob Costa
PA505	**Estimation of the minimal important difference (MID) for the 1 repetition max (1RM) in COPD** George D Edwards (Ilford, United Kingdom), Suhani Patel, Timothy Jenkins, Karen A Ingram, William D-C Man, Claire M Nolan
PA506	**Impaired training-induced myogenesis in COPD is due to blunt expression of extracellular matrix proteins.** Davina C M Simoes (Newcastle upon Tyne, United Kingdom), Efpraxia Kritikaki, Gerasimos Terzis, Ioannis Vogiatzis
PA507	**Interval-load vs constant-load upper limb exercise in patients with COPD: a cross-over study** Mara Paneroni (Mazzano (BS), Italy), Alessandro Cavicchia, Beatrice Salvi, Laura Bertacchini, Michele Vitacca
PA508	**Estimation of the minimal important difference (MID) of quadriceps maximum voluntary contraction (QMVC) in response to pulmonary rehabilitation (PR) in COPD** George D Edwards (Ilford, United Kingdom), Suhani Patel, Timothy Jenkins, Karen A Ingram, William D-C Man, Claire M Nolan
PA509	**Effect of Baduanjin combined with singing therapy on respiratory function of COPD patients** Qiao Qiao (Changchun, China), Hongjing Lin
PA510	**Strength, effort tolerance and muscle fatigue in COPD patients under Long Term Oxygen Therapy: role of different obstruction severity** Alessandro Cavicchia (Verona, Italy), Michele Vitacca, Beatrice Salvi, Laura Bertacchini, Massimo Venturelli, Mara Paneroni
PA511	**Immediate Effects of Thoracic Manual Therapy on Pulmonary Function in Stroke Patients** Yunus Emre Tutuneken (İstanbul, Turkey), Emine Atici, Kenan Gul, Yasemin Buran Çırak, Kubra Kardes, Nurgül Dürüstkan Elbaşı, Burcu Isıkcı
PA512	**Reliability of remote 1-minute sit-to-stand test to measure physical capacity in patients with chronic respiratory diseases** Santiago Larrateguy (Paraná, Argentina), Matias Otto-Yañes, Juan Bogado, Luis Larrateguy, Isabel Blanco, Elena Gimeno-Santos, Rodrigo Torres-Castro

PA513	**Reference values for the 1-minute sit-to-stand test for the Argentine population** Santiago Larrateguy (Paraná, Argentina), Santiago Burgos, Rocio Iglesias, Laura Carrizo, Martin Cestari, Santiago Saavedra, Luis Larrateguy, Matias Otto-Yañez, Guillermo Mazzucco, Elena Gimeno-Santos, Rodrigo Torres-Castro
PA514	**Modified six-minutes walk test in children with medical complexity and chronic lung disease** Gregory Villarroel Silva (Santiago, Chile), Macarena Faúndez Silva, Paula Vera Tapia, Gonzalo Moscoso Altamira, Barbara Moya Torres, Maria Jose Miranda Miño, Ignacio Oyarzun Aguirre
PA515	**Biomarkers differentiating acute heart failure from COPD exacerbations: not much evidence** Sanne H B van Dijk (Enschede, Netherlands), Marjolein G J Brusse-Keizer, Charlotte C Bucsán, Eline H Ploumen, Wendy J C Van Beurden, Job Van Der Palen, Carine J M Doggen, Anke Lenferink
PA516	**Investigation of Disease Status, Dyspnea Severity, and Disease Symptoms According to Exercise Habits in Patients with Chronic Obstructive Pulmonary Disease Completing Pulmonary Rehabilitation Program** Melissa Köprülüoglu (Izmir, Turkey), İlknur Naz, Hülya Doğan Şahin
PA517	**Findings from a modified six-minute walk test (m-6MWT) in patients attending the long COVID clinic** Emma Denneny (London, United Kingdom), Robert Chapman, Rebecca Evans, Ewen Brennan, Rebecca Livingston, Rebecca Gore, Helen Purcell, Jeremy Brown, Ronan Astin, Toby Hillman, Melissa Heightman
PA518	**Relevance of multidimensional dyspnea assessment in context of pulmonary rehabilitation** Virginie Molinier (Lodève, France), Espérance Moine, Pauline Caille, Nathalie Fernandes, Francois Alexandre, Nelly Heraud

PS-20 in poster area — Session 64 — 08:00 - 09:30

Poster session: How much can we afford? The balance of costs and clinical benefits in the light of chronic respiratory diseases

Disease(s) : Airway diseases | Respiratory critical care

Method(s) : General respiratory patient care | Epidemiology | Public health | Respiratory intensive care | Palliative care

Tag(s) : Clinical

Chairs : Sylvia Hartl (Wien, Austria), Chair to be confirmed

PA519	**A retrospective study on the association of covid 19 vaccination status with hospital outcomes and costs (expenses) among patients admitted in a tertiary government hospital** April Calleja, Andre Angelo Tanque, Norman Maghuyop
PA520	**Estimating costs associated with paediatric Respiratory Syncytial Virus infection managed in the hospital setting in England.** Rebecca Butfield (Tadworth, United Kingdom), Jack Said
PA521	**A cost and environmental analysis of a vibrating mesh nebuliser** Amy Dymond (York, United Kingdom), Daniela Afonso, Stuart Mealing
PA522	**Health, environmental, and societal impact of asthma care pathway in the UK: A cost-of-illness study** Martina Orlovic (Parma, Italy), Dimitrios Tzelis, Ines Guerra, Vlada Bar-Katz, Nicolas Wolley, Hannah Bray, Mohammed Hanslot, Omar Usmani, Alessandra Madoni
PA523	**Cost effectiveness analysis of treatments for children with uncontrolled asthma symptoms despite taking inhaled corticosteroids** Giovanna Culeddu (Bangor, United Kingdom), Ian Sinha, Sarah Donegan, Michelle Maden, Sofia Cividini, Katie Rose, Olivia Fulton, Stephen Turner, Catrin Tudor Smith, Dyfrig A. Hughes
PA524	**Development, validation and application of an asthma cost-effectiveness model for value assessment of digital inhaler adherence enhancing strategies** Susanne J. van de Hei (Groningen, Netherlands), Chong H. Kim, Persijn J. Honkoop, Jacob K. Sont, Tjard R.J. Schermer, Elaine Mac Hale, Richard W. Costello, Janwillem W.H. Kocks, Maarten J. Postma, Job F.M. Van Boven
PA525	**Direct health care cost of Chronic Obstructive Pulmonary Disease (COPD) in Morocco:a cost of illness study.** Soumaya Benmaamar (FEZ, Morocco), Btissame Es-Sabbahi, Mohamed Teghi Heiba, Mohamed Omari, Ibtissam El Harch, Mohammed Youbi, Latifa Belakhhel, Loubna Abousselham, Hafid Hachri, Imane El Menchawyi, Samira El Fakir, Mohammed Chakib Benjelloun, Nabil Tachfouti
PA526	**ANALYSIS OF THE CLINICAL CHARACTERISTICS AND COMORBIDITIES OF PATIENTS WITH COPD AND HOME MECHANICAL VENTILATION** Marina Galdeano Lozano (Montacada I Reixach (Barcelona), Spain), Adriana Martin Pascual, Carmen Fernandez Arias, Ariadna Ning Morancho Pallaruelo, Guillem Hernandez Guillamet Hernandez Guillamet, Francesc López Seguí, Agnes Hernández Biette, Irene Aldás Criado, Antoni Marin Muñiz, Monica Matute Villacis, Ignasi Garcia Olivé, Jorge Abad Capa

PA527 **Feelings of Family Members of Patients with Chronic Respiratory Disease Before and After the Introduction of Home Oxygen Therapy**
Rika Tonami (Fukui, Japan), Miyuki Sato, Keiko Kobayashi, Keiko Kobayashi

PA528 **The last hours in a pulmonology ward: a retrospective look at end-of-life care**
Maria Conceicao Alvarenga Santos (Lisboa, Portugal), Rita Enriquez, Joana Duarte, Catarina Amorim, Fernanda Mendes, Margarida Duarte Barata, Nídia Caires, Raquel Rosa, Teresa Martín, Inês Claro, Filipa Todo Bom

PA529 **Evaluation of an audio-visual informed consent procedure in a diagnostic tuberculosis trial**
Luis Gómez Paciello (Concepción, Paraguay), Floryn Schippers, Ana Aguiar, Cecile Magis

PA530 **Late Breaking Abstract - Cradle-to-grave emission reduction for dry powder inhaler product portfolio**
Hanna Hisinger-Mölkänen (Tuusula, Finland), Matleena Inget, Satu Lähelmä, Noora Paronen

PS-4 in poster area Session 66 08:00 - 09:30

Poster session: New concepts in pulmonology

Disease(s) : Respiratory critical care | Thoracic oncology | Airway diseases | Interstitial lung diseases | Pulmonary vascular diseases

Method(s) : Cell and molecular biology | Public health | Endoscopy and interventional pulmonology | Imaging | Physiology | General respiratory patient care | Pulmonary function testing

Tag(s) : Basic science, Translational

Chairs : Jonathan Baker (London, United Kingdom)

PA550 **Alveomic fingerprinting of acute inflammation in the human lung**
Stuart Dickson (Glasgow, United Kingdom), Antonella Pellicoro, Erin Gaughan, Thomas Craven, Jessica Ghobrial, Sarah Kelly, Ahad Abdalla, Hazel Stewart, Tarek Haloubi, Tom Michael Quinn, Bethany Mills, Renske Hoekstra, Manu Shankar-Hari, Kevin Dhaliwal

PA551 **Primary human type II alveolar cells cultured in human decellularized lung slices maintain phenotype and respond to TGF-ß1 stimuli with altered ECM production**
Anna-Karin Larsson-Callerfelt (Lund, Sweden), Oskar Rosmark, Mans Kadefors, Goran Dellgren, Christofer Karlsson, Anders Ericsson, Sandra Lindstedt, Johan Malmstrom, Oskar Hallgren, Gunilla Westergren-Thorsson

PA552 **Late Breaking Abstract - Role of eosinophil mitochondrial function in severe eosinophilic asthma**
Janice Koranteng (London, United Kingdom), Katie Raby, Piers Dixey, Sook Ling Lai, Peter Howarth, Kian Fan Chung, Charalambos Michaeloudes, Pankaj Bhavsar

PA553 **High-content imaging assays to monitor the effects of cigarette smoke on mitochondrial health**
Maria Karlsson (Västra Frölunda, Sweden), Tiiu Wennberg, Gabriel Skogberg, Johan Jirholt

PA554 **COX-1-derived mediators in the functional interplay between bronchi and vessels**
Ida Cerqua (Napoli, Italy), Elisabetta Granato, Antonietta Rossi, Maria Lopes Pires, Nicholas Kirkby, Jane Mitchell, Giuseppe Cirino, Fiorentina Roviezzo

PA555 **Distinct expression of collagen IV chains; a potential marker to discriminate COPD phenotypes?**
Natalia El-Merhie (Giessen, Germany), Ceren Mutgan, Rajender Nandigama, Clemens Ruppert, Andreas Guenther, Ali Önder Yildirim, Rajkumar Savai, Marek Bratkuhn, Grazyna Kwapiszewska

PA556 **Pulmonary consequences of global and focal cerebral ischemia in rats**
Petra Somogyi (Hódmezővásárhely, Hungary), Ibolya Tóth, Bence Ballók, Zaid Hammad, Ramez A. Hussein, Fruzsina Kun-Szabó, Szilvia Kecskés, János Lückl, József Tolnai, Gergely H. Fodor, Eszter Farkas, Ferenc Peták

PA557 **Evidence of microvascular damage in Covid-19 survivors by simultaneous measure of diffusing capacity for carbon monoxide and nitric oxide.**
Nicola Compagnone (San Cipriano d'Aversa, Italy), Patrizia Rovere-Querini, Rebecca De Lorenzo, Cecilia Bussolari, Giacomo Pacioni, Giordano Vitali, George Cremona

PA559 **Effects of vitamin D3 on human lung fibroblasts derived from patients with IPF**
Tom Voisin (Rennes, France), Audrey Joannes, Claudie Morzadec, Dominique Lagadic-Gossmann, Cécile Le Naoures, Bertrand Richard De Latour, Stéphane Jouneau, Laurent Vernhet

PA560 **Induction of epithelial cellular senescence and pro-fibrotic changes in human precision-cut lung slices**
Maria Camila Melo Narvaez (Munich, Germany), Mircea-Gabriel Stoleriu, Anne Hilgendorff, Claudia Staab-Weijnitz, Ali Oender Yildirim, Melanie Koenigshoff, Mareike Lehmann

PA561 **Interaction of human lung mesenchymal cells with an elastin-derived extracellular matrix-like microenvironment**
Arturo Ibáñez Fonseca (Lund, Sweden), Linnea Persson, Zackarias Söderlund, Måns Kadefors, Linda Elowsson, José Carlos Rodríguez-Cabello, Gunilla Westergren-Thorsson

PA562	**Extracellular vesicles are taken up by airway epithelial cells through a dynamin-dependent mechanism** Justine Devulder (London, United Kingdom), Jonathan Baker, Susie Cao, Louise Donnelly, Peter Barnes
PA563	**Mitochondrial transplantation reduces endothelial injury in the ARDS environment in vitro** Anna Krasnodembskaya (Belfast (Belfast), United Kingdom), Dayene de Assis Fernandes Caldeira, Johnatas D Silva, Patricia R M Rocco, Pedro S Leme, Fernanda F Cruz
PA564	**Effect of Galantamine on lipopolysaccharide-induced acute lung injury during neutropenia recovery in mice** Hyonsoo Joo (Seoul, Republic of Korea), Oh Beom Kwon, Seong Yong Lim, Jin Woo Kim
PA565	**Omeg@Silica microparticles modulates p53 and cell proliferation in A549** Caterina Di Sano (Palermo, Italy), Claudia D'Anna, Rosaria Ciriminna, Mario Pagliaro, Elisabetta Pace
PA566	**Rapamycin reduces oxidative stress-induced senescence by increasing sirtuin-1 in small airway epithelial cells** Faye Shrosbery (London, United Kingdom), Werngard Czechtizky, Louise Donnelly, Peter Barnes
PA567	**Impaired STAT3 function increases susceptibility to LPS-induced lung injury in hyper-IgE syndrome** Verena Haefner (Neuherberg, Germany), David Kutschke, Carola Voss, Christine Hollauer, Christine Wolf, Ali Önder Yildirim, Renate Effner, Ellen Renner, Tobias Stoeger, Beate Hagl
PA568	**Neutrophil extracellular traps drive lung remodelling in tuberculosis** Julia Kutschenreuter (London, United Kingdom), Ramla Cusman, Daniela E. Kirwan, Jon S. Friedland, Deborah L.W. Chong
PA569	**Tartrate-resistant acid phosphatase activity and apoptotic clearance by alveolar macrophages of rabbits on an oil diet and with pulmonary emphysema** Snežana Zunic (Belgrade, Republic of Serbia), Svetlana Zunic

PS-5 in poster area — Session 67 — 08:00 - 09:30

Poster session: New insights in positive airway pressure therapy

Disease(s) : Sleep and breathing disorders, Respiratory critical care

Method(s) : General respiratory patient care, Pulmonary rehabilitation, Public health, Epidemiology, Physiology

Tag(s) : Clinical

Chairs : Matteo Bradicich (Zollikerberg, Switzerland)

PA570	**Predictors for CPAP pressure titration in obstructive sleep apnea syndrome; could Baveno classification be helpful?** Ahmed Ehab (Schwaikheim, Germany), Axel T. Kempa, Harald Englert, Shaza Almasri Bittar, Aida M. Yousef, Heba Wagih Abdelwahab
PA571	**Usefulness of nocturnal oximetry (NOxi) following positive airway pressure (PAP) initiation** Clara Bianquis (Saint-Prix, France), Vanessa Bironneau, Cécile Londner, Carole Philippe, Inès Zaien, Valérie Attali, Garance Vaillant, Bérénice Soyez, Stéphane Attard, Gum Suk Cabrillac, Isabelle Arnulf, Justine Frija-Masson, Maxime Patout
PA572	**TRANSCUTANEOUS CAPNOGRAPHY AS A MONITOR OF POSITIVE AIRWAY PRESSURE TREATMENT** Jorge Rodriguez Sanz (ZARAGOZA (SPAIN), Spain), María Aguado Agudo, Marta Miranda Hernández, Luisa Margarita Cabrera Pimentel, María Teresa Martín Carpi
PA573	**Prevention of obstructive apnea events with machine learning** Hamed Hanafi (Halifax (NS), Canada), Julia Paffile, Meagan Sinclair, Kamal El-Sankary, Scott Lowe, Sageev Oore, Stephen Driscoll, Thomas Penzel, Ingo Fietze, Sanjay Patel, Reena Mehra, Debra Morrison
PA574	**The efficiency of azelastine hydrochloride and fluticasone propionate nasal spray to improve PAP adherence in patients with obstructive sleep apnea** Rachata Wongchan (Pathumthani., Thailand), Chatkarin Tepwimonpetkun
PA575	**Current treatment strategies in managing side effects associated with domiciliary Positive Airway Pressure (PAP) therapy for patients with sleep disordered breathing: A systematic review and meta-analysis** Stephanie K. Mansell (Guildford (Surrey), United Kingdom), Nikesh Devani, Amar Shah, Swapna Mandal, Silvia Schievano, Eleanor Main
PA576	**Evaluation of CPAP adherence in non-obese and obese obstructive sleep apnoea patients** Liam Chilton (Hull, United Kingdom), Harriet Hearn, Shoaib Faruqi
PA577	**Factors influencing the CPAP therapeutic adherence in women with obstructive sleep apnea (OSA)** Bárbara Gracia Hernández (Huelva, Spain), Alberto González Hernández, Ana Belén Rodríguez Gómez, Jessiva Ivana Hilares Vera

PA578 **Compliance with continuous positive airway pressure in the military: a Tunisian study**
Hana Mrassi (Tunis, Tunisia), Islam Mejri, Marwa Kacem, Chiraz Aichaouia, Samira Mhamdi, Zied Moatemri

PA579 **Early predictors of long-term PAP compliance**
Andrew Scott (Brisbane (QLD), Australia), James Howell, Travis Bell, Judy Carter, Luca Maioli, Alex Bruce

PA580 **Investigating associations between social determinants, self-efficacy measurement of sleep apnea and CPAP adherence: the SEMSA study**
Sébastien Bailly (Grenoble, France), Thibaut Gentina, Elodie Gentina, Bernard Douay, Jean-Arthur Micoulaud, Jean-Louis Pépin

PA581 **Heathy adherer effect and positive airway pressure therapy of obstructive sleep apnea**
Claire Launois (Reims, France), Sébastien Bailly, Wojciech Trzepizur, François Goupil, Thierry Pigeanne, Laurene Leclair-Visonneau, Phillippe Masson, Acya Bizieux-Thaminy, Nicole Meslier, Sandrine Kerbrat, Frédéric Gagnadoux

PA582 **Effects of CPAP and its withdrawal on nocturnal blood pressure and sleepiness in obstructive sleep apnea – a two-phase interventional trial**
Joël Julien Herzig (Zürich, Switzerland), Robin Mozolowski, Martina Meszaros, Malcolm Kohler, Silvia Ulrich, Esther Irene Schwarz

PA583 **Continuous Positive Airway Pressure effects on electrocardiographic manifestations of Severe Obstructive Sleep Apnea**
Amal Saidani (Bizerte, Tunisia), Fateh Kadardar, Sofiene Haboubi, Mouna Hacheni, Wiem Satouri, Hedi Ben Slima

PA584 **Peak airflow-triggered adaptive servo-ventilation improves sleep structure of patients with heart failure and sleep apnea**
Shoichiro Yatsu (Toronto, Canada), Christian M. Horvath, John S. Floras, Alexander G. Logan, Clodagh M. Ryan, T. Douglas Bradley

PA585 **SUBJECTIVE HRQOL IN PATIENTS WITH SLEEP APNOEA SYNDROME WHO UNDERWENT PAP THERAPY IN A REHABILITATION SETTING: A FOLLOW-UP STUDY**
Francesco Fanfulla (Pavia (PV), Italy), Antonia Pierobon, Martina Vigorè, Eugenia Taurino, Gemma Grassi, Valeria Torlaschi, Marina Maffoni, Rita Maestroni, Roberto Maestri

PA586 **Sleep apnea and psoriasis: a multidisciplinary approach**
Patrizia Pochetti (Vercelli, Italy), Beatrice Ragnoli, Beatrice Bacco, Ginevra Pertusi, Mario Malerba

PA587 **Insights from a hospitalised domiciliary NIV (DNIV) population: the use of DNIV data.**
Lynn McDonnell (London, United Kingdom), Stephanie Mansell, Rhiannon Parry, Swapna Mandal

PA588 **Ventilation mask choice: development of a custom made test bench**
Baptiste Rouchié (Bagneux, France), Clara Virbel-Fleischman, Yann Retory, Alexandra Schmidt, Giorgio Mattana, Benoit Piro, Emilie Bequignon, Bruno Louis, Steeve Reisberg

PA589 **Ventilation mask choice: feedbacks by 72 Health professionals through pointing area diagrams**
Baptiste Rouchié (Bagneux, France), Maxime Fieux, Clara Virbel-Fleischman, Yann Retory, Alexandra Schmidt, Emilie Bequignon

PS-6 in poster area Session 68 08:00 - 09:30

Poster session: From bench to bedside: translational studies in airway diseases

Disease(s) : Airway diseases

Method(s) : Cell and molecular biology Physiology Public health General respiratory patient care Pulmonary rehabilitation Imaging

Tag(s) : Translational

Chairs : Lena Uller (Lund, Sweden), Ian M. Adcock (London, United Kingdom)

PA590 **BNT162b2 COVID-19 vaccine increases the sensitivity to histamine in human hyperresponsive airways**
Luigino Calzetta (Roma (RM), Italy), Alfredo Chetta, Marina Aiello, Annalisa Frizzelli, Josuel Ora, Enrico Melis, Francesco Facciolo, Lorenzo Ippoliti, Andrea Magrini, Paola Rogliani

PA591 **BNT162b2 COVID-19 vaccine increases contractility to EFS in human hyperresponsive airways**
Luigino Calzetta (Roma (RM), Italy), Alfredo Chetta, Marina Aiello, Annalisa Frizzelli, Josuel Ora, Enrico Melis, Francesco Facciolo, Lorenzo Ippoliti, Andrea Magrini, Paola Rogliani

PA592 **The effects of pH alteration on human metapneumovirus infection in human airway epithelial cells**
Ivana Daniels (Indianapolis, United States), Jessica Saunders, Laura Smith, Taiya Edwards, Benjamin Gaston, Michael Davis

PA593	**The effect of magnetic stimulation of paravertebral ganglia on the anti-inflammatory reserves in COPD patients** Bohdana Basina (Dnipropetrovsk, Ukraine), Nataliia Sanina, Tetyana Pertseva, Svitlana Panina
PA594	**Modulation of wound healing in human and murine respiratory epithelial cells** Francine Medjiofack Djeujo (PADUA, Italy), Davide Malfacini, Marcello Trevisani, Girolamo Calo'
PA595	**Characterization of contractile and relaxant responses in intralobular airways using a novel ex-vivo guinea pig model** Mu Nie (Solna, Sweden), Jielu Liu, Jesper Säfholm, Mikael Adner
PA596	**Characterization of a corticosteroid-resistant inflammatory model of human bronchial epithelial cells cultured at air-liquid interface** Fabrizio Facchinetti (Parma (PR), Italy), Stefano Marchesi, Elisa Schiavi, Andrea Disanza, Leonardo Barzaghi, Massimiliano Bonanni, Giorgio Scita
PA597	**The level of ICS in BDP/FF/GB modulates inflammation in a human ex vivo model of severe eosinophilic asthma** Paola Rogliani (Roma (RM), Italy), Josuel Ora, Enrico Motta, Enrico Melis, Francesco Facciolo, Luigino Calzetta
PA598	**Effects of salbutamol and its combination with aminophylline on human stem cell-derived cardiomyocytes´ function.** Kristian Brat (Brno, Czech Republic), Simon Klimovic, Martin Pesl, Jan Pribyl, Daniil Kabanov, Deborah Beckerova, Martin Scurek, Vladimir Rotrekl
PA599	**EP395 effect on cell diapedesis measured by intravital microscopy** Yanira Riffo-Vasquez (London, United Kingdom), Jennifer A. Kricker, Clive Page, Michael J. Parnham
PA600	**Immunomodulatory effects of tanimilast on human dendritic cells activated by thymic stromal lymphopoietin** Fabrizio Facchinetti (Parma (PR), Italy), Oanh Hoang Nguyen, Laura Tiberio, Giulia Ripari, Gino Villetti, Maurizio Civelli, Daniela Bosisio
PA601	**Tanimilast modulates IL-17 response in lymphocytes under different in vitro T17-promoting conditions** Elisa Schiavi (Parma, Italy), Gino Villetti, Maurizio Civelli, Fabrizio Facchinetti
PA602	**Curcumin and grape pomace extract loaded in liposomes to counteract oxidative stress and inflammation induced by cigarette smoke in bronchial epithelial cells** Maria Ferraro (Palermo (PA), Italy), M.Letizia Manca, Rita Abi Rached, Serena Di Vincenzo, Valentina Lazzara, Paola Pinto, Elisabetta Pace
PA603	**In vitro antibiofilm activity of hexylresorcinol lozenges against oropharyngeal pathogens** Katja Hill (Cardiff, United Kingdom), Priyanka Sharma, Charlotte Richards, Jennifer Adams, Lydia Powell, Elaine Ferguson, Graca Coutinho, Thomas Hallett, Anuradha Kulasekaran, David Thomas
PA604	**A new formulation of n-acetylcisteine, carnitine, curcumin and B2 vitamin exerts anti-oxidant and anti-inflammatory effects in a primary 3D bronchial epithelial model exposed to cigarette smoke extracts.** Elisabetta Pace (Palermo (PA), Italy), Serena Di Vincenzo, Maria Ferraro, Valentina Lazzara, Poala Pinto, Filippo Catalano, Maria Rosaria Bonsignore
PA605	**Maternal e-cigarettes reduce offspring size and alter terminal airway cells in D. melanogaster** Beate Höschler (Borstel, Germany), Hanna Angstmann, Birte Ehrhardt, Susanne Krauss-Etschmann
PA606	**Eosinophil depletion decrease cardiovascular dysfunction in an emphysema with exacerbation rat model** Axel Bellanger (Montpellier, France), Pierre Edouard Grillet, Isabelle Vachier, Quentin Wynands, Elodie Desplanche, Anne Virsolvy, Fares Gouzi, Arnaud Bourdin, Olivier Cazorla
PA607	**Late Breaking Abstract - The interim analysis result of allogeneic umbilical cord mesenchymal stem cells administration to moderate COPD patients: an open-label, dose escalation, Phase I study.** Kang-Yun Lee (New Taipei City, Taiwan), Kuan-Yuan Chen, Chang-Yo Hsuan, Ching-Mei Chen
PA608	**Late Breaking Abstract - Safety and Efficacy of RLS-0071 on Neutrophils and Inflammatory Mediators in a Phase--1b Inhaled LPS Study** Jens Hohlfeld (Hannover, Germany), Olaf Holz, Meike Müller, Saskia Carstensen, Linda Dell, Jessica Goss, Pamela Hair, Philipp Badorrek, Kenji Cunnion, Ulrich Thienel

PS-7 in poster area — Session 69 — 08:00 - 09:30

Poster session: Biomarkers in chronic obstructive pulmonary disease

Disease(s) : Airway diseases

Method(s) : General respiratory patient care Physiology Cell and molecular biology Epidemiology Pulmonary function testing Public health

Tag(s) : Translational

Chairs : Louise Donnelly (London, United Kingdom)

PA609	**Endothelial dysfunction markers in patients with chronic obstructive pulmonary disease** Olga Sadovenko (Kharkiv, Ukraine)
PA610	**Phenotypes and cluster analysis as predictors of survival in a real-life COPD cohort (RETRO-POPE Study)** Vladimir Koblizek (Hradec Králové, Czech Republic), Branislava Milenkovic, Michal Svoboda, Jana Kocianova, Stanislav Holub, Vladimir Zindr, Miroslav Ilic, Jelena Jankovic, Vojislav Cupurdija, Jiri Jarkovsky, Boris Popov, Arschang Valipour
PA611	**Airway epithelial TSLP production is increased in COPD patients** Lynda SABER CHERIF (Reims, France), Maeva-A Devilliers, Jeanne-Marie Perotin, Julien Ancel, Delepine Gonzague, Myriam Polette, Gaetan Deslee, Valérian Dormoy
PA612	**FENO50 stability over a 2–year period in relation to COPD outcomes** Marieann Högman (Uppsala, Sweden), Christer Janson, Andreas Palm, Björn Ställberg, Kristina Bröms, Karin Lisspers, Maria Hårdstedt, Andrei Malinovschi
PA613	**Optimising research bronchoalveolar lavage in COPD and alpha-1 antitrypsin deficiency** Malcolm Herron (Dublin, Ireland), Daniel Fraughen, Suzanne Roche, Lasya Kanchi, Emma Leacy, Lameese Alhaddah, Ronan Heeney, Tomas Carroll, Mark Murphy, Noel Gerard Mcelvaney
PA614	**Hyperkalemia is an underestimated risk factor in COPD: a retrospective study from two Phase 3 trials** Jukka Mäenpää (Mölndal, Sweden), Isobel Anderson, Caroline A. Owen, Ulrika Emerath, Rod Hughes, Stefan Sultana, Marita Olsson
PA615	**Functional characterization of FoxP3+ regulatory T cells in Chronic Obstructive Pulmonary Disease** Anjana Talwar (Noida (Uttar Pradesh), India), Meghashree Sampath, Geetanjali Bade, Randeep Guleria, Sudip Sen, Anant Mohan
PA616	**Comparison of stable state and historic blood eosinophil counts in COPD patients at the GOLD guideline thresholds.** Arun Prasad (North Shields, United Kingdom), Carlos Echevarria, John Steer, Stephen. C. Bourke
PA617	**Blood-biomarkers to assess acute respiratory events (ARE) risk in COPD and chronic bronchitis (CB)** Jun Chen (, China), Yanqiu Wu, Tao Wang, Shuling Hu, Fuqaing Wen, Paul Jones, Nanshan Zhong
PA618	**Associations between serum Humanin levels and outcomes in stable COPD.** Carlos Antonio Amado Diago (Santander (Cantabria), Spain), Paula Martin-Audera, Juan Agüero-Calvo, Mayte García-Unzueta, Bernardo Alio Lavin, Armando Raul Guerra, Ana Berja, Tamara Quijano, Cristina Ghadban
PA619	**Can we predict the prognosis of COPD with a routine blood test?** Améni Nâaroura (Tunis, Tunisia), Jihen Ben Amar, Hend Ouertani, Emna Ben Jemia, Haifa Zaibi, Hichem Aouina
PA620	**Burden of disease in COPD, stratified by eosinophils levels: a UK biobank study** Catia C Proenca (Basel, Switzerland), Oscar Dumoulin, Aurélie Chekroun Martinot, Pepi Hurtado, Mathieu Rose
PA621	**Dynamics of iron content in bronchoalveolar fluid in COPD patients** Alla Zuban (Ivano-Frankivsk, Ukraine), Mykola Ostrovskyy, Mariana Kulynych-Miskiv, Iryna Savelikhina, Oleksandr Varunkiv, Iryna Makoida, Olha Melnyk-Sheremeta
PA622	**Study to analyze factors responsible for readmission within 90 days in COPD patients in tribal area of central India.** Rudrika Pushpraj Bhatele (Jabalpur, India), Sandeep Singh, Sanjay Bharty
PA623	**The role of RNA binding proteins in eosinophilic COPD.** Ilektra Voulgareli (Αθηνα, Greece), Maria Semitekolou, Ioannis Morianos, Myrto Blizou, Spyridon Papiris, Georgios Hillas, Petros Bakakos, Stylianos Loukides
PA624	**Novel spirometric parameters of the flow volume curve in COPD.** James Dean (Holmes Chapel, United Kingdom), Stephen Fowler, Dave Singh
PA625	**Influence of tobacco-smoking on serum amyloid A (SAA) level in stable COPD patients.** Bohdana Basina (Dnipropetrovsk, Ukraine), Daria Koval
PA626	**Clinical significance of serum oxidative stress in COPD patients** Keitaro Nakamoto (Tokyo, Japan), Masato Watanabe, Masaoki Saito, Keisuke Kasuga, Chika Miyaoka, Yuki Yoshida, Aya Hirata, Hiroki Nunokawa, Junpei Aso, Yasuo Nakamoto, Manabu Ishida, Kojiro Honda, Saori Takata, Takeshi Saraya, Masafumi Shimoda, Yoshiaki Tanaka, Mikio Saotome, Ken Ohta, Haruyuki Ishii
PA627	**Could red cell distribution width predict COPD severity?** Améni Nâaroura (Tunis, Tunisia), Jihen Ben Amar, Hend Ouertani, Emna Ben Jemia, Haifa Zaibi, Hichem Aouina

PA628	**Association of Interleukin-6 and Tumor necrosis factor alpha with COPD severity:** safa marzouki (ben arous, Tunisia), Abir Hedhli, marzouki safa, S Hajtaeib, Khadija Echi, Lilia Laadhar, Yassine Ouahchi, Sana Cheikhrouhou, Sonia Toujani, M Sellami, Meriem Mjid, Besma Dhahri

PS-8 in poster area — Session 70 — 08:00 - 09:30

Poster session: Advances in the management of asthma and allergic airways disease

Disease(s) : Airway diseases, Interstitial lung diseases, Sleep and breathing disorders

Method(s) : Cell and molecular biology, Pulmonary function testing, General respiratory patient care, Epidemiology, Public health

Tag(s) : Clinical

Chairs : Christian Taube (Essen, Germany), Christina Bal (Wien, Austria)

PA629	**Response to biologics and clinical remission in the adult GAN severe asthma cohort.** Katrin Milger-Kneidinger (Munich, Germany), Hendrik Suhling, Dirk Skowasch, Annette Holtdirk, Nikolaus Kneidinger, Jürgen Behr, Hartmut Timmermann, Christian Schulz, Olaf Schmidt, Rainer Ehmann, Marek Lommatzsch, Eckard Hamelmann, Marco Idzko, Christian Taube, Roland Buhl, Stephanie Korn
PA630	**Real-world mepolizumab outcomes in severe asthma: REALITI-A post hoc analysis by exacerbation history** Diego Bagnasco (GENOVA (GE), Italy), Diane Lougheed, Vijay Subramanian, Ian J Clifton, Robert G Price, Peter Howarth
PA631	**A real-life comparison of patients with severe eosinophilic asthma treated with benralizumab or mepolizumab** Torben Smidt-Hansen (Stavtrup, Denmark), Helle H Andersen, Lene M Pedersen, Tina Skjold, Johannes Schmid
PA632	**Mepolizumab long-term safety in severe eosinophilic asthma** Ian Douglas Pavord (Oxford (Oxfordshire), United Kingdom), Robert Chan, Peter Howarth, Martin Gilson, Robert G Price, Jorge F Maspero
PA633	**Dupilumab may be beneficial for severe asthma patients with high FeNO And low blood eosinophil counts in real world observational study.** Tatsuhiko Uno (saitama prefecture, Japan), Yuki Hoshino, Tomoyuki Soma, Yoshitaka Uchida, Takeshi Asado, Reina Ishii, Kazuki Katayama, Hidetoshi Iemura, Takahiro Uchida, Shun Shinomiya, Sachiko Miyauchi, Kazuyuki Nakagome, Hidetoshi Nakamura, Makoto Nagata
PA634	**A modified COMSA score is a good tool to identify responders and non-responders to mepolizumab in severe asthma** Valentyna Yasinska (Rönninge, Sweden), Maria Sparreman-Mikus, Johan Kolmert, Lars I. Andersson, Andrei Malinovschi, Christer Janson, Barbro Dahlén, Sven-Erik Dahlén
PA635	**German Asthma Net: Characterization of responders of anti-IL5 and anti-IL5(R) therapy** Christina Bal (Wien, Austria), Katrin Milger, Dirk Skowasch, Christian Schulz, Margret Jandl, Olaf Schmidt, Rainer Ehmann, Slagjana Stoshikj, Sonja Zehetmayer, Christian Taube, Eckard Hamelmann, Roland Buhl, Stephanie Korn, Marco Idzko
PA636	**Patients with severe asthma reducing ICS treatment during treatment with biologicals do not have more frequent exacerbations.** Torben Smidt-Hansen (Stavtrup, Denmark), Helle H Andersen, Lene M Pedersen, Anne-Sofie Bjerrum, Tina Skjold, H.J. Hoffmann, Johannes Schmid
PA637	**Factors predictive of poor adherence to treatment in patients with asthma** Aboubekr Imzil (Agadir, Morocco), Ossama Halloumi, Abdelkrim Khannous, Abdelmajid Oulahbib, Youness Essaid, Fatiha Bounoua, Khadija Ait Nasser, Houssame Ennaciri, Sofiya Farhat, Hanane Ikrou, Nada Boutbagha, Houda Moubachir, Hind Serhane
PA638	**Role of atopy in occupational asthma** Amira Belkahla (Tunis, Tunisia), Amira Belkahla, Dorra Brahim, Mariem Mersni, Imen Youssef, Najla Mechergui, Ghada Bahri, Hanene Ben Said, Soumaya Fenniche, Nizar Ladhari
PA639	**Impact of smoking on biologicals treatment response in patients from the German Severe Asthma (GAN) Registry** Slagjana Stoshikj (Wien, Austria), Leonie Biener, Jonas Brugger, Christoph Krall, Kathrin Milger, Christian Schulz, Margret Jandl, Rainer Ehmann, Olav Schmidt, Dirk Skowasch, Roland Buhl, Eckard Hamelmann, Christian Taube, Stephanie Korn, Marco Idzko
PA640	**Impact of inhaled corticosteroids on specific inhalation challenges for diagnosing occupational asthma** Gabriel Lavoie (MONTRÉAL, Canada), Catherine Lemière
PA641	**Impact of staphylococcus aureus enterotoxins on clinical responses to omalizumab in severe asthma patients** Wei-Ciao Wu (Taipei, Taiwan), Chih-Ming Weng, Han-Pin Kuo, Chun-Liang Chou

PA642 **Assessement of the Healthcare Providers Knowledge, Practice and Attitudes Towards Allergen-Specific Immunotherapy**
ASMA SAIDANE (TUNIS, Tunisia), Selsebil Daboussi, Meriem Chaabane, Marwa Kacem, Nouha Boubaker, Chiraz Aichaouia, Samira Mhamedi, Zied Moatameri

PA643 **Results of health education training for asthmatic patients: A prospective cohort study**
Bandi Solongo (Ulaanbaatar, Mongolia), Gankhuyag Tumenulzii, Dansran Densenbal

PA644 **Anti-IgE Ab treatment attenuates OVA-Ag-induced neutrophilic airway inflammation and IL-17 production in the lungs**
Kazuyuki Nakagome (Moroyama, Iruma, Japan), Mitsuru Imamura, Masaaki Kawano, Kimito Kawahata, Rie Takagi, Hiroaki Harada, Makoto Dohi, Sho Matsushita, Makoto Nagata

PA645 **Therapeutic effect and mechanism study of 35 kDa Progesterone-induced blocking factor for elderly female asthmatic patients**
Hyun Jae Shim (Seoul, Republic of Korea), Ji-Hyang Lee, Mini Jeong, Min Ju Pyo, Keun-Ai Moon, Sin-Jeong Kim, Kyomoon Koo, Ye Eun Hong, Yura Ha, You Sook Cho

PA646 **Late Breaking Abstract - Clinical remission with mepolizumab in severe asthma: impact of lung function parameters**
John Oppenheimer (summit, United States), Teresa Carrillo Díaz, Eva Martínez Moragón, M. Guadalupe Sanchez Herrero, David Bañas Conejero, Geoffrey Chupp, Robert G Price, Alejandro Raimondi, Shiyuan Zhang, Peter Howarth, Christian Domingo Ribas

PA647 **Late Breaking Abstract - Comparability and usability of FeNO analyzers: a LEAD prospective general population study**
Christina Bal (Wien, Austria), Marco Idzko, Caspar Schiffers, Maarten Van Herck, Sonja Zehetmayer, Marie-Kathrin Breyer, Sylvia Hartl, Robab Breyer-Kohansal

PS-9 in poster area Session 71 08:00 - 09:30

Poster session: Multimorbidity in people with lung diseases

Disease(s) : Airway diseases | Pulmonary vascular diseases | Sleep and breathing disorders

Method(s) : Epidemiology Physiology Pulmonary function testing Public health Cell and molecular biology

Tag(s) : Clinical

Chairs : Chair to be confirmed

PA648 **Characterisation and burden of eosinophilic granulomatosis with polyangiitis in European patients by disease phase**
Lee Baylis (Apex, United States), Jeremiah Hwee, Lynn Huynh, Rafael Alfonso-Cristancho, Anamika Khanal, Mei Sheng Duh, Waseem Ahmed

PA649 **Prevalence and disease burden of alpha-1 antitrypsin deficiency in Germany**
Prasad Gawade (Boston, United States), Kuen-Cheh Yang, Ina Jazic, Christina Scirica, Zheng-Yi Zhou, Wenxi Tang

PA650 **An update from the Irish national alpha-1 antitrypsin deficiency targeted detection programme**
Ronan Heeney (Dublin, Ireland), Orla Cahalane, Ilaria Ferrarotti, Stefania Ottaviani, Geraldine Kelly, Cedric Gunaratnam, Gerry Mcelvaney, Tomás Carroll

PA652 **The incidence of sarcopenia is higher in the group of COPD subjects than non-COPD subjects**
Chih-Ming Lin (Taipei, Taiwan), Jhih-Jhen Wu, Huan-Ting Lin, Shih-Wei Huang

PA653 **Isolated small airways obstruction predicts future chronic airflow obstruction: Preliminary findings**
Ben Knox-Brown (NEWMARKET, United Kingdom), James Potts, Cosetta Minelli, Jaymini Patel, Peter Burney, Andre Amaral

PA654 **The trend of Medication use and Mortality in chronic obstructive pulmonary disease in Korea: A nationwide cohort study 2002-2013**
Jinhyung Cho (Seoul, Republic of Korea), Young Sam Kim

PA655 **Persistence of asthma from 8-28 years – a population-based cohort study**
Linnéa Almqvist (Boden, Sweden), Martin Andersson, Helena Backman, Eva Rönmark, Linnea Hedman

PA656 **Rhinovirus specific IgG responses and respiratory health in children and adults of the EGEA cohort**
Marion Mauclin (Grenoble, France), Alicia Guillien, Katarzyna Niespodziana, Anne Boudier, Thomas Schlederer, Maja Bajic, Raphaël Vernet, Rachel Nadif, Jean Bousquet, Emmanuelle Bouzigon, Rudolf Valenta, Valérie Siroux

PA657 **Sub-phenotypes and asthma outcomes by cluster analysis among elderly patients**
Tsu-Nai Wang, Yu-Chun Lin, Meng-Chih Lin, Chao-Chien Wu

PA658	**Maternal asthma during pregnancy and offspring type 1 diabetes – a Swedish population-based cohort study** Awad I. Smew (Stockholm, Sweden), Amanda Wikström, Cecilia Lundholm, Gustaf Rejnö, Bronwyn K. Brew, Catarina Almqvist
PA659	**Sleep-related symptoms among asthmatics in the RHINESSA study** Rajesh Shigdel (Bergen, Norway), Ronas Shakya, Sarala Banjara, Eva Lindberg, Bryndis Benediktsdottir, Össur Emilsson, Nils Oskar Jögi, José Luis Sánchez Ramos, Francisco Javier Callejas González, Cecilie Svanes, Francisco Gomez Real, Chamara Senaratna, Vivi Schlünssen, Thorarinn Gislason, Randi J Bertelsen
PA660	**Chronic OCS use and biologics uptake in asthma: real-world data (RWD) insights** Michael Cushion (Biggleswade, United Kingdom), Mary Brown
PA661	**Genes involved in IL6-related pathways and asthma: the EGEA and FEAS studies** Laurent Orsi (Paris, France), Taina K. Lajunen, Patricia Margaritte-Jeannin, Maritta S. Jaakkola, Jouni J.K. Jaakkola, Rachel Nadif*, Marie-Hélène Dizier*
PA662	**The prevalence of severe asthma and severe eosinophilic asthma in Finland** Lauri Lehtimäki (Tampere, Finland), Arja Viinanen, Pinja Ilmarinen, Juha Mehtälä, Tero Ylisaukko-Oja, Juhana J Idänpään-Heikkilä, Hannu Kankaanranta
PA663	**Association between SNPs in candidate genes and mixed granulocytic asthma in adults** Antonino Margagliotti (Verona, Italy), Lucia Calciano, Valentina Lando, Cristina Bombieri, Giovanni Malerba, Mario Olivieri, Simone Accordini
PA664	**Depression from childhood to early adulthood and association with respiratory symptoms** Gang Wang (Stockholm, Sweden), Jenny Hallberg, Ellen Vercalsteren, Natalia Hernandez-Pacheco, Sandra Ekström, Bronwyn K Brew, Catarina Almqvist, Inger Kull, Anna Bergström, Erik Melén, Donghao Lu
PA665	**Risk factors of early dying among in-hospital community-acquired pneumonia deaths** Ezequiel Pessoa (Lisbon, Portugal), Cristina Bárbara, Andreia Costa, Paulo Nogueira
PA666	**Trends in outpatient azithromycin prescribing in respiratory diseases** Victor Pera (Rotterdam, Netherlands), Helen Panen, Maria A.J. De Ridder, Lies Lahousse, Guy G. Brusselle, Peter R. Rijnbeek, Katia M.C. Verhamme
PA667	**The impact of the war in Ukraine on the prevalence of multidrug-resistant tuberculosis in Poland: an epidemiological overview and overview of countermeasures implemented.** Adam Nowinski (Warszawa, Poland), Askar Yedilbayev, Joanna Ladomirska, Andrei Dadu, Tatiana Makarevich, Stefan Wesolowski, Paloma Cuchi, Maria Korzeniewska-Kosela

Gold — Session 72 — 08:30 - 10:00

State of the art session: Airway diseases

Longitudinal cohorts in airway disease. What have they taught us about personalised treatment of our everyday patients?

Aims : to discuss effective studies on phenotypes and endotypes of airway diseases, the novel, discovered underlying pathologies and novel therapies based on longitudinal cohorts; to present the long-term effects of different therapies; to explain input of longitudinal cohorts to our current knowledge about airway diseases; to critically review the setting up and results of four main longitudinal cohorts.

Disease(s) : Airway diseases

Method(s) : Cell and molecular biology Epidemiology Physiology

Tag(s) : Translational

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Nurse, Patient, Physician in Pulmonary Training, Radiologist

Chairs : Omar S. Usmani (London, United Kingdom), Vanessa M. McDonald (Newcastle (NSW), Australia), Apostolos Bossios (Stockholm, Sweden)

08:30	**The Unbiased Biomarkers for the Prediction of Respiratory Disease Outcomes (U-BIOPRED) cohort. Applying systems biology to reveal the mechanisms of severe asthma** Kian Fan Chung (London, United Kingdom)	**668**
08:45	**The COPDGene® Study: investigating the underlying genetic factors of chronic obstructive pulmonary disease** MeiLan K. Han (Ann Arbor, United States)	**669**
09:00	**Assessment of the involvement of small airways in asthma: the ATLANTIS study** Monica Kraft (New York, United States)	**670**

09:15	**The NOVEL observational longiTudinal studY (NOVELTY): real-world evidence on asthma and/or chronic obstructive pulmonary disease development** Alberto Papi (Cona, Ferrara, Italy)	**671**
09:30	**Discussion and Q&A** All Speakers	**672**

Silver — Session 73 — 08:30 - 10:00

Symposium: Progressive pulmonary fibrosis: challenges and controversies

Aims : to describe the magnitude of the problem of progressive pulmonary fibrosis (PPF); to discuss the diagnostic tools to detect or predict PPF; to explore some of the putative pathogenic mechanisms that may be involved in the progression of fibrotic lung disorder; to discuss the therapeutic approach, covering immunosuppression and antifibrotic drugs, antifibrotic drugs alone, nonpharmacological support, and when to start and stop this all.

Disease(s) : Interstitial lung diseases

Method(s) : Cell and molecular biology Imaging Pulmonary function testing

Tag(s) : Translational

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Medical Student, Nurse, Pathologist, Patient, Physician in Pulmonary Training, Physiologist, Radiologist, Respiratory physiotherapist, Scientist (basic, translational)

Chairs : Michael Kreuter (Heidelberg, Germany), Marlies S. Wijsenbeek (Rotterdam, Netherlands)

08:30	**Patient's perspective** Speaker to be confirmed	**673**
08:35	**Progressive pulmonary fibrosis. The burden of disease progression in fibrotic interstitial lung disease** Phil Molyneaux (London, United Kingdom)	**674**
08:50	**Diagnostic challenges and biomarkers to profile progression. Time is gold** Anna Podolanczuk (New York, United States)	**675**
09:05	**Cellular and molecular mechanisms involved in progression of pulmonary fibrosis** Moises Eduardo Selman Lama (Mexico, Mexico)	**676**
09:20	**Therapeutic approach and challenges in PPF** Elisabeth Bendstrup (Aarhus N, Denmark)	**677**
09:35	**Discussion and Q&A** All Speakers	**678**

Coral 4+5 — Session 74 — 08:30 - 10:00

Hot topics: Burden of tobacco farming and use of electronic nicotine delivery systems on the environment and occupational health

Aims : to address the urgent need to take action against the rapidly increasing epidemic of electronic nicotine delivery system use in childhood and adolescence; to disclose how and why the industry targets the paediatric population; to highlight the recent evidence on inhalation of e-liquids and flavoured nicotine products; to discuss the effects on the paediatric asthmatic population and to discuss solutions and policy recommendations.

Disease(s) : Airway diseases Paediatric respiratory diseases

Method(s) : Cell and molecular biology Epidemiology Public health

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Respiratory critical care physician, Paediatrician, Pathologist, Patient, Physician in Pulmonary Training, Physiologist, Radiologist, Scientist (basic, translational), Respiratory therapist, Journalist

Chairs : Silvia Ulrich (Zurich, Switzerland), Giovanni Viegi (Pisa (PI), Italy), Chair to be confirmed

08:30	**Health effects of e-liquids, flavours and other chemicals** Sven-Eric Jordt (Durham, NC, United States)	**679**
08:45	**Environmental damage caused by tobacco farming and manufacturing** Selin Çakmakcı Karakaya (Ankara, Turkey)	**680**
09:00	**Global burden of tobacco use** Om Prakash Kurmi (Coventry, United Kingdom)	**681**
09:15	**Greenwashing of the tobacco industry** Elif Dagli (Istanbul, Turkey)	**682**

09:30	**Discussion and Q&A** All Speakers	**683**

Coral 3 — Session 75 — 08:30 - 10:00

Symposium: War, climate change, migration and respiratory infections

Aims : to discuss 1) the menaces the world is facing and how adaptative strategies can help to minimise health risks.; 2) policy interventions that can facilitate the mobility of people, enhance well-being and maximise social and economic development in both places of origin and destination

Disease(s) : Airway diseases | Paediatric respiratory diseases | Respiratory infections

Method(s) : Epidemiology | General respiratory patient care | Public health

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Paediatrician, Patient, Radiologist, Respiratory physiotherapist, Journalist

Chairs : Andrew Bush (London, United Kingdom), Raquel Duarte (Porto, Portugal)

08:30	**Acute respiratory infections in crisis affected populations** Giovanni Battista Migliori (Varese (VA), Italy)	**684**
08:45	**Climate change and respiratory infections** Carlos Robalo Cordeiro (Coimbra, Portugal)	**685**
09:00	**Effect of climate changes and migration on infection in the paediatric population** Marijke Proesmans (Leuven, Belgium)	**686**
09:15	**Respiratory health in migrant populations** Dennis Falzon (Genève, Switzerland)	**687**
09:30	**Discussion and Q&A** All Speakers	**688**

Coral 1 — Session 76 — 08:30 - 10:00

Symposium: Evolving concepts in the management of nonsmall cell lung cancer

Aims : to highlight the latest trends in lung cancer and pleural mesothelioma care. Adoption of emerging therapies such as immunotherapy in early-stage nonsmall cell lung cancer (NSCLC) represents a paradigm shift relative to the previous treatment algorithms. Individualised approaches in thoracic surgery and oligometastasic NSCLC are just finding their way into routine care. Likewise, malignant pleural effusion treatment and research of pleural mesothelioma are currently being redefined.

Disease(s) : Thoracic oncology

Method(s) : General respiratory patient care | Imaging | Surgery

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Pathologist, Patient, Physician in Pulmonary Training, Physiologist, Radiologist, Thoracic oncologist, Thoracic surgeon, Respiratory therapist

Chairs : Federica Meloni (Pavia (PV), Italy), Torsten Gerriet Blum (Berlin, Germany)

08:30	**Choosing between new and established adjuvant regimens perioperatively** Martin Forster (London, United Kingdom)	**689**
08:45	**Individualized surgical approach in thoracic lung cancer** Monica Casiraghi (Milan, Italy)	**690**
09:00	**Integrating systemic and local therapies in the management of oligometastatic NSCLC** Dragana M. Jovanović (Beograd, Republic of Serbia)	**691**
09:15	**Innovative approaches for pleural effusion in lung cancer** Kevin Blyth (Glasgow (Glasgow), United Kingdom)	**692**
09:30	**Discussion and Q&A** All Speakers	**693**

Coral 2 — Session 77 — 08:30 - 10:00

Symposium: Lung consequences of the obesity epidemic from children to the elderly

Obesity and lung diseases

Aims : to give an epidemiological overview of the obesity and its detrimental effects on general health; to present the most important clinical consequences of obesity on lung health and cardiovascular effects, spanning from early life to adulthood

Disease(s) : Airway diseases | Paediatric respiratory diseases | Sleep and breathing disorders

Method(s) : Epidemiology | General respiratory patient care | Public health

Tag(s) : Translational

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Respiratory critical care physician, Paediatrician, Pathologist, Patient, Physician in Pulmonary Training, Physiologist, Radiologist, Respiratory physiotherapist, Scientist (basic, translational), Respiratory therapist, Journalist

Chairs : Angela Zacharasiewicz (Wien, Austria), Johan Verbraecken (Edegem (Antwerp), Belgium)

08:30	**The immune system and obesity-related asthma: what is the link?** Deepa Rastogi (Bronx, United States)	**694**
08:45	**Obesity in children and its relationship with sleep** Indra Narang (Toronto (ON), Canada)	**695**
09:00	**Why childhood obesity causes respiratory diseases** Erick Forno (Indianapolis, United States)	**696**
09:15	**Metabolic determinants of asthma and COPD across ages** Miguel Angel Alejandre Alcázar (Köln, Germany)	**697**
09:30	**Discussion and Q&A** All Speakers	**698**

Purple — Session 78 — 08:30 - 10:00

Respiratory medicine meets other disciplines: Artificial intelligence in chest radiology and clinical practice

A joint ERS/European Society of Thoracic Imaging (ESTI) session

Aims : to introduce the current artificial intelligence (AI) - derived applications in chest radiology; to discuss clinical application of artificial intelligence AI.

Disease(s) : Airway diseases | Interstitial lung diseases | Thoracic oncology

Method(s) : Imaging

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, General practitioner, Medical Student, Medical Technical Assistant, Respiratory critical care physician, Paediatrician, Pathologist, Radiologist, Scientist (basic, translational), Thoracic oncologist, Thoracic surgeon, Respiratory therapist, Journalist

Chairs : Walter De Wever (Leuven, Belgium), Elżbieta Magdalena Grabczak (Warszawa, Poland), Anna Rita Larici (Roma (RM), Italy)

08:30	**Artificial intelligence in thoracic imaging: what is AI and where do we stand?** Rozemarijn Vliegenthart (Groningen, Netherlands)	**699**
08:45	**Artificial intelligence and organ or lesion segmentation** Marleen De Bruijne (Rotterdam, Netherlands)	**700**
09:00	**Artificial intelligence and detection, classification and prognosis of thoracic malignancies**	**701**
09:15	**Artificial intelligence and detection, classification and prognosis of diffuse lung diseases** Nicola Sverzellati (Parma (PR), Italy)	**702**
09:30	**Discussion and Q&A** All Speakers	**703**

Studio (White) — Session 79 — 08:30 - 08:45

News from the studio: News from the studio

Chairs : Richard Costello (Dublin 9, Ireland), Anita Simonds (London, United Kingdom)

08:30	**Discussion and Q&A** All Speakers	**704**

Studio (White) Session 95 09:10 - 10:00

Experts interview: Phenotypes of central sleep apnoea/precision medicine approach in acute respiratory distress syndrome

Tag(s) : Clinical

Chairs : Richard Costello (Dublin 9, Ireland), Anita Simonds (London, United Kingdom)

09:10	**Phenotypes of central sleep apnoea: therapeutic options and future management perspectives** Winfried J. Randerath (Solingen, Germany)	**735**
09:25	**Discussion and Q&A** All Speakers	**736**
09:35	**Precision medicine approach in acute respiratory distress syndrome** Christian Karagiannidis (Cologne, Germany)	**737**
09:50	**Discussion and Q&A** All Speakers	**738**

Red 1+2 Session 96 09:30 - 10:45

Oral presentation: Novelties in pulmonary hypertension management

Disease(s) : Pulmonary vascular diseases

Method(s) : Imaging General respiratory patient care Surgery Epidemiology Physiology Public health

Tag(s) : Clinical

Chairs : Marc Humbert (Le Kremlin-Bicêtre, France), Esther Jeritza Nossent (Amsterdam, Netherlands)

OA739	**Late Breaking Abstract - A long-term follow-up (LTFU) study of sotatercept for pulmonary arterial hypertension (PAH)** Ioana R Preston (Boston, United States), David Badesch, Hossein-Ardeschir Ghofrani, J. Simon R. Gibbs, Mardi Gomberg-Maitland, Marius M. Hoeper, Marc Humbert, Vallerie V. Mclaughlin, Aaron B. Waxman, Solaiappan Manimaran, Elina Mikhailova, Janethe De Oliveira Pena, Rogerio De Souza
OA740	**Population health model predicting the long-term impact of sotatercept on morbidity and mortality in patients with Pulmonary Arterial Hypertension (PAH)** Vallerie McLaughlin (Ann Arbor, United States), Adnan Alsumali, Rogier Klok, Rongzhe Liu, Eliana Martinez, Jestinah Chevure, Janethe De Oliveira Pena, Dominik Lautsch, Marius Hoeper
OA741	**Long term outcome in chronic thromboembolic pulmonary hypertension in the multimodality treatment era: a UK national cohort analysis** Paula Appenzeller (Zürich, Switzerland), Ashwin Reddy, Katherine Bunclark, John Cannon, Karen Shears, Mark Toshner, Dolores Taboada, Stephen Hoole, Gerry Coghlan, David Jenkins, Choo Ng, John Taghavi, Steven Tsui, Nick Screaton, Alessandro Rugierro, Luigia D'Errico, Joanna Pepke-Zaba
OA742	**Seralutinib improves pulmonary arterial blood vessel volume distribution in pulmonary arterial hypertension (PAH): results of the TORREY phase 2 imaging substudy** Roham Zamanian (Portola Valley, United States), Farbod N. Rahaghi, Marion Delcroix, Sandeep Sahay, Namita Sood, Ronald L. Zolty, Murali M. Chakinala, Veronica Franco, Pavel Jansa, Shelley M. Shapiro, Leslie A. Spikes, Wendy Stevens, R. James White, Patrick Muchmore, Ben Lavon, Jan De Backer, Thao Duong-Verle, Robert F. Roscigno, David Mottola, Richard Aranda, Matt Cravets, Robin Osterhout, Jean-Marie Bruey, Ed Parsley, Vallerie V. Mclaughlin, Robert P. Frantz, Hossein-Ardeschir Ghofrani, Lawrence S. Zisman
OA743	**External validation of the European cardiac magnetic resonance risk stratification in the Amsterdam UMC PAH patient cohort** Lucas Celant (Amstelveen, Netherlands), J.N. Wessels, J.T. Marcus, L.J. Meijboom, H.J. Bogaard, F.S. De Man, A. Vonk Noordegraaf
OA744	**Subtypes of pulmonary hypertension: gas uptake to lung capillaries and lung microstructure assessed by 129Xe MRI** Agilo Luitger Kern (Hannover, Germany), Da-Hee Park, Jan Fuge, Jens M. Hohlfeld, Frank Wacker, Karen M. Olsson, Marius M. Hoeper, Jens Vogel-Claussen
OA745	**Prediction of revised pumonary hypertension hemodynamic thresholds using 4D flow MRI** Deepa Gopalan (LONDON, United Kingdom), Kai'En Leong, William Auger, Peter Lindholm

OA746	**Comparison of risk stratification models for prediction of mortality in SSc-PAH in EUSTAR** Hilde Jenssen Bjørkekjær (Kristiansand, Norway), Cosimo Bruni, Patricia Carreira, Paolo Airò, Carmen Pilar Simeón-Aznar, Marie-Elise Truchetet, Alessandro Giollo, Alexandra Balbir-Gurman, Mickael Martin, Christopher P Denton, Armando Gabrielli, Håvard Fretheim, Imon Barua, Helle Bitter, Øyvind Midtvedt, Torhild Garen, Kaspar Broch, Arne Andreassen, Yoshiya Tanaka, Gabriela Riemekasten, Ulf Müller-Ladner, Marco Matucci-Cerinic, Ivan Castellví, Elise Siegert, Eric Hachulla, Oliver Distler, Anna-Maria Hoffmann-Vold
OA747	**Long-term outcome of patients with combined post- and precapillary pulmonary hypertension** Anna Titz (Zürich, Switzerland), Laura Mayer, Paula Appenzeller, Julian Müller, Simon R. Schneider, Michael Tamm, Andrei M. Darie, Sabina A. Guler, John-David Aubert, Frédéric Lador, Hans Stricker, Jean-Marc Fellrath, Susanne Pohle, Mona Lichtblau, Silvia Ulrich
OA748	**Altitude related adverse effect and therapeutic benefit of supplemental oxygen in patients with pulmonary vascular disease during an overnight stay at 2500m** Simon Raphael Schneider (Zürich, Switzerland), Julian Müller, Meret Bauer, Laura Mayer, Lea Lüönd, Tanja Ulrich, Michael Furian, Aglaia Forrer, Esther I. Schwarz, Konrad E. Bloch, Mona Lichtblau, Silvia Ulrich
OA749	**Discussion and Q&A** All Speakers

Brown 3 Session 97 09:30 - 10:45

Oral presentation: Non-volitional assessment and new predictions in respiratory physiology

Disease(s) : Airway diseases Interstitial lung diseases

Method(s) : Physiology Pulmonary function testing Imaging General respiratory patient care

Tag(s) : Clinical

Chairs : Karl Sylvester (Cambridge (Cambridgeshire), United Kingdom), Elizabeth Smith (Beaconsfield (WA), Australia)

OA750	**Late Breaking Abstract - Accuracy of respiratory gas variables, of fifteen CPET systems during simulated exercise with metabolic simulator.** Tjeu Souren (Utrecht, Netherlands), Bas Van Hooren, Bart Bongers
OA751	**Title Comparing the use of global lung initiative 2012 vs 2021 predicted values on vital capacity in idiopathic pulmonary fibrosis (IPF) patients.** Kate Donovan (Cmbridge, United Kingdom), Joshua Barnes, Karl Sylvester
OA752	**Reference equations for intra-breath respiratory oscillometry in adults** Chiara Veneroni (Milano (MI), Italy), Alessandro Gobbi, Pasquale Pio Pompilio, Raffaele Dellaca, Salvatore Fasola, Stefania La Grutta, Agustin Leyva, Janos Porszasz, Silvia Romana Stornelli, Leonello Fuso, Christoph Valach, Robab Breyer-Kohansal, Chiara Contu, Riccardo Inchingolo, Kevin Hodgdon, David A. Kaminsky
OA753	**Respiratory system oscillometric resistance decreases over time in idiopathic pulmonary fibrosis** Pauline Tossan (Tours, France), Stéphanie Dirou, Wemeau Lidwine, Chambellan Arnaud, Perez Thierry, Chenivesse Cécile, Bokov Plamen, Bayeh Bestega, Marchand-Adam Sylvain, Guichard Elie, Plantier Laurent
OA754	**Comparison of forced oscillation technique (FOT) with spirometry measures in acute asthma** Paula Cristina Andrade Almeida (Aracaju (SE), Brazil), Mouaid Aljehani, Matthew J. Martin, Tim W. Harrison
OA755	**The effect of breathing pattern on airway resistance and reactance using forced oscillation technique (FOT)** Mark Howlett-Foster (Cambridge, United Kingdom), Ella O'Neill, Karl Sylvester
OA756	**Effects of renewed ERS/ATS criteria on classification of significant bronchodilator response** Nena Maria Rokx (Nijmegen, Netherlands), Jeanette B. Peters, Hieronymus W. H. Van Hees, Bram Van Den Borst, Alex J. Van 'T Hul, Hanneke A. C. Van Helvoort
OA757	**Bronchodilator response discordance in patients with asthma and/or COPD using Xe-MRI and spirometry** Laurie Smith (Sheffield (South Yorkshire), United Kingdom), Helen Marshall, Alberto Biancardi, Guilhem Collier, Ho-Fung Chan, Dave Capener, Jody Bray, Demi Jakymelen, Laura Saunders, Joshua Astley, Bilal Tahir, Ryan Munro, Oliver Rodgers, James Ball, Paul Hughes, Smitha Rajaram, Andy Swift, Neil Stewart, Graham Norquay, Martin Brook, Leanne Armstrong, Latife Hardaker, Titti Fihn-Wikander, Rod Hughes, Jim Wild
OA758	**Weight associates positively with FeNO in adult females but not males in a large healthy population-based sample** Tiago Jacinto (Senhora da Hora, Portugal), Rita Amaral, João Fonseca, Kjell Alving
OA759	**An alternative non-invasive indicator to respiratory exchange ratio for exercise effort.** Patrick Jak (Diemen, Netherlands)
OA760	**Discussion and Q&A** All Speakers

Brown 1+2 Session 98 09:30 - 10:45

Oral presentation: Improving respiratory care from a primary care perspective

Disease(s) : Airway diseases

Method(s) : General respiratory patient care Public health Imaging Pulmonary function testing Epidemiology

Tag(s) : Clinical

Chairs : Miguel Román Rodriguez (Palma De Mallorca, Spain), María Mar Martínez Vázquez (Bilbao (Bizkaia), Spain)

OA761	**Late Breaking Abstract - Improving the diagnosis of breathlessness in primary care: development and implementation of the "Breathlessness Diagnostics in a Box" (BiaB)** Janwillem W. H. Kocks (Groningen, Netherlands), Chantal Arling, Thomas A. Le Rütte, Marjan Kerkhof, Merijn M.G. Driessen-Roelfszema, Chris P. Gale, Ana M. Cebrián-Cuenca, Fiona Mosgrove, Rudolf A. De Boer, Richard E. Russell, Bernardino Alcázar-Navarrete, Huib A.M. Kerstjens, Yoran Gerritsma
OA762	**Developing a clinical pathway for breathlessness in primary care based on analysis of routine primary care data** Anthony Paulo Sunjaya (Sydney, Australia), Allison Martin, Gian Luca Di Tanna, Christopher Gianacas, Clare Arnott, Guy Marks, Christine Jenkins
OA763	**Building a diagnostic picture of asthma in primary care: A novel 'jigsaw puzzle' approach** Siân Williams (London, United Kingdom), Dermot Ryan, Janwillem Kocks, Jaime Correia De Sousa
OA764	**Insights into spirometry usage and the potential for AI-based decision support software in Belgian primary care** Marko Topalovic (Kessel-lo, Belgium), Maarten De Vos, Julie Maes, Karolien Van Orshoven, Paul Desbordes, Vincent Vanheule, Charlotte Quataert, Isabelle Fovel
OA765	**The clinical presentation of tuberculosis in English primary care** Farah Kidy (Coventry, United Kingdom), Noel Mccarthy, Krishna Nirantharakumar, Shamil Haroon
OA766	**Sonographic follow-up of diaphragm function in COVID-19: an exploratory study** Wytze de Boer (Zwolle, Netherlands), Carlijn Veldman, Mireille Edens, Huib Kerstjens, Jan Willem Van Den Berg
OA767	**The role of the asthma nurse educator in identifying severe asthma in primary care.** Holly Minshall (Stoke, United Kingdom), Angela Cooper, Elfatih Idris
OA768	**Sustained health system benefits of primary care based integrated disease management for COPD: an interrupted time series** Christopher Licskai (London (ON), Canada), Anna Hussey, Véronique Rowley, Madonna Ferrone, Zihang Lu, Kimball Zhang, Emilie Terebessy, Andrew Scarffe, Shannon Sibbald, Cathy Faulds, Tim O'Callahan, Teresa To
OA769	**Systematic review of methods of scoring inhaler technique** Ruth De Vos (Horndean, United Kingdom), Alexander Hicks, Mitch Lomax, Heather Mackenzie, Lauren Fox, Thomas P Brown, Anoop J Chauhan
OA770	**Providing evidence based answers to first hand COVID and respiratory questions from the IPCRG Sentinel Network of practising primary care clinicians: A novel service report.** Alan Kaplan (Stouffville (ON), Canada), Neil Fitch, Fiona Mosgrove, Janwillem Kocks, Jaime Correia De Sousa, Ee-Ming Khoo, Karin Lisspers, Tiago Maricoto, Ioanna Tsiligianni, Tracey Lonergan, Siân Williams
OA771	**Discussion and Q&A** All Speakers

Blue 1+2 Session 99 09:30 - 10:45

Oral presentation: Lost in translation: new insights into cell-to-cell crosstalk in lung disease

Disease(s) : Thoracic oncology Airway diseases Interstitial lung diseases

Method(s) : Cell and molecular biology

Tag(s) : Translational

Chairs : Suzanne Cloonan (Dublin, Ireland), Antonella Dost (Zeist, Netherlands)

OA772	**Late Breaking Abstract - Evolution of epithelial-mesenchymal cell circuits in the progression of pulmonary fibrosis** Laurens De Sadeleer (München, Germany), Yuexin Chen, Christoph Jentzsch, Zhenda Wang, Niyeti Qazi, Niklas Lang, Pascal Albanese, Andris Jankevics, Fabian Theis, Richard Scheltema, Wim Wuyts, Janine Gote-Schniering, Herbert Schiller
OA773	**Basophils inhibit tumors by suppressing Tregs** Nahal Mansouri (Lausanne, Switzerland), Bruno Torchia, Simge Yucel, Christophe Von Garnier, Michele De Palma

OA774	**Decoding the epithelial-T helper cell signalling axis in human asthmatic airways one cell at a time** Amanda Oliver (Cambridge, United Kingdom), Elo Madissoon, Waradon Sungnak, Marijn Berg, Rakeshlal Kapuge, Laura Richardson, Claudi Semprich, Anna Wilbrey-Clark, Tessa Gillet, Kerstin Meyer, Martijn Nawijn, Sarah Teichmann
OA775	**Unveiling the role of Isthmin-1 in allergic asthma: Implications for therapeutic interventions** Jong Huat Tee (Singapore, Singapore), Udhaya Vijayakumar, Mahalakshmi Shanmugasundaram, Terence Yin Weng Lam, Wupeng Liao, Yuan Sheng Yang, Wai Shiu Fred Wong, Ruowen Ge
OA776	**GM-CSF increases uptake of Charcot-Leyden crystals in neutrophils and can induce NETopathic airway inflammation** Dóra Paróczai (Deszk, Hungary), Robbe Vermoesen, Helena Aegerter, Bart N. Lambrecht
OA777	**Crosstalk between memory B cells and fibroblasts contributes to COPD pathogenesis** Ken Bracke (Ghent, Belgium), Merel Jacobs, Jasper Anckaert, Alen Faiz, Femke Van Gaever, Sven Verschraegen, Bihiyga Salhi, Tinus Schynkel, Koen Venken, Dirk Elewaut, Phil Hansbro, Guy Brusselle, Pieter Mestdagh, Leen Seys
OA778	**Dendritic cells are defective for improving survival in lung adenocarcinoma** Heloisa Zimermam (Ribeirão Preto, Brazil), Sabrina Setembre Batah, Maria Júlia Faci Do Marco, Mateus Magalhães Lage Moraes, Danilo Tadao Wada, Saulo Brito Silva, Alexandre Todorovic Fabro
OA779	**IL36γ reduces macrophage phagocytosis in COPD** Harriet Owles (London, United Kingdom), Jonathan R Baker, Peter Fenwick, Carolin K Watson, Karim C Kasmi, Peter J Barnes, Louise E Donnelly
OA780	**Mapping of eosinophils, immune cell profiles, and microbes in COPD lung tissue** Caroline Lindö (Lund, Sweden), Premkumar Siddhuraj, Renan Mauch, Jimmie Jönsson, Johan Ahlgren, Prajakta Jogdand, Cecilia Andersson, Jennifer Cann, Christopher Nazaroff, Sandra Lindstedt, Thais Mauad, Caroline Sandén, Christopher Mc Crae, Jonas S Erjefält
OA781	**Discussion and Q&A** All Speakers

Yellow 1+2+3 Session 100 09:30 - 10:45

Oral presentation: Hot topics in intensive care medicine

Disease(s) : Respiratory critical care | Airway diseases | Pulmonary vascular diseases

Method(s) : Respiratory intensive care | Physiology | Cell and molecular biology

Tag(s) : Clinical

Chairs : Lieuwe D.J. Bos (Amsterdam, Netherlands), Ana Cysneiros (Lisboa, Portugal)

OA782	**Late Breaking Abstract - CLUSTERING ARDS PATIENTS THROUGH THE FIRST DAYS OF ICU ADMISSION.** Adrian Ceccato (Barcelona, Spain), Carles Forne, Lieuwe D. Bos, Marta Camprubi, Aina Areny, Elena Campaña, Sara Quero, Emilio Diaz, Oriol Roca, David De Gonzalo-Calvo, Laia Fernandez Barat, Anna Motos, Ricard Ferrer, Jordi Riera, Jose Angel Lorente, Oscar Peñuelas, Rosario Menendez, Jesus Bermejo, Ferran Barbe, Antonio Artigas, Antoni Torres
OA783	**Late Breaking Abstract - Transcriptome profiling of persistent ICU-acquired weakness in a cohort of ARDS survivors** Israel David Duarte Herrera (Oviedo, Spain), Karla Miravete-Lagunes, Cecilia López-Martínez, Sara M Exojo-Ramírez, Paula Martín-Vicente, Marcelino González Iglesias, Raquel Rodríguez García, Ana García De Alaiz, Margarita Fernández-Rodríguez, Elías Cuesta-Llavona, Sergio Pérez-Oliveira, Juan Gómez De Oña, Eliecer Coto, Inés López-Alonso, Diego Parra-Ruiz, Guillermo M Albaiceta, Laura Amado-Rodríguez
OA784	**The association between respiratory effort parameters during the first 48 hours with clinical outcomes in mechanically ventilated patients: A prospective observational study.** Phruet Soipetkasem (bangkok, Thailand), Detajin Junhasavasdikul, Yuda Sutherasan, Pongdhep Theerawit
OA785	**Differences in nosocomial infections in patients on VV-ECMO for COVID-19 and Influenza** Clemens Wiest (Regensburg, Germany), Alois Philipp, Maik Foltan, Florian Geismann, Maximilian Malfertheiner, Christoph Fisser, Thomas Mueller, Lars Siegfried Maier, Florian Hitzenbichler, Barbara Schmidt, Dirk Lunz, Thomas Dienemann, Bernd Salzberger, Matthias Lubnow
OA786	**Vilobelimab's effect on mortality in severe COVID-19 ARDS patients: Phase 3 RCT** Endry Lim (Amsterdam, Netherlands), Alexander Vlaar, Djillali Annane, Martin Witzenrath, Michael Bauer, Leo Heunks, Bruno Mourvillier, Vasquez Luis Hercilla, Tobias Welte, Pieter Van Paassen, Sanne De Bruin, Matthijs Brouwer, Pieter Tuinman, Jose Saraiva, Marx Gernot, Suzana Lobo, Rodrigo Boldo, Jesus Simon-Campos, Alexander Cornet, Anastasia Grebenyuk, Johannes Engelbrecht, Maria Habel, Claus Thielert, James Dickinson, Bruce Burnett, Simon Ruckinger, Robert Zerbib, Dorothee Neukirchen, Renfeng Guo, Diederik Van De Beek, Niels Riedemann

OA787	**Dead-space ventilation indices and mortality in acute respiratory distress syndrome: a systematic review and meta-analysis.** Dilip Jayasimhan (Hamilton, New Zealand), Jennifer Chieng, John Kolbe, David Sidebotham
OA788	**long-term outcomes in critical covid-19 survivors: a 2-year longitudinal cohort** Jessica Gonzalez Gutierrez (Lleida, Spain), Maria Zuil, Iván D. Benítez, Jordi De Batlle, Maria Aguilà, Sally Santisteve, Natalia Varvará, Aida Monge, Nuria Forns, Rafaela Vaca, Olga Minguez, Faty Seck, Clara Gort-Paniello, Anna Moncusí-Moix, Ricard Ferrer, Adrián Ceccato, Laia Fernández, Ana Motos, Jordi Riera, Rosario Menéndez, Dario Garcia-Gasulla, Oscar Peñuelas, Gonzalo Labarca, Jesús Caballero, Carme Barberà, David De Gonzalo-Calvo, Antoni Torres, Ferran Barbé
OA789	**Lung microbiota compositions differ between influenza, COVID-19 and bacteria-related acute respiratory distress syndrome** Renaud Prével (Bordeaux, France), Sébastien Imbert, Raphaël Enaud, Mathilde Revers, Arthur Orieux, Florian Lussac-Sorton, Adrian Camino, Alexandre Massri, Laurent Villeneuve, Cédric Carrié, Laurent Petit, Alexandre Boyer, Patrick Berger, Didier Gruson, Laurence Delhaes
OA790	**Tranexamic acid to treat hemoptysis in real life (ATHENE study)** Marie Gaffier (PARIS, France), Annabelle Beaudoin, Emilie Lanoy, Vincent Rothstein, Amer Hamdan, Thibaud Soumagne, Olivier Sanchez, Benjamin Planquette
OA791	**Discussion and Q&A** All Speakers

Gold — Session 101 — 10:15 - 11:45

Clinical cases: Lungs on fire: airway diseases?

Aims : to present real-life clinical cases as part of an interactive session. Cases vary in difficulty and may require differential diagnosis. This session is led by two discussants who will present cases submitted by respiratory health professionals to a panel of experts and will drive the discussion in a step-by-step approach, encouraging dialogue and reflection among the panel, who have no prior knowledge of these cases. As the cases are discussed, the discussants will invite the audience to participate in determining which diagnostic and therapeutic options would be best for these patients.

Disease(s) : Airway diseases | Pulmonary vascular diseases | Interstitial lung diseases

Chairs : Omar S. Usmani (London, United Kingdom), Apostolos Bossios (Stockholm, Sweden), Vanessa M. McDonald (Newcastle (NSW), Australia)

Discussants : Emer Kelly (Dublin 4, Ireland), Marc Miravitlles (Barcelona (CT), Spain)

10:15	**Case 1 incl. panel discussion and Q&A - Author: L. Elsey (United Kingdom)** Emer Kelly (Dublin 4, Ireland)	**792**
10:37	**Case 2 incl. panel discussion and Q&A - Author: B. Martins (Portugal)** Marc Miravitlles (Barcelona (CT), Spain)	**793**
10:59	**Case 3 incl. panel discussion and Q&A - Author: O. E. Terzi (Turkey)** Emer Kelly (Dublin 4, Ireland)	**794**
11:21	**Case 4 incl. panel discussion and Q&A - Author: H. Madsen (Denmark)** Marc Miravitlles (Barcelona (CT), Spain)	**795**

Silver — Session 102 — 10:15 - 11:45

Clinical trials session: ALERT 1: pharmacological treatments

Treatment of COPD, asthma, ILD, PCD, and lung transplantation

Chairs : Michael Kreuter (Heidelberg, Germany), Marlies S. Wijsenbeek (Rotterdam, Netherlands)

Discussants : Dave Singh (Manchester, United Kingdom), Discussant to be confirmed

10:15		**RCT796**
10:22		**RCT797**
10:29		**RCT798**
10:36	**Wrap-up by discussant and discussion** Dave Singh (Manchester, United Kingdom)	**RCT799**
10:58		**RCT800**
11:05		**RCT801**

11:12		**RCT802**
11:19	**Wrap-up by discussant and discussion** Speaker to be confirmed	**RCT803**
11:41	**Closing remarks** All Speakers	**RCT804**

Coral 4+5 Session 103 10:15 - 11:45

Hot topics: Disease modification in pulmonary arterial hypertension

Aims : to describe the goal for new disease-modifying treatment of pulmonary arterial hypertension (PAH); to review whether the currently available treatments really change PAH evolution; to describe new therapies affecting different signalling pathways that may modify disease progression.

Disease(s) : Pulmonary vascular diseases

Method(s) : Cell and molecular biology Physiology

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Patient, Physician in Pulmonary Training, Physiologist, Scientist (basic, translational)

Chairs : Silvia Ulrich (Zurich, Switzerland), Giovanni Viegi (Pisa (PI), Italy), Chair to be confirmed

10:15	**Defining disease modification in PAH** Sandeep Sahay (Houston, United States)	**805**
10:30	**Are approved PAH drugs disease-modifying?** Olivier Sitbon (Le Kremlin-Bicêtre, France)	**806**
10:45	**Sotatercept for the treatment of PAH: an update** Marius M. Hoeper (Hannover, Germany)	**807**
11:00	**Moving the field forward: novel pathways and targets for reverse remodelling** Soni Savai Pullamsetti (Giessen, Germany)	**808**
11:15	**Discussion and Q&A** All Speakers	**809**

Coral 3 Session 104 10:15 - 11:45

Journal session: Cystic fibrosis in the era of highly effective cystic fibrosis transmembrane conductance regulator modulator therapy

Highlights from The Lancet and The Lancet Respiratory Medicine

Aims : to bring together leaders in the field to provide an overview of the clinical and research landscape in the era of highly effective cystic fibrosis transmembrane conductance regulator (CFTR) modulator therapy; to provide insights into disease mechanisms; to review progress in the development of small-molecule CFTR modulator therapies; to discuss and consider the needs of people with cystic fibrosis who are eligible for current CFTR modulators and the unmet needs of patients for whom CFTR-directed therapies are not available at present, highlight novel treatment approaches in development that could shape the future of clinical care and outline priorities for research.

Disease(s) : Airway diseases Paediatric respiratory diseases Respiratory infections

Method(s) : Cell and molecular biology General respiratory patient care

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Respiratory critical care physician, Paediatrician, Patient, Respiratory physiotherapist, Scientist (basic, translational), Respiratory therapist

Chairs : Rebecca Craven (London, United Kingdom), Andrew Bush (London, United Kingdom), Raquel Duarte (Porto, Portugal)

10:15	**CFTR modulator therapy: transforming the landscape of clinical care in cystic fibrosis** Damian Downey (Belfast, Ireland)	**810**
10:30	**Understanding and addressing the needs of people with cystic fibrosis in the era of highly effective CFTR modulator therapy** Katherine Hisert (Denver, United States)	**811**
10:45	**The future of cystic fibrosis treatment: from disease mechanisms to novel therapeutic approaches** Marcus Mall (Berlin, Germany)	**812**

11:00	**The future of clinical trials in cystic fibrosis** Nicole Mayer-Hamblett (Seattle, United States)	**813**
11:15	**Discussion and Q&A** All Speakers	**814**

Coral 1 — Session 105 — 10:15 - 11:45

Symposium: Infectious and noninfectious complications of immunosuppressed patients

Aims : to highlight the different complications of immunosuppressed patients; to focus on difficult-to-manage respiratory infections and innovative approaches such as phage therapy and its application, and preventive and treatment strategies for fungal pulmonary infections; to address the pathogenesis and treatment approaches of noninfectious complications, either immune-driven (chronic lung allograft dysfunction (CLAD) and graft-versus-host disease (GVHD)) or drug-related.

Disease(s) : Airway diseases | Interstitial lung diseases | Respiratory infections

Method(s) : Pulmonary function testing | Transplantation

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Respiratory critical care physician, Patient, Physician in Pulmonary Training, Thoracic surgeon

Chairs : Federica Meloni (Pavia (PV), Italy), Torsten Gerriet Blum (Berlin, Germany)

10:15	**Patient's perspective**	**815**
10:20	**Multidrug-resistant bacterial pulmonary infections: challenges of phage therapy** Mariagrazia Di Luca (Pisa, Italy)	**816**
10:35	**Fungal infections in solid organ and bone marrow transplant recipients: preventive and treatment strategies** Husain Shahid (Toronto (ON), Canada)	**817**
10:50	**Chronic lung allograft dysfunction and chronic GVHD: common pathogenic mechanisms and clinical features?** Robin Vos (Leuven, Belgium)	**818**
11:05	**CLAD and chronic pulmonary GVHD: old and new therapeutic approaches** Daniel Wolff (Regensburg, Germany)	**819**
11:20	**Discussion and Q&A** All Speakers	**820**

Coral 2 — Session 106 — 10:15 - 11:45

Symposium: Obesity and the lung: from wakefulness to sleep

Aims : to present the latest advances in basic and clinical research, with a clear translational component, about the relationship between obesity and respiratory function (from wakefulness to sleep); to identify the latest advances in the description of pathophysiological mechanisms related to obesity and pulmonary dysfunction, considering a wide age spectrum, from childhood to adulthood; to present the available evidence that shows the effect of obesity on the functional level in ventilatory mechanics; to explore recent and significant advances in the study of the gut microbiota and its relationship with the manifestation of pulmonary pathology; to present the latest studies showing the different therapeutic options and clinical management of patients with obesity hypoventilation syndrome.

Disease(s) : Airway diseases | Paediatric respiratory diseases | Sleep and breathing disorders

Method(s) : Physiology | Pulmonary function testing | Respiratory intensive care

Tag(s) : Translational

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Respiratory critical care physician, Paediatrician, Patient, Physiologist, Respiratory physiotherapist, Scientist (basic, translational), Respiratory therapist

Chairs : Angela Zacharasiewicz (Wien, Austria), Johan Verbraecken (Edegem (Antwerp), Belgium)

10:15	**Pathophysiological mechanism linking obesity and lung dysfunction: from childhood to adults** Stefania Redolfi (Cagliari, Italy)	**821**
10:30	**Mechanics of the lungs and chest wall in obesity and respiratory compliance** Anne Dixon (Charlotte, United States)	**822**
10:45	**Crosstalk between the gut microbiota and lung diseases** Niki Ubags (Epalinges, Switzerland)	**823**

11:00	**Obesity and sleep-related hypoventilation: new perspectives for clinical management and therapeutic interventions** Juan Fernando Masa Jiménez (Cáceres, Spain)	**824**
11:15	**Discussion and Q&A** All Speakers	**825**

Purple — Session 107 — 10:15 - 11:45

Mini symposium: Bronchoscopy in challenging situations

Respiratory failure, infectious diseases, bleeding from airways

Aims : to describe the difficulties of performing bronchoscopy in selected life-threatening situations; to describe possible complications and risks for patients and the medical team; to present potential solutions and describe use of particular devices and procedures to minimise the risk of complications and to enable the procedure to obtain diagnostic material or resolve life-threatening problems.

Disease(s) : Respiratory critical care | Respiratory infections | Thoracic oncology

Method(s) : Endoscopy and interventional pulmonology | Imaging | Respiratory intensive care

Target audience : Adult pulmonologist/Clinician, General practitioner, Medical Student, Nurse, Respiratory critical care physician, Physician in Pulmonary Training, Radiologist, Thoracic oncologist

Chairs : Walter De Wever (Leuven, Belgium), Elżbieta Magdalena Grabczak (Warszawa, Poland), Anna Rita Larici (Roma (RM), Italy)

10:15	**Patients with respiratory failure: how to make a bronchoscopic procedure still possible?** Szymon Skoczyński (Katowice, Poland)	**826**
10:30	**Bronchoscopy in highly contagious lung infections: what lessons did we learn from COVID-19?** Lina Zuccatosta (Torrette (AN), Italy)	**827**
10:45	**Bleeding from the airways: spontaneous or a complication of interventional procedures. What to do?** Samira Shojaee (Richmond, United States)	**828**
11:00	**Discussion and Q&A** All Speakers	**829**

10:30-11:15
INDUSTRY SKILLS LAB WORKSHOP SEE PAGE 1

ERS Stand/World Village — Session 110 — 10:30 - 11:30

Public: Coffee and clean air - 1

Studio (White) — Session 111 — 10:30 - 11:15

Pro-Con debate: Rising from the ashes: exploring the benefits and challenges of early mobilisation

Aims : to provide an overview of the importance of early mobilisation in patients with acute respiratory failure; to discuss the latest research and evidence regarding the benefits and challenges of early mobilisation in acute respiratory failure, including its impact on patient outcomes and quality of life; to highlight the practical aspects of implementing early mobilisation in clinical practice, including patient selection, timing and appropriate interventions.

Disease(s) : Respiratory critical care

Method(s) : Pulmonary rehabilitation | Respiratory intensive care

Target audience : Adult pulmonologist/Clinician, Nurse, Respiratory critical care physician, Respiratory physiotherapist, Respiratory therapist

Chairs : Richard Costello (Dublin 9, Ireland), Anita Simonds (London, United Kingdom)

10:30	**Pro** Leo Heunks (Amsterdam, Netherlands)	**836**
10:45	**Con** Nicholas Hart (London, United Kingdom)	**837**
11:00	**Discussion and Q&A** All Speakers	**838**

Amber 1+2 Session 112 10:40 - 13:00

Skills workshop: SW2 Pulmonary rehabilitation: extending practice to improve health outcomes
A personalised medicine approach

Aims : to describe diagnostic methods and interventions that enable phenotyping of individuals based on the clinical problems experienced and tailoring of the content of pulmonary rehabilitation programmes to deliver a personalised approach; to describe methods for assessing the physical activity level and promoting physical activity; to assess patients who may benefit from neuromuscular electrical stimulation and to explain how to apply and progress the treatment; to describe and evaluate the incorporation of mindfulness-based interventions into pulmonary rehabilitation and their outcomes.

Disease(s) : Airway diseases | Interstitial lung diseases | Pulmonary vascular diseases

Method(s) : General respiratory patient care | Physiology | Pulmonary rehabilitation

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist, Respiratory therapist

Chairs : Sarah Houben-Wilke (Horn, Netherlands)

10:40	**Introduction** All Speakers	**839**
10:40	**Physical activity assessment and intervention** Henrik Watz (Großhansdorf, Germany)	**840**
10:40	**Neuromuscular electrical stimulation: in who and how?** Roy Meys (Horn, Netherlands)	**841**
10:40	**How to improve balance and reduce falls in people undergoing pulmonary rehabilitation** Marla Beauchamp (Hamilton, Canada)	**842**
10:40	**Implementing mindfulness interventions into pulmonary rehabilitation** Alice Malpass (Bristol, United Kingdom)	**843**

Amber 3+4 Session 113 10:40 - 13:00

Skills workshop: SW17 Cardiac ultrasound in the management of pulmonary disease

Aims : Develop a rigorous and systematic approach in performing and analyzing cardiac ultrasound parameters in respiratory disease.
Explain systolic function, diastolic function, right heart dysfunction during COPD patients , the management of pulmonary embolism.
Explain the hemodynamic consequences of non-invasive ventilation and propose an echocardiographic monitoring for the best settings of non-invasive ventilation
Develop knowledge and understanding of echocardiographic parameters in patients with COPD, pumonary embolism or requiring non invasive ventilation.

Disease(s) : Pulmonary vascular diseases | Respiratory critical care

Tag(s) : Clinical

Chairs : Paul M. Hassoun (Baltimore, United States)

10:40	**Introduction** All Speakers	**844**
10:40	**Assessment of diastolic function in COPD patients** Valentina Mercurio (Napoli, Italy)	**845**
10:40	**Cardiac ultrasound assessment of right heart function** Paul M. Hassoun (Baltimore, United States)	**846**
10:40	**Cardiac ultrasound for the management of pulmonary embolism** Mario Gerges (Vienna, Austria)	**847**
10:40	**Hemodynamic consequences of non-invasive ventilation** Bouchra Lamia (Le Havre, France)	**848**

Red 1+2 Session 114 11:00 - 12:15

Oral presentation: Novel insights for the management of interstitial lung disease of known cause

Disease(s) : Interstitial lung diseases

Method(s) : Epidemiology General respiratory patient care Imaging Cell and molecular biology Pulmonary function testing Palliative care Physiology

Tag(s) : Clinical

Chairs : Elena Bargagli (Siena, Italy), Kseniia Bielosludtseva (Dniepropetrovsk, Ukraine)

OA849	**Late Breaking Abstract - A pilot study of telemonitoring to detect acute exacerbations in fibrosing interstitial lung diseases** Yuanyuan Jia (YinChuan, China), Hongyan Fu, Juan Chen
OA850	**The automated e-Lung CT algorithm is more prognostic than lung function in patients with non IPF fibrotic ILD; a validation study** Peter George (London, United Kingdom), Christian Rennison-Jones, Giacomo Benvenuti, Wassim Bou-Zeid, Olivier Joly, Stephen Gerry, Claire Fernandez, George Harston, Anand Devaraj
OA851	**Dendritic cells as a potential new tool in predicting patient's survival in airway-centered interstitial fibrosis** Mateus Magalhães Lage Moraes (RIBEIRÃO PRETO, Brazil), Wagner Moneda Telini, Sabrina Setembre Batah, Maria Julia Faci Do Marco, Heloisa Acurcio Zimermam, Danilo Tadao Wada, Andrea De Cássia Vernier Antunes Cetlin, Marcel Koenigkam Santos, Tales Rubens De Nadai, Alexadre Todorovic Fabro
OA852	**Electronic nose technology detects connective tissue disease-associated interstitial lung disease** Karen Moor (Rotterdam, Netherlands), Iris G. Van Der Sar, Marlies S. Wijsenbeek
OA853	**AI-based quantification of ILD and pulmonary vasculature in a retrospective SSc-ILD cohort correlates with pulmonary function test: a perspective from the PROFILE.net ERS Clinical Research Collaboration** Julien Guiot (Liège, Belgium), Fanny Gester, Monique Henket, Benoit Ernst, Clio Ribbens, Béatrice André, Renaud Louis, Leticia Gallardo Estrella, Jonne Engelberts, Jean-Paul Charbonnier
OA854	**Unveiling common molecular pathways linked to ILDs with progressive fibrosing phenotype: the role of MUC5B promoter variants** Helder Novais Bastos (Lousada, Portugal), Rita Santos, Catarina Gouveia Cardoso, Patrícia Caetano Mota, David Coelho, Melany Gonçalves, Andreia Coelho, Oksana Sokhatska, Marília Beltrão, Susana Guimarães, Conceição Souto Moura, André Carvalho, Luís Delgado, Miguel Soares, Natália Melo, André Terras Alexandre, António Morais, Margarida Saraiva
OA855	**Novel e-Lung CT biomarkers combine to provide higher prognostic discrimination than FVC in patients with non-IPF fibrotic interstitial lung disease** Peter George (London, United Kingdom), Giacomo Benvenuti, Christian Rennison-Jones, Wassim Bou-Zeid, Olivier Joly, Stephen Gerry, Claire Fernandez, George Harston, Anand Devaraj
OA856	**Skin transcriptomes link severity of skin involvement and lung function impairment in systemic sclerosis** Jana Zielonka (New Haven, United States), Ningshan Li, Zuoheng Wang, Xiting Yan, Jose Gomez
OA857	**Progression of interstitial lung disease in systemic sclerosis does not predict further progression** Anna Maria Hoffmann-Vold (Oslo, Norway), Liubov Petelytska, Håvard Fretheim, Imon Barua, Hilde Bjørkekjær, Mike Becker, Cathrine Brunborg, Cosimo Brunio, Phuong Phuong Diep, Rucsandra Dobrota, Michael Durheim, Muriel Elhai, Suzana Jordan, Emily Langballe, Øyvind Midtvedt, Carina Mihai, Øyvind Molberg, Oliver Distler
OA858	**Rheumatoid arthritis and idiopathic pulmonary fibrosis: a bidirectional Mendelian randomisation study** Joshua Solomon (Denver, United States), Olivia C. Leavy, Leticia Kawano-Dourado, Ian D. Stewart, Jennifer K. Quint, Raphael Borie, Bruno Crestani, Louise V. Wain, R. Gisli Jenkins, Philippe Dieude, Cosetta Minelli
OA859	**Discussion and Q&A** All Speakers

Brown 3 Session 115 11:00 - 12:15

Oral presentation: Advances in the epidemiology, diagnosis and treatment of tuberculosis and non-tuberculous mycobacterial disease

Disease(s) : Interstitial lung diseases

Method(s) : Epidemiology Imaging Pulmonary function testing General respiratory patient care Respiratory intensive care Public health Endoscopy and interventional pulmonology

Tag(s) : Clinical

Chairs : Alberto Garcia-Basteiro (Maputo, Mozambique), Ayşegül Fusun Öner Eyüboğlu (Ankara, Turkey)

OA860	**Late Breaking Abstract - Global treatment outcomes of extensively drug-resistant tuberculosis in adults: A systematic review and meta-analysis** Ole Skouvig Pedersen (Aarhus C, Denmark), Freja Breth Holmgaard, Mads Kristian Duborg Mikkelsen, Cristoph Lange, Giovanni Sotgiu, Troels Lillebaek, Aase Bengaard Andersen, Christian Morberg Wejse, Victor Nasetholt Dahl

OA861	**DLCO, spirometry and PET/CT findings after completing tuberculosis treatment - preliminary findings of StatinTB/ExtendTB trial** Karen Wolmarans (Cape Town, South Africa), Sandra Mukasa, Antoneta Mashinyira, Patrick Katoto, Fareda Jakoet-Bassier, Tessa Kotze, Christian Buess, Reto Guler, Gunar Gunther, Friedrich Thienemann
OA862	**Tuberculosis drives impaired lung function: a systematic review and meta-analysis** Sharenja Ratnakumar (London, United Kingdom), Sally Hayward, Emma Denneny, Lucy Goldsmith, Rebecca Evans, William Checkley, Delia Goletti, Catherine Ong, Mateusz Gotowiec, Junkai Zhu, Jon Friedland, Joanna Porter
OA863	**PET-CT reveals sites yielding culturable Mycobacterium tuberculosis infection in household TB contacts with a clinical phenotype of latent infection: A descriptive case series** Jee Whang Kim (Leicester, United Kingdom), Joanne Lee, Ismail Novsarka, Gerrit Woltmann, Raman Verma, Anver Kamil, Pranabashis Haldar
OA864	**Diagnostic accuracy of TB PCR in bronchoalveolar lavage samples, TRiBE - a multicentre prospective UK study** Mirae Park (London, United Kingdom), Giovanni Satta, Joan Nanan, Beatriz Tomas-Cordero, Meg Coleman, Laura Martin, Osman Hatem, Kavina Manalan, Arnab Datta, Ashley Whittington, Parul Kalia, Michael Loebinger, Helen Burgess, Lianne Castle, Heinke Kunst, Ronan Breen, Anne Dunleavy, Mohammed Munavvar, Prasheena Naran, Marc Lipman, Thomas Gorsuch, Pranab Haldar, Onn Min Kon
OA865	**Programmatic management of bedaquiline-pretomanid-linezolid regimens in Georgia.** Nana Kiria (Tbilisi, Georgia), Zaza Avaliani, Tamar Togonidze, Lali Mikiashvili
OA866	**2 versus 3-drug regimen to treat Mycobacterium avium complex infection: a systematic review and meta-analysis** Dong Nguyen Van (Danang, Vietnam), Hai Duong, Ming-Chia Lee, Chih-Hsin Lee
OA867	**Electronic nose in differentiating and ascertaining clinical status among patients with pulmonary nontuberculous mycobacteria: a prospective multicenter study** Jann-Yuan Wang (Taipei, Taiwan), Meng-Rui Lee, Hung-Ling Huang
OA868	**Longitudinal lung function in bronchiectasis patients with mycobacterium abscessus pulmonary disease** Ying Na Ho (Singapore, Singapore), Keith Zhi Xian Toh, John Arputhan Abisheganaden, Albert Yick Hou Lim
OA869	**Discussion and Q&A** All Speakers

Brown 1+2 Session 116 11:00 - 12:15

Oral presentation: Interpretative strategies for lung function testing

Disease(s) : Airway diseases Interstitial lung diseases Respiratory critical care

Method(s) : Pulmonary function testing Physiology General respiratory patient care Epidemiology Imaging

Tag(s) : Clinical

Chairs : Monika Franczuk (Warszawa, Poland), Matthew Rutter (Cambridge (Cambridgeshire), United Kingdom)

OA870	**Late Breaking Abstract - Lung volumes differentiate emphysema- vs. airway disease-dominant pathologies wit h distinct clinical features in tobacco-exposed persons with preserved spirometry in SPIROMICS** Mehrdad Arjomandi (San Francisco, United States), Siyang Zeng, Igor Barjaktarevic, Eugene R Bleecker, Russell P Bowler, Gerard J Criner, Alejandro P Comellas, David J Couper, Jeffrey L Curtis, Mark T Dransfield, M. Bradley Drummond, Spyridon Fortis, Meilan K Han, Nadia N Hansel, Eric A Hoffman, Robert J Kaner, Richard E Kanner, Jerry A Krishnan, Wassim Labaki, Stephen P Peters, Robert Paine Iii, Christopher B Cooper, Donald P Tashkin, Prescott G Woodruff
OA871	**New race neutral GLI equation impacts ethnic groups differently!** Ahmed Elmahy (Leuven, Belgium), Julie Maes, Paul Desbordes, Maarten De Vos, Marko Topalovic
OA872	**Effect of altitude on spirometry values in Latin American: A GLI Network ERS Clinical Research Collaboration** Laura Graciela Gochicoa Rangel (Ciudad de México, Mexico), David Martínez-Briseño, Cole Bowerman, Sanja Stanojevic, Luciano Enrique Busi, Carlos Aguirre-Franco, Santiago C Arce, Monica Gutierrez Claveria, Carlos E Rodríguez-Martinez, Ana Moya Olivares, Vanessa Vernaza, Nilda Luz Palma Chambilla, Nelson Villca-Alá, Rosario Fernández-Plata, Rogelio Perez-Padilla, Carlos Valderrábano, Solange Caussade, Luis Torre-Bouscoulet
OA873	**Effect of changes in ERS-ATS 2021 bronchodilator significance reclassification on a large Australian community cohort** Thomas Ledger (Sydney, Australia), Keith Burgess
OA874	**Machine learning can predict patterns of pulmonary function** Michael Tisi (Toronto, Canada), Joyce Wu, Zoltán Hantos, Shahrokh Valaee, Chung-Wai Chow

OA875	**Minimal Clinically Important Difference for Impulse Oscillometry in Adults with Asthma** Mustafa Abdo (Grosshansdorf, Germany), Anne Kirsten, Erika Von Mutius, Matthias Kopp, Gesine Hansen, Klaus F Rabe, Henrik Watz, Frederik Trinkmann, Thomas Bahmer
OA876	**How sensitive are reversibility criteria in paediatric and adult asthma?** Samuel Wallbanks (BIRMINGHAM, United Kingdom), Paul Burns, Adel Mansur, Maximillian Thomas
OA877	**Defining and grading an obstructive ventilatory disease: ATS/ERS interpretive strategies of 2005 vs 2021** Balsam Barkous (ARIANA, Tunisia), Khouloud Kchaou, Chaima Briki, Sirine Jamli, Saloua Ben Khamsa Jameleddine
OA878	**Normative lung clearance index (LCI) values using a commercial open circuit washout device in children from White British and Indian Subcontinent ethnic groups** Christopher Hine (Birmingham (West Midlands), United Kingdom), Maya Desai, Elizabeth Sapey, Jane C Davies, Prasad Nagakumar
OA879	**Normative reference equations for breathlessness intensity during CPET in people aged ≥40 years: the CanCOLD study** Magnus Ekström (Lund, Sweden), Pei Zhi Li, Hayley Lewthwaite, Jean Bourbeau, Wan Tan, Linus Schiöler, Andrew Brotto, Michael Stickland, Dennis Jensen
OA880	**Discussion and Q&A** All Speakers

Blue 1+2 Session 117 11:00 - 12:15

Oral presentation: Risks of hospitalisation and mortality from chronic lung diseases

Disease(s) : Airway diseases

Method(s) : Epidemiology Public health Cell and molecular biology

Tag(s) : Clinical

Chairs : Om Prakash Kurmi (Coventry, United Kingdom)

OA881	**Late Breaking Abstract - Colostrum microbiome and childhood allergy** Caroline Lodge (Melbourne (VIC), Australia), Adrian Lowe, Xin Dai, Michael Abramson, Dharmage Shyamali
OA882	**Profiles of pregnancy and early-life urban and lifestyle exposures and respiratory health in children** Alicia Guillien (LA TRONCHE, France), Rémy Slama, Maribel Casas, Leda Chatzi, Montserrat De Castro, Berit Granum, Regina Grazuleviciene, Barbara Heude, Jordi Julvez, Norun Krog, Léa Maitre, Rosemary Mceachan, Mark Nieuwenhuijsen, Bente Oftedal, Cathrine Thomsen, Jose Urquiza, Marina Vafeiadi, John Wright, Martine Vrijheid, Xavier Basagaña, Valérie Siroux
OA883	**Risk of asthma in offspring of asthmatic fathers versus mothers: A population-based study of 21,000 individuals in Denmark** Morten Dahl (Køge, Denmark), Suzan Al-Shuweli, Eskild M. Landt, Christina Ellervik, Henrik E. Poulsen, Ramar Mohankumar, Alexey Fedulov
OA884	**Gabapentinoids and the risk of severe exacerbations in patients with chronic obstructive pulmonary disease** Alvi Rahman (Montreal, Canada), Sophie Dell'Aniello, Erica Moodie, Madeleine Durand, Janie Coulombe, Jean-François Boivin, Pierre Ernst, Christel Renoux
OA885	**Long-term outcomes between adults with and without breathlessness: a UK cohort study** Urvee Karsanji (London, United Kingdom), Claire A Lawson, Emily Petherick, Jennifer K Quint, Kamlesh Khunti, Michael C Steiner, Rachael A Evans
OA886	**Fetal exposure to vitamin D and risk of altered lung function and asthma throughout childhood: a meta-analysis of 14,000 children** Júlia Sangüesa (Sant Cugat del Vallès, Spain), Tarik Karramas, Mariona Bustamante, Dolors Pelegrí, Raquel Granell, Matt Boyton, Rachel Foong, Jennie Carson, Rae-Chi Huang, John Curtin, Martine Vrijheid, Maribel Casas, Liesbeth Duijts
OA887	**Treatment intensity level as a proxy for severity of COPD: A nationwide cohort study** Marie Dam Lauridsen (Aalborg, Denmark), Emil Fosbøl, Søren Paaske Johnsen, Ulla Weinreich Møller, Jan Valentin
OA888	**Respiratory symptom clusters and cause-specific mortality in a representative adult population** Daniil Lisik (Gothenburg, Sweden), Lowie Vanfleteren, Rani Basna, Linnea Hedman, Linda Ekerljung, Fredrik Nyberg, Göran Wennergren, Anne Lindberg, Hannu Kankaanranta, Eva Rönmark, Bright Nwaru, Helena Backman
OA889	**Long-term air pollution exposure and risk of SARS-CoV-2 infection: A UK-wide cohort study** Hajar Hajmohammadi (London, United Kingdom), Mohammad Talaei, Daniela Fecht, Weiyi Wang, Giulia Vivaldi, Sian Faustini, Alex Richter, Seif Shaheen, Adrian Martineau, Aziz Sheikh, Ian Mudway, Christopher Griffiths

OA890	**Lifetime body mass index trajectories and lung function and chronic obstructive pulmonary disease in the Tasmanian longitudinal health study (TAHS)** Gulshan Ali (melbourne, Australia), Dinh Bui Bui, Haydn Walters, Jennifer Perret, Bircan Erbas, Paul Thomas, Caroline Lodge, Garun Hamilton, Bruce Thompson, David Johns, John Hopper, Gayan Bowatte, Michael Abramson, Adrian Lowe, Shyamali Dharmage
OA891	**Discussion and Q&A** All Speakers

Yellow 1+2+3 Session 118 11:00 - 12:15

Oral presentation: From the transcriptome landscape to innovative preclinical models in lung diseases

Disease(s) : Airway diseases Interstitial lung diseases

Method(s) : Cell and molecular biology Physiology

Tag(s) : Translational

Chairs : Arnaud Mailleux (Paris, France), Sara Cuevas Ocaña (Nottingham, United Kingdom)

OA892	**Late Breaking Abstract - Development of a bronchial epithelium with a sensory innervation both derived from induced pluripotent stem cells** Arnaud Bourdin (Montpellier Cedex 5, France), FLORENT FOISSET, Christine Lehalle, Amel Nasri, Carine Bourdais, Lisa Morichon, Isabelle Vachier, Said Assou, John De Vos, Nelly Frossard
OA893	**Late Breaking Abstract - Volatile organic compounds in exhaled breath reflect physiological changes in ultramarathon runners** Hsuan Chou (Cambridge, United Kingdom), Kayleigh Arthur, Elen Shaw, Chad Schaber, Billy Boyle, Max Allsworth, Eli Kelley, Glenn Stewart, Courtney Wheatley, Jess Schwartz, Catlin Fermoyle, Briana Ziegler, Kay Johnson, Paul Robach, Patrick Basset, Bruce Johnson
OA894	**Identification of abnormal airway niches in the fibrotic lung using Spatial Transcriptomics** Aurélien Justet (Caen, France), Jiayi Zhao, Taylor Adams, Agshin Balayev, Thomas Barnthaler, Sam Raredon, Fernando Poli De Frias, Juan Cala-Garcia, John Mcdonough, Amy Zhao, Liu Yunqing, Li Ningshan, Wang Anita, Ivan Rosas, Xiting Yan, Naftali Kaminski
OA895	**Single-cell RNA sequencing of bronchoalveolar lavage reveals pro-inflammatory macrophage activation in fibrotic hypersensitivity pneumonitis** Avraham Unterman (Tel Aviv, Israel), Tali Hana Bar-Lev, Yan Stein
OA896	**Transcriptomic landscape of post-covid-19 pulmonary fibrosis (PCPF): insights and implications of bronchoalveolar lavage (BAL)** Mohammad Shadab Ali (New Delhi, India), Vijay Hadda, Anita Chopra, Sonia Verma, Anant Mohan
OA897	**LSC - 2023 - In vitro modelling of respiratory infections in Idiopathic Pulmonary Fibrosis using patient-specifi c hiPSC-derived alveolar epithelial cells** Serna Valverde Ana Lilia (Nottingham, United Kingdom), Liam Reed, Sara Cuevas Ocaña, Peggy Cho Kiu Lo, Amanda Tatler, Gisli Jenkins, Nicholas Rf Hannan
OA898	**Preclinical evaluation of HL001, a novel lysophosphatidic acid 1 (LPA1) receptor antagonist, for idiopathic pulmonary fibrosis utilizing physiologically relevant stem cell-derived lung organoids** Yuki Yamamoto (Kyoto, Japan), Tetsuharu Nagamoto, Harry Choi, Shunsuke Ito, Masako Kishihata, Noriaki Iwase, Kenichi Arai, Masahiro Kojima, Kenji Nishikawa, Eiji Okanari, Yuuko Shinohara
OA899	**Dual αVβ6/αVβ1 integrin inhibitor bexotegrast reduces fibrogenesis in pathological cell populations present in the fibrotic human lung** Martin Decaris (South San Francisco, United States), (,), Mahru An, Richard Ahn, Steve Ho, Vikram Rao, Erine Budi, Brenda Ho, Jessie Lao, Chris Her, Paul Wolters, Tushar Desai, Johanna Schaub, Scott Turner
OA900	**Involvement of the CXCR4/CXCL12 axis in skeletal muscle wasting in a murine model of Chronic Obstructive Pulmonary Disease (COPD)** Pauline Henrot (Pessac, France), Pierre Schilfarth, Marilyne Campagnac, Elise Maurat, Pauline Estèves, Jean-William Dupuy, Reshed Abohalaka, Olivier Chassande, Maéva Zysman, Patrick Berger, Isabelle Dupin
OA901	**Discussion and Q&A** All Speakers

Studio (White) Session 119 11:45 - 13:20

Year in review: Paediatric year in review

Aims : to provide an update on four topics in paediatric respiratory medicine, namely, paediatric asthma in low-income settings, imaging in paediatric respiratory diseases, primary ciliary dyskinesia and long-term consequences of preterm birth; to highlight the most recent and significant literature and developments relating to these topics.

Disease(s) : Airway diseases | Paediatric respiratory diseases | Respiratory infections

Method(s) : Epidemiology | Imaging | Public health

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Paediatrician, Physician in Pulmonary Training, Radiologist, Scientist (basic, translational), Journalist

Chairs : Monika Gappa (Düsseldorf, Germany), Susanne Vijverberg (Amsterdam, Netherlands)

11:45	**Asthma care in low-resource settings: towards solutions** Refiloe Masekela (Durban, South Africa)	**902**
12:00	**Imaging in paediatric respiratory diseases: where are we now?** Pierluigi Ciet (Rotterdam, Netherlands)	**903**
12:15	**Discussion and Q&A** All Speakers	**904**
12:30	**Break** All Speakers	**905**
12:35	**Primary ciliary dyskinesia: diagnosis and management** Amelia Shoemark (Dundee (Angus), United Kingdom)	**906**
12:50	**Preterm birth and long-term consequences** Sailesh Kotecha (Cardiff (South Glamorgan), United Kingdom)	**907**
13:05	**Discussion and Q&A** All Speakers	**908**

12:15-13:15
INDUSTRY LUNCHTIME SYMPOSIUM SEE PAGE 1

PS-1 in poster area — Session 129 — 12:30 - 14:00

Poster session: Rehabilitation of chronic respiratory diseases

Disease(s) : Airway diseases | Interstitial lung diseases | Thoracic oncology

Method(s) : Pulmonary rehabilitation | General respiratory patient care | Physiology | Pulmonary function testing | Epidemiology | Surgery | Public health

Tag(s) : Clinical

Chairs : Anouk W. Vaes (Horn, Netherlands), Jennifer Alison (Killara (NSW), Australia)

PA951	**Body Reprogramming for the extra-pulmonary symptoms of severe asthma** Joseph Lanario (Plymouth (Devon), United Kingdom), Drew Davies, Michael Hyland, Rupert Jones, Matthew Masoli
PA952	**Patient views on pulmonary rehabilitation and maintenance programs: a French national survey** Francois Alexandre (Lodeve, France), Virginie Molinier, Amandine Calvat, Laurène Charbonnel, Benjamin Eichenauer, Magali Poulain, Estelle Villiot-Danger, Catherine Miffre, Nicolas Oliver, Nelly Héraud
PA953	**Occupational asthma and allergic asthma: differences in the physical activity level, clinical control, and airway inflammation** Ronaldo Aparecido Da Silva (São Paulo (SP), Brazil), Lucas Rodrigues Silva Freitas, Francine Maria De Almeida, Clóvis Eduardo Santos Galvão, Soraia Felix Nogueira, Suellen Karoline Moreira Bezerra, Celso Ricardo Fernades De Carvalho, Kaique Alves De Araujo, Fabiola Matos Da Cruz, Rosana Câmara Agondi, Milton Arruda Martins, Iolanda De Fátima Lopes Calvo Tibério, Beatriz Mangueira Saraiva-Romanholo
PA954	**Rehabilitation outcomes for an exercise based multi-morbid rehabilitation programme – a survey of healthcare professionals** Sally J. Singh (Leicester (Leicestershire), United Kingdom), Susan Smith, Frances Mair, Rachael Evans, Paulina Daw, Colin Greaves, Sharon Simpson, Rod Taylor
PA955	**Effect of adding cognitive training to pulmonary rehabilitation program in patients with chronic obstructive pulmonary diseases: a randomized controlled trial.** oussama Tabka (Evry courcouronnes, France), Marwa Mekki, Amal Acheche, Monia Zaouali, Yassine Trabelsi

PA956	**Comparison of the effects of pulmonary and cognitive telerehabilitation in severe COPD** Amine Atac (Istanbul, Turkey), Esra Pehlivan, Fulya Senem Karaahmetoglu, Zeynep Betul Ozcan, Halit Cınarka, Mustafa Cortuk, Kursad Nuri Baydili, Erdogan Cetinkaya
PA957	**Chronic obstructive pulmonary disease in elderly** Sabrine Majdoub Fehri (Nabeul, Tunisia), Rahma Sellami, Imen Ketata, Hamida Kwass
PA958	**Breathlessness and disability in different domains of life: a population-based, cross-sectional study** Vanessa Brunelli (Cooma, Australia), Slavica Kochovska, Diana Ferreira, Sungwon Chang, Deidre Morgan, Thomas Similowski, Miriam Johnson, Magnus Ekström, David Currow
PA959	**Feasibility of a shared decision-making intervention for individuals with COPD considering Pulmonary Rehabilitation** Sally J. Singh (Leicester (Leicestershire), United Kingdom), Amy Barradell, Hilary Bekker, Linzy Houchen-Wolloff, Kim Marshall-Nichols, Noelle Robertson
PA960	**Effects of a respiratory physiotherapy program on extraesophageal reflux disease symptoms** Pavla Horova (Pardubice, Czech Republic), Martin Dvoracek, Ana Oliveira, Katerina Raisova
PA961	**An overview of systematic reviews of exercise-based interventions for people with long-term conditions** Lucy Gardiner (Leicester, United Kingdom), Grace O Dibben, Hannah M L Young, Sally Singh, Rod S Taylor, Perform Collaborative Group
PA962	**Correlation between a new incremental step test and the incremental shuttle walk test in people with COPD** Rui Vilarinho (Maia, Portugal), Tânia Gonçalves, Cátia Caneiras, António Mesquita Montes
PA963	**Comprehensive Geriatric Assessment for people with COPD and frailty starting pulmonary rehabilitation: a mixed methods feasibility RCT** Lisa Jane Brighton (London, United Kingdom), Catherine J Evans, Morag Farquhar, Katherine Bristowe, Aleksandra Kata, Jade Higman, Margaret Ogden, Claire M Nolan, Deokhee Yi, Wei Gao, Maria Koulopoulou, Sharmeen Hasan, Karen Ingram, Stuart Clarke, Kishan Parmar, Eleni Baldwin, Claire J Steves, William D C Man, Matthew Maddocks
PA964	**Educational needs of patients with COPD and asthma entering pulmonary rehabilitation and their significant others: a cross-sectional study** Anouk Muijsenberg (Panningen, Netherlands), Sarah Houben-Wilke, Jan Tatousek, Joyca Lacroix, Martijn Spruit, Daisy Janssen
PA965	**Co-designing chronic lung disease education resources with Aboriginal Health Workers (AHWs) and exercise physiologists (EPs)** David P Meharg (Camperdown, Australia), Sarah M Dennis, Justin Mcnab, Kylie G Gwynne, Christine R Jenkins, Graeme P Maguire, Stephen Jan, Tim Shaw, Zoe Mckeough, Boe Rambaldini, Vanessa Lee, Debbie Mccowen, Jamie Newman, Scott Monaghan, Hayley Longbottom, Sandra J Eades, Jennifer A Alison
PA966	**Is longer really better? Results of a real-life study comparing once- versus twice-weekly home-based pulmonary rehabilitation session in people with COPD.** Sarah Gephine (Pérenchies, France), Olivier Le Rouzic, Cecile Chenivesse, Jean-Marie Grosbois
PA967	**Development of a questionnaire to capture perspectives of COPD patients undergoing pulmonary rehabilitation (PR): An ongoing process.** Adis Halilovic (Hartford, United States), Bruce Bernstein, Rebecca Crowell, Mary Gawlicki, Jane Reardon, Kendra Williams, Richard Zuwallack
PA968	**Association of physical activity and CAT score in a longitudinal COPD cohort** Maximilian Boesch (St.Gallen, Switzerland), Frank Rassouli, Florent Baty, Martin Brutsche
PA969	**Physical performance of non-small cell lung cancer patients 3 months post treatment initiation compared to healthy peers** Eva Arents (Knokke, Belgium), Kirsten Quadflieg, Sarah Haesevoets, Fien Hermans, Maarten Criel, Marc Daenen, Eric Derom, David Ruttens, Martijn A. Spruit, Dieter Stevens, Veerle Surmont, Michiel Thomeer, Chris Burtin, Heleen Demeyer
PA970	**Pulmonary rehabilitation survey in Japan in 2022; comparison with survey in 2014** Hideki Katsura (Tokyo, Japan), So Imamura

PS-10 in poster area Session 130 12:30 - 14:00

Poster session: Biomarkers in asthma

Disease(s) : Airway diseases

Method(s) : Epidemiology Physiology Pulmonary function testing General respiratory patient care Pulmonary rehabilitation Public health Cell and molecular biology

Tag(s) : Translational

Chairs : Renaud Louis (Liège, Belgium), Andrei Malinovschi (Uppsala, Sweden)

PA971	**Particles in exhaled air (PExA) - the protein composition in children** Kristiina Malmstrom (Helsinki, Finland), Marjut Lehtinen, Ulrich Bergmann, Seppo Sarna, Venla Aaltonen, Erik Qvist, Maria Juusela
PA972	**Burden of disease in asthma, stratified by eosinophils levels: a UK biobank study** Catia C Proenca (Basel, Switzerland), Aurelie Chekroun Martinot, Oscar Dumoulin, Mathieu Rose
PA973	**Exhaled volatiles to rule out asthma in symptomatic, untreated adults** Ran Wang (Manchester (Greater Manchester), United Kingdom), Waqar Ahmed, Emma Barrett, Laura Healy, Sarah Drake, Clare Murray, Angela Simpson, Stephen Fowler
PA974	**Circulating cell-free miRNA as biomarkers of asthma severity** piera soccio (Foggia (FG), Italy), Giorgia Moriondo, Donato Lacedonia, Pasquale Tondo, Carla Maria Irene Quarato, Giorgia Lepore, Annarita Depalo, Antonella Santoro, Anela Hoxhallari, Maria Pia Foschino Barbaro, Giulia Scioscia
PA975	**The role of alarmins in mixed neutrophilic/eosinophilic asthma** Elisa Arrigo (Orbassano, Italy), Vitina Carriero, Francesca Bertolini, Giuseppe Guida, Stefano Levra, Gino Villetti, Daniela Miglietta, Fabio L. M. Ricciardolo
PA976	**Characteristics of Aspergillus sensitized severe asthma patients in a single-center SHARP cohort** Katarina Pelicon Slabanja (Šempas, Slovenia), Matevž Harlander, Saša Rink, Simone Hashimoto, Jacob K. Sont, Elisabeth H. Bel, Sabina Skrgat
PA977	**Methacholine challenge test versus nitrogen washout in patients with suspicion of asthma and normal spirometry.** Aline Stalder Siebeneichler (Basel, Switzerland), Desiree Schumann, Meropi Karakioulaki, Nora Braschler, Andrei Darie, Michael Tamm, Daiana Stolt
PA978	**Inflammatory phenotype categorized by proximal and distal airway in patients with stable asthma** Kensuke Fukumitsu (Nagoya, Japan), Yoshihiro Kanemitsu, Keima Ito, Hirono Nishiyama, Tomoko Tajiri, Yuta Mori, Satoshi Fukuda, Takehiro Uemura, Hirotsugu Ohkubo, Ken Maeno, Yutaka Ito, Tetsuya Oguri, Masaya Takemura, Akio Niimi
PA979	**Muscle function in moderate to severe asthma: association with functional and clinical outcomes** Edith Visser (Leeuwarden, Netherlands), Kim De Jong, Tim Van Zutphen, Huib A.M. Kerstjens, Anneke Ten Brinke
PA980	**Association between neutrophil-to-lymphocyte ratio and severity of asthma exacerbation** Yossr Aloulou (Manouba, Tunisia), Houda Snene, Hana Blibech, Rym Cheour, Sameh Belhadj, Jalloul Daghfous, Nedia Mehiri, Nozha Ben Salah, Bechir Louzir
PA981	**Correlation between FeNO and level of adherence to inhaled corticosteroids in pediatric asthma patients in a developing country** Pedro David Vargas Duque (bogota, Colombia), Daniela Cleves, Ranniery Acuña Cordero, Paula Aguilera Otalvaro, Bethy Camargo, Ricardo Aristizabal Duque, Carlos Rodriguez Martinez
PA982	**Treatable traits and their impact on asthma outcomes in a multi-racial difficult asthma cohort** Kundan Reddy Saripalli (Singapore, Singapore), Nicole Sieow, Wilson Chan, Xue Ning Choo, Anthony Yii, Tunn Ren Tay
PA983	**Are lipid mediators correlated to asthma features?** Meriem Mjid (Tunis, Tunisia), Bochra Jamoussi, Abir Hedhli, Khadija Euchi, Sameh Hadj Taieb, Yacine Ouahchi, Sana Cheikh Rouhou, Sonia Toujani, Moncef Fekih, Besma Dhahri
PA984	**Diagnostic values of FeNO, allergosorbent test and serum immunoglobulin E level in mild asthma patients with normal spirometry** Dae Sung Hyun (Daegu, Republic of Korea), Kyung Chan Kim, Chi Young Jung, Keum Ju Choi
PA985	**Clinical characteristics, biomarkers, and lung function of adolescent vs adult asthma patients** Kevin Murphy (Omaha, United States), Alison Church, Robert S. Zeiger, David A. Beuther, Robert A. Wise, Joan Reibman, Maureen George, William Mccann, Ileen Gilbert, James M. Eudicone, Hitesh N. Gandhi, Karin Coyne, Bradely E. Chipps
PA986	**Acoustic biomarkers in asthma monitoring** Karolina Wieczorek (London, United Kingdom), Zofia Przypasniak, Diana Velazquez-Pimentel

PA987	**Patterns of adherence and nonadherence among asthma patients in a tertiary hospital** Mohammed Almutairi (Birmingham, United Kingdom), John Marriott, Hanan Hussein, Lisa White, Sharron Gilbey, Baljit Ahitan, Adel Mansur
PA988	**Comparision of changes observed in forced midexpiratory flow of patients who underwent spirometry with both positive and negative bronchodilator test.** Cristina Sánchez Fernández (Oropesa, Spain), Walther Ivan Girón Matute, Zichen Ji, Javier De Miguel Díez, Luis Puente Maestu
PA989	**Sputum cell counts and FeNO levels in patients treated with anti-IgE and anti-IL-5 /IL-5R: Evidence for a dissociation between sputum eosinophil counts and FeNO levels** Mare Sabbe (Olne, Belgium), Florence Schleich, Nicolas Bougard, Catherine Moermans, Monique Henquet, Françoise Guissard, Carole Sanschez, Virginie Paulus, Renaud Louis
PA990	**Late Breaking Abstract - Enhancing asthma management through advanced prediction of indoor pollutant peaks: a 30-minute forecasting model for trigger avoidance and early intervention** Victor Higgs (London, United Kingdom), Hanya Ahmed, Jona Angelica Flavier

PS-11 in poster area Session 131 12:30 - 14:00

Poster session: Smoking cessation

Disease(s) : Interstitial lung diseases | Thoracic oncology | Airway diseases | Sleep and breathing disorders

Method(s) : Cell and molecular biology | Imaging | General respiratory patient care | Epidemiology | Pulmonary function testing | Public health

Tag(s) : Clinical

Chairs : Paraskevi Katsaounou (Athens, Greece), Siyu Dai (Hangzhou, China)

PA991	**Healthy lungs for life for schools – developing an early life intervention to prevent chronic adult lung disease (a CADSET pilot project)** Pippa Powell (Sheffield (South Yorkshire), United Kingdom), Jessica Denning, Paola Pierucci
PA992	**An example of comprehensive approach to tobacco cessation: Collaboration with Rheumatology Clinic** Dilek Karadoğan (Rize, Turkey), Osman Cüre, Tahsin Gökhan Telatar, Kadir Ilkkılıç
PA993	**Effectiveness of smoking cessation program in hospitalized patients** Dilek Karadoğan (Rize, Turkey), Esin Bilgin Konyalıhatipoğlu, Tahsin Gökhan Telatar, Ünal Şahin
PA994	**Strategies to deliver smoking cessation interventions during targeted lung health screening, a systematic review and meta-analysis.** Parris Williams (London, United Kingdom), Keir Philip, Saeed Alghamdi, Alexis Perkins, Sara Buttery, Michael Polkey, Anthony Laverty, Nicholas Hopkinson
PA995	**E-cigarettes dependence comparing to traditional cigarettes: a pilot Tunisian study** Houda Rouis (Ariana, Tunisia), Nour Mahmoud, Chirine Moussa, Abdelnadher Mahdi, Maalej Sonia
PA996	**Smoking behavior change and the risk of pneumonia hospitalization among patients with diabetes mellitus** Dong-Woo Han (Seoul, Republic of Korea), Wonyoung Jung, Kyu Na Lee, Kyungdo Han, Dong Wook Shin, Sei Won Lee
PA997	**Lung cancer as a comorbidity in patients with Combined Pulmonary Fibrosis and Emphysema Syndrome** Jolanda Nikolla (Tirana, Albania), Daniela Xhemalaj
PA998	**Impact of COVID-19 pandemic on change in tobacco use behavior** Makiko Kanai (Kyoto, Japan), Osamu Kanai, Takahiro Tabuchi, Tadashi Mio
PA999	**Prevalence of smoking in adolescents.** Khurshidbek Tashmetov (Ташкент, Uzbekistan), Naima Ubaydullaeva, Gulchekhra Tashmetova
PA1000	**COMPARISON OF RESPIRATORY SYMPTOMS AMONG ADULTS WITH VERSUS WITHOUT VAPING, SMOKING, AND DUAL-USE: A CROSS-SECTIONAL STUDY IN A CALL CENTER IN QUEZON CITY** Catherine Joy Tubig (Quezon city, Philippines), Ma. Encarnita Limpin
PA1001	**Impacts of the COVID-19 Pandemic on Smoking Cessation Success** Muzaffer Onur Turan (Izmir, Turkey), Pakize Ayşe Turan
PA1002	**Effect of five years heated tobacco products use on health-Comparison with smoking cessation** Shin-ichi Hagiwara (Tochigi, Japan), Hiroo Wada
PA1003	**Smoking Cessation in patients with severe mental illness** Adamadia Liapikou (Athens, Greece), Vasiliki Ntoumou

PA1004	**Factors Associated with the Early Initiation of Smoking** Parakkal Sukumaran (Kottayam (Kerala), India), Thomas Beena, Joy Thomas, M Midhun, P Rekha, K P Venugopal, Ninan Mathew
PA1005	**Telemedicine as a tool in the smoking cessation clinic – 154 cases in 2 years in the largest city in Latin America.** Lavinia Clara Del Roio (São Paulo (SP), Brazil), Telma Cassia Santos Nery, Stella R Martins, Jefferson Benedito Pires Freitas, Gustavo Correa De Almeida, Rafael Futoshi Mizutani, Carlos Roberto Ribeiro Carvalho
PA1007	**Changes in smoking behavior among healthcare professionals after COVID-19 pandemic** Hana Blibech (Ariana, Tunisia), Soumaya Debbiche, Nozha Ben Salah, Houda Snene, Sameh Belhaj, Nadia Mehiri, Bechir Louzir
PA1008	**Smoking among Tunisian medical professionals suffering from burnout syndrom during the COVID 19 pandemic.** Dorra Gharbi (Sfax, Tunisia), Rahma Gargouri, Nour Gargouri, Ahmed Dhia Elleuch, Sameh Msaad, Nedia Moussa, Samy Kammoun
PA1009	**Predicting factors of the success of smoking cessation** Takwa Bejaoui (Tunis, Tunisia), Rahma Gargouri, Mariem Ayadi, Ahmed Dhia Elleuch, Nesrine Kallel, Hajer Ayadi, Najla Bahloul, Samy Kammoun
PA1010	**Use of obstructive airway medication in Denmark dependent of age – past and present.** Peter Ascanius Jacobsen (Aalborg, Denmark), Kristian Kragholm, Christian Torp-Pedersen, Ulla Møller Weinreich

PS-12 in poster area Session 132 12:30 - 14:00

Poster session: Global burden and management of chronic obstructive pulmonary disease

Disease(s) : Airway diseases

Method(s) : Epidemiology General respiratory patient care Physiology Public health Pulmonary function testing

Tag(s) : Clinical

Chairs : Nagendra Chaudhary (Bhairahawa, Nepal), Chair to be confirmed

PA1011	**Prevalence and presentation of early stage of chronic obstructive pulmonary disease in China: a national cross-sectional study** Jieping Lei (Beijing, China), Ke Huang, Sinan Wu, Ting Yang, Chen Wang
PA1012	**Correlation of COPD Assessment Test score and severity of disease in non-smoking COPD patients.** Ajay Kumar Verma (Lucknow (Uttar Pradesh), India), Anuj Kumar Pandey, Surya Kant, Arpita Singh, Jyoti Bajpai, Rakesh Kumar Dixit, Shaym Chand Chaudhary
PA1013	**Pre-COPD in young adults and COPD later in life: A population-based cross-cohort comparison study** Yunus Çolak (Espergærde, Denmark), Peter Lange, Jørgen Vestbo, Børge G. Nordestgaard, Shoaib Afzal
PA1014	**COPD exacerbations during and beyond the COVID-19 pandemic in the UK** Derek Skinner (Cambridge, United Kingdom), Jeffrey Shi Kai Chan, Mehul Patel, Richard Hubbard, Himanshu Parikh, David Price, Victoria Carter
PA1015	**Changes in COPD treatment in Brazil: Findings from the National Health Surveys** Gabriela Marques (Pelotas, Brazil), Andre F.S Amaral, Fernando C. Wehrmeister
PA1016	**Characteristics and treatment patterns of COPD patients according to GOLD classification in the Philippines** Bernice Ong-dela Cruz (Quezon City, Philippines), Kenneth Alberca, Beatriz Tan-Helera, Dennis Teo, Violeta Reyes, Guinevere Agra, Celeste Mae Campomanes, Teresita De Guia, Helen Isaac, Lenora Fernandez, Rodolfo Pagcatipunan, Roland Panaligan, Tim Trinidad
PA1017	**Mortality and exacerbations in chronic obstructive pulmonary disease associated with Stenotrophomonas maltophilia. A regional cohort study of 22,689 outpatients.** Christian Philip Rønn (København Ø, Denmark), Peter Kamstrup, Josefin Eklöf, Louise Lindhart Toennesen, Jonas Bredtoft Boel, Christian Østergaard Andersen, Ram Benny Dessau, Jon Torgny Wilcke, Pradeesh Sivapalan, Charlotte Ulrik, Jens Ulrik Stæhr Jensen
PA1018	**Characteristics of COPD patients on maintenance inhaled therapy in Hungary** Márta Kamocsai (Győr, Hungary), Balázs Sánta, Margit Bíró, Krisztina Vincze, Zsófia Lázár
PA1019	**COPD-related mortality through different waves of the COVID-19 pandemic** Gabriella Guarnieri (Padova (PD), Italy), Claudio Barbiellini Amidei, Veronica Casotto, Alessia Achille, Leonardo Bertagna De Marchi, Sara Lococo, Federico Lionello, Andrea Vianello, Ugo Fedeli
PA1020	**Impact of stigma and inhaler counseling among geriatric asthma/COPD patients: a pilot study** Saqib Ahmed-Chowdhury (Chittagong, Bangladesh)

PA1021 **Dietary flavonoids and ventilatory function in adults from the multinational Burden of Obstructive Lung Disease (BOLD) Study**
Mulubirhan Assefa Alemayohu (Mekelle, Ethiopia), Maria Elisabetta Zanolin, Lucia Cazzoletti, Karima El-Rhazi, Hasan Hafizi, Asaad Ahmed Nafees, Kirthi Gunasekera, Mahesh Padukudru Anand, Talant Sooronbayev, Peter Burney, Vanessa Garcia-Larsen

PA1022 **Risk of mortality and cardiovascular events in patients with chronic obstructive pulmonary disease treated with azithromycin, roxithromycin, clarithromycin and amoxicillin**
Imane Alispahic (Rødovre, Denmark), Josefin Eklof, Alexander Svorre Jordan, Pradeesh Sivapalan, Zitta Barrella Harboe, Jens-Ulrik Stæhr Jensen

PA1023 **Real-world study of vaccine effectiveness decline against SARS-Cov-2 Delta variant in COPD patients**
Lorinc Polivka (Üröm, Hungary), István Valyi-Nagy, Zoltán Szekanecz, Krisztina Bogos, Hajnalka Vago, Anita Kamondi, Ferenc Fekete, Janos Szlavik, Gyorgy Surjan, Orsolya Surjan, Peter Nagy, Zsuzsa Schaff, Cecilia Muller, Zoltan Kiss, Miklos Kasler, Veronika Muller

PA1024 **Anemia and proBNP levels as risk factors for airflow limitation in patients with acute coronary syndrome**
Santiago Rodriguez-Segade Alonso (A Coruña, Spain), Irene Nieto Codesido, Carmen Diego Roza, Elvira Clavero Fernández

PA1025 **Effect of smoking on the development of chronic obstructive pulmonary disease in young individuals: a nationwide cohort study**
Chiwook Chung (Seoul, Republic of Korea), Kyu Na Lee, Kyungdo Han, Dong Wook Shin, Sei Won Lee

PA1026 **Chronic obstructive pulmonary disease management by pulmonologists in private health care structures in Tizi-Ouzou city (Algeria): a cross-sectional survey.**
Kahina Lanani (Tizi-Ouzou, Algeria), Imane Smaoun, Belaid Bouazza

PA1027 **Risk of chronic lower respiratory disease prior to development of inflammatory bowel disease: A population-based cohort study**
Ulla Møller Weinreich (Ålborg, Denmark), Henrik Albæk Jacobsen, Anastasia Karachalia Sandri, Tine Tine Jess, Lone Larsen

PA1028 **Biomarkers of systemic inflammation are not associated with the risk of COPD exacerbations**
Jens Ellingsen (Uppsala, Sweden), Kristina Bröms, Maria Hårdstedt, Marieann Högman, Christer Janson, Karin Lisspers, Andreas Palm, Björn Ställberg, Andrei Malinovschi

PA1029 **The economic and health burden of COPD in Western Europe: forecasting through 2050**
Elroy Boers (Calgary, Canada), Angier Allen, Meredith Barrett, Adam Benjafield, Carlos Nunez, Jadwiga Wedzicha, Atul Malhotra

PA1030 **The economic and health burden of COPD in the Middle East: forecasting through 2050**
Elroy Boers (Calgary, Canada), Angier Allen, Meredith Barrett, Adam Benjafield, Carlos Nunez, Atul Malhotra, Jadwiga Wedzicha

PS-13 in poster area Session 133 12:30 - 14:00

Poster session: Daily activity, exercise and others in chronic obstructive pulmonary disease and asthma

Disease(s) : Respiratory critical care Airway diseases

Method(s) : Pulmonary rehabilitation Respiratory intensive care General respiratory patient care Imaging

Tag(s) : Clinical

Chairs : Elena Gimeno-Santos (Barcelona, Spain), Alda Sofia Pires De Dias Marques (Aveiro, Portugal)

PA1031 **Are physical activity levels different between non-frail and pre-frail patients with COPD?**
Sara Pimenta (Meirinhas, Portugal), Sofia Flora, Ana Alves, Nádia Hipólito, Ana Oliveira, Nuno Morais, Cândida G. Silva, Alda Marques, Dina Brooks, Chris Burtin, Filipa Januário, Fátima Rodrigues, Vitória Martins, Lilia Andrade, Joana Cruz

PA1032 **Reproducibility of the six-minute walk test on a 20-meter course in patients with COPD**
Jeannet Delbressine (Horn, Netherlands), Alex Van 'T Hul, Dennis Jensen, Pei Zhi Li, Jean Bourbeau, Wan C. Tan, Martijn Spruit, Anouk Vaes

PA1033 **Fidelity and experience regarding an exercise training program in primary care for patients after an AECOPD**
Marieke Wuyts (Laeken, Belgium), Fien Hermans, Sofie Breuls, Stephanie Everaerts, Eric Derom, Wim Janssens, Heleen Demeyer, Thierry Troosters

PA1034	**Diaphragmatic mobility assessed by ultrasound is associated with thoracoabdominal asynchrony in severe to very severe COPD patients** Juliana Melo Batista Santos (São Bernardo do Campo, Brazil), Estéfane C M Reis, Pedro L Lino, Adriana C Lunardi, Cibele C B M Silva, Thiago F Pinto, Regina M Carvalho-Pinto, Alberto Cukier, Maria C Chammas, Celso R F Carvalho
PA1035	**Usability of the OnTRACK platform to promote physical activity in COPD** Nádia Hipólito (Leiria, Portugal), Sofia Flora, Jessica Gordo, Diogo Pinto, Rúben Caceiro, Sara Pimenta, Fernando Silva, José Ribeiro, Marcelo Brites-Pereira, Nuno Morais, Cândida G. Silva, Ana Oliveira, Chris Burtin, Dina Brooks, Alda Marques, Joana Cruz
PA1036	**Experiences of interprofessional collaboration and the care delivery pathway for patients with COPD.** Sara Lundell (Umea, Sweden), Åsa Wikman, Gunilla Stenberg
PA1037	**Relationship between social support and COPD GOLD groups** Cíntia Dias (Aveiro, Portugal), Patrícia Rebelo, Guilherme Rodrigues, Ana Sofia Grave, Maria Aurora Mendes, Sara Almeida, Célia Freitas, Isabel Moreira, Cristiana Santos, Adriana Simões, Claúdia Rodrigues, Inês Amado, Alda Marques
PA1038	**Investigation of chest and neuropathic pain on disease severity in patients with COPD** aynur demirel (ankara, Turkey), Mustafa Celik, Melda Saglam, Naciye Vardar Yaglı, Lutfi Coplu
PA1039	**Acute effects of EPAP during exercise on chest wall volumes and breathing pattern in COPD** Guilherme Fregonezi (Rio Grande do Norte, Brazil), Lailane Saturnino Da Silva, Vanessa Resqueti, Marina Lyra Lima Cabral Fagundes, Pricila Mayara Da Silva Resende, Hugo Leonardo Alves Pereira, Veronica Franco Parreira, Andrea Aliverti
PA1040	**Automated oxygen titration at home for patients with COPD - a pilot study** Linette Marie Kofod (Jyllinge, Denmark), Ejvind Frausing Hansen, Barbara Brocki, Morten Tange Kristensen, Elisabeth Westerdahl
PA1041	**ANALYSIS OF VENTILATORY CHARACTERISTICS IN PATIENTS WITH COPD AND HOME MECHANICAL VENTILATION.** Adriana Martin Pascual (Tiana, Spain), Marina Galdeano Lozano, Carmen Fernandez, Ariadna Ning Morancho, Guillem Hernandez, Francesc López, Irene Aldàs, M Matute Villacis, Antoni Marin, Agnes Hernández, Ignasi Garcia, Jorge Abad
PA1042	**A Core Outcome Set for Pulmonary Rehabilitation of patients with COPD: a modified Delphi survey** Sara Souto-Miranda (Aveiro, Portugal), Isabel Saraiva, Martijn A. Spruit, Alda Marques
PA1043	**The use of Virtual Reality as a rehabilitational strategy in patients with COPD. Systematic Review** Irini Patsaki (Piraeus, Greece), Vasiliki Avgeri, Theodora-Maria Rigoulia, Dimitris Tsimouris, Theodoros Zekis, Eirini Grammatopoulou
PA1044	**Feasibility of an animated video intervention post-acute exacerbation of COPD** Kriti Agarwal (Montreal, Canada), Matheus De Paiva Azevedo, Jean Bourbeau, Deborah Da Costa, Sarah Ahmed, Pauline Anderson, Tania Janaudis-Ferreira
PA1045	**Survey of Australian pulmonary rehabilitation health professionals: is exercise prescribed in line with clinical guidance?** Hayley Lewthwaite (Merewether, Australia), Emily R Cox, Gennaro D'Elia, Sarah Valkenborghs, Jennifer Mackney, Vanessa M Mcdonald
PA1046	**LungFlareCare: development and evaluation of a new web-based educational resource** Christian Osadnik (Melbourne, Australia), Alethea Kavanagh, Ruben Hopmans, Georgia Roberts, Chooi-Ee Lai, Jessica Degaris, Lauren Palmer, Amy Catlin, Marielle Collings, Rachel Smith, Carla Gordon
PA1047	**Perceptions and beliefs associated with enrolling in pulmonary rehabilitation** Ana Oliveira (Aveiro, Portugal), Anne-Marie Selzler, Cindy Ellerton, Dina Brooks, Roger Goldstein
PA1048	**Utility of respiratory impedance to evaluate the efficacy of pulmonary rehabilitation in people with chronic obstructive pulmonary disease** Simone Pancera (Milan, Italy), Marialaura Bertussi, Riccardo Buraschi, Luca Nicola Cesare Bianchi
PA1049	**Motivation to exercise and its relation to self-efficacy in adolescents with asthma: an observational study** Fernanda Lehrbaum (Londrina, Brazil), Joice Mara De Oliveira, Nathalia Ribeiro Berdu, Ana Beatriz Matos Bernardo, Cláudio Luiz Castro Gomes De Amorim, Simone Dal Corso, Fabio De Oliveira Pitta, Manuela Karloh, Karina Couto Furlanetto
PA1050	**Problematic activities of daily living in adult patients with asthma** Roy Meys (Horn, Netherlands), Frits Franssen, Nienke Nakken, Anouk Vaes, Daisy Janssen, Anouk Stoffels, Hieronymus Van Hees, Bram Van Den Borst, Peter Klijn, Chris Burtin, Martijn Spruit

PS-14 in poster area Session 134 12:30 - 14:00

Poster session: Advances in the diagnosis of tuberculosis

Disease(s) : Airway diseases

Method(s) : General respiratory patient care Cell and molecular biology Imaging Public health Epidemiology Endoscopy and interventional pulmonology

Tag(s) : Clinical

Chairs : Delia Goletti (Roma (RM), Italy), Chair to be confirmed

PA1051	**Ocular tuberculosis (OTB): typical and atypical phenotypes in a UK setting** Claudia Liang (London, United Kingdom), Osman Hatem, Kavina Manalan, Ilaria Testi, Sethi Charanjit, Bhavini Dixit, Laura Martin, Meg Coleman, Carlos Pavesio, Harry Petrushkin, Rashmi Akshikar, Onn Min Kon
PA1052	**Clinical and radiological predictors of tuberculous meningitis** Rebekah Young (London, United Kingdom), Erik Skyllberg, Akhilesh Sharma, Veronica White, Simon Tiberi, Susan Dart, Heinke Kunst
PA1053	**Usage of Silver Nanoparticles to Restore Rifampicin Efficacy for Rifampicin-Resistant M.Tuberculosis Cultures** Nino Kiria (Tbilisi, Georgia), Teona Avaliani, Nino Bablishvili, Giorgi Phichkhaia, Nana Kiria
PA1054	**Quantifying Myeloid-derived suppressor cells in pleural effusion can distinguish Tuberculosis from Pneumonia** Eun Sun Kim (Seoul, Republic of Korea), Je-In Youn
PA1055	**Diagnostic accuracy of adenosine deaminase in GeneXpert positive tuberculosis pleural effusion.** Zulfiqar Ali Detho (Karachi, Pakistan), Faisal Faiyaz Zuberi
PA1056	**Interleukin 32 as a Potential Marker for Diagnosis of Tuberculous Pleural Effusion** Juan Du (Beijing, China)
PA1057	**Determinants of tuberculosis diagnosis delay** Maria João Cavaco (Coimbra, Portugal), Sofia Alves, Luis Mateus, André Nunes, Ricardo Cordeiro, Carina Silvestre, Paula Matilde, Natália André, Paula Raimundo, Teresa Falcão
PA1058	**Isolated positivity of NAAT in bronchial aspirate - What entity?** Fernando Pereira da Silva (Vila Real, Portugal), Filipa Jesus, Joana Ribeiro, Sara Braga, Élin Almeida, Mariana Tavares, Madalena Reis, Filomena Luís, Luís Ferreira
PA1059	**Cell-mediated immune responses against specific antigen for diagnosing pulmonary Mycobacterium avium complex disease stage** Yoshiro Yamashita (Nagasaki, Japan), Ikkoh Yasuda, Takeshi Tanaka, Toru Ikeda, Mayumi Terada, Masahiro Takaki, Yoshiko Tsuchihashi, Norichika Asoh, Sohkichi Matsumoto, Konosuke Morimoto
PA1060	**CyTOF analysis for differential immune cellular profiling between latent tuberculosis infection and active tuberculosis** Jaehee Lee (Daegu, Republic of Korea), Ji Eun Park
PA1061	**Host factors associated with false negative results in an interferon-γ release assay in adults with active tuberculosis:a single-center retrospective study** quanxian Liu (Chengdu, China), Jian-Qing He
PA1062	**The error rate of phenotypic drug susceptibility tests in tuberculosis patients according to specimen type.** Hong-Joon Shin (Gwangju, Republic of Korea), Bo Gun Kho, Young-Ok Na, Jae-Kyeong Lee, Tae-Ok Kim
PA1063	**Sensitivity and Specificity of screening and confirmatory tests to detect TB disease: a systematic review of reviews (RoR).** Dominik Zenner (London, United Kingdom), Tahreem Chaudry, Ibrahim Abubakar, Frank Cobelens
PA1064	**Expression levels of maturation and activation markers in immune cells as a correlate of anti- tuberculosis therapy monitoring.** Irene Latorre Rueda (Badalona (Barcelona), Spain), Sergio Díaz Fernández, Zoran Stojanovic, Raquel Villar-Hernández, Marco Fernández, Maria Luiza De Souza-Galvão, Jorge Abad, María Ángeles Jiménez-Fuentes, Guillem Safont, Nadiia Tytarenko, Mariia Finohenova, Cristina Prat, Jose Dominguez
PA1065	**Phenotypic susceptibility testing of pyrazinamide in lineage 1 M.tuberculosis isolates – a North London cohort experience** Santino Capocci (London, United Kingdom), Rebecca Duff, Ana Garcia Mingo, Stephen Morris-Jones
PA1066	**Contribution of smear-negative pulmonary tuberculosis in interferon gamma releasing assay-confirmed nosocomial transmission** YA-JEN YANG (Taipei City, Taiwan), Jann-Yuan Wang, Chi-Tai Fang, Yee-Chun Chen

PA1067 **Implications of LTA4H Genetic Polymorphism on Pulmonary Tuberculosis (PTB)outcome – a Pilot Study**
Devasahayam Jesudas Christopher (Vellore (Tamil Nadu), India), V R Sangeeth Priyadarshan, Deepa Shankar, Christhunesa Soundararajan Christudass, Kotamreddy Sreedevi, Barney Isaac, Balamugesh Thangakunam

PA1068 **High prevalence of isoniazid and fluoroquinolone resistance among rifampicin sensitive tuberculosis patients**
Rashmi Ratnam (Lucknow, India), Parul Jain, Amita Jain, R A S Kushwaha

PA1069 **Latent tuberculosis infection screening in patients undergoing immunosuppressive treatment: a real-life experience in Milan**
Gloria Leonardi (Trento, Italy), Sarah O'Donnell, Federica Piedepalumbo, Maurizio Ferrarese, Alice Repossi, Marco Mantero, Pierachille Santus, Francesco Blasi, Luigi Codecasa

PS-15 in poster area Session 135 12:30 - 14:00

Poster session: Bronchiectasis diagnostics and outcomes

Disease(s) : Airway diseases Pulmonary vascular diseases

Method(s) : Cell and molecular biology General respiratory patient care Pulmonary function testing Epidemiology Physiology Imaging Pulmonary rehabilitation

Tag(s) : Clinical

Chairs : Michael Loebinger (London, United Kingdom), Oriol Sibila Vidal (Barcelona, Spain)

PA1070 **Preliminary results from the "Genes encoding complex ciliopathies of bronchiectasis" GECCO study: An EMBARC project**
Amelia Shoemark (Dundee (Angus), United Kingdom), Mahmoud Fassad, Lidia Perea, Erin Cant, Mathieu Bottier, Josje Altenburg, Anthony De-Soyza, Natalie Lorent, Michael R Loebinger, Felix C Ringshausen, Hannah M Mitchison, James D Chalmers

PA1071 **Convergent validity of the Bronchiectasis Impact Measure: data from the EMBARC-BRIDGE study**
Megan Crichton (Dundee (Angus), United Kingdom), Arietta Spinou, Amelia Shoemark, Stefano Aliberti, Josje Altenburg, Francesco Blasi, Clare Clarke, Sanjay Chotirmall, Raja Dhar, Pieter Goeminne, Chalres Haworth, Michael Loebinger, Natalie Lorent, Eva Polverino, Felix Ringshausen, Michal Shteinberg, Oriol Sibila, Tobias Welte, James Chalmers

PA1072 **Muscle phenotypic features in the vastus lateralis of patients with bronchiectasis**
Adriana Núñez Robainas (Barcelona, Spain), Mariela Nieves Alvarado Miranda, María Perez-Peiró, Esther Barreiro

PA1073 **Multiple-breath washout is more sensitive than spirometry to detect lung function impairment in children and adults with bronchiectasis**
Niklas Ziegahn (Berlin, Germany), Mirjam Stahl, Stephanie Thee, Mehrak Yoosefi Moridani, Styliani Zagkla, Louise Tröltzsch, Charlotte O. Pioch, Christine Allomba, Leonie M. Busack, Apolline Tosolini, Bent R. Fuhlrott, Marcus A. Mall, Jobst F. Röhmel

PA1074 **The spectrum of structural lung changes in bronchiectasis: Analysis of 524 EMBARC CTs.**
Angelina Pieters (Helmond, Netherlands), Tjeerd Van Der Veer, Eleni-Rosalina Andrinopoulou, Jennifer J Meerburg, Menno M Van Der Eerden, Pierluigi Ciet, Stefano Alibert, Pierre-Regis Burgel, Megan L Crichton, Pieter C Goeminne, Michal Shteinberg, Francesco Blasi, Michael R Loebinger, Charles S Haworth, Daan Caudri, James D Chalmers, Harm Awm Tiddens

PA1075 **Telomere length in patients with bronchiectasis**
Lídia Perea (Barcelona, Spain), Sandra Casas, Estrella Caballeria, Belén Solarat, Tamara Garcia, Núria Mendoza, Pilar Martínez-Olondris, Patricia Chang-Macchiu, Alvar Agustí, Amelia Shoemark, James D Chalmers, Rosa Faner, Oriol Sibila

PA1076 **Association of blood total immunoglobulin E and eosinophils with radiological features of bronchiectasis**
Yongchang Sun (Beijing, China), Jiaqi Ren, Ai Chen, Jun Wang, Chun Chang, Juan Wang, Lina Sun

PA1077 **Relationship between sputum concentration and airway inflammatory markers in adults with stable bronchiectasis**
Beatriz Herrero Cortina (Zaragoza, Spain), Victoria Alcaraz-Serrano, Hector Sanz-Fraile, Juan Antonio Sáez-Pérez, Lidia Perea-Soriano, Rosa Faner-Canet, Oriol Sibila-Vidal

PA1078 **Upper and lower limb muscle dysfunction in patients with bronchiectasis: the role of systemic inflammation and oxidative stress**
Adriana Núñez Robainas (Barcelona, Spain), Mariela Nieves Alvarado Miranda, Maria Pérez Peiró, Esther Barreiro

PA1079 **Bronchiectasis are associated with lower lung function in lung cancer screening participants**
A. K. A. L. Kwee (Utrecht, Netherlands), B. Luijk, Pim A. De Jong, R. Vliegenthart, Harry J. M. Groen, Joachim G. J. V. Aerts, Firdaus A. A. Mohamed Hoesein

PA1080 **Clinical outcome prediction by HRCT and Echocardiography Assessment of Pulmonary Hypertension in Patients with Bronchiectasis**
Ina Jeong (Seoul, Republic of Korea), Inhan Lee, Jieun Kim, Joon-Sung Joh, Ji Yeon Lee, Joohae Kim, Sooim Sin

PA1081	**Assessment of malnutrition with L1- skeletal muscle mass in non-cystic fibrosis bronchiectasis patients and the effects on exacerbation** Dilara Ömer Topçu (Bursa, Turkey), Aslı Görek Dilektaşlı, Esra Kunt Uzaslan, Nevzat Uslu, Mehmet Karadağ
PA1082	**Assessment of the Non-Cystic Fibrosis Bronchiectasis Severity: the Bronchiectasis Severity Index** Houda Rouis (Ariana, Tunisia), Safa belkhir, Chirine Moussa, Mahdi Abdennadher, Faten Mhiri, Amel Khattab, Ibtihel Khouaja, Ines Zendah, Sonia Maalej
PA1083	**Nutritional status in non-cystic fibrosis bronchiectasis** Dilara Ömer Topçu (Bursa, Turkey), Aslı Görek Dilektaşlı, Esra Kunt Uzaslan, Mehmet Karadağ
PA1084	**Association between the lung microbiome and severity scores in bronchiectasis** Leticia Bueno Freire (Barcelona, Spain), Rubén López-Aladid, Patricia Oscanoa, Victoria Alcaraz-Serrano, Nil Vázquez, Andrea Palomeque, Roberto Cabrera, Rosanel Amaro, Laia Fernández-Barat*, Antoni Torres*
PA1085	**The usefulness of impulse oscillometry for predicting the severity of bronchiectasis** Ji Soo Choi (Seoul, Republic of Korea), Seok Jae Heo, Se Hyun Kwak, Min Chul Kim, Chang Hwan Seol, Sung Ryeol Kim, Eun Hye Lee
PA1086	**The relationship between chest CT scoring, aetiology and severity of disease in Bronchiectasis: an EMBARC analysis** Angelina Pieters (Helmond, Netherlands), Tjeerd Van Der Veer, Jennifer M Meerburg, Eleni-Rosalina Andrinopoulou, Menno M Van Der Eerden, Pierluigi Ciet, Megan L Crichton, Stefano Aliberti, Pierre-Regis Burgel, Pieter C Goeminne, Charles S Haworth, Michael R Loebinger, Michal Shteinberg, Francesco Blasi, Harm Awm Tiddens, Daan Caudri, James D Chalmers
PA1087	**Variation in clinical characteristics of bronchiectasis according to lung function: an observational study from a lower middle income country** Amna Irfan Ansari (Karachi, Pakistan), Shayan Shahid, Muhammad Tayyab Ihsan, Akbar Shoukat Ali, Muhammad Irfan
PA1088	**Correlation between high resolution computed tomography (HRCT) score and spirometry indices in patients with stable bronchiectasis - A cross sectional study** Soumya Das (Kolkata (West Bengal), India), Amit Kushwaha, Santanu Ghosh
PA1089	**Sarcopenia incidence and implications in bronchiectasis** Umberto Semenzato (PADOVA, Italy), Mariaenrica Tine, Chiara Contin, Andrea Rastelli, Virginia Santello, Rossella Valvason, Marta Zuffellato, Giulia Fichera, Alessandro Miceli, Chiara Giraudo, Andrea Sattin, Anna Maria Cattelan, Marina Saetta

PS-16 in poster area — Session 136 — 12:30 - 14:00

Poster session: Basic science of respiratory infection

Disease(s) : Airway diseases | Interstitial lung diseases | Respiratory critical care

Method(s) : Cell and molecular biology | Physiology | General respiratory patient care

Tag(s) : Basic science, Translational

Chairs : James D. Chalmers (Dundee (Angus), United Kingdom), Anne M. van der Does (Leiden, Netherlands)

PA1091	**LSC - 2023 - Recombinant Histone Deacetylase 6 (rHDAC6) treatment protects against influenza A virus (IAV) infection and disease in vivo** Katie Daly (Booker Bay, Australia), Alan Hsu, Kristy Nichol, Jemma Mayall, Jay Horvat, Phil Hansbro, Peter Wark
PA1092	**The in vivo antiviral efficacy of a novel inhalation drug candidate in a mouse treatment and post-exposure prophylaxis model** Thomas Bjarnsholt (Copenhagen, Denmark), Jinglin Zhou, Elin Jørgensen, Jan Pravsgaard Christensen, Marianne Thuy Duong Le, Christopher Burton
PA1093	**Antimicrobial mitochondrial reactive oxygen species induction by lung epithelial metabolic reprogramming** Scott Evans (Houston, United States), Yongxing Wang, Vikram Kulkarni, Jezreel Pantaleón García, David Goldblatt, Jichao Chen, Philip Lorenzi, Hao Wang, Lee-Jun Wong, Michael Tuvim
PA1094	**LSC - 2023 - APC: T cell interactions in the lung: exploring the generation and phenotype of memory CD4 T cell s during influenza virus infection** Kerrie Hargrave (Glasgow, United Kingdom), Julie Worrell, Euan Brennan, Thomas Purnell, Megan Macleod
PA1095	**LSC - 2023 - Harnessing T regulatory cells to treat respiratory infections** Ntombizodwa Makuyana (Cambridge, United Kingdom), Oliver Burton, James Dooley, Adrian Liston

PA1096	**Engineered live bacteria as a new therapy for P. aeruginosa biofilms in ventilator-associated pneumonia** Alba Soler-Comas (Barcelona, Spain), Laia Fernández-Barat, Rubén López-Aladid, Nil Vázquez-Burgos, Anna Motos, Irene Rodríguez Arce, Alicia Broto, Roberto Cabrera, Kasra Kiarostami, Flavia Galli, Blanca Llonch, Carolina Segura, Luis Serrano, Antoni Torres
PA1097	**Peripheral blood gene expression changes at exacerbation of COPD: an observational cohort study** Holly R. Keir (Dundee (Angus), United Kingdom), Merete B. Long, Chloe Hughes, Amy Gilmour, Yan Hui Giam, Thomas Pembridge, Lilia Delgado, Rebecca Hull, James D. Chalmers
PA1098	**Deciphering the role of pulmonary α-(1,2)-fucosylation in pneumococcal pneumonia** Cengiz Goekeri (Berlin, Germany), Alina Nettesheim, Kerstin Linke, Sebastian Schickinger, Ulrike Behrendt, Denise Barthel, Peter Pennitz, Elena Lopez-Rodriguez, Vladimir Gluhovic, Konrad Schmidt, Leila Bechtella, Anne Voß, Sandra Kunder, Kevin Pagel, Achim D. Gruber, Sarah Hedtrich, Matthias Ochs, Martin Witzenrath, Geraldine Nouailles
PA1099	**In vitro identification of essential genes of carbapenems resistant OprD mutant Pseudomonas aeruginosa** Cléophée VAN MAELE (Reims, France), Ségolène Caboche, Thomas Blanchot, Audrey Brisebarre, Christophe Audebert, Anaëlle Muggeo, Thomas Guillard
PA1100	**Immunoinformatics investigation of B- and T- cell epitopes in the VP2 protein of the BOCA respiratory virus** Erasmia Rouka (Larissa, Greece), Kerasia Goupou, Sotirios Zarogiannis
PA1101	**Palmitoleic acid suppresses Pseudomonas aeruginosa quorum sensing-controlled virulence and relieves infection-induced lung injury** lei han (Shanghai, China), Yishu Xue, Jianwei Gao, Qiang Fu, Ping Shao, Min Zhang, Fengming Ding
PA1102	**Whole transcriptome profile underlies the COVID-19 bimodal phenotypes** Sabrina Setesmbre Batah (Ribeirão Preto, Brazil), Heloisa Zimermam, Maria Júlia Marco, João Paulo Almeida, Danilo Wada, Amanda Schnepper, Robson Carvalho, Alexandre Fabro
PA1103	**In silico investigation of B- and T-cell epitopes in the M2 protein of the H5N6 influenza virus** Erasmia Rouka (Larissa, Greece), Sotirios Kampouris, Sotirios Zarogiannis
PA1104	**Sand Particles Increase Pneumococcal Adhesion to Respiratory cells in vitro** Lisa Miyashita (London, United Kingdom), Beverley Coldwell, David Wertheim, Ian Gill, Simon Crust, Nemesio M. Pérez, Nick Petford, Jonathan Grigg
PA1105	**Profiling the immune response in patients hospitalised with lower respiratory tract infection** Merete Bridget Long (Dundee, United Kingdom), Holly R Keir, Yan Hui Giam, Thomas Pembridge, Rebecca C Hull, Lilia Delgado, Amy Gilmour, Chloe Hughes, Hollian Richardson, James D Chalmers
PA1106	**The plasmidome in bronchiectasis** Kai Xian Thng (Tampines, Singapore), Micheál Mac Aogáin, Fransiskus Xaverius Ivan, Jayanth Kumar Narayana, Tavleen K. Jaggi, Holly R. Keir, Mariko Siyue Koh, Thun How Ong, Mau Ern Poh, Teck Boon Low, John A. Abisheganaden, Francesco Blasi, Stefano Aliberti, James D. Chalmers, Sanjay H. Chotirmall
PA1107	**Late Breaking Abstract - MV130, a Trained Immunity-based Vaccine, in the prevention of RRTIs in adults: A retrospective study** Laura Conejero Hall (Madrid, Spain), Karla Montalbán, Ana Cogollo, Patricia Girón De Velasco, Raquel Caballero, Miguel Casanovas, José Luis Subiza
PA1108	**Late Breaking Abstract - An exploratory study highlighting the use of night-time cough frequency as a potential marker of disease surveillance in patients with Primary ciliary dyskinesia and Cystic fibrosis.** Evie Robson (Leeds, United Kingdom), Surinder Birring, Richard Feltbower, Christopher O'Callaghan, Daniel Peckham
PA1109	**Late Breaking Abstract - The clinical application value of a novel chip in the detection of pathogens in adult pneumonia: a multi-center prospective study in China** Ruixue Zhang (Beijing, China), Yingying Liu, Lianjun Lin

PS-17 in poster area Session 137 12:30 - 14:00

Poster session: Screening, patient pathways and quality of life in the lung cancer world

Disease(s) : Thoracic oncology Airway diseases

Method(s) : Epidemiology Imaging Pulmonary function testing General respiratory patient care Public health Surgery Palliative care

Tag(s) : Clinical

Chairs : Wouter H. van Geffen (Leeuwarden, Netherlands), Joanna Domagała-Kulawik (Warszawa, Poland)

PA1110	**Assessing lung cancer risk in young and elderly patients in a lung cancer screening programme** Aranzazu Campo Ezquibela (Pamplona (Navarra), Spain), Begoña Ortiz, Ana Belén Alcaide, Juan Berto, Teresa Pérez-Warnisher, Carmen Felgueroso, Jesus Pueyo, Marimar Ocon, Juan Pablo De Torres, Gorka Bastarrika, Luis Seijo
PA1111	**Prevalence of recent thoracic CT imaging in a population undergoing lung cancer screening** Tanya Patrick (London, United Kingdom), Sindhu Bhaarrati Naidu, Amyn Bhamani, Paul Robinson, Lauren Molyneux, Thea Buchan, Jeannie Eng, Fanta Bojang, Shivani Patel, Ricky Thakrar, Neal Navani, Arjun Nair, Sam Janes
PA1112	**Use of telehealth to improve lung cancer screening program delivery of results** Ludmila Pereira Barbosa Dos Santos (Barretos (SP), Brazil), Fabiana Lima Vazquez, Letícia Ferro Leal, José Elias Miziara, Maurício Wagner Souto Ferraz, Sérgio Vicente Serrano, Carolina Lourenço Da Conceição, Bianca De Bortoli Petiquer Capucho, Rodrigo Sampaio Chiarantano, Rui Manuel Vieira Reis, Giovanna Maria Stanfoca Casagrande
PA1113	**Smoking cessation integrated with a lung cancer screening program: most effective method?** Anna Núñez (Barcelona, Spain), Sonia Baeza, Ester Cervera, Laura Rodriguez, Adela Gonzalez, Ignasi García Olivé, Roxana Chirinos, Felipe Andreo, Antoni Rosell
PA1114	**Volumetric tumor volume doubling time in lung cancer: a systematic review and meta-analysis** Beibei Jiang (Groningen, Netherlands), Daiwei Han, Marjolein Heuvelmans, Carlijn Van Der Aalst, Harry De Koning, Matthijs Oudkerk
PA1115	**Effectiveness of the screening review MDT(SRMDT) of a pilot national targeted lung health check (TLHC) cancer screening programme in England** Ailsa Holbourn (, United Kingdom), Abdul Nasimudeen, Jason Page, Ante Marusic, Sue Matthews, Moe Kyi
PA1116	**Results and challenges of lung cancer screening in Serbia** Jelena Djekic Malbasa (Novi Sad, Republic of Serbia), Tomi Kovacevic, Bojan Zaric, Darijo Bokan, Dragan Dragišić, Goran Stojanović
PA1117	**Integrated lung Cancer Screening program employing a mobile unit in Brazil** Leticia Ferro Leal (Barretos, Brazil), Rodrigo Chiarantano, Fabiana Vazquez, Ludmila Barbosa Pereira Dos Santos, José Elias Miziara, Edmundo Mauad, Maurício Souto Ferraz, Rui Manuel Reis
PA1118	**Have lung cancer patients been missed from the cancer screening programme?** Kiran Nandakumar (ROTHERHAM, United Kingdom), Abdul Nasimudeen, Jason Page, Sue Matthews, Moe Kyi
PA1119	**Eligibility for lung cancer screening in Greece: a retrospective study** Eleni Kokkotou (N.Faliro (Piraeus), Greece), Emmanouil Panagiotou, Mirsini Livanou, Anastasia Karachaliou, Ioannis Gkiozos, Maria Mani, Lamprini Stournara, Sofia Tsagouli, Ioannis Vathiotis, Andriani Charpidou
PA1120	**Psychosocial consequences of lung cancer screening; early results from the Australian International Lung Screen Trial (ILST) cohort.** Asha Bonney (Melbourne, Australia), John Brodersen, Volkert Siersma, Katharine See, Kwun Fong, Stephen Lam, Daniel Steinfort, Henry Marshall, Louis Irving, Jiashi Li, Siyuan Pang, Linda Lin, Paul Fogarty, Fraser Brims, Annette Mcwilliams, Emily Stone, Renee Manser
PA1121	**Psychosocial consequences of lung cancer screening; validation of an Australian English translation of a lung cancer-specific questionnaire.** Asha Bonney (Melbourne, Australia), John Brodersen, Volkert Siersma, Katharine See, Kwun Fong, Stephen Lam, Daniel Steinfort, Henry Marshall, Louis Irving, Jiashi Li, Siyuan Pang, Linda Lin, Paul Fogarty, Fraser Brims, Annette Mcwilliams, Emily Stone, Renee Manser
PA1122	**Outcome after curative treatment of patients diagnosed with clinical stage I lung cancer in the Yorkshire Lung Screening Trial** Hannah R Bailey (Leeds, United Kingdom), Philip A J Crosbie, Michael Darby, Kevin N Franks, Rhian Gabe, Martyn P T Kennedy, Hui Zhen Tam, Alessandro Brunelli, Matthew E J Callister
PA1123	**Is the local implementation of NOLCP 72 hour access to CT scan reducing delays in the lung cancer pathway?** Bethany Jones (Bedfordshire, United Kingdom), Lukas Kalinke, Nick Adams
PA1124	**The effect of delays on survival patients with lung cancer** Amani Kacem (Sousse, Tunisia), Jihene Ghariani, Imen Kharrat, Anis Maatallah, Rahma Benjazia, Yosri Benali, Hend Zorgati, Sourour Belhajyoussef, Jihene Ayachi, Asma Gaddour
PA1125	**Route to Diagnosis in Danish Lung Cancer Patients** Anja Gouliaev (Viby J, Denmark), Niels Lyhne Christensen, Torben Riis Rasmussen
PA1126	**Outcomes of patients who receive systemic therapy for metastatic lung cancer after diagnosis via emergency presentation** Rachel Solomons (London, United Kingdom), Neena Patel, Ketan Patel, Adam Januszewski

PA1127 **How does lung cancer progression impair quality-life of caregivers**
Rahma Gargouri, Nour Kallel, Olfa Bouaziz, Nessrine Kallel, Ilhem Yangui, Walid Feki, Samy Kammoun

PA1128 **Association between quality of life questionnaire at diagnosis and survival in patients with lung cancer**
Sukjin Bae (Seoul, Republic of Korea), Chang Dong Yeo

PA1129 **Long-Term Lung Cancer Survivors – Who are they and how is their quality of life?**
Ana Da Cunha Fonseca (Vila Nova de Gaia, Portugal), Mariana Antunes, Margarida Dias, Eloísa Silva, Ana Barroso

PS-18 in poster area Session 138 12:30 - 14:00

Poster session: Biomarkers in interstitial lung disease

Disease(s) : Interstitial lung diseases Airway diseases

Method(s) : Epidemiology Imaging Physiology Public health Pulmonary function testing General respiratory patient care Cell and molecular biology

Tag(s) : Translational

Chairs : Manuela Funke-Chambour (Bern, Switzerland), Chair to be confirmed

PA1130 **Two CT image-based Biomarkers for Predicting Progression in fibrosing interstitial lung diseases**
Ju hyun Oh (Seoul, Republic of Korea), Grace Hyun J. Kim, S. Samuel Weigt, Jared D Wilkinson, Fereidoun Abtin, Lila Pourzand, Bianca Villegas, Jihey Lee, Kyungjong Lee, Jonathan Goldin, Jin Woo Song

PA1131 **CT-derived biomarkers as predictors of overall survival in patients with idiopathic pulmonary fibrosis (IPF)**
Francesco Bonella (Düsseldorf, Germany), Luca Salhöfer, Mathias Meetschen, Lale Umutlu, Michael Forsting, Benedikt Schaarschmidt, Marcel Opitz, Rene Hosch, Sven Koitka, Vicky Parmar, Felix Nensa, Johannes Haubold

PA1132 **Prognostic value of circulating biomarkers in patients with progressive pulmonary fibrosis**
Francesco Bonella (Düsseldorf, Germany), R Gisli Jenkins, Toby M Maher, Shervin Assassi, Imre Noth, Claudia Diefenbach, Carina Ittrich, Klaus B Rohr, Martin Kolb

PA1133 **A combined measure of blood leukocytes, FVC and quantitative CT is highly predictive of mortality in idiopathic pulmonary fibrosis (IPF)**
Andrew Achaiah (Oxford, United Kingdom), Emily Fraser, Peter Saunders, Rachel Hoyles, Rachel Benamore, Ling-Pei Ho

PA1134 **Longitudinal changes in CT quantified pulmonary artery volume and interstitial abnormalities correlate with pulmonary function decline in IPF patients**
Anne-Noëlle Frix (Liege, Belgium), Fanny Gester, Monique Henket, Benoit Ernst, Renaud Louis, Jonne Engelberts, Jean-Paul Charbonnier, Julien Guiot

PA1135 **Blood gene expression is associated with decline in lung function in interstitial lung disease**
Daniel He (Vancouver, Canada), Boyang Zheng, Scott J Tebbutt, Christopher J Ryerson

PA1136 **Associations between neutrophil and lymphocyte counts and ILD progression in subjects with progressive fibrosing ILDs**
Michael Kreuter (Heidelberg, Germany), Justin M Oldham, Claudia Valenzuela, Takafumi Suda, Heiko Müller, Kamila Sroka-Saidi, Toby M Maher

PA1137 **Differential blood count as a prognostic tool in interstitial lung diseases**
Nimrod Orr Urtreger (Tel Aviv, Israel), Ophir Freund, Tzlil Hershko, Liran Levy, Amir Bar-Shai, Avraham Unterman

PA1138 **Clinical utility of heparin-binding protein as an acute-phase inflammatory marker in interstitial lung disease**
Xue Mingshan (Guangzhou, China), Teng Zhang, Runpei Lin, Yifeng Zeng, Zhangkai Jason Cheng, Ning Li, Peiyan Zheng, Huimin Huang, Baoqing Sun

PA1139 **Increasing CRPM levels following antifibrotic therapy in IPF is associated with adverse outcomes with nintedanib, but not pirfenidone**
Jannik Ruwisch (Hannover, Germany), Francesco Bonella, Jannie Marie Bülow Sand, Henrik Jessen, Diana Julie Leeming, Tobias Welte, Antje Prasse, Benjamin Seeliger

PA1140 **Osteopontin as a biomarker in interstitial lung diseases**
David Iturbe Fernández (Santander (Cantabria), Spain), Verónica Pulito Cueto, Víctor Manuel Mora Cuesta, Sara Remuzgo Martínez, Diego José Ferrer Pargada, José Manuel Cifrián Martínez, Raquel López Mejías, Fernanda Genre, Sandra Tello Mena, María Sebastián Mora-Gil, Sheila Izquierdo Cuervo, Miguel Ángel González-Gay Mantecón

PA1141 **Exploring the Potential of Serum Periostin as a Predictive biomarker for Early-Onset Idiopathic Pulmonary Fibrosis: A Follow-Up Study**
Mingtao Liu (Guangzhou, China), Zhangkai J. Cheng, Haiyang Li, Runpei Lin, Mingshan Xue, Yanjun Li, Jiaxin Wang, Chenwei You, Haisheng Hu, Baojun Guo, Huimin Huang, Baoqing Sun

PA1142 **Lipid metabolism in interstitial lung diseases: serum amyloid A a new potential biomarker in idiopathic pulmonary fibrosis**
Lucia Vietri (Ferrara, Italy), Miriana D'Alessandro, Laura Bergantini, Paolo Cameli, Elena Bargagli

PA1143 **Lactate dehydrogenase predicts disease progression in patients with IPF**
Nils Hoyer (København NV, Denmark), Michael Brun Andersen, Lene Collatz, Emilia Kassandra Achilles Åttingsberg, Saher Burhan Shaker

PA1144 **Circulating prostasin associates with presence and severity of idiopathic pulmonary fibrosis (IPF)**
Jamie Todd (Durham, United States), Hillary Mulder, Megan L Neely, John A Belperio, Joseph A Lasky, Tracy R Luckhardt, Scott M Palmer, Christian Hesslinger, Thomas Schlange, Thomas B Leonard

PA1145 **Serum Krebs von den Lungen-6 (KL-6) level as a prognostic biomarker in patients with interstitial lung abnormalities (ILA)**
Hye Kyeong Park (Goyang-Si, Republic of Korea), Young-Soon Yoon, Jae-Uk Song, Hyung Koo Kang

PA1146 **Circulating biomarkers in children and adolescents with fibrosing interstitial lung disease (ILD)**
Robin Deterding (Aurora, United States), Kevin K Brown, Steven Cunningham, Emily M Deboer, Matthias Griese, Nicolaus Schwerk, Lisa R Young, Carina Ittrich, Thomas Schlange, Martina Gahlemann, David Warburton

PA1147 **Machine learning-based identification of RNA and protein biomarkers predictive of disease progression or death in the IPF-PRO Registry**
Kolja Becker (Biberach, Germany), Julia Soellner, Thomas Schlange, Christian Hesslinger, Richard Vinisko, Thomas B Leonard, Jamie L Todd, Megan L Neely, Ramona Schmid

PA1148 **Predicting factors of acute exacerbation of idiopathic pulmonary fibrosis**
Morgane Browarski (Rennes, France), Chloe Rousseau, Pierre Chauvin, Stéphanie Guillot, Mathieu Lederlin, Mallorie Kerjouan, Stéphane Jouneau

PA1149 **Histological and molecular characterization of lung cancer (LC) in patients with and without interstitial lung disease (ILD)**
Gioele Castelli (Padova, Italy), Matteo Scordari, Nicol Bernardinello, Elisabetta Cocconcelli, Mariaenrica Tinè, Giulia Grisostomi, Serena Bellani, Fiorella Calabrese, Paolo Spagnolo, Elisabetta Balestro

PS-19 in poster area Session 139 12:30 - 14:00

Poster session: Novel insights in the pathogenesis of interstitial lung disease

Disease(s) : Interstitial lung diseases

Method(s) : General respiratory patient care Cell and molecular biology Endoscopy and interventional pulmonology Epidemiology Imaging Physiology Pulmonary function testing

Tag(s) : Clinical, Translational

Chairs : Paolo Cameli (Siena (SI), Italy), Chair to be confirmed

PA1150 **Hypersensitivity Pneumonitis associated to foam pillows and mattresses - mold analysis**
Onofre Moran Mendoza (Kingston (ON), Canada), Gurmohan Dhillon, Alexander Boag

PA1151 **Systemic inflammatory indices in silicosis due to occupational exposure to silica agglomerates (SA).**
Alfonso Marin Andreu (San Fernando, Spain), Antonio León Jiménez, Gema Jiménez-Gómez, Raquel De Andrés David, Antonio Hidalgo Molina, Antonio Campos Caro

PA1152 **Capelozzi's necrosis is a novel histological biomarker for the diagnosis of chronic microaspiration in fibrosing interstitial lung diseases**
Alexandre Todorovic Fabro (Ribeirao Preto (SP), Brazil), Sabrina Setembre Batah, Heloisa Acurcio Zimermam, Maria Júlia Faci Do Marco, Mateus Magalhães Lage Moraes, Wagner Moneda Telini, Adriana Paes Leme, Romenia Ramos Domingues, Robson Francisco Carvalho, Amanda Piveta Schnepper, Andrea Antunes Cetlin, Danilo Tadao Wada, Marcel Koenigkam Santos, Tales Rubens Nadai, José Antônio Baddini-Martinez, Vera Luiza Capelozzi

PA1153 **Pathology and radiology of interstitial lung disease in patients with telomere-related genes mutations**
Alice Guyard (Paris, France), Augustin Gaudemer, Caroline Kannengiesser, Ibrahima Ba, Pierre Mordant, Bruno Crestani, Hervé Mal, Raphaël Borie, Pierre Le Guen, Marie-Pierre Debray, Aurélie Cazes

PA1154 **Dendritic cells profile is related to differential diagnosis in airway-centered interstitial fibrosis**
Mateus Magalhães Lage Moraes (RIBEIRÃO PRETO, Brazil), Wagner Moneda Telini, Sabrina Setembre Batah, Maria Julia Faci Do Marco, Heloisa Acurcio Zimermam, Danilo Tadao Wada, Andrea De Cássia Vernier Antunes Cetlin, Marcel Koeningkam Santos, Tales Rubens De Nadai, Alexandre Todorovic Fabro

PA1155 **Serum metalloproteinase 7 as a biomarker of progressive pulmonary fibrosis**
Márcia Araújo (Porto (Porto), Portugal), Marilia Beltrão, Oksana Sokhatska, Natalia Melo, Patricia Caetano Mota, Helder Novais Bastos, André Terras, Luís Delgado, António Morais

PA1156	**The neutrophil to lymphocyte ratio in broncho-alveolar lavage in hypersensitivity pneumonitis: preliminary results** Marius-Alexandru Coteț (Bucuresti, Romania), Andreea Maftei (Mutu), Ionela Belaconi, Ștefan Dumitrache-Rujinski, Claudia Lucia Toma, Marina Ruxandra Oțelea
PA1157	**Peripheral immune cell profiling reveals distinct immune hallmarks in progressive pulmonary fibrosis** Fernanda Ines Hernandez Gonzalez (Barcelona, Spain), Nuria Mendoza, Sandra Casas-Recasens, Tamara Cruz, Nuria Albacar, Gemma Lopez Saiz, Xavier Alsina, Mauricio Rojas, Alvar Agusti, Rosa Faner, Jacobo Sellares
PA1158	**Enhancing the Detection of Interstitial Pneumonia with Autoimmune Features and Idiopathic Pulmonary Fibrosis through the Harmony of Matrix Metalloproteinases and Clinical Diagnosis** Mingtao Liu (Guangzhou, China), Zhangkai J. Cheng, Haiyang Li, Zhiman Liang, Huimin Huang, Baoqing Sun
PA1159	**The remodeling of hemomicrocirculatory bed of the lungs in induced systemic sclerosis** Bohdana Doskaliuk (Ivano-Frankivsk, Ukraine), Liubomyr Zaiats, Roman Yatsyshyn
PA1160	**Evaluation of pro-inflammatory proteins and joint disease activity in individuals with interstitial lung disease associated with rheumatoid arthritis.** Karol Jazmin Nava Quiroz (México, Mexico), Jorge Rojas-Serrano, Espiridión Ramos-Martínez, Mayra Mejía, Gloria Pérez-Rubio, Ivette Buendía-Roldán, Pedro Rodríguez-Henríquez, Ramcés Falfán-Valencia
PA1161	**Pulmonary Silicosis due to different sources of exposure. Clinical Features** Denisse Paulette Mediavilla Angulo (Barcelona, Spain), Galo David Granados Rosales, Cristina Aljama Vizcarra, Julia Sampol Sirvent, Iñigo Ojanguren Arranz, Xavier Muñoz Gall, Cristina Berastegui Garcia, Ana Villar Gomez, Jaume Ferrer Sancho
PA1162	**Novel lipid mediators in pulmonary fibrosis.** Marissa O'Callaghan (County Cork, Ireland), Amina Jouida, Elizabeth J Tarling, Aurelie Fabre, Elizabeth F Redente, James P. Bridges, Michael P. Keane, Cormac Mccarthy
PA1163	**Smoking and hypersensitivity pneumonitis: a single Institution retrospective analysis** Francesco Bertuccio (Pavia, Italy), Nicola Baio, Vittorio Chino, Valentina Ferroni, Simone Montini, Valerio Partenope, Lucrezia Pisanu, Vincenzo Sanci, Alessandro Cascina, Valentina Conio, Angelo Guido Corsico, Giulia Maria Stella
PA1164	**Monocyte/macrophage axis as potential drivers of Progressive Fibrosing Hypersensitivity Pneumonitis** Helder Novais Bastos (Lousada, Portugal), Ana Pinto, Filipa Aguiar, Catarina Cardoso, David Coelho, Vanessa Santos, André Terras Alexandre, Ana Luísa Fernandes, Natália Melo, Patrícia Mota, Inês Neves, Susana Guimarães, Conceição Souto Moura, José Miguel Jesus Pereira, André Carvalho, Luís Delgado, Oksana Sokhatska, Marília Beltrão, António Morais, Margarida Saraiva, Rita Santos
PA1165	**Predictors of myositis-specific and myositis-associated antibodies among subjects with interstitial lung diseases** Ori Wand (Kfar Sava, Israel), Yair Levy, David Shitrit, Anna Breslavsky
PA1166	**Anti-Ro-52 antibodies in interstitial lung disease associated with autoimmune disorders** Juan Ignacio Enghelmayer (Ciudad Autónoma Buenos Aires, Argentina), Anabella Rodriguez, Tamara Arias, María José Lopez Meiller, Marina Garcia Carrasco, María Pino, Cecilia Pisoni, Ana María Putruele, Gustavo Medina
PA1167	**Interstitial pneumonia with autoimmune features (IPAF) and connective tissue disease-associated interstitial lung disease (CTD-ILD) – differences in parameters measured in bronchoalveolar lavage (BAL)** Ewa Miadlikowska (Łódź, Poland), Joanna Miłkowska-Dymanowska, Adam Jerzy Białas, Wojciech Jerzy Piotrowski
PA1168	**Frequency and background of progressive fibrosing interstitial lung disease (PF-ILD) in patients with anti-aminoacyl tRNA synthetase (ARS) antibody-positive interstitial lung disease.** Takafumi Yamano (Kurashiki, Japan), Machiko Arita, Tadashi Ishida
PA1169	**Prognostic value of autoantibodies in bronchoalveolar lavage in ILD patients** Karina Portillo Carroz (Badalona (Barcelona), Spain), Carmen Centeno-Clemente, Laura Rodriguez-Pons, Paloma Millan-Billi, Isabel Alfaya, Aina Teniente-Serra, Bibiana Quirant, Amalia Moreno, Pere Serra-Mitjà, Marian García-Nuñez, Eva Martinez-Cáceres, Antoni Rosell Gratacos, Iñaki Salvador-Corres

PS-2 in poster area — Session 140 — 12:30 - 14:00

Poster session: The lung after COVID-19: sequelae and functional recovery

Disease(s) : Respiratory critical care | Airway diseases | Pulmonary vascular diseases | Interstitial lung diseases

Method(s) : General respiratory patient care | Imaging | Public health | Physiology | Pulmonary function testing | Pulmonary rehabilitation | Respiratory intensive care

Tag(s) : Clinical

Chairs : Rainer Gloeckl (Schoenau am Koenigssee, Germany), Damien Bachasson (Paris, France)

PA1170	**Mechanisms of impaired gas diffusion following hospitalisation for severe COVID-19 pneumonitis utilising nitric oxide** Leigh Seccombe (Sydney (NSW), Australia), David Heath, Claude Farah, James Di Michiel, Elizabeth Veitch, Matthew Peters
PA1171	**Characterisation of cardiopulmonary exercise tolerance in patients with COVID19 sequelae** Achim Grünewaldt (Darmstadt, Germany), Tara Azem, Carla Bellinghausen, Cornelius Lask, Christian Hügel, Alexander Seeger, Yascha Khodamoradi, Eva Herrmann, Maria Vehreschild, Gernot Rohde
PA1172	**Oximetry at hospital admission as a predictor of persistence of tomographic and pulmonary functional impairment after 3-6 months in hospitalized patients with COVID-19.** Bruna Scharlack Vian (Campinas, Brazil), Pedro Maximink Esteves Villar, Paulo Roberto Araújo Mendes, Tatiana Alves Kiyota, Lígia Dos Santos Roceto Ratti, Laís Bacchin De Oliveira, Ana Lúcia Cavallaro Baraúna Lima, Hugo Dugolin Ceccato, Julian Furtado Silva, Wander De Oliveira Villalba, Lucieni De Oliveira Conterno, Mariângela Ribeiro Resende, Mônica Corso Pereira
PA1173	**Long term respiratory effects of COVID-19 pneumonitis in patients underwent veno-venosus extracorporeal membrane oxygenation** Alexandra Pálfi (Szeged, Hungary), Gabriella Polónyi, Ádám Balogh, Éva Zöllei, Péter Hankovszky, Anita Korsós, Zoltán Varga, Gábor Bari, Zsófia Csorba, László Rudas, Ferenc Peták, Barna Babik
PA1174	**Association of Composite Physiologic Index with dyspnea, disability and submaximal exercise tolerance in COVID-19 survivors** Sirine Jamli (Kairouan, Tunisia), Khouloud Kchaou, Balsam Barkous, Chaima Briki, Saloua Ben Khamsa Jameleddine
PA1175	**Correlation between Distance-Saturation Product and Composite Physiologic Index in COVID-19 survivors** Sirine Jamli (Kairouan, Tunisia), Khouloud Kchaou, Soumaya Khaldi, Chaima Briki, Balsam Barkous, Saloua Ben Khamsa Jameleddine
PA1176	**Predictors of reduced 6-minute walk distance among critically ill COVID-19 survivors** Rahma Ben Jazia (Sousse, Tunisia), Dhouha Ben Braiek, Safa Ben Mansour, Yosri Ben Ali, Hend Zorgati, Haifa Sfar, Oussama Saadaoui, Amani Kacem, Anis Maatallah, Jihene Ayachi
PA1177	**Pulmonary vascular volume distribution and oxygen saturation during exercise in patients with post-acute sequelae of COVID-19 (PASC)** Kris Ides (Antwerpen, Belgium), Wendel Dierckx, Yinka De Meyer, Erik Franck, Eline Lauwers, Ben Lavon, Jan De Backer, Bita Hajian, Wilfried De Backer
PA1178	**Exercise capacity in a cohort of patients with post-Covid-19 syndrome** Timo Mustonen (Vantaa, Finland), Mari Kanerva, Ritva Luukkonen, Arja Uusitalo, Päivi Piirilä
PA1179	**Gender differences in hospitalized COVID-19 patients: Focusing on markers of endothelial dysfunction and the survival rate** Audrey Borghi Silva (São Carlos (SP), Brazil), MURILO OLIVEIRA, Bianca Domingos, Guilherme Back, Cássia Goulart, Audrey Borghi-Silva
PA1180	**Unexplained lung function differences in dyspnoeic non-hospitalised Long-COVID (NHLC) patients and asymptomatic fully recovered COVID-19 controls - the EXPLAIN study** Kher Ng (London, United Kingdom), James Grist, Laura Saunders, Guilhem Collier, Avianna Laws, Gabriele Abu Eid, Nina Kainth, Scarlett Strickland, Lotta Gustafsson, Siby Thomas, Lily Dryhurst-Pearce, Laurie Smith, Violet Matthews, Kenneth Jacob, Jenny Rodgers, Amany Elbehairy, Samantha Jones, Helen Davies, Alexander Horsley, Roger Thompson, Emily Fraser, Jim Wild, Fergus Gleeson
PA1181	**High fat mass is associated with non-recovery among females following COVID-19 hospitalisation** Hamish Mcauley (Leicester, United Kingdom), Cara Flynn, George Mills, George Mills, Molly Baldwin, Charlotte E Bolton, Christopher E Brightling, Omer Elneima, Paul L Greenhaff, William D-C Man, Sally J Singh, Michael Steiner, Louise V Wain, Janet M Lord, Rachael A Evans, Neil J Greening
PA1182	**Dose post -exercise heart rate recovery time predict subclinical heart damage in non-severe covid survivors? A lesson from cardiopulmonary exercise test** Mehrnaz Asadi Gharabaghi (Tehran, Islamic Republic of Iran), Seyedeh Zahra Fotook Kiaei, Hossein Kazemizadeh, Atefeh Roumi, Omalbanin Paknejad
PA1183	**Long term pulmonary sequelae of COVID-19 pneumonia among recovered healthcare workers using High Resolution Chest CT scan and mMRC score** Gayle Francez Monique Tandoc (Baguio City, Philippines), Maria Luella De Leon, Bernard Demot, Cajulao Thea Pamela, Haya Larry, Dulay Tyrone, Pagalanan Jason
PA1184	**Combination of tachycardia, brain fog, and dizziness in a cohort of patients with post-Covid-19 syndrome** Timo Mustonen (Vantaa, Finland), Mari Kanerva, Ritva Luukkonen, Arja Uusitalo, Päivi Piirilä

PA1185 **Long COVID symptoms in intensive care unit survivors, a prospective study**
Rahma Ben Jazia (Sousse, Tunisia), Yosri Ben Ali, Safa Ben Mansour, Khalil Attia, Dhouha Ben Braiek, Hend Zorgati, Sourour Bel Haj Youssef, Amani Kacem, Anis Maatallah, Ahmed Jamel, Houda Belkhiria, Jihene Ayachi

PA1186 **Long term changes in pulmonary function among ICU COVID19 survivors**
Rahma Ben Jazia (Sousse, Tunisia), Yosri Ben Ali, Safa Ben Mansour, Rihab Boubtane, Dhouha Ben Braiek, Hend Zorgati, Sourour Bel Haj Youssef, Amani Kacem, Anis Maatallah, Ahmed Jamel, Houda Belkhiria, Jihene Ayachi

PA1187 **Exercise Training Improves Exercise Capacity and Quality of Life in Long Haul COVID Patients-Preliminary Results**
William Stringer (Long Beach, United States), Asghar Abbasi, Michelina Iacovino, Jaqueline Tosolini, Chiara Gattoni, Christopher Hwe, Mary Burns, Charles Lanks, Carrie Ferguson, Harry Rossiter, Richard Casaburi

PA1188 **Exercise tolerance in patients with long COVID-19 syndrome: a combined cardiopulmonary exercise testing and echocardiographic study**
Angelos Vontetsianos (ATHENS, Greece), Nikolaos Chynkiamis, Maria Ioanna Gounaridi, Christina Anagnostopoulou, Evaggelia Koukaki, Agamemnon Bakakos, Evangelos Oikonomou, Emmanouil Vavouranakis, Georgios Kaltsakas, Ioannis Vogiatzis, Antonia Koutsoukou, Nikolaos Koulouris

PA1189 **One year evolution of abnormal breathing during exercise in patients with post COVID-19 condition**
Kristofer Hedman (Linköping, Sweden), Anna Von Gruenewaldt, Frida Nikesjö, Karolina Kristenson, Eva Nylander

PS-20 in poster area Session 141 12:30 - 14:00

Poster session: From diagnosis to therapy in pulmonary arterial hypertension

Disease(s) : Pulmonary vascular diseases Interstitial lung diseases

Method(s) : Epidemiology General respiratory patient care Public health Pulmonary function testing Physiology Respiratory intensive care

Tag(s) : Clinical

Chairs : Horst Olschewski (Graz, Austria), Etienne-Marie Jutant (Paris, France)

PA1190 **Diagnosing pulmonary arterial hypertension in the Real World**
Rogier Klok (Twello, Netherlands), R James White, Julia Harley, Mark Small, Carmine Dario Vizza, Dominik Lautsch

PA1191 **Management of acute decompensated pulmonary arterial hypertension: results of the ERS Clinical Research Collaboration PHAROS survey**
Laurent Savale (Le Kremlin-Bicêtre, France), Harm-Jan Bogaard, Irene Lang, Pilar Escribano-Subias, Frances De Man, Abilio Reis, Marion Delcroix, Olivier Sitbon

PA1192 **As time goes by... 2022 versus 2011 ERS-CRC PHAROS survey on managing pulmonary arterial hypertension (PAH) in European expert centres**
Adam Torbicki (Otwock, Poland), Luke S Howard, Gergely Meszaros, Joanna Pepke-Zaba, Abilio Reis, Olivier Sitbon, Marion Delcroix On Behalf Of Pharos Investigators

PA1193 **Impact of the new definition of precapillary pulmonary hypertension on the prevalence of portopulmonary hypertension in patients referred for liver transplantation**
Hélène Pringuez (Paris, France), Audrey Baron, Anne Roche, Xavier Jaïs, Athénaïs Boucly, David Montani, Marc Humbert, Olivier Sitbon, Laurent Savale

PA1194 **Treprostinil transition from subcutaneous to intravenous in pediatric patients with Pulmonary Hypertension undergoing a risky procedure.**
Gina Bustamante (Barcelona, Spain), Ana Diez, Alba Torrent, Maria Morillo, Ignacio Iglesias, Sandra Rovira, Montserrat Pujol, Antonio Moreno

PA1195 **End-of-life healthcare resource utilization and costs in patients with PAH: a real-world analysis**
Tracey Weiss (Coopersburg, United States), Dena Rosen Ramey, Ngan Pham, Nazneen Shaikh, Dajun Tian, Xiaohui Zhao, Aimee Near, Steven Nathan

PA1196 **Macitentan tadalafil fixed dose combination (FDC) in patients with pulmonary arterial hypertension (PAH): A subgroup analysis from A DUE**
Pavel Jansa (Jirny, Czech Republic), Kelly Chin, Ekkehard Grünig, Jakob Hauser, Matthieu Pannaux, Hany Rofael, Fenling Fan

PA1197 **A real-word evidence study of PH-LD, PH-ILD and PAH in France, Germany, and the UK**
John Wort (London, United Kingdom), Juergen Behr, Vincent Cottin, David Kiely, Michael Kreuter, Olivier Sitbon, Aurélie Chekroun Martinot, Catia C. Proenca, Miriam Fernández Delgado, Gabriela Bacchini Jeanneret

PA1198 **Treatment-associated changes in cardiopulmonary exercise test variables: upfront combination vs monotherapy in pulmonary arterial hypertension**
Andrea Baccelli (Milano, Italy), Rocco Rinaldo, Rachel Davies, Francesco Lo Giudice, Gulammehdi Haji, Michele Mondoni, Stefano Centanni, Luke Howard

PA1199 **Living with pulmonary hypertension – a cross-sectional survey of UK patients**
Iain Armstrong (sheffield, United Kingdom), Catherine Billings, J Paul Sephton, Shaun Clayton, Mary Ferguson, John Smith

PA1200 **Rodatristat ethyl: characterization of reductions in peripheral serotonin supportive of ELEVATE 2, a Phase IIb clinical study for pulmonary arterial hypertension**
Courtney McKernan (Durham, United States), Michelle Palacios, Jill Denning, Himanshu Naik, Howard Lazarus, Steve Wring

PA1201 **Pulmonary arterial hypertension with comorbidities – does dual therapy have a role?**
Julia Thomas (Dumfries, United Kingdom), Harrison Stubbs, Martin Johnson, Colin Church, Melanie Brewis

PA1202 **Initial dual oral combination therapy in patient with pulmonary arterial hypertension and cardiovascular comorbidities**
Athénaïs Boucly (Le Kremlin Bicètre, France), Laurent Savale, David Montani, Xavier Jaïs, Marc Humbert, Olivier Sitbon

PA1203 **The impact of comorbidities on inhaled treprostinil treatment in patients with pulmonary arterial hypertension**
Vallerie McLaughlin (Ann Arbor, United States), Rahul Argula, Shelley Shapiro, Eric Shen, Hyoshin Kim, Meredith Broderick

PA1204 **Methamphetamine and idiopathic PAH: Similar treatment, similar outcomes**
Cole Uhland (tucson, United States), Angela Gibbs, Michael Insel, Saad Kubba, Franz Rischard

PA1205 **Use of Long-term Oxygen Therapy in Patients With Pulmonary Hypertension in Spain**
Rodrigo Torres Castro (Barcelona, Spain), Gregorio Miguel Pérez Peñate, Jesús Pérez Sagredo, Rafael Bravo Marqués, Clara Soto Abánades, Purificación Ramírez Martín, Víctor M. Becerra Muñoz, Pilar Escribano Subías, Joan Albert Barberà, Isabel Blanco, . On Behalf Of The Rehap Investigators

PA1206 **A UK national patient survey of attitudes towards aspects of novel clinical trial design in pulmonary hypertension**
Joseph Newman (Cambridge, United Kingdom), Shaun Clayton, Mary Ferguson, Iain Armstrong, Elisa Ferrer-Mallol, Elin Haf Davies, Mark Toshner

PA1207 **The UPHILL study: a nutrition and lifestyle intervention to improve quality of life for patients with pulmonary arterial hypertension**
Chermaine Kwant (Den Haag, Netherlands), Frances De Man, Frans Van Der Horst, Harm-Jan Bogaard, Anton Vonk Noordegraaf

PA1208 **A randomized study to evaluate the effects of single-dose MK-5475 co-administered with sildenafil on systemic hemodynamics**
Mahesh J. Patel (Rahway, United States), Ednan K. Bajwa, Dawn Cislak, John Palcza, Tom Reynders, Jenny Barthson, Eseng Lai, S. Aubrey Stoch

PA1209 **Rodatristat ethyl: peripheral serotonin targeting with low risk for impacting mood supportive of ELEVATE 2, a Phase IIb clinical study for pulmonary arterial hypertension**
Michelle Palacios (Cary, United States), Courtney Mckernan, Jill Denning, Himanshu Naik, Howard Lazarus, Steve Wring

PS-3 in poster area Session 142 12:30 - 14:00

Poster session: Acute respiratory distress syndrome

Disease(s) : Respiratory critical care | Interstitial lung diseases | Airway diseases

Method(s) : Public health | General respiratory patient care | Respiratory intensive care | Physiology | Imaging | Epidemiology

Tag(s) : Clinical

Chairs : Lieuwe D.J. Bos (Amsterdam, Netherlands), Chair to be confirmed

PA1210 **ARDS mortality prediction model using evolving clinical data and chest x ray imaging**
Ana Cysneiros (Lisboa, Portugal), Tiago Galvão, Nuno Domingos, Pedro Jorge, Luis Bento

PA1211 **Development and validation of a diagnostic model for acute respiratory distress syndrome based on volatile organic compounds in exhaled breath**
Shiqi Zhang (Amsterdam, Netherlands), Laura A. Hagens, Nanon F.L. Heijnen, Marcus J. Schultz, Tom Van Der Poll, Marry R. Smit, Ronny M. Schnabel, Dennis C.J.J Bergmans, Lieuwe D.J. Bos

PA1212	**Modeling lung ventilation in de novo acute respiratory failure: a bench study** Elise Artaud Macari (Rouen, France), Emeline Fresnel, Adrien Kerfourn, Christian Caillard, Robin Thevenin, Clemence Roussel, David Debeaumont, Marie-Anne Melone, Gurvan Le Bouar, Pierre-Alexandre Roger, Luis-Carlos Molano, Francis-Edouard Gravier, Tristan Bonnevie, Clement Medrinal, Mathieu Salaun, Antoine Cuvelier, Christophe Girault
PA1213	**Physiological effects of lung protective ventilation in patients with lung fibrosis and usual interstitial pneumonia pattern versus primary ARDS: a preliminary matched-control study** Roberto Tonelli (Modena, Italy), Salvatore Grasso, Andrea Cortegiani, Lorenzo Ball, Giulia Bruzzi, Antonio Moretti, Francesco Murgolo, Rossella Di Mussi, Dario Andrisani, Filippo Gozzi, Ivana Castaniere, Riccardo Fantini, Luca Tabbì, Stefania Cerri, Anna Valeria Samarelli, Giulia Raineri, Giacomo Grasselli, Enrico Clini, Alessandri Marchioni
PA1214	**Modeling lung ventilation of control and patients with lung fibrosis at rest and effort: a bench study** Elise Artaud Macari (Rouen, France), Emeline Fresnel, Adrien Kerfourn, Clemence Roussel, David Debeaumont, Christian Caillard, Marie-Anne Melone, Gurvan Le Bouar, Pierre-Alexandre Roger, Luis-Carlos Molano, Francis-Edouard Gravier, Tristan Bonnevie, Clement Medrinal, Mathieu Salaun, Antoine Cuvelier, Christophe Girault
PA1215	**Serial metabolic lung biopsies identify candidate metabolites of ARDS pathogenesis** Kathleen Stringer (Ann Arbor, United States), Ruchi Sharma, Christopher Gillies, Mohammad Tiba, Brendan Mccracken, Thomas Flott, Menglian Zhou, Kristine Konopka, Michael Sjoding, Kevin Ward, Robert Dickson
PA1216	**Association between fluid balance and clinical outcomes in pediatric acute respiratory distress syndrome: A single-center retrospective cohort study** JIEUN YOO (seoul, Republic of Korea), Hamin Kim, Yun Young Roh, Mireu Park, Jong Deok Kim, Min Jung Kim, Yong Ju Lee, Yoon Hee Kim, Kyung Won Kim, Myung Hyun Sohn, Soo Yeon Kim
PA1217	**In Taiwan Comparing ARDS Severity: Berlin Definition vs Lung Injury Score** Chang Yujen (Taichung City, Taiwan), Chi Shuhua
PA1218	**Time to disrupt VILI with mixed high-frequency oscillatory and negative-pressure ventilation?** Daniel Black (Chermside, Queensland, Australia), Liliana Black, Simon Black
PA1219	**Modeling lung ventilation in acute exacerbation of interstitial lung diseases: a bench study** Elise Artaud Macari (Rouen, France), Emeline Fresnel, Adrien Kerfourn, Christian Caillard, Robin Thévenin, Clemence Roussel, David Debeaumont, Marie-Anne Melone, Gurvan Le Bouar, Pierre-Alexandre Roger, Luis-Carlos Molano, Francis-Edouard Gravier, Tristan Bonnevie, Clément Médrinal, Mathieu Salaun, Antoine Cuvelier, Christophe Girault
PA1220	**Effectiveness of ECCO2-R in AE-COPD with hypercapnic acute respiratory failure, at risk of unsuccesfull NIV treatment, to avoid endotracheal intubation: a rational of use** Salvatore Longobardi (Milan, Italy), Sara Bombelli, Jacopo Civello, Vincenzo Bocchino, Michele Chiericozzi, Francesco Squillante, Paolo Tarsia
PA1221	**FINANCIAL ANALYSIS OF TWO HIGH AND LOW COMPLEXITY INTERMEDIATE RESPIRATORY CARE UNITS** Marina Galdeano Lozano (Montacada I Reixach (Barcelona), Spain), Sarah Beatrice Heili-Frades Zimmermann, Adriana Martin Pascual, Toni Marin Muñiz, Irene Aldàs Criado, Monica Matute Villacis, Julio Alfaro Alvarez, Ana Nuñez Condominas, Antoni Rosell Gratacós, Jorge Abad Capa, Olga Parra Ordaz
PA1222	**Methodological approaches for the determination of diaphragm atrophy and dysfunction during invasive ventilation.** Jens Spiesshoefer (Aachen, Germany), Mehdi Senol, Binaya Regmi, Faniry Ratsimba, Oscar Gorol, Mustafa Elfeturi, Benedikt Jörn, Alexander Kersten, Michael Dreher
PA1223	**Relationship between cytokine storm and hospital mortality in severe coronavirus disease-2019** Je Hyeong Kim (Ansan, Republic of Korea), Beong Ki Kim, Sua Kim, Yu Jin Kim, Seung Heon Lee, In Bum Suh
PA1224	**Clinical and demographic risk factors for the development of ARDS among severe COVID-19 patients** Marelyn Jao (Quezon City, Philippines), Windfield Tan
PA1225	**Late Breaking Abstract - Contemporary risk factors for severe COVID-19** Paulo Mergulhão (GONDOMAR, Portugal), José Artur Paiva, Inês Mendonça, Pedro Silveira, Isabel Eira, João Ribeiro, Pedro Póvoa, Rosário Cardoso, Aníbal Marinho, Nádia Guimarães, Francisco Esteves, Daniela Bento, Luís Bento, Ricardo Nejo Jr, Igor Milet, Joana Cepeda, Antero Vale Fernandes, Rui Gomes, Manuela Henriques, Mariana Santos, Paulo Martins, Carolina Costa, Paulo Telles Freitas, Joana Nogueira, João Gonçalves Pereira, Filipe Froes, Henrique Oliveira
PA1226	**Prognostic value of eosinophil count on mortality of ECMO treated COVID-19 patients** Flora Varga (Budapest, Hungary), Szabolcs Szigeti, Fruzsina Szilágyi, Zsuzsanna Miklós, Ildikó Horváth
PA1227	**Late Breaking Abstract - Unveiling Exceptional Outcomes: A Comprehensive Evaluation of Patient Admissions in a Novel COVID-19 High Dependency Unit during the Initial Surge** Razan Ghareeb (London, United Kingdom), Sobia Chaudhary, Sundeep Kaul

PA1228 **Late Breaking Abstract - Aminophylline in COPD- Utility and Treatment Effects: ACUTE**
Amrita Bhattacharyya (North 24 Parganas, India), Raja Dhar, Shyam Krishnan, Aditya Satpati, Beauty Biswas, Shubham Sharma

PA1229 **Late Breaking Abstract - Diaphragmatic dysfunction in patient with dyspnea in emergency department**
Cosimo Cosimato (Naples, Italy), Claudia Carelli, Giovanna Cristiano, Clarissa Anna De Rosa, Claudia Sara Cimmino, Francesca Paudice, Raffaella Epifani, Gabriella Maria Monsurrò, Vincenzo De Simone, Giuseppe Fiorentino, Mario Guarino

PS-4 in poster area Session 143 12:30 - 14:00

Poster session: New insights and biomarkers in pulmonary fibrosis and lung cancer

Disease(s) : Interstitial lung diseases | Respiratory critical care | Pulmonary vascular diseases | Airway diseases | Thoracic oncology

Method(s) : Cell and molecular biology | Endoscopy and interventional pulmonology | Epidemiology | Respiratory intensive care

Tag(s) : Basic science, Translational

Chairs : Arnaud Mailleux (Paris, France), Guillaume Beltramo (Dijon, France)

PA1230 **Anti-fibrotic effect of FGF21 in pulmonary fibrosis**
Mada Ghanem (Paris, France), Gabrielle Archer, Aurélien Justet, Mouna Hachem, Tiara Boghanim, Aurélie Vadel, Nicolas Poté, Aurélie Cazes, Pierre Mordant, Yves Castier, Hervé Mal, Madeleine Jaillet, Arnaud Mailleux, Bruno Crestani

PA1231 **Endotracheal FGF19 limits bleomycin-induced pulmonary fibrosis in mice : an innovative treatment of pulmonary fibrosis?**
Mada Ghanem (Paris, France), Aurélien Justet, Madeleine Jaillet, Shraddha Sharma, Arnaud Mailleux, Bruno Crestani

PA1232 **Endothelial cellular senescence contributes to the pathogenesis of IPF with pulmonary hypertension**
Kohei Otsubo (Hamilton, Canada), Kazuya Tsubouchi, Quan Zhou, Alex Noble, Kjetil Ask, Martin Kolb

PA1233 **CRISPR screening in primary human lung fibroblasts and small airway epithelial cells identifies novel targets to reduce cellular senescence with potential to treat both COPD and IPF**
Johan Mattsson (Mölndal, Sweden), Jenna Bradley, Pooja Sharma, Leire Escudero-Ibarz, Bairu Zhang, Chen Qian, Patrick O'Shea, Catherine Wrench, Maria Karlsson, Catherine Overed-Sayer, Isabel Rosa, James Pilling, Stephanie Constantinou, Lambert Montava Garriga, Valentina Quarantotti, Hui Sun Leong, Chang Kim, Elissavet Kentepozidou, Ceri Wiggins, Roxane Paulin, Laura Rosenberg, Davide Gianni, Henric Olsson

PA1234 **Pirfenidone ameliorates acute respiratory distress syndrome through suppressing pulmonary inflammation and fibrosis in rats**
Cheonwoong Choi (Seoul, Republic of Korea), Yeehyung Kim

PA1235 **Functional profiling of primary human fibroblasts derived from healthy and diseased lung tissue**
Michael Gerckens (München, Germany), Armando-Marco Dworsky, Mircea Gabriel Stoleriu, Nikolaus Kneidinger, Jürgen Behr, Roxana Maria Wasnick, Ali Önder Yildirim, Gerald Burgstaller

PA1236 **mtDNA in bronchoalveolar lavage fluid is a prognostic factor for IPF and AE-IPF**
Jun Fukihara (Seto, Japan), Koji Sakamoto, Taiki Furukawa, Ryo Teramachi, Yoshiki Ikeyama, Kensuke Kataoka, Yasuhiro Kondoh, Naozumi Hashimoto, Makoto Ishii

PA1237 **Endothelin-1 as a potential biomarker of interstitial lung disease in patients with rheumatoid arthritis**
Verónica Pulito-Cueto (Santander, Spain), Sara Remuzgo-Martínez, Belen Atienza-Mateo, Fernanda Genre, Victor Mora-Cuesta, David Iturbe-Fernández, María Sebastián Mora-Gil, Virginia Portilla, Alfonso Corrales, Iván Ferraz-Amaro, Ricardo Blanco, Raquel López-Mejías, José M. Cifrián, Miguel A. González-Gay

PA1238 **BIOMARKERS BASED ON GENE EXPRESSION IN LUNG CANCER**
Esperanza Salcedo Lobera (Málaga, Spain), Macarena Arroyo Varela, Diego Lozano Peral, Rafael Larrosa Jiménez, Rocio Bautista Moreno

PA1239 **USE OF miRNA AS A BIOMARKER IN LUNG NEOPLASMS**
Esperanza Salcedo Lobera (Málaga, Spain), Macarena Arroyo Varela, Diego Lopez Peral, Rafael Larrosa Jiménez, Rocio Bautista Moreno

PA1240 **Elucidating the molecular mechanism of Non-specific interstitial pneumonia from bronchoalveolar lavage**
Mohammad Shadab Ali (New Delhi, India), Vijay Hadda, Anita Chopra

PA1241 **Detection of NTRK fusions in a series of Brazilian patients diagnosed with non-small cell lung cancer.**
Rui Reis (Barretos, Brazil), Rodrigo de Oliveira Cavagna, Beatriz Garbe Zaniolo, Flávia Escremim De Paula, Gustavo Noriz Berardinelli, Murilo Queiroz De Almeida Bonatelli, Iara Santana, Eduardo Caetano Albino Da Silva, Josiane Mourão Dias, Alexandre Arthur Jacinto, Rachid Eduardo Noleto Da Nóbrega Oliveira, Leticia Ferro Leal

PA1242	**EARLY DETECTION OF LUNG CANCER BY METABOLOMIC ANALYSIS APPLIED TO SERUM SAMPLES BEFORE CLINICAL DIAGNOSIS IN HIGH-RISK PATIENTS.** Carolina Gotera (Madrid, Spain), Antonio Pereira Vega, Tamara García Barrera, José María Marín Trigo, Ciro Casanova Macario, Borja García-Cosío Piqueras, Isabel Mir Viladrich, Ingrid Solanes García, José Luis Gómez Ariza, José Luis López-Campos Bodineau, Luis Seijo Maceiras, Nuria Feu Collado, Carlos Cabrera López, Carlos Amado Diago, Amparo Romero Plaza, Luis Alejandro Padrón Fraysse, Belen Callejón Leblic, Eduardo Márquez Martín, Margarita Marín Royo, Antonia Llunell Casanovas, Eva Balcells Vilarnau, Cristina Martínez González, Juan Bautista Galdíz Iturri, Celia Lacárcel Bautista, Juan Pablo De Torres Tajes, Isabel Díaz Olivarez, Germán Peces-Barba Romero
PA1243	**A prospective study of NSCLC patients investigating treatment response and resistance mutations** Jana Laszkowski (Kiel, Germany), Michael Forster, Georg Hemmrich-Stanisak, Andre Franke, Malene Støchkel Frank
PA1244	**Screening of potential protein biomarkers in Bronchoalveolar Lavage Fluid (BALF) for early-stage lung adenocarcinoma with diagnostic value by Liquid chromatography MS analysis (LC-MS/MS)** Huohuan Tian (Chengdu, China), Linhui Yang, Shisheng Wang, Tao Su, Hui Zhu, Sai Yang, Hao Yang, Dan Liu
PA1245	**Thymic epithelial tumours present the number of known and novel gene variants in molecular analysis using targeted next-generation sequencing** Adam Szpechciński (Warszawa, Poland), Malgorzata Szolkowska, Sebastian Winiarski, Urszula Lechowicz, Piotr Wisniewski, Magdalena Knetki-Wroblewska
PA1246	**Exogenous tryptophan aggravates experimental lung fibrosis through activation of AKT-mTORC1 pathway** Sung-Woo Park (Bucheon-Si, Republic of Korea), Jisu Hong, Ae-Rin Baek, Susie Chin, An Soo Jang, Do Jin Kim, June Hyuk Lee, Shin Hee Park
PA1247	**Late Breaking Abstract - Inhibiting OGG1, a new strategy for the treatment of IPF, blocking inflammatory and fibrotic cascades** Sandra Ekstedt (Stockholm, Sweden), Christina Kalderen, Ulrika Warpman Berglund
PA1248	**Late Breaking Abstract - Anti-fibrotic and anti-inflammatory properties of isoform-selective SIK inhibitors in vitro and in vivo** Kristin Wiqvist (Mölndal, Sweden), Alexander Vidal, Madeleine Ingelsten, Tomas Ottosson, Eylem Gürcan, Thomais Markou, Melker Göransson

PS-5 in poster area — Session 144 — 12:30 - 14:00

Poster session: Lung repair and regeneration

Disease(s) : Pulmonary vascular diseases | Airway diseases | Respiratory critical care | Interstitial lung diseases

Method(s) : Physiology | Respiratory intensive care | Cell and molecular biology | Imaging | Pulmonary function testing

Tag(s) : Translational

Chairs : H. Irene Heijink (Groningen, Netherlands), Chair to be confirmed

PA1249	**OMV promotes the secretory autophagy of IL-1βin macrophage via GBP2** (GUANGZHOU, China), Ying Meng
PA1250	**The SASP from COPD fibroblasts is pro-inflammatory and reduces decorin secretion** Rhodé Meuleman (Groningen, Netherlands), Corry-Anke Brandsma, Wierd Kooistra, Maarten Van Den Berge, Wim Timens, Roy R Woldhuis
PA1251	**Protein disulfide-isomerase A3 contributes to COPD pathogenesis by enhancing inflammation and apoptosis in lung epithelial cells** Kyoung-Hee Lee (Seoul, Republic of Korea), Jimyung Park, Jiso Woo, Jiyeon Kim, Nakwon Kwak, Sang-Min Lee, Chul-Gyu Yoo
PA1252	**The ALDH3A1 gene suppresses Periostin gene expression in human airway epithelial cells exposed to cigarette smoke** Senani Rathnayake (Leppington, Australia), Karosham Reddy, Dikaia Xenaki, Brian Oliver, Marteen Van Den Berge, Alen Faiz
PA1253	**Response of bronchial and alveolar epithelial cells to poly (I:C)** Fatemeh Moheimani (Manchester, United Kingdom), Nafeesa Shahdab, Chris Ward, Stephen Cummings, John S Young
PA1254	**Study of the comorbid background and features of the clinical course of chronic obstructive pulmonary disease (COPD) in combination with atrial fibrillation** Guzal Karimdjanova (Tashkent, Uzbekistan), Dano Egamberdieva
PA1255	**Smoking effects over experimental lung cancer model** Laura Sánchez Carretero (Madrid, Spain), Sandra Pérez Rial, Adele Chloe Cardeñosa Pérez, Oderay Mabel Cedeño Díaz, Jordi Llop, Jesús Ruíz-Cabello Osuna, Luis Seijo, Germán Peces-Barba Romero

PA1256	**Small molecule inhibition of ATM reduces LPS-induced inflammation in acute lung injury** Man Luo (Hangzhou, China), Jiaoli Wang, Limin Wang
PA1257	**4-Indole-2-Arylaminopyrimidine identifies lysosomal cathepsin L activation critical for acute lung injury** shiyi yang (hangzhou, China), Kaijun Chen, Min Zhang, Zhangchu Jin, Zhouyang Li, Zhengtong Mao, Huahao Shen, Xingxian Zhang, Gensheng Zhang, Zhihua Chen
PA1258	**Acute effects of e-cigarettes on lung-related extracellular vesicles** Mikael Kabele (Tavelsjö, Sweden), Jenny Bosson, Lukasz Antoniewicz, Magnus Lundbäck, Fariborz Mobarrez
PA1259	**Differential protomic profiles of lung injury in rat models upon pulmonary exposure to air pollution** Chia-Li Han (Taipei, Taiwan), Yu-Teng Jheng, Denise Utami Putri, Manh Quan Nguyen, Hsiao-Chi Chuang, Kang-Yun Lee
PA1260	**Late Breaking Abstract - Combined treatment of Formoterol and Tanimilast improves lung organoid growth** Rocío Fuentes-Mateos (Groningen, Netherlands), Ka Yu Wang, Loes Kistemaker, Barbro Melgert, Fabrizio Facchinetti, Reinoud Gosens
PA1261	**Virlaza® Efficiently Inhibited LPS-induced Acute Lung Injury** Rodolfo De Paula Vieira (Anápolis, Brazil), Maysa Alves Rodrigues Brandao-Rangel, Dobroslav Melamed, Anamei Silva-Reis, Boris Brill, Manoel Carneiro Oliveira-Junior, Edilson De Souza Carvalho, Razi Ronen
PA1262	**Effect of an agro-based compound (A-bC) on regeneration of airway epithelium in Cystic Fibrosis (CF)** Emilie LUCZKA (Reims, France), Damien Adam, Myriam Polette, Michel Abély, Christelle Coraux
PA1263	**Late Breaking Abstract - The expression of NOX4 and ESRP1 correlate with airway epithelial-mesenchymal transition in COPD** Jing Xue (Yin Chuan, China), Jieda Cui, Jiaqi Wang, Juan Chen
PA1264	**The clinical and pathogenetic roles of ITIH4 in particulate matter-related emphysema** Kang-Yun Lee (New Taipei City, Taiwan), Kuan-Yuan Chen, Sheng-Ming Wu, Hsiao-Chi Chuang, Shu-Chuan Ho
PA1265	**A non-Canonical cGAS-CREB Pathway in Airway Epithelium inhibits LPS-induced Acute Lung Injury** zhangchu Jin (, China), Zhehua Shao, Wenqi Diao, Anyi Guo, Shiyi Yang, Yinling Han, Yinfang Wu, Yun Zhao, Yanping Wu, Jiaxin Shen, Songmin Ying, Chao Zhang, Wen Li, Huhao Shen, Zhihua Chen, Fugui Yan
PA1266	**Alveolar epithelial cells facilitate lung inflammation and fibrosis in response to cytokines** Robert M. Jackson (Miami, United States), Tengjiao Cui, Medhi Wangpaichitr, Andrew V. Schally
PA1267	**Implications of reduced E-cadherin for abnormal airway epithelial damage and repair responses in COPD** Xinzi Zheng (Groningen, Netherlands), Irene Heijink, Martijn Nawijn
PA1268	**Specialized Pro-resolving Mediators and its precursors in Chronic Obstructive Pulmonary Disease** Warda Jelassi (Tunis, Tunisia), Abir Hedhli, Sameh Hadj Taieb, Khadija Euchi, Sana Cheikhrouhou, Yacine Ouahchi, Sonia Toujani, Meriem Mjid, Besma Dhahri, Moncef Feki

PS-6 in poster area — Session 145 — 12:30 - 14:00

Poster session: Basic and clinical science in sleep breathing disorders: a bidirectional relationship

Disease(s) : Sleep and breathing disorders, Airway diseases

Method(s) : General respiratory patient care, Surgery, Physiology, Epidemiology, Cell and molecular biology, Public health, Pulmonary function testing, Pulmonary rehabilitation

Tag(s) : Clinical, Translational

Chairs : Anne Briançon-Marjollet (Grenoble Cedex 9, France), Candelaria Caballero Eraso (Bormujos, Spain)

PA1269	**Application of intermittent hypoxia to precisely-cut tissue slices: a novel ex vivo model for studying the parenchymal effects of obstructive sleep apnea (OSA)** Isaac Almendros (Barcelona, Spain), Alicia Jurado, Anna Ulldemolins, Helena Lluis, Xavier Gasull, Nuria Gavara, Raimon Sunyer, Jorge Otero, David Gozal, Ramón Farré Ventura
PA1270	**RNA expression in cord blood. Can obstructive sleep apnea (OSA) during pregnancy have any effect on fetal development?** Laura Cànaves (Palma de Mallorca, Spain), Paloma Giménez, Aarne Fleischer, Josep Muncunill, Maria Cerda Moncades, Ainhoa Álvarez Ruiz De Larrinaga, Andrés Sánchez Barón, Mercedes Codina Marcet, Mónica De La Peña Bravo, Antònia Barceló Bennasar, Daniel Morell-Garcia, Javier Pierola Lopetegui, José Antonio Peña Zarza, María Concepción Piñas Cebrian, Susana García Fernández, Carme Ferrer Quintana, Sabina Perello Rosello, Alberto Alonso Fernández
PA1271	**PD-L1+ small extracellular vesicles in obstructive sleep apnea syndrome** Wojciech Trzepizur (Angers, France), Sylvain Recoquillon, Grégoire Justeau, Jérémie Riou, Carmen Martinez, Ramaroson Andriantsitohaina, Frédéric Gagnadoux

PA1272	**Effects of CPAP therapy on molecular breath pattern in newly diagnosed OSA** Jonas Herth (Zürich, Switzerland), Felix Schmidt, Noriane A. Sievi, Stefan Malesevic, Patrick Baumgartner, Sarah Basler, Matteo Bradicich, Maurice Roeder, Esther I. Schwarz, Malcolm Kohler
PA1273	**Measuring value of telemonitoring in obstructive sleep apnea patient pathway optimization in hospital: a Spanish example** Sara Correia Pinto (Porto, Portugal), Monica Gonzalez, Melike Deger Wehr, Peter Pitts
PA1274	**Hypoxic burden to guide CPAP treatment allocation in OSA: findings from the ISAACC trial** Lucia Pinilla (Lleida, Spain), Neda Esmaeili, Gonzalo Labarca, Olga Mínguez, Dolores Martínez, Jorge Abad, Maria José Masdeu, Olga Mediano, Carmen Muñoz, Valentín Cabriada, Joaquín Duran-Cantolla, Mercè Mayos, Ramón Coloma, Josep Maria Montserrat, Mónica De La Peña, Wen-Hsin Hu, Andrew Wellman, Scott Sands, Ludovico Messineo, Ferran Barbé, Manuel Sánchez-De-La-Torre, Ali Azarbarzin
PA1275	**Central sleep apnea treated by a constant low dose of CO2 supplied by a novel device** Yuanming Luo (Guangzhou (Guangdong), China), Yongyi Chen, Shanfeng Liang, Luguang Wu, Andrew Wellman, R Doug Mcevoy, Joerg Steier, Danny J Eckert, Michael I Polkey
PA1276	**Peri-Operative Outcomes of Bariatric Surgery in Obstructive Sleep Apnoea: a Single-Centre Cohort Study** Cristiano van Zeller (London, United Kingdom), Richard Brown, Michael Cheng, Johan Meurling, Barbara Mcgowan, Joerg Steier
PA1277	**Treatment of OSA initiating with CPAP at 10 cmH2O** Yan Chen, Lu Wang, Qishan Wei, Yingxin Wu, Shanfeng Liang, Joerg Steier, Yuanming Luo
PA1278	**Is CPAP pressure titration always necessary?** Qishan Wei (Guangzhou, China), Qiong Ou, Shanfeng Liang, Cuizhen Huang, Simin Liu, Yuanming Luo
PA1279	**Effects of adaptive servo-ventilation on quality of life and symptoms according to its treatment indication –a subgroup analysis from the read-asv registry** Oliver Munt (Ascheberg, Germany), Michael Arzt, Pepin Jean-Louis, Heinzer Raphael, Adam Benjafield, Holger Woehrle
PA1280	**Atomoxetine and spironolactone combine to reduce obstructive sleep apnea (OSA) severity and blood pressure (BP) in hypertensive patients.** Alan R. Schwartz (Baltimore, United States), Laura Herpel, Richard Bogan, Bruce Corser
PA1281	**Association of physical activity and BMI on sleep disordered breathing and sleep related symptoms.** Ronas Shakya (bergen, Norway), Elin Helga Thorarinsdottir, Rajesh Shigdel, Thorarinn Gislason, Bryndis Benediktsdottir, Eva Lindberg, Chamara Senaratna, Vivi Schlünssen, Cecilie Svanes, Francisco Gomez Real, Randi J. Bertelsen, Össur Emilsson, Nils Oskar Jögi, Francisco Javier Callejas González
PA1282	**The link between the sphingolipid rheostat and obstructive sleep apnea** Péter Horváth (Budapest, Hungary), Lilla Büdi, Dániel Hammer, Rita Varga, György Losonczy, Ádám Tárnoki, Dávid Tárnoki, Martina Mészáros, András Bikov
PA1283	**Comparing right ventricular function in patients with severe Obstructive Sleep Apnea when treated and not treated with Continuous Positive Airway Pressure** Amal Saidani (Bizerte, Tunisia), Fateh Kadardar, Sofiene Haboubi, Hajer Farhat, Saddem Zemzem, Hedi Ben Slima
PA1284	**Obstructive sleep apnea and falls in COPD patients: a cross-sectional and follow-up study** Caroline Maschio de Censo (São Paulo, Brazil), Viviane Vieira Passini, Bárbara Aparecida Teodoro Alcantara Verri, Regina Maria De Carvalho Pinto, Rafael Stelmach, Rafaella Fagundes Xavier, Geraldo Lorenzi-Filho, Celso Ricardo Fernandes De Carvalho
PA1285	**Impact of nocturnal hypoxemia on systemic inflammation in obstructive sleep apnea hypopnea syndrome (OSAS)** Samira Mhamdi (Mannouba, Tunisia), Safa Marzouki, Améni Naaroura,, Houda Snoussi, Chiraz Aichaouia, Selsabil Daboussi, Zied Moetamri
PA1286	**Late Breaking Abstract - In-Home Smartphone-Based Prediction of Obstructive Sleep Apnea: A Validation Study with Level 2 Polysomnography** Jeong-Whun Kim (Seongnam, Republic of Korea), Daewoo Kim, Dongheon Lee, Joonki Hong
PA1287	**Late Breaking Abstract - Differences in morbidity and mortality between patients with heart failure and either obstructive or central sleep apnea** Christian Horvath (Toronto, Canada), Shoichiro Yatsu, John Floras, Alexander Logan, George Tomlinson, Thomas Bradley
PA1288	**Late Breaking Abstract - Detecting sleep apnea in advance using machine learning and ECG-deprived spectrogram during CPAP titration** Thanh Duy Linh Tran (Ho Chi Minh, Vietnam), Thi Hoang Trang Nguyen, Shang-Yang Lin, Wen-Te Liu, Chaur-Jong Hu

PS-7 in poster area Session 146 12:30 - 14:00

Poster session: Novel treatment strategies for airway diseases: a glimpse into the future

Disease(s) : Airway diseases

Method(s) : Cell and molecular biology Physiology General respiratory patient care Pulmonary function testing Epidemiology Pulmonary rehabilitation

Tag(s) : Translational

Chairs : Tania Maes (Ghent, Belgium), Juan José Nieto-Fontarigo (Santiago De Compostela, Spain)

PA1289	**A Clinical-Stage Inhaled RNAi Therapeutic For Pulmonary Inflammation Mediates Durable RAGE Silencing In Nonhuman Primates (NHP)** David Kasahara (Madison, United States), Szymon Klossowski, Ben Turner, Holly Hamilton, Taylor Reed, Tao Pei, James Hamilton, Erik Bush
PA1290	**A Lung-Targeted RNAi Therapeutics Delivery Platform Compatible With Subcutaneous (s.c.) Administration Mediates Pulmonary RAGE Silencing In Rodents And Nonhuman Primates** David Kasahara (Madison, United States), Ben Turner, Holly Hamilton, Taylor Reed, Szymon Klossowski, Clay Williams, Christopher Cousineau, Jing Chen, Julia Hegge, Maria Branca-Afrazi, James Hamilton, Tao Pei, Erik Bush
PA1291	**Heterogeneity of the lung microbiome influences response to Astegolimab, an anti ST2, in COPD** Koirobi Haldar (leicester, United Kingdom), David F. Choy, Ahmed Yosuf, Vijay Mistry, Jordan S. Mar, Dorothy Cheung, Michele A. Grimbaldeston, Christopher Brightling
PA1292	**ALIENTO and ARNASA: Study designs of two randomised, double-blind, placebo-controlled trials of astegolimab in patients with COPD** Christopher E. Brightling (Leicester (Leicestershire), United Kingdom), James D Chalmers, Parameswaran Nair, Neil J Greening, Russell P Bowler, Tonya Winders, Julie Olsson, Katerina Samara, Divya Mohan, Peter Calverley
PA1293	**Characterization of the ADME profile of tanimilast following administration of an intravenous microtracer combined with a single inhaled dose in healthy males** Michele Bassi (Parma, Italy), Veronica Puviani, Debora Santoro, Sonia Biondaro, Aida Emirova, Mirco Govoni
PA1294	**Effects of Telaglenastat, a glutaminase inhibitor, on airway inflammation and cellular senescence in Cigarette-smoke exposed mice** Kazuhiro Ito (London, United Kingdom), Yasuo Kizawa, Yuki Nishimoto, Genki Kimura, Shyreen Hassibi, Jonathan Baker
PA1295	**COPD and anticoagulant therapy: A retrospective cohort study of 1-year all-cause mortality and risk of hospitalization due to a severe exacerbation of COPD** Bård-Emil Vang Gundersen (København Ø, Denmark), Pradeesh Sivapalan, Josefin Eklöf, Tor Biering-Sørensen, Allan Linneberg, Jens Ulrik Jensen
PA1296	**The bacterial lysate OM-85 amplifies efficacy of Allergen Immunotherapy (AIT) in allergic patients with asthma and rhinitis** Antonios Christopoulos (Patras, Greece), Maria Elpida Christopoulou, Panagiota Tsiri, Vasiliki Sotiropoulou, Eva Theohari, Electra Koulousousa, Demitris Komninos, Georgios Tsirikos, Ioannis Christopoulos, Argyrios Tzouvelekis
PA1297	**Effects of acid-suppressive medications in patients with chronic obstructive pulmonary disease: a multicenter study using a common data model** Jeongwon Heo (Chuncheon-si, Republic of Korea), Seung-Joon Lee, Sung Joon Lee, Seon-Sook Han, Seong-Joon Cho, Ja Kyoung Kim, Yeonjeong Heo
PA1298	**The corticosteroid-sparring effect of vigorous physical activity - a secondary analysis of a randomised controlled trial** Anders Pitzner-Fabricius (Allerød, Denmark), Vibeke Backer
PA1299	**Ensifentrine, a novel dual phosphodiesterase (PDE) 3 and 4 inhibitor, reduces annualized exacerbations and delays the time to first exacerbation in COPD over 48 Weeks** Henrik Watz (Großhansdorf, Germany), Tara Rheault, Thomas Bengtsson, Kathleen Rickard
PA1300	**Anamorelin, a ghrelin receptor agonist, inhibited the allergic airway inflammation in mice** Hiroki Bando (Tokushima, Japan), Seidai Sato, Hirohisa Ogawa, Kazuya Koyama, Kojin Murakami, Yuya Yamashita, Nandin-Erdene Danzan, Keiko Haji, Nobuhito Naito, Hiroshi Kawano, Yasuhiko Nishioka
PA1301	**PI3Kγd inhibition suppresses key disease features in a rat model of asthma** James Pinkerton (New Lambton Heights (NSW), Australia), Silvia Preite, Antonio Piras, Dimitrios Zervas, Thomais Markou, Mark Freeman, Tobias Hofving, Eva Lamm Bergstrom, Emil Ivarsson, Sara Bonvini, Wayne Brailsford, Linda Yrlid, Maria Belvisi, Mark Birrell
PA1302	**Cyclo Z alleviates asthma induced by house dust mite (HDM).** Dohyun Lee (Pohang, Republic of Korea), Onyu PARK, Jongsu Jeon, Seoyeong Baek, Hoe-Yune Jung

PA1303 **Effects of Toll-like Receptor Activation on Airway Responses and Inflammation in Guinea Pigs**
Yujiao Xiang (Solna, Sweden), Jielu Liu, Mu Nie, Jesper Säfholm, Mikael Adner

PA1304 **Effects of melatonin in an Asthma-COPD overlap model**
Vitorio Crema Scheffer (São Paulo, Brazil), Cristiane Ribeiro, Leandro Camargo, Silvia Fukuzaki, Francine Almeida, Renato Righetti, Iolanda Tibério, Edna Leick

PA1305 **Silencing TSLP expression with a lung-targeted RNAi molecule suppresses pulmonary allergic inflammation**
Tingting Yuan (VERONA, United States), Szymon Klossowski, Maria Afrazi, Holly Hamilton, Julia Hegge, James Hamilton, Tao Pei, Erik Bush

PA1306 **Effectiveness of roflumilast, a phosphodiesterase type-4 (PDE4) inhibitor on biomarkers of inflammation in COPD**
Iryna Savelikhina (Ivano-Frankivsk, Ukraine), Mykola Ostrovskyy, Alla Zuban, Oleksandr Varunkiv, Mariana Kulynych-Miskiv, Kostiantyn Shvets, Galyna Korzh, Iryna Makoyda, Nadiia Korzh, Uliana Shevchuk-Budz

PA1307 **The efficacy of chronotherapy in asthma: an open-label, randomised 3-way crossover trial of inhaled corticosteroids (ICS) in atopic asthma**
Ran Wang (Manchester (Greater Manchester), United Kingdom), Robert Maidstone, David Ray, Andrew Loudon, Angela Simpson, Dave Singh, Hannah Durrington

PA1308 **Late Breaking Abstract - Efficacy and Safety of Dupilumab for COPD with Type 2 Inflammation Indicated by Elevated Eosinophils**
Surya Bhatt (Birmingham, United States), Klaus F. Rabe, Nicola A. Hanania, Claus Vogelmeier, Jeremy Cole, Mona Bafadhel, Stephanie A. Christenson, Alberto Papi, Dave Singh, Elizabeth Laws, Leda Mannent, Eric Mortensen, Jennifer Maloney, Xin Lu, Deborah Bauer, Ashish Bansal, Lacey B. Robinson, Raolat M. Abdulai

PS-8 in poster area Session 147 12:30 - 14:00

Poster session: New frontiers in chronic obstructive pulmonary disease characterisation and management

Disease(s) : Airway diseases Sleep and breathing disorders

Method(s) : Imaging General respiratory patient care Pulmonary function testing Epidemiology Public health Cell and molecular biology

Tag(s) : Clinical

Chairs : Alexander Mathioudakis (Stockport, United Kingdom), Augusta Beech (Manchester, United Kingdom)

PA1309 **Bronchodilator response assessed by spirometry and SPECT/CT in COPD.**
Edward Jeagal (Croydon Park, Australia), Hooria Alowiwi, Harley Koltai, Troy Cross, Kaj Blokland, Elizabeth Bailey, Kathy Willowson, David Chapman, Gregory King

PA1310 **Clinical and functional effects of inhaled dual therapy umeclidinium/vilanterol in patients with chronic obstructive pulmonary disease: a real-life study**
Corrado Pelaia (Catanzaro (CZ), Italy), Anna Ferrante Bannera, Fioramante Lello Rotundo, Francesco Giuseppe Tropea, Giuseppe Armentaro, Angelantonio Maglio, Angela Sciacqua, Alessandro Vatrella, Girolamo Pelaia

PA1311 **Current smoking reduces small airway eosinophil counts in COPD**
Augusta Beech (Manchester, United Kingdom), Sophie Booth, Dave Singh, Andrew Higham

PA1312 **COPD and heart rhythm disturbances: Overview of supraventricular and ventricular arrhythmias**
Daniela Buklioska Ilievska (Skopje, North Macedonia), Jordan Minov

PA1313 **Regional variation of COPD burden in Alberta, Canada**
Christopher Licskai (London (ON), Canada), Sheena Kayaniyil, Anna Hussey, Phongsack Manivong, Suzanne Mcmullen, Madonna Ferrone, Manisha Talukdar

PA1314 **Impact of comorbidities on quality of sleep among Tunisian patients with chronic obstructive pulmonary disease**
amal chennoufi (tunis, Tunisia), Chirine Moussa, Rouis Houda, Ghourabi Asma, Khattab Amel, Khouaja Ibtihel, Mhiri Fatma, Bayahi Leila, Zendah Ines, Maalej Sonia

PA1315 **Does corticosteroid intake increase the risk of Vitamin D deficiency in Tunisias COPD patients?**
Meriem Mjid (Tunis, Tunisia), Asma Zargouni, Abir Hedhli, Khadija Euchi, Yacine Ouahchi, Sana Cheikhrouhou, Sonia Toujani, Besma Dhahri

PA1316 **Clinical characteristics of patients with COPD in Hong Kong**
Fanny W.S. Ko (Shatin, Hong Kong), Xiaomeng Xu, Pinky Hon, Priyan Ratnasingham, Dominique Milea, David S C Hui

PA1317 **Observance of long-term non-invasive ventilation in COPD: VentiObs study**
Gilles Jebrak (Paris, France), Capucine Morelot-Panzini, Jean Christophe Honoré, Laurent Pupin, Bouchra Lamia

PA1318	**Clinical factors linked to the type of respiratory medication in COPD: Results from COSYCONET** Peter Alter (Marburg, Germany), Kathrin Kahnert, Franziska C. Trudzinski, Robert Bals, Henrik Watz, Tim Speicher, Sandra Söhler, Tobias Welte, Klaus F. R. Rabe, Emiel F. M. Wouters, Claus F. Vogelmeier, Rudolf A. Jörres
PA1319	**Medication success among real-world users of budesonide/glycopyrrolate/formoterol fumarate (BGF) for the management of COPD in a UK primary care population** Hana Müllerová (Cambridge, United Kingdom), Jeffrey Shi Kai Chan, Heath Heatley, Victoria Carter, John Townend, Derek Skinner, Stefan Franzén, Johann Castaneda, Jonathan Marshall, David Price
PA1320	**Addressing treatable traits: a meta-analysis to assess the effect of N-acetylcysteine on respiratory symptoms and exacerbations in pre-COPD and COPD patients** Alberto Papi (Cona, Ferrara, Italy), Federico Baraldi, Franco Alfano, Tommaso Bigoni
PA1321	**Cost-Effectiveness of Umeclidinium/Vilanterol (UMEC/VI) Versus Glycopyrrolate/Formoterol Fumarate (GLY/FOR) in Symptomatic Patients with COPD in the UK: The AERISTO trial** Afisi S Ismaila (Malvern, United States), Dhvani Shah, Alan Martin, Robyn Kendall, Stephen Noorduyn, Priyadarsini Dasari, Nancy A Risebrough, Chris Compton
PA1322	**Real-world study of formoterol/budesonide delivered through BAI in COPD patients** Balamurugan Santhalingam (Chennai (Tamil Nadu), India), Himanshu Pophale, Utsav Samariya, Komalkirti Apte, Sheetu Singh, Raja Dhar, Sujeet Rajan, Rajesh Swarnakar, Deepak Talwar, Meena Lopez, Vaishali Naik, Sandesh Sawant, Sushmeeta Chhowala, Abhijit Vaidya, Jaideep Gogtay
PA1323	**Benralizumab increases time to recurrent exacerbations in COPD patients on triple therapy with frequent exacerbations and an eosinophilic phenotype** Dave Singh (Manchester, United Kingdom), Gerard J. Crine, Alvar Agustí, Mona Bafadhel, Johan Söderström, Gabriela Luporini Saraiva, Ying Fan, Maria Jison, Ubaldo J. Martin, Ioannis Psallidas
PA1324	**Azithromycin maintenance therapy for prevention of Chronic Obstructive Pulmonary Disease Exacerbations** Deepansh Gupta (Rishikesh, India), Lokender Kumar, Avishek Layek
PA1325	**Clusters in chronic obstructive pulmonary disease based on inhaled corticosteroid treatment and pneumonia incidence – a nationwide cohort study** Allan Klitgaard (Vejle, Denmark), Rikke Ibsen, Ole Hilberg, Anders Løkke
PA1326	**Trends in severe COPD exacerbations and mortality following the introduction of ultra-long-acting bronchodilators: an interrupted time-series study between 2007 and 2018 in the province Quebec, Canada** Charles-Antoine Guay (Québec, Canada), Caroline Sirois, Claudia Beaudoin, Laurie Perreault, François Maltais, Pierre-Hugues Carmichael, Elhadji Anassour Laouan Sidi, Steeve Provencher
PA1327	**Clinical effect of inhaled corticosteroid withdrawal in stable COPD Patients** Chung-Yu Chen (Douliou (Yunlin), Taiwan), Cheng-Yu Chang, Shih-Chieh Chang, Yu-Feng Wei
PA1328	**Cost-Effectiveness of Umeclidinium/Vilanterol Versus Indacaterol/Glycopyrronium in Symptomatic patients with COPD in the UK** Afisi S Ismaila (Malvern, United States), Dhvani Shah, Alan Martin, Robyn Kendall, Stephen Noorduyn, Priyadarsini Dasari, Nancy A Risebrough, Chris Compton

PS-9 in poster area — Session 148 — 12:30 - 14:00

Poster session: Comorbidities in chronic obstructive pulmonary disease

Disease(s) : Airway diseases Thoracic oncology

Method(s) : Epidemiology General respiratory patient care Imaging Pulmonary function testing Physiology Pulmonary rehabilitation Public health Cell and molecular biology

Tag(s) : Clinical

Chairs : Leonardo Michele Fabbri (Modena, Italy), Chair to be confirmed

PA1329	**Cardiac adrenergic innervation and air trapping in patients with moderate-to-severe chronic obstructive pulmonary disease: initial data from a pilot study** Ieva Dimiene (Kaunas, Lithuania), Deimantė Hoppenot, Donatas Vajauskas, Skaidrius Miliauskas
PA1330	**The prevalence of emphysema in patients undergoing lung cancer screening** Marija Vukoja (Sremska Kamenica, Republic of Serbia), Dragan Dragisic, Gordana Vujasinovic, Jelena Djekic Malbasa, Ilija Andrijevic, Goran Stojanovic, Ivan Kopitovic
PA1331	**Diagnostic utility of specific frailty questionnaire, the Kihon Checklist for hippocampal atrophy in COPD** Tsunahiko Hirano (Ube, Japan), Shun Takahashi, Ayumi Fukatsu-Chikumoto, Takuya Ishida, Tomihiro Donishi, Kazuyoshi Suga, Keiko Doi, Keiji Oishi, Shuichiro Ohata, Yoriyuki Murata, Yoshikazu Yamaji, Maki Asami-Noyama, Nobutaka Edakuni, Tomoyuki Kakugawa, Kazuto Matsunaga

PA1332	**Impact of atrial fibrillation and flutter on mortality in patients admitted with acute exacerbation of COPD** Peter Ascanius Jacobsen (Aalborg, Denmark), Stine Kjærsgaard Hansen, Sofie Vejby Thorndal, Ulla Møller Weinreich
PA1333	**The impact of air trapping on left ventricle volumes in patients with treatment naïve moderate-to-severe chronic obstructive pulmonary disease** Ieva Dimiene (Kaunas, Lithuania), Deimante Hoppenot, Lina Padervinskiene, Skaidrius Miliauskas
PA1334	**Coronary artery disease, COPD exacerbation and inflammation** Mairi MacLeod (London, United Kingdom), Aaron Braddy-Green, Ralph Lopez, Philippa Webb, Logan Sun, Paras Dalal, Kristopher Knott, Simon Davies, M Rubens, Edward D Nicol, Anand Devaraj, Dorian O Haskard, Gavin C Donaldson, Ramzi Y Khamis, Jadwiga A Wedzicha
PA1335	**Impact of COPD on sympathetic drive** Binaya Regmi (Aachen, Germany), Faniry Ratsimba, Benedikt Jörn, Mehdi Senol, Oscar Gorol, Mustafa Elfeturi, Ayham Daher, Vaughan Macefield, Michael Dreher, Jens Spiesshoefer
PA1336	**Unrecognised coronary artery disease in COPD: a case for screening?** Mairi MacLeod (London, United Kingdom), Aaron Braddy-Green, Ralph Lopez, Paras Dalal, Kris Knott, Simon Davies, Michael Rubens, Edward D Nicol, Anand Devaraj, Dorian O Haskard, Gavin C Donaldson, Ramzi Y Khamis, Jadwiga A Wedzicha
PA1337	**Climatic conditions as an important factor in the development of symptoms and comorbidities in COPD** Eugenija Basioli Kasap (Zadar, Croatia), Martina Dokoza, Nataša Karamarković Lazarušić, Gordana Pavliša, Sanda Škrinjarić-Cincar
PA1338	**Association of leptin, adiponectin, and IL-8 gene polymorphism and serum biomarkers in COPD and COPD with T2DM in the north Indian population** Seema Singh (Lucknow, India), Santosh Kumar, Sk Verma
PA1339	**Analysis of ECG parameters associated with worse prognosis in patients with COPD** Martina Kulirova (Hradec Králové, Czech Republic), Miroslav Solar, Michal Kopecky, Barbora Novotna, Marek Plutinsky, Libor Fila, Petr Vanik, Pavlina Musilova, Tomas Dvorak, Petr Safranek, Michal Svoboda, Vladimir Koblizek
PA1340	**Exacerbation history and myocardial infarction in patients with chronic obstructive pulmonary disease (COPD) in Sweden** Oskar Wallström (Göteborg, Sweden), Fredrik Nyberg, Caroline Stridsman, Anne Lindberg, Lowie Vanfleteren
PA1341	**OBSTRUCTIVE PULMONARY DISEASE CORONAROPATHY RISK (COPDCORI) AND SYSTEMIC INFLAMMATION VALUES IN PATIENTS WITH COPD AFTER COMPLETION OF A PULMONARY REHABILITATION PROGRAMME.** Natalia González Florido (Málaga, Spain), Ana Muñoz Montiel, Pedro Ruiz Esteban, Adolfo Domenech Del Río, Miguel Ángel Sánchez Chaparro, Casilda Olveira Fuster
PA1342	**Association of CAT and PHQ-9 scores for depression among COPD patients – a Philippine cohort.** Jermelyn Saron (Manila, Philippines), Guinevere Agra, Celeste Mae Campomanes, Teresita De Guia, Helen Isaac, Lenora Fernandez, Rodolfo Pagcatipunan, Roland Panaligan, Tim Trinidad
PA1343	**The continuously evolved RE-SAMPLE cohort: predicting outcomes of COPD and comorbidities** Anke Lenferink (Oldenzaal, Netherlands), Charlotte Cecile Bucsán, M G J Brusse-Keizer
PA1344	**Correlation of FEV1 and Pulmonary artery hypertension among patients with COPD, presented to tertiary care hospital, Pakistan.** Saadia Ashraf (Peshawar, Pakistan), Sehrish Khan
PA1345	**Title: Is smoking associated with higher cardiovascular risk and increased unplanned acute medical attendance? A retrospective analysis from the Lung Cancer screening cohort** Rehab Haider (Shrewsbury, United Kingdom), Elizabeth Finn, Shabeena Zeb, Faraz Bharwana, Alice Fitzgerald, Sana Iftikhar, Imran Hussain
PA1346	**Which patient characteristics are associated with exercise-induced desaturation in COPD combined with hypertension?** Anastasiia Melenevych (Kharkiv, Ukraine)
PA1347	**The prevalence and clinical characteristics of COPD in patients with lung cancer** Ivana Canak (Sremska Kamenica, Republic of Serbia), Jelena Mikov, Goran Stojanovic, Nevena Secen, Ilija Andrijevic, Ivan Kopitovic, Nensi Lalic, Marija Vukoja
PA1348	**Exploring patterns of COPD exacerbations and comorbid flare-ups** Sanne H B van Dijk (Enschede, Netherlands), Marjolein G J Brusse-Keizer, Tanja Effing, Paul D L P M Van Der Valk, Eline H Ploumen, Job Van Der Palen, Carine J M Doggen, Anke Lenferink

12:45-13:45
INDUSTRY VIRTUAL SYMPOSIUM SEE PAGE 1

12:45-13:45
INDUSTRY LUNCHTIME SYMPOSIUM SEE PAGE 1

Brown 1+2 Session 151 12:45 - 13:45

Joint session: Updates on inhalers for COPD and asthma

an ERS / Industry Joint Session

Tag(s) : Clinical

Chairs : Frans H.C. De Jongh (Enschede, Netherlands), Antonio Spanevello (Milano, Italy)

12:45	**How to choose and use and inhaler** Omar S. Usmani (London, United Kingdom)	**1361**
12:55	**How to monitor and improve inhaler technique** Janwillem W. H. Kocks (Groningen, Netherlands)	**1362**
13:05	**How to assess and improve inhaler adherence** Federico Lavorini (Firenze (FI), Italy)	**1363**
13:15	**Q&A session** All Speakers	**1364**

Gold Session 154 13:45 - 15:15

State of the art session: Pulmonary vascular diseases

Chronic thromboembolic pulmonary hypertension: treating local complications of systemic disease?

Aims : to place recent insights into the molecular pathogenesis of chronic thromboembolic pulmonary hypertension (CTEPH) into the context of the existing state of the art knowledge of CTEPH and its implementation in current clinical guidelines; to answer the question is whether and how these insights into pathophysiology will change future treatment of CTEPH and determine prognosis and outcomes for patients; to discuss novel targets for treatment and improvements in pharmacological therapy

Disease(s) : Pulmonary vascular diseases

Method(s) : Cell and molecular biology Imaging Surgery

Tag(s) : Translational

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Pathologist, Scientist (basic, translational), Thoracic surgeon

Chairs : Olivier Sitbon (Le Kremlin-Bicêtre, France), Mona Lichtblau (Zürich, Switzerland), Judith Löffler-Ragg (Innsbruck, Austria)

13:45	**Novel molecular insight into the development of CTEPH** Jurjan Aman (Amsterdam, Netherlands)	**1371**
14:00	**The natural history of CTEPH** Marion Delcroix (Leuven, Belgium)	**1372**
14:15	**(Sub)segmental CTEPH should be treated by surgery** David Jenkins (Cambridge, United Kingdom)	**1373**
14:30	**(Sub)segmental CTEPH should be treated by balloon angioplasty** Xavier Jais (Le Kremlin-Bicêtre, France)	**1374**
14:45	**Discussion and Q&A** All Speakers	**1375**

Silver Session 155 13:45 - 15:15

Journal session: Highlights from the Journal of the American Medical Association

Global burden of long COVID, morphine for breathlessness in chronic obstructive pulmonary disease and autotaxin inhibitor treatment for idiopathic pulmonary fibrosis

Aims : to provide an update on the global burden of long COVID; to provide information about the use of morphine to treat breathlessness in patients with chronic obstructive pulmonary disease (COPD); to provide information about the effect of autotaxin inhibitor treatment on lung function in patients with idiopathic pulmonary fibrosis (IPF).

Disease(s) : Airway diseases | Interstitial lung diseases | Respiratory infections

Method(s) : Epidemiology | General respiratory patient care

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Respiratory critical care physician, Physician in Pulmonary Training

Chairs : Kristin Walter (Chicago, United States)

13:45	**Global burden of long COVID** Merel Hellemons (Rotterdam, Netherlands)	**1376**
14:00	**Morphine for breathlessness in COPD** Magnus Ekström (Lund, Sweden)	**1377**
14:15	**Autotaxin inhibitor treatment for IPF** Marlies S. Wijsenbeek (Rotterdam, Netherlands)	**1378**
14:30	**Discussion and Q&A** All Speakers	**1379**

Coral 4+5 — Session 156 — 13:45 - 15:15

Symposium: Novel concepts for understanding mechanisms of chronic obstructive pulmonary disease initiation and progression

Aims : to present leading avenues of investigation that will enhance the participants' understanding of early COPD and its progression, relevant molecular disease endotypes and preventive as well as therapeutic strategies; to discuss current advances in our knowledge of COPD immune mechanisms; to discuss how the integration of cutting-edge technologies such as (spatial) single-cell RNA sequencing can help to find more efficient therapies; to discuss novel translational and (pre)clinical development for therapeutic strategies, as well as scientific advancements that may direct current and future therapeutic development; to explain the need for COPD classification and further biomarker discovery for patient 'endophenotyping'; to explain how changes in cell-cell interactions trigger molecular and pathological mechanisms responsible for disease onset and progression; to discuss how to use current advanced technologies to delineate novel targets for COPD drug discovery.

Disease(s) : Airway diseases | Interstitial lung diseases | Respiratory critical care

Method(s) : Cell and molecular biology | Epidemiology | Public health

Tag(s) : Translational

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Medical Student, Respiratory critical care physician, Patient, Scientist (basic, translational), Journalist

Chairs : Ali Oender Yildirim (Neuherberg, Germany), Stylianos Loukides (Athens, Greece), Florence Schleich (Liège, Belgium)

13:45	**Introduction** Ali Oender Yildirim (Neuherberg, Germany)	**1380**
13:50	**Novel immune mechanisms of COPD initiation and progression** Francesca Polverino (Houston, United States)	**1381**
14:05	**Approaches to lung regeneration** Mareike Lehmann (Marburg, Germany)	**1382**
14:20	**Metabolic alterations in COPD that direct new treatment strategies** Suzanne Cloonan (Dublin, Ireland)	**1383**
14:35	**Translating resilience and pathogenesis to personalised therapy for COPD** Irina Petrache (Denver, United States)	**1384**
14:50	**Discussion and Q&A** All Speakers	**1385**

Coral 3 — Session 157 — 13:45 - 15:15

Hot topics: The unfortunate relationship between respiratory disease and infection: challenges which need us to think outside the box

Aims : to understand the molecular mechanism for either the higher likelihood of respiratory infection in chronic respiratory disease or the complications of pulmonary infection in patients with chronic diseases; to highlight the role of preventive measures, mainly vaccination.

Disease(s) : Airway diseases | Paediatric respiratory diseases | Respiratory infections

Method(s) : General respiratory patient care

Tag(s) : Translational

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Paediatrician, Patient, Journalist

Chairs : Daiana Stolz (Freiburg, Germany), Francesco Blasi (Milan, Italy)

13:45	**Sadoul lecture: Dr. Jekyll and Mr. Hyde: why respiratory infectious affect lung health so much?** Tobias Welte (Hannover, Germany)	**1386**
14:00	**Injuries in childhood are responsible for lung diseases later in life: the role of infection and allergy** Erika von Mutius (München, Germany)	**1387**
14:15	**Innate Immunity and Inflammation in the lungs, friends and foes** Alberto Mantovani (Pieve Emanuele (Milan), Italy)	**1388**
14:30	**Prevention is better than cure: why vaccination is a key to healthier lungs.** Peter Openshaw (London, United Kingdom)	**1389**
14:45	**Discussion and Q&A** All Speakers	**1390**

Coral 1 — Session 158 — 13:45 - 15:15

Symposium: Acute respiratory distress syndrome: update and future treatment

Aims : to describe the state of the art in acute respiratory distress syndrome (ARDS) and upcoming treatment options.

Disease(s) : Respiratory critical care | Respiratory infections

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Nurse, Respiratory critical care physician, Paediatrician, Patient, Physician in Pulmonary Training, Physiologist, Radiologist, Respiratory physiotherapist, Scientist (basic, translational), Respiratory therapist, Journalist

Chairs : João Carlos Winck (Vila Nova de Gaia, Portugal), Marieke L. Duiverman (Groningen, Netherlands)

13:45	**The new ARDS definition** Lorraine Ware (Nashville, United States)	**1391**
14:00	**The new European guideline in ARDS: nonpharmaceutical treatments** Christian Karagiannidis (Cologne, Germany)	**1392**
14:15	**The new European guideline in ARDS: pharmaceutical treatments and upcoming targets** Danny Mcauley (Belfast (Belfast), United Kingdom)	**1393**
14:30	**Weansafe: how do we wean from mechanical ventilation?** Leo Heunks (Amsterdam, Netherlands)	**1394**
14:45	**Discussion and Q&A** All Speakers	**1395**

Coral 2 — Session 159 — 13:45 - 15:15

Symposium: Better outcomes for adults with chronic breathlessness: earlier diagnosis and management

Aims : to review healthcare pathways for people living with chronic breathlessness, from their first presentation to palliation, highlighting the role of integrated care throughout; to critically appraise research and clinical care evaluations of integrated diagnostic pathways for chronic breathlessness to achieve earlier diagnosis and treatment; to discuss the role of artificial intelligence in diagnostic pathways for chronic breathlessness; to review the role of nonpharmacological management for chronic breathlessness including the multidisciplinary team and rehabilitation; to discuss specific causes of breathlessness, such as breathing pattern disorder, exercise-induced laryngeal obstruction and excessive dynamic airway collapse, and their respective management for clinicians to appropriately diagnose and manage breathlessness; to describe complex interventions for distressing breathlessness including breathlessness support services.

Disease(s) : Airway diseases | Interstitial lung diseases | Pulmonary vascular diseases

Method(s) : General respiratory patient care | Palliative care | Pulmonary rehabilitation

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Patient, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist, Respiratory therapist, Journalist

Chairs : Karl Sylvester (Cambridge (Cambridgeshire), United Kingdom), Hilary Pinnock (Edinburgh (Edinburgh), United Kingdom), Thomas Gille (Bobigny, France)

13:45	**Patient's perspective**	**1396**
13:50	**Earlier diagnosis to earlier treatment for people living with chronic breathlessness** Rachael A. Evans (Leicester (Leicestershire), United Kingdom)	**1397**
14:05	**Nonpharmacological management of chronic breathlessness including rehabilitation and the multidisciplinary team** William Man (Harefield, United Kingdom)	**1398**
14:20	**Special considerations in complex breathlessness: breathing pattern disorder, exercise-induced laryngeal obstruction and excessive dynamic airway collapse** Thomas Halvorsen (Bergen, Norway)	**1399**
14:35	**Integrated breathlessness support services: what are they and what should they include?** Daisy J.A. Janssen (Horn, Netherlands)	**1400**
14:50	**Discussion and Q&A** All Speakers	**1401**

Purple Session 160 13:45 - 15:15

Symposium: Air pollution, pollen and lung health in the climate change era

Aims : to provide insight into the associations between air pollution/pollen exposures and respiratory health, and to enable clinicians and researchers to tackle the increase in environment-induced diseases emerging with climate change; to describe current knowledge about pollen and air pollution exposures and respiratory allergies and asthma; to explain methodological pitfalls when investigating the effects of pollens and other pollutants; to expand knowledge of air pollution and respiratory health in children; to summarise the role of sex and gender in respiratory immune responses to emerging environmental inhalant threats.
Specifically, the session aims are: 1) To describe current knowledge about pollen and air pollution exposures and respiratory allergies and asthma; 2) To explain methodological pitfalls when investigating effects of pollens and other pollutants; 3) To expand knowledge on air pollution and respiratory health in children; 4) To summarize the role of sex and gender on respiratory immune response to emerging environmental inhalant threats.

The proposed symposium connects important priority areas of Assembly 6 (1. Determinants (including airborne pollutants) of lung health in non-smoking adults; 2. Air pollution, emission sources, desert dust storms and climate change: impact on lung health; 3. Towards chronic respiratory disease prevention through occupational and environmental exposure management) to those of other assemblies, such as Assembly 1 (an aging lung: respiratory disease in elderly), Assembly 3 (mechanisms responsible for progression of pulmonary diseases) and Assembly 7 (childhood onset lung disease into adulthood). Appeal and relevance to the broad range of ERS constituents has been carefully built into this proposal.

Disease(s) : Airway diseases Respiratory infections

Method(s) : Cell and molecular biology Epidemiology Public health

Tag(s) : Translational

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Respiratory critical care physician, Paediatrician, Pathologist, Patient, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist, Scientist (basic, translational), Respiratory therapist, Journalist

Chairs : Maria Rosaria Bonsignore (Palermo, Italy), Sergio Alfonso Harari (Milano (MI), Italy), Christopher Carlsten (Vancouver (BC), Canada)

13:45	**Pollen exposure, respiratory allergy and asthma: what do we know so far?** Adrian Lowe (Parkville, Australia)	**1402**
14:00	**Short-term effects of exposure to pollens and other air pollutants: methodological insights for researchers and clinicians** Antonio Gasparini (London, United Kingdom)	**1403**
14:15	**Air pollution and paediatric respiratory health: little particles and little lungs** Jonathan Grigg (London, United Kingdom)	**1404**
14:30	**Sex as a modifier of effects of the environment and occupation on respiratory disease** Meghan Rebuli (Chapel Hill, United States)	**1405**
14:45	**Discussion and Q&A** All Speakers	**1406**

14:00-14:45
INDUSTRY SKILLS LAB WORKSHOP SEE PAGE 1

Red 1+2 Session 163 14:15 - 15:30

Oral presentation: Biological treatments for asthma: a new era in severe asthma management

Disease(s) : Airway diseases

Method(s) : General respiratory patient care Cell and molecular biology Endoscopy and interventional pulmonology Physiology

Tag(s) : Clinical

Chairs : Lena Uller (Lund, Sweden), Apostolos Bossios (Stockholm, Sweden)

OA1412	**Late Breaking Abstract - Phase I safety and tolerance study of the inhalable anti IL-4Rα single domain antibody, LQ036, demonstrates promising clinical profile to treat asthma** Yakun Wan (Shanghai , China), Junwei Gai, Min Zhu, Huaiyu Gu, Zhenzhen Deng, Jing Huang
OA1413	**Bronchial submucosal eosinophils predict clinical remission better than blood eosinophils and FeNO in severe uncontrolled asthma treated with biological therapy** Hanaa Shafiek (Alexandria, Egypt), Amanda Iglesias, Mar Mosteiro, Ines Escribano, Nuria Toledo-Pons, Cristina Gomez, Jacinto Ramos, Luis Perez De Llano, Fco.De Borja Garcia-Cosio Piqueras
OA1414	**Non-T2 cytokines post Benralizumab associate with residual symptoms** Manali Mukherjee (Hamilton (ON), Canada), Chynna Huang, Kayla Zhang, Xiaotian Ju, Melanie Kjarsgaard, Carmen Venegas-Garrido, Katherine Radford, Anurag Bhalla, Kiho Son, Sylvia Lauks, Nicola Calma, Sarah Svenningsen, Paul O'Byrne, Roma Sehmi, Parameswaran Nair
OA1415	**Biomarkers and clinical outcomes after cessation of tezepelumab after 2 years of treatment (DESTINATION)Biomarkers and clinical outcomes after cessation of tezepelumab after 2 years of treatment (DESTINATION)** Christopher E. Brightling (Leicester (Leicestershire), United Kingdom), David Jackson, Ales Kotalik, Nestor A Molfino, Scott Caveney, Gene Colice, Neil Martin, Elliot Israel, Ian D Pavord, Michael E Wechsler, Celeste Porsbjerg
OA1416	**Long-Term Dupilumab Efficacy in Patients with Type 2 Asthma by Age of Onset: LIBERTY ASTHMA TRAVERSE** William Busse (Madison, United States), Monica Kraft, Christian Domingo, Ines De Mir, Diego J. Maselli, Xavier Soler, Changming Xia, Nami Pandit-Abid, Juby A. Jacob-Nara, Harry Sacks, Paul J. Rowe, Yamo Deniz
OA1417	**Tezepelumab can restore normal lung function in patients with severe, uncontrolled asthma** Ian Douglas Pavord (Oxford (Oxfordshire), United Kingdom), Christopher E Brightling, Stephanie Korn, Nicole Martin, Sandhia Ponnarambil, Nestor A Molfino, Jane R Parnes, Christopher S Ambrose
OA1418	**The proportion of patients achieving low biomarker levels with tezepelumab treatment in the phase 3 NAVIGATOR study** David J Jackson (London, United Kingdom), Ian D Pavord, J Christian Virchow, Jane R Parnes, Amgad Gamil, Gillian Hunter, Sandhia Ponnarambil, Neil Martin, Michael E Wechsler
OA1419	**Changes in serum total IgE after cessation of tezepelumab after 2 years of treatment (DESTINATION)** Marco Caminati (Verona (VR), Italy), Jean-Pierre Llanos, Joseph D Spahn, Ales Kotalik, Santiago Quirce, Jonathan Corren
OA1420	**Durability of Benralizumab-induced remission in severe asthma: an analysis of the BORA study** Marek Lommatzsch (Rostock, Germany), Anat Shavit, Anaud Bourdin, Justin Kwiatek, David Cohen, Delphine Leynaud, Andrew Menzies-Gow
OA1421	**Parasitic Infections and Biological Therapies Targeting Type 2 Inflammation: a Vigibase® Study.** Laurent Guilleminault (Toulouse Cedex, France), François Montastruc, Laurent L. Reber, Jean-François Magnaval, Philippine Lifar
OA1422	**Discussion and Q&A** All Speakers

Brown 3 Session 164 14:15 - 15:30

Oral presentation: Novel research impacting clinical practice in interstitial lung disease

Disease(s) : Interstitial lung diseases

Method(s) : Epidemiology General respiratory patient care Surgery Pulmonary function testing Endoscopy and interventional pulmonology Imaging

Tag(s) : Clinical

Chairs : Wim A. Wuyts (Leuven, Belgium), Athina Trachalaki (London, United Kingdom)

OA1423	**Late Breaking Abstract - Safety, tolerability and antifibrotic activity of bexotegrast: Phase 2a INTEGRIS-IPF study (NCT04396756)** Wim A. Wuyts (Leuven, Belgium), Claudia Valenzuela, Gisli Jenkins, Jonathan G Goldin, Grace Hyun J Kim, Marzena Jurek, Scott Turner, Martin Decaris, Chris N Barnes, Éric Lefebvre, Gregory Cosgrove, Vincent Cottin

OA1424	**Nationwide All ILD registry with central MDD in Japan; Providing Multidisciplinary ILD diagnoses (PROMISE) study.** Taiki Furukawa (Nagoya (Aichi), Japan), Yasuhiro Kondoh, Shintaro Oyama, Ryo Teramachi, Hironao Hozumi, Takafumi Suda, Tomoyuki Fujisawa, Ryoko Egashira, Takeshi Johkoh, Junya Fukuoka, Kensuke Kataoka, Hideya Kitamura, Osamu Nishiyama, Masaki Okamoto, Naoki Koshimizu, Nobuhisa Ishikawa, Satoshi Okamori, Yasunari Miyazaki, Masashi Bando, Yoshikazu Inoue, Takashi Ogura, Masataka Kuwana, Hiromi Tomioka, Yasuhiko Nishioka, Hirofumi Chiba, Masahito Ebina, Kazuya Ichikado, Yoichi Nakanishi, Naozumi Hashimoto, Yoshimune Shiratori, Yoshinori Hasegawa, Makoto Ishii, . The Providing Multidisciplinary Ild Diagnoses [promise] Study Group
OA1425	**Experience of making early interstitial lung disease diagnosis from patients taking part in UK national pilot lung screening programme.** Daniel Trushell-Pottinger (Doncaster, United Kingdom), Ailsa Holbourn, Kiran Nandakumar, Jason Page, Sue Matthews, Abdul Nasimudeen, Moe Kyi
OA1426	**Use of 1.1-mm probes in transbronchial lung cryobiopsy for diagnosing interstitial lung diseases: a randomized trail** Gang Hou (Beijing, China), Yiding Bian, Mingming Deng
OA1427	**Electronic nose technology differentiates interstitial lung diseases from other chronic respiratory diseases** Iris G. van der Sar (Rotterdam, Netherlands), Marlies S. Wijsenbeek, Gert-Jan Braunstahl, Jason O. Loekabino, Annemarie C. Dingemans, Johannes C. C. M. In 'T Veen, Catharina C. Moor
OA1428	**Development and validation of a nomogram for predicting pulmonary complications after curative resection in idiopathic pulmonary fibrosis patients with early stage lung cancer** Yunjoo Im (Seoul, Republic of Korea), Hongseok Yoo
OA1429	**Telemedicine in patients with Idiopathic Pulmonary Fibrosis** Matteo Davì (Pesaro, Italy), Claudia Duranti, Lina Zuccatosta, Federico Mei, Martina Bonifazi
OA1430	**The clinical frailty scale is associated with progression of fibrotic interstitial lung disease – a multicentre cohort study.** Sabina A. Guler (Bern, Switzerland), Daniel-Costin Marinescu, Gerard Cox, Celine Durand, Jolene H. Fisher, Amanda Grant-Orser, Gillian C. Goobie, Nathan Hambly, Kerri A. Johannson, Nasreen Khalil, Martin Kolb, Stacey Lok, Sarah Macisaac, Helene Manganas, Veronica Marcoux, Julie Morisset, Ciaran Scallan, Shane Shapera, Kelly Sun, Boyang Zheng, Christopher J. Ryerson, Alyson W. Wong
OA1431	**Patient reported assessment of swallowing and throat symptoms and reflux in patients with idiopathic pulmonary fibrosis** amal alamer (NEWCASTLE UPON TYNE, United Kingdom), Amal Alamer, Chris Ward, Ian Forrest, Michael Drinnan, Joanne M Patterson
OA1432	**Buccal microbiome and survival in idiopathic pulmonary fibrosis: CleanUP-IPF** John Kim (Charlottesville, United States), Promi Das, Shwu-Fan Ma, Piyush Ranjan, Yong Huang, Kevin Anstrom, David O'Dwyer, Fernando Martinez, Jack Gilbert, Imre Noth
OA1433	**Discussion and Q&A** All Speakers

Brown 1+2 Session 165 14:15 - 15:30

Oral presentation: Latest research on paediatric asthma

Disease(s) : Airway diseases

Method(s) : General respiratory patient care Cell and molecular biology Physiology Pulmonary function testing Epidemiology Public health

Tag(s) : Clinical, Translational

Chairs : Angela Zacharasiewicz (Wien, Austria), Erol Gaillard (Leicester (Leicestershire), United Kingdom)

OA1434	**Late Breaking Abstract - Gut microbiota maturity in infancy and atopic wheeze in childhood.** Yuan Gao (Beijing, China), Martin O'Hely, Mimi Lk Tang, Sarath Ranganathan, Leonard C.Harrison, Peter Vuillermin
OA1435	**The ERS CRC Severe Paediatric Asthma Collaborative in Europe: asthma control in Children on Biologics** Norrice Liu (London, United Kingdom), Marielle W.H. Pijnenburg, Antoine Deschildre, Silvia Carraro, Grazia Fenu, Valentina Ferraro, Louise L. Fleming, Laurence Hanssens, Amelia Licardi, Enrico Lombardi, Jose Valverde Molina, Anouk Vierhout, Ines De Mir, Franca Rusconi
OA1436	**How much change in FEV1 is associated with an increased risk of an asthma exacerbation?** Stephen Turner (Aberdeen (Aberdeenshire), United Kingdom), Nicole Filipow, Francoise Vermeulen, Robin Vael, Thomas Frischer, Anne Chang, Helen Petsky, Stanley Szefler, Sanja Stanojevic

OA1437	**Exhaled metabolite profiling for asthma control classification in children: results from the SysPharmPediA study** Shahriyar Shahbazi Khamas (Amsterdam, Netherlands), Yoni Van Dijk, Mahmoud I Abdel-Aziz, Anne H Neerincx, Susanne Jh Vijverberg, Simone Hashimoto, Mario Gorenjak, Antoaneta A. Toncheva, Susanne Harner, Susanne Brandstetter, Christine Wolff, Anna Hedman, Catarina Almqvist, Paula Corcuera-Elosegui, Javier Korta-Murua, Olaia Sardón-Prado, Maria Pino-Yanes, Uroš Potočnik, Michael Kabesch, Aletta D Kraneveld, Paul Brinkman, Anke-Hilse Maitland - Van Der Zee
OA1438	**Lung function fluctuation patterns may unveil distinct clinical phenotypes in asthmatic children** Sotirios Fouzas (Patras, Greece), Eirini - Sofia Frima, Nikolaos Karantaglis, Dimos Gidaris, Grigorios Chatziparasidis, Ilias Theodorakopoulos, Aris Bertzouanis, Michael Anthracopoulos, Urs Frey, Edgar Delgado - Eckert
OA1439	**Prematurity-associated lung disease is frequently mis-diagnosed as asthma** Tiffany Bradshaw (Perth, Australia), Denby Evans, Rhea Urs, Elizabeth Smith, Shannon Simpson
OA1440	**Sphingolipid classes and the interrelationship with pediatric asthma risk factors and clinical asthma phenotypes** Yulu Chen (Boston, United States), Antonio Checa, Pei Zhang, Mengna Huang, Rachel Kelly, Min Kim, Yih-Chieh Chen, Kathleen Lee-Sarwar, Nicole Prince, Kevin Mendez, Sofina Begum, Priyadarshini Kachroo, Su Chu, Jakob Stokholm, Klaus Bønnelykke, Augusto Litonjua, Hans Bisgaard, Scott Weiss, Bo Chawes, Craig Wheelock, Jessica Lasky-Su
OA1441	**Prediction of adult asthma-risk in early childhood using novel Adult aSthma PredIctive Risk scorEs (ASPIRE)** Ramesh J. Kurukulaaratchy (Newport (Hants), United Kingdom), Hasan Arshad, Abd Farhan, Dilini Kothalawala, Raquel Granell, Angela Simpson, Clare Murray, Adnan Custovic, Graham Roberts, Hongmei Zhang, Ramesh Kurukulaaratchy
OA1442	**Evaluation of early life factors and childhood persistent airflow limitation in severe asthma** Sormeh Salehian (London, United Kingdom), Cara Bossley, Andrew Bush, Sejal Saglani, Louise Fleming
OA1443	**Dynamic network of symptom-trajectories in infancy predicts wheezing disorders at later age** Uri Nahum (Basel, Switzerland), Olga Gorlanova, Fabienne Decrue, Heide Oller, Edgar Delgado Eckert, Andreas Böck, Sven Schulzke, Philipp Latzin, Bianca Schaub, Erika Von Mutius, Urs Frey
OA1444	**Discussion and Q&A** All Speakers

Blue 1+2 Session 166 14:15 - 15:30

Oral presentation: Untangling the molecular footprints in lung cancer diagnosis and treatment

Disease(s) : Thoracic oncology

Method(s) : Cell and molecular biology General respiratory patient care

Tag(s) : Clinical, Translational

Chairs : Rainer G. Wiewrodt (Münster, Germany), Maria Joana Pereira Catarata (Porto, Portugal)

OA1445	**Integrated multi-omics unraveled a basal cell-dependent signature predictor of outcome and immunotherapy response in LUSC** Jianlong Jia (Munich, Germany), Ruonan Liu, Benteng Deng, Xuanze Guo, Lilith Trassl, Georgia Giotopoulou, Sabine Behrend, Yang Liu, Ali Yildirim, Georgios Stathopoulos, Andrea Schamberger, Isis Fernandez
OA1446	**1G6-D7 regulates the extracellular heat shock protein 90 involved in DNA damage repair affecting tumor immunity in non-small cell lung cancer** Jiangzhou Du (Guangzhou, China), Hangming Dong
OA1447	**IL-17A induces EGFR-targeted therapy resistance via enhancing EGFR activation in lung cancer** Kai Ling Lee (Taipei, Taiwan), Chi-Li Chung, Ming-Hsien Chien
OA1449	**Validation of a 5-gene signature for predicting outcomes in early-stage NSCLC patients** Rui Reis (Barretos, Brazil), Keila Cristina Miranda, Alexia Polo Siqueira, Maria Fernanda Santiago Gonçalves, Isabella Lemuqui Tegami, Ícaro Alves Pinto, Pedro De Marchi, Josiane Mourão Dias, Iara Vidigal Santana, Vinicius Duval Silva, Sabrina Setembre Batah, Heloisa Acurcio Zimermam, Alexandre Todorovic Fabro, Conceição Souto-Moura, Susana Guimarães, Fátima Carneiro, Cláudia Freitas, Helder Novais E Bastos, Luciane Sussuchi Da Silva, Rui Manuel Reis, Letícia Ferro Leal
OA1450	**The role of CD137-CD137L and CD200-CD200L pathways in the regulation of tumor immune microenvironment.** Iwona Kwiecień (Warszawa, Poland), Elżbieta Rutkowska, Agata Raniszewska, Rafał Sokołowski, Karina Jahnz- Różyk, Piotr Rzepecki

OA1451	**Reproducibility of a 12-gene set for predicting outcome and benefit from ACT in early-stage NSCLC patients** Rui Reis (Barretos, Brazil), Alexia Polo Siqueira, Maria Fernanda Santiago Gonçalves, Isabella Lemuqui Tegami, Keila Cristina Miranda, Ícaro Alves Pinto, Pedro De Marchi, Josiane Mourão Dias, Iara Vidigal Santana, Rachid Eduardo Noleto Da Nobrega, Vinicius Duval Da Silva, Sabrina Setembre Batah, Heloisa Acurcio Zimermam, Alexandre Todorovic Fabro, Conceição Souto-Moura, Susana Guimarães, Fátima Carneiro, Cláudia Freitas, Helder Novais E Bastos, Ignacio Wistuba, Yang Xie, Luciane Sussuchi Da Silva, Rui Manuel Reis, Letícia Ferro Leal
OA1452	**Circulating extracellular vesicles in the identification of immune checkpoint associated with lung cancer** Maureen Cambier (Liège, Belgium), Gaëlle Vanderstichelen, Claire Remacle, Monique Henket, Hadrien Gillet, Barbara Polese, Anne Sibille, Renaud Louis, Julien Guiot, Ingrid Struman
OA1453	**The predictors of lung injury during durvalumab maintenance therapy following concurrent chemoradiotherapy in unrescectable locally advanced non-small cell lung carcinoma** Nobuyuki Hirama (Kanagawa, Japan), Masaki Yamamoto, Satoshi Nagaoka, Yukihito Kajita, Chisato Maeda, Sousuke Kubo, Kenichi Seki, Yoshinori Nagahara, Shuhei Teranishi, Ken Tashiro, Makoto Kudo, Takeshi Kaneko
OA1454	**Discussion and Q&A** All Speakers

Yellow 1+2+3 Session 167 14:15 - 15:30

Oral presentation: Bronchiectasis

Disease(s) : Airway diseases

Method(s) : General respiratory patient care Imaging Cell and molecular biology

Tag(s) : Clinical

Chairs : Michael Loebinger (London, United Kingdom), Pieter Goeminne (Bornem, Belgium)

OA1455	**Late Breaking Abstract - Bronchoalveolar lavage amylase level as a promising biomarker of aspiration: a multicenter cross-sectional clinical study** Lianjun Lin (Beijing, China), Ruixue Zhang, Yeliang Wen, Kun Wang, Dong Xu, Haixia Li, Zhi Zhang, Yiqun Wu, Shiyue Li
OA1456	**Neutrophil metabolomics in bronchiectasis: data from the EMBARC BRIDGE study** Amelia Shoemark (Dundee (Angus), United Kingdom), Yan Hui Giam, Amy Gilmour, Merete B Long, Holly R Keir, Thomas Pembridge, Chloe Hughes, Rebecca C Hull, Eve Mcintosh, Holly Lind, Megan L Crichton, Eva Polverino, Stefano Aliberti, Francesco Blasi, Pieter C Goeminne, Tobias Welte, Josje Altenburg, Michal Shteinberg, James D Chalmers
OA1457	**Blood eosinophils, inhaled corticosteroids and exacerbations in bronchiectasis: Data from the EMBARC registry** Jennifer Pollock (Dundee, United Kingdom), Eva Polverino, Megan L. Crichton, Pierre Regis-Burgel, Charles Haworth, Katerina Dimakou, Michael R. Loebinger, Rosario Menendez, Antoni Torres, Tobias Welte, Francesco Blasi, Felix Ringshausen, Anthony De Soyza, Montserrat Vendrell, Stuart J. Elborn, Amelia Shoemark, Stefano Aliberti, Pieter Goeminne, James D. Chalmers
OA1458	**Validation of the Rose Criteria for COPD-Bronchiectasis Overlap: Data from the European Bronchiectasis Registry (EMBARC)** Letizia Traversi (Cittiglio, Italy), Eva Polverino, Pierre-Regis Burgel, Charles Haworth, Katerina Dimakou, Muchael Loebinger, Rosario Menendez, Antoni Torres, Tobias Welte, Francesco Blasi, Felix Ringshausen, Antony De Soyza, Montserrat Vendrell, Amelia Shoemark, Josjie Altenburg, Wim Boersma, Stuart Elborn, Stefano Aliberti, Pieter C. Goeminne, James Chalmers
OA1459	**Treatment with the dipeptidyl peptidase-1 inhibitor brensocatib increases the antimicrobial peptide secretory leukocyte peptidase inhibitor (SLPI) in patients with bronchiectasis: results from the WILLOW trial** Lídia Perea (Barcelona, Spain), Emma Johnson, Carlos Fernandez, Kevin Mange, Ariel Teper, Holly R Keir, Oriol Sibila, Amelia Shoemark, James D Chalmers
OA1460	**Bronchiectasis and mortality in smokers with distinct spirometric phenotypes** Alejandro A Diaz (Arlington, United States), Jose L Orejas, Rim Elalami, Wojciech R Dolliver, Pietro Nardelli, Ruben San Jose Estepar, Bina Choi, Carrie Pistenmaa, James C Ross, Diego J Maselli, Andrew Yen, Michael H Cho, Raul San Jose Estepar
OA1461	**qPCR and 16S rRNA marker-gene sequencing as endpoints for clinical trials of antimicrobials: iBEST study** Michael M Tunney (Belfast (Belfast), United Kingdom), Gisli G Einarsson, Andrew J Lee, Aya Alkhatib, Jack Carson, Andrew Marshall, Stephen Carson, Deirdre F Gilpin, Gerhild Angyalosi, Vincent Malaterre, Michael R Loebinger, James D Chalmers, Francesco Blasi, Charles S Haworth, J Stuart Elborn

OA1462	**Anxiety, depression and bronchiectasis outcomes: Data from the BronchUK study** Jennifer Pollock (Dundee, United Kingdom), Tess Saunders, Georgina Wild, Phil Mawson, Martin Kelly, Stuart Elborn, Adam T. Hill, Tim Gatheral, Anita Sullivan, Charles Haworth, John R. Hurst, Jeremy Brown, Mary Carroll, Vidya Navaratnam, Michael R. Loebinger, Gareth Davies, Judy Bradley, Paul P. Walker, John Steer, Jamie Duckers, Megan L. Crichton, James D. Chalmers, Richard Mcnally, Anthony De-Soyza
OA1463	**Genetic diversity of Pseudomonas aeruginosa virulence factors in bronchiectasis** Rebecca C Hull (Dundee, United Kingdom), Amy Gilmour, Eve Mcintosh, Pieter C Goeminne, Charles Haworth, Holly R Keir, Merete B Long, James D Chalmers
OA1464	**Bronchiectasis and cardiovascular risk: a systematic review and meta-analysis** Ivan Barone (MILANO, Italy), Andrea Gramegna, Crizia Colombo, Antonella Arcadu, Emilia Privitera, Gianfranco Alicandro, Francesco Amati, Marco Vicenzi, Stefano Aliberti, Francesco Blasi
OA1465	**Discussion and Q&A** All Speakers

Amber 1+2 Session 168 14:30 - 16:50

Skills workshop: SW3 Pulmonary rehabilitation: extending practice to improve health outcomes
A personalised medicine approach

Aims : to describe diagnostic methods and interventions that enable phenotyping of individuals based on the clinical problems experienced and tailoring of the content of pulmonary rehabilitation programmes to deliver a personalised approach; to describe methods for assessing the physical activity level and promoting physical activity; to assess patients who may benefit from neuromuscular electrical stimulation and to explain how to apply and progress the treatment; to describe and evaluate the incorporation of mindfulness-based interventions into pulmonary rehabilitation and their outcomes.

Disease(s) : Airway diseases | Interstitial lung diseases | Pulmonary vascular diseases

Method(s) : General respiratory patient care | Physiology | Pulmonary rehabilitation

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist, Respiratory therapist

Chairs : Rainer Gloeckl (Schoenau am Koenigssee, Germany)

14:30	**Introduction** All Speakers	**1466**
14:30	**Physical activity assessment and intervention** Heleen Demeyer (Leuven, Belgium)	**1467**
14:30	**Neuromuscular electrical stimulation: in who and how?** Lorna Latimer (Rugby (Warwickshire), United Kingdom)	**1468**
14:30	**How to improve balance and reduce falls in people undergoing pulmonary rehabilitation** Samantha Harrison (Middlesbrough (Stockton-on-Tees), United Kingdom)	**1469**
14:30	**Implementing mindfulness interventions into pulmonary rehabilitation** Ingeborg Farver-Vestergaard (Vejle, Denmark)	**1470**

Amber 3+4 Session 169 14:30 - 16:50

Skills workshop: SW18 Cardiac ultrasound in the management of pulmonary disease

Aims : Develop a rigorous and systematic approach in performing and analyzing cardiac ultrasound parameters in respiratory disease.
Explain systolic function, diastolic function, right heart dysfunction during COPD patients , the management of pulmonary embolism.
Explain the hemodynamic consequences of non-invasive ventilation and propose an echocardiographic monitoring for the best settings of non-invasive ventilation
Develop knowledge and understanding of echocardiographic parameters in patients with COPD, pumonary embolism or requiring non invasive ventilation.

Disease(s) : Pulmonary vascular diseases | Respiratory critical care

Tag(s) : Clinical

Chairs : Bouchra Lamia (Le Havre, France)

14:30	**Introduction** All Speakers	**1471**
14:30	**Assessment of diastolic function in COPD patients** Valentina Mercurio (Napoli, Italy)	**1472**

14:30	**Cardiac ultrasound assessment of right heart function** Paul M. Hassoun (Baltimore, United States)	**1473**
14:30	**Cardiac ultrasound for the management of pulmonary embolism** Mario Gerges (Vienna, Austria)	**1474**
14:30	**Hemodynamic consequences of non-invasive ventilation** Bouchra Lamia (Le Havre, France)	**1475**

Gold — Session 170 — 15:30 - 17:00

Clinical cases: Lungs on fire: pulmonary vascular diseases?

Aims : to present real-life clinical cases as part of an interactive session. Cases vary in difficulty and may require differential diagnosis. This session is led by two discussants who will present cases submitted by respiratory health professionals to a panel of experts and will drive the discussion in a step-by-step approach, encouraging dialogue and reflection among the panel, who have no prior knowledge of these cases. As the cases are discussed, the discussants will invite the audience to participate in determining which diagnostic and therapeutic options would be best for these patients.

Disease(s) : Pulmonary vascular diseases | Interstitial lung diseases | Respiratory critical care

Chairs : Mona Lichtblau (Zürich, Switzerland), Olivier Sitbon (Le Kremlin-Bicêtre, France), Judith Löffler-Ragg (Innsbruck, Austria)

Discussants : Silvia Ulrich (Zurich, Switzerland), David Jiménez Castro (Madrid, Spain)

15:30	**Case 1 incl. panel discussion and Q&A - Author: V. Stamatopoulou (Greece)** Silvia Ulrich (Zurich, Switzerland)	**1476**
15:52	**Case 2 incl. panel discussion and Q&A - Author: S. Singh (India)** David Jiménez Castro (Madrid, Spain)	**1477**
16:14	**Case 3 incl. panel discussion and Q&A - Author: L. Power (Ireland)** Silvia Ulrich (Zurich, Switzerland)	**1478**
16:36	**Case 4 incl. panel discussion and Q&A - Author: A. Moin (United States of America)** David Jiménez Castro (Madrid, Spain)	**1479**

Silver — Session 171 — 15:30 - 17:00

Clinical trials session: ALERT

Chairs : Kristin Walter (Chicago, United States)

15:30		**RCT1480**
15:37		**RCT1481**
15:44		**RCT1482**
15:51	**Wrap-up by discussant and discussion**	**RCT1483**
16:13		**RCT1484**
16:20		**RCT1485**
16:27		**RCT1486**
16:34	**Wrap-up by discussant and discussion**	**RCT1487**
16:56	**Closing remarks** All Speakers	**RCT1488**

Coral 4+5 — Session 172 — 15:30 - 17:00

Symposium: Novel aspects of T helper 17 cells in lung diseases

Aims : to introduce respiratory fellows and clinical, basic and translational researchers to the emerging role of interleukin-17 and T helper 17 (Th17) cells in lung diseases.

Disease(s) : Airway diseases Respiratory infections

Method(s) : Cell and molecular biology

Tag(s) : Translational

Target audience : Clinical researcher, Medical Student, Scientist (basic, translational)

Chairs : Ali Oender Yildirim (Neuherberg, Germany), Stylianos Loukides (Athens, Greece), Florence Schleich (Liège, Belgium)

15:30	**The principal immunology of Th17 cells in the lungs** Jay Kolls (New Orleans, United States)	**1489**
15:45	**Th17 cells in COVID-19** Speaker to be confirmed	**1490**
16:00	**Th17-associated cytokines in obstructive airway diseases** Qutayba Hamid (Montréal (QC), Canada)	**1491**
16:15	**Th17 cells in fibrosis** Speaker to be confirmed	**1492**
16:30	**Discussion and Q&A** All Speakers	**1493**

Coral 3 Session 173 15:30 - 17:00

Hot topics: Community-acquired infections: what is changing?

An update in the field of respiratory infections is needed due to changing epidemiology and new developments in prevention and treatment

Aims : to provide an update in the field of respiratory infections, which is needed due to changing epidemiology and new developments in prevention and treatment; to explain the observed changes in the epidemiology of community-acquired infections; to review the management of pneumonia in immunocompromised patients; to discuss the recent updates in vaccination and management of pleural infection.

Disease(s) : Respiratory critical care Respiratory infections

Method(s) : Epidemiology General respiratory patient care Public health

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Respiratory critical care physician, Respiratory physiotherapist

Chairs : Daiana Stolz (Freiburg, Germany), Francesco Blasi (Milan, Italy)

15:30	**The changing epidemiology of community-acquired pneumonia in the ageing population** Catia Cilloniz Campos (Barcelona, Spain)	**1494**
15:45	**The new challenges of pneumonia in immunocompromised patients** Scott Evans (Houston, United States)	**1495**
16:00	**How vaccines can reduce the impact of respiratory infections** Tobias Welte (Hannover, Germany)	**1496**
16:15	**Updating the management of pleural infections: from prognostic scores to novel fibrinolytic agents** Eihab Bedawi (Sheffield, United Kingdom)	**1497**
16:30	**Discussion and Q&A** All Speakers	**1498**

Coral 1 Session 174 15:30 - 17:00

Symposium: Targeting treatable traits in severe chronic obstructive pulmonary disease: a nonpharmacological approach

Aims : to explain the global burden and challenges of chronic obstructive pulmonary disease (COPD); to provide an update on 'treatable traits' for advanced COPD patients beyond 'regular care', covering advanced care planning, pulmonary rehabilitation, lung volume reduction and other innovative bronchoscopic modalities, chronic noninvasive ventilation and lung transplantation; to provide an update on the latest insights into new innovative treatment options for severe COPD patients; to advocate the use of a multidisciplinary team meeting for management of severe COPD patients.

Disease(s) : Airway diseases Sleep and breathing disorders

Method(s) : Endoscopy and interventional pulmonology Pulmonary rehabilitation Respiratory intensive care

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Respiratory critical care physician, Patient, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist, Thoracic surgeon, Respiratory therapist

Chairs : João Carlos Winck (Vila Nova de Gaia, Portugal), Marieke L. Duiverman (Groningen, Netherlands)

15:30	**Patient's perspective** Davies Chantal (, United Kingdom), Cathrien Franke-Bax (, Netherlands)	**1499**
15:37	**Home mechanical ventilation in stable and postacute COPD: when, how and why** Nicholas Hart (London, United Kingdom)	**1500**
15:52	**High-flow therapy in COPD: from acute care to home** Lara Pisani (Bologna (BO), Italy)	**1501**
16:07	**Innovative bronchoscopic treatment modalities for COPD** Konstantina Kontogianni (Heidelberg, Germany)	**1502**
16:22	**Pulmonary rehabilitation in severe and very severe COPD** Frits M.E. Franssen (Horn, Netherlands)	**1503**
16:37	**Discussion and Q&A** All Speakers	**1504**

Coral 2 Session 175 15:30 - 17:00

Symposium: An ageing lung: respiratory disease in the elderly

Aims : to explain the cellular, structural and functional changes that take place in the ageing lung; to evaluate the physiological and immunological changes in elderly patients with chronic obstructive pulmonary disease and interstitial lung disease compared with their healthy age-matched counterparts; to familiarise participants with the diagnostic approach as well as the available therapeutic interventions to combat the consequences of the ageing lung; to explain chronic respiratory diseases across the life course and their associations with frailty.

Disease(s) : Airway diseases Interstitial lung diseases

Method(s) : Cell and molecular biology Physiology Pulmonary function testing

Tag(s) : Clinical, Translational

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Respiratory critical care physician, Paediatrician, Pathologist, Patient, Physician in Pulmonary Training, Physiologist, Radiologist, Respiratory physiotherapist, Scientist (basic, translational), Thoracic oncologist, Thoracic surgeon, Respiratory therapist, Journalist

Chairs : Karl Sylvester (Cambridge (Cambridgeshire), United Kingdom), Hilary Pinnock (Edinburgh (Edinburgh), United Kingdom), Thomas Gille (Bobigny, France)

15:30	**Cellular changes in the aging lung** Melanie Konigshoff (Pittsburgh, United States)	**1505**
15:45	**Respiratory function in the ageing respiratory system** Georgios Kaltsakas (Athens, Greece)	**1506**
16:00	**Age-related diseases and chronic respiratory diseases** Lowie E.G.W. Vanfleteren (Gothenburg, Sweden)	**1507**
16:15	**Frailty transitions among patients with chronic respiratory diseases** Lies Lahousse (Ghent, Belgium)	**1508**
16:30	**Discussion and Q&A** All Speakers	**1509**

Purple Session 176 15:30 - 17:00

Symposium: Pollution, climate changes and sustainable developments

Aims : to focus on our knowledge of pollution, climate changes and health effects and how to manage sustainable developments.

Disease(s) : Airway diseases Paediatric respiratory diseases Thoracic oncology

Method(s) : Epidemiology Public health

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Paediatrician, Patient, Physician in Pulmonary Training, Physiologist, Scientist (basic, translational), Journalist

Chairs : Maria Rosaria Bonsignore (Palermo, Italy), Sergio Alfonso Harari (Milano (MI), Italy), Christopher Carlsten (Vancouver (BC), Canada)

15:30	**Why fighting against air pollution and climate change is paramount for planetary health** Maria Neira (Geneva, Switzerland)	**1510**
15:45	**The striking scientific evidence of air pollution's health effects in children and adults** Zorana Andersen (Frederiksberg, Denmark)	**1511**
16:00	**Quantifying the morbidity of polluted air** Francesco Forastiere (Roma (RM), Italy)	**1512**
16:15	**The respiratory health benefits of improved urban exposures** Erik Melén (Stockholm, Sweden)	**1513**
16:30	**Discussion and Q&A** All Speakers	**1514**

15:30-16:15
INDUSTRY SKILLS LAB WORKSHOP SEE PAGE 1

Red 1+2 Session 179 15:45 - 17:00

Oral presentation: Phenotypes and biomarkers in asthma

Disease(s) : Airway diseases

Method(s) : Imaging Physiology Pulmonary function testing Epidemiology Public health General respiratory patient care Cell and molecular biology

Tag(s) : Translational

Chairs : Fabio L. M. Ricciardolo (Torino, Italy)

OA1523	**Late Breaking Abstract - Seasonal variation in nasal epithelium gene expression** Tatiana Karp (Groningen, Netherlands), Alen Faiz, Huib A. M. Kerstjens, Martijn C. Nawijn, Yidan Sun, Elin T. G. Kersten, Gerard H. Koppelman, Monica Kraft, Bianca Beghé, Klaus F. Rabe, Maxim Kotz, Alberto Papi, Chris E. Brightling, Dave Singh, Thys Van Der Molen, Salman Siddiqui, Victor Guryev, Maarten Van Den Berge
OA1524	**Impact of ERS/ATS 2022 BDR criteria on the characteristics of patients with airways disease** Rod Hughes (Sheffield (South Yorkshire), United Kingdom), Richard Beasley, Eleni Rapsomaniki, Hana Müllerová, Alberto Papi
OA1525	**Cluster analysis to identify distinct clinical asthma phenotypes within ATLANTIS** Pauline Kuks (Groningen, Netherlands), Tatiana Karp, Jorine Hartman, Monica Kraft, Salman Siddiqui, Leonardo Fabbri, Klaus Rabe, Alberto Papi, Chris Brightling, Dave Singh, Maxim Kots, Thys Van Der Molen, Huib Kerstjens, Irene Heijink, Daan Pouwels, Dirk-Jan Slebos, Maarten Van Den Berge
OA1526	**How respiratory symptoms impact asthma-related quality of life in severe asthmatics** Gilles Louis (Liège, Belgium), Florence Schleich, Michèle Guillaume, Bernardo Sousa-Pinto, Jean Bousquet, Renaud Louis, Benoit Pétré
OA1527	**Patient-centred composite index for assessment of response to biological therapy for adult severe asthma.** Ekateirina Khaleva (Southampton, United Kingdom), Chris Brightling, Ratko Djukanovic, Sven-Erik Dahlén, Courtney Coleman, Markaya Henderson, Graham Roberts
OA1528	**Longitudinal assessment of glucocorticoid toxicity in biologics treated severe asthma** Pamela Jane McDowell (Bangor (Co. Down), United Kingdom), John Busby, John Stone, Kirsty Honeyford, Louise Dunn, Claire Butler, Liam Heaney

OA1529	**Associations of imaging biomarkers with physiological markers of small airways dysfunction in asthma in the ATLANTIS study.** Franz Aaron Clemeno (London, United Kingdom), Alexander Bell, Matthew Richardson, Janwillem Kocks, Simonetta Baldi, Judith Vonk, Marika Leving, Bertine Flokstra-De Blok, Leonardo Fabbri, Monica Kraft, Alberto Papi, Klaus Rabe, Maarten Van Den Berge, Tessa Kole, Dave Singh, Craig Galban, Maxim Kots, Christopher Brightling, Salman Siddiqui
OA1530	**Eosinophil-derived neurotoxin determinants and reference values in a middle-aged Swedish population** Suneela Zaigham (Malmö, Sweden), Robert Movérare, Magnus Molin, Anders Sjölander, Christer Janson, Andrei Malinovschi
OA1531	**Urinary eicosanoids - novel biomarkers in T2-low severe asthma** Matthew Chad Eastwood (, Ireland), John Busby, Johan Kolmert, Craig Wheelock, Sven-Erik Dahlén, Pamela-Jane Mcdowell, David Jackson, Ratko Djukanovic, John Matthews, Joseph Arron, Peter Bradding, Chris Brightling, Rekha Chaudhuri, David Choy, Douglas Cowan, Stephen Fowler, Catherine Hanratty, Timothy Hardman, Timothy Harrison, Cecile Holweg, Peter Howarth, James Lordan, Adel Mansur, Andrew Menzies-Gow, Ian Pavord, Douglas Robinson, Samantha Walker, Ashley Woodcock, Liam Heaney
OA1532	**Identification of neutrophilic asthma via the ratio of sphingolipids to glucocorticoids** Craig Wheelock (Stockholm, Sweden), Yulu Chen, Antonio Checa, Mengna Huang, Pei Zhang, Qingwen Chen, Ayobami Akenroye, Jessica Lasky-Su
OA1533	**Discussion and Q&A** All Speakers

Brown 3 Session 180 15:45 - 17:00

Oral presentation: Cystic fibrosis in adults

Disease(s) : Airway diseases Respiratory critical care

Method(s) : General respiratory patient care Imaging Pulmonary function testing Cell and molecular biology Epidemiology Public health

Tag(s) : Clinical

Chairs : Andrea Gramegna (Milano (MI), Italy), Maria Do Pilar Azevedo De Almeida Cardim (Lisboa, Portugal)

OA1534	**Late Breaking Abstract - A novel treatment for chronic P. aeruginosa pulmonary infection in CF subjects - A phase 1b/2a randomized, double-blind, placebo-controlled, multicenter study to evaluate phage therapy** Urania Rappo (Ness Ziona, Israel), Ariel Cohen, Edith Kario, Jenia Gold, Hadas-Tamar Nevenzal, Inbal Levy-Saar, Tal Cohen, Iddo Nadav Weiner, Hila Sberro Livnat, Ilya Vainberg Slutskin, Jagoda Jablonska, Tim Axelrod, Ori Bahar, Nufar Buchshtab, Vered Lev, Yaron Tzur, Yulia Zarchin, Myriam Golembo, Eitan Kerem, Merav Bassan
OA1535	**The cellular immune landscape in end-stage cystic fibrosis lungs** Astrid Vermaut (Oud-Heverlee, Belgium), Pieterjan Kerckhof, Hanne Beeckmans, Charlotte De Fays, Vincent Geudens, Janne Kaes, Lynn Willems, Gitte Aerts, Charlotte Hooft, Yousry Mohamady, Jan Van Slambrouck, Birgit Weynand, Ghislaine Gayan-Ramirez, Laurens De Sadeleer, Karen Maes, Laurent Godinas, John Mcdonough, Naftali Kaminsky, Laurens J. Ceulemans, Robin Vos, Lieven Dupont, Bart M. Vanaudenaerde, Mieke Boon
OA1536	**Characterisation of the CF sputum proteome reveals that innate host defence proteins are depleted in frequent exacerbators** Claire Houston (Belfast, United Kingdom), Aya Alkhatib, Gísli Einarsson, Michael Tunney, Clifford Taggart, Damian Downey
OA1537	**Pharmacokinetics and safety of brensocatib in patients with cystic fibrosis** Ariel Teper (Hastings-on-Hudson, United States), Michael Konstan, Patrick Flume, Christina Ramirez, Sherry Li, Marcela Vergara, Helen Usansky
OA1538	**Interim results from a post-marketing observational safety study (PASS) of levofloxacin inhalation solution in patients with cystic fibrosis** Nicholas Simmonds (London, United Kingdom), Susan C. Charman, Julia Wosniok, Debora Santoro, Stella Fiorini, Rémi Charretier, Clara Sanchez, Claudio Procaccianti, Lutz Naehrlich
OA1539	**Economic impact using a virtual model of care in Cystic Fibrosis** Paola Iacotucci (Napoli (NA), Italy), Vincenzo Carnovale, Dandi Qiao, Lorenza Ferrillo, Jolanda Somma, Serena Buonaurio, Luigi Massari, Alessandro Sanduzzi Zamparelli, Daniela Savi
OA1540	**Cluster analysis explains heterogeneity in response to elexacaftor/tezacator/ivacaftor in people with cystic fibrosis** Federica Bellino (Milano, Italy), Gianfranco Alicandro, Andrea Gramegna, Chiara Premuda, Federica Piedepalumbo, Erica Nazzari, Calogero Sciarabba, Valeria Daccò, Francesco Blasi

OA1541	**Cystic fibrosis transmembrane conductance regulator (CFTR) modulator therapy (ETI) for one-year and changes in structural lung disease in people with CF (pwCF)** Shahid Sheikh (Columbus, United States), Courtney Gushue, Mariah Eisner, Melissa Holtzlander, Karen Mccoy
OA1542	**Eradication of Nontuberculous Mycobacteria in people with Cystic Fibrosis treated with Elexacaftor/Tezacaftor/Ivacaftor: A Multicenter Cohort Study** Inbal Golan-Tripto (Beer sheva, Israel), Vered Wiesel, Micha Aviram, Meir Mei-Zahav, Miri Dotan, Dario Prais, Malena Cohen-Cymberknoh, Michal Gur, Ronen Bar-Yoseph, Galit Livnat, Aviv Goldbart, Guy Hazan, Itai Hazan
OA1543	**Comorbidities in adult patients with Cystic Fibrosis (CF)** Almudena Felipe Montiel (Rubí (CT), Spain), Antonio Álvarez Fernández, Letizia Traversi, David Clofent Alarcón, Karina Loor Reyes, Mario Culebras Amigo, Cristina Esquinas López, Eva Polverino
OA1544	**Discussion and Q&A** All Speakers

Brown 1+2 Session 181 15:45 - 17:00

Oral presentation: Technical and epidemiological novelties in paediatric lung function and sleep

Disease(s) : Sleep and breathing disorders Airway diseases

Method(s) : Physiology Pulmonary function testing Epidemiology General respiratory patient care

Tag(s) : Clinical

Chairs : Stijn Verhulst (Antwerpen, Belgium), Jessica Taytard (Paris Cedex 12, France)

OA1545	**Late Breaking Abstract - Nasal nitric oxide measurement in children for the diagnosis of primary ciliary dyskinesis: ERS technical standard** Nicole Beydon (Paris, France), Panayiotis Kouis, June Marthin, Philipp Latzin, Murielle Colas, Stephanie Davis, Eric Haarman, Harris Amanda, Hogg Claire, Kilbride Emma, Kuehni Claudia, Marangu Diana, Nielsen Kim, Pendergrast Catherine, Robinson Phil, Rumman Nisreen, Rutter Matthew, Walker Woolf, Ferkol Thomas, Jane Lucas
OA1546	**Lower tidal breathing lung function at 6 weeks of age, higher maternal BMI in pregnancy and larger sibship size are associated with viral bronchiolitis hospitalisations** Carla Rebeca Da Silva Sena (Basel, Switzerland), Ediane De Queiroz Andrade, Patricia De Gouveia Belinelo, Vanessa E Murphy, Paul D Robinson, Peter G Gibson, Peter D Sly, Wilfried Karmaus, Adam Collison, Joerg Mattes
OA1547	**Determinants of lung function trajectories from birth to 5 years in a South African birth cohort** Diane Gray (Cape Town, South Africa), Carlyle Mccready, Francesca Little, Carvern Jacobs, Shaakira Chaya, Lesley Workman, Mark P Nicol, Zoltan Hantos, Adnan Custovic, Heather J Zar
OA1548	**The impact of GLI Global equations on spirometry interpretation in a diverse pediatric population** Jacob McCoy (Toronto, Canada), David Wilson, Lucy Perrem
OA1549	**Trajectories of sleep oximetry results in Pierre Robin Sequence in the first 6 months of life.** Andrew Prayle (Nottingham (Nottinghamshire), United Kingdom), Abyrami Sivanandarajah, Poppy Godding, Jodie Hussain, Heather Sahunta, Mags Sheahan-Parry, Victoria Stainsby, Emma Watson, Catherine Clarke, Jonathan Syme-Grant, Jason Neil-Dwyer, Rebecca Devaney
OA1550	**The lung clearance ratio: a ventilation inhomogeneity index less sensitive to breathing pattern** Florian Wyler (Bern, Switzerland), Marion Curdy, Xenia Bovermann, Sophie Yammine, Philipp Latzin
OA1551	**Nocturnal Oximetry Reference Values in Healthy Term Infants Aged 1-6 Months** Maria Eleni Liagkaki (Athens, Greece), Anastasia Polytarchou, Angeliki Moudaki, Georgia Koltsida, Christina Kanaka-Gantenbein, Athanasios G. Kaditis
OA1552	**Oxygen(O2) prescribing and compatibility issues in infants on NIV in the UK.** Emily McInnes (London, United Kingdom), Caroline Lock, Divya Patel, Katharine Harman, Cara Bossley
OA1553	**A review of respiratory inductive plethysmography sum (RIPSum) as a surrogate to nasal flow in paediatric cardiorespiratory polygraphy** Natalie Blyth (Nottingham, United Kingdom), Joe Madge, Prakash Patel, Molla Imaduddin Ahmed
OA1554	**Analysis of mandibular movements to improve ventilatory management of children** Julie Cassibba (Paris, France), Audrey Dupond-Athenor, Guillaume Aubertin, Jean-Louis Pepin, Guillaume Mortamet
OA1555	**Discussion and Q&A** All Speakers

Blue 1+2 Session 182 15:45 - 17:00

Oral presentation: Optimising diagnostic tools and treatment for malignant pleural effusion and mesothelioma

Disease(s) : Thoracic oncology

Method(s) : Palliative care General respiratory patient care Surgery Endoscopy and interventional pulmonology

Tag(s) : Clinical

Chairs : Kevin Blyth (Glasgow (Glasgow), United Kingdom), Valentina Pinelli (Sarzana, Italy)

OA1556	**Serum mesothelin is a biomarker for disease progression and mortality in mesothelioma** Geraldine Lynch (Bristol (Avon), United Kingdom), Anna Morley, William Cooper, Anthony Edey, Duneesha De Fonseka, Jenny Symonds, Louise Staddon, Sonia Patole, Kevin Blyth, Anna Bibby
OA1557	**Defining a new diagnostic biomarker panel for malignant pleural mesothelioma using a novel proteomic technique.** Eline Schillebeeckx (Antwerpen, Belgium), Esperanza Fernandez, An Staes, Jan Van Meerbeeck, Kris Gevaert, Kevin Lamote
OA1558	**Pleural fluid mesothelin as a further diagnostic tool in subjects with a histological diagnosis of non specific pleuritic (NSP)** Valentina Pinelli (Sarzana, Italy), Federica Novelli, Paola Ferro, Massimiliano Sivori, Fiorenza Marugo, Ines Costa, Gianfranco Puppo, Intersimone Donatella, Pier Aldo Canessa, Silvio Roncella
OA1559	**Exhaled breath analysis predicts treatment response in malignant pleural mesothelioma patients.** Ellen Heirwegh (Antwerp, Belgium), Eline Schillebeeckx, Eline Janssens, Veerle Surmont, Kristiaan Nackaerts, Elly Marcq, Jan Van Meerbeeck, Kevin Lamote
OA1560	**The Scottish Mesothelioma Network: Impact of a national MDT on overall survival in pleural mesothelioma** Matthew Tate (Glasgow (Glasgow), United Kingdom), Joshua Roche, Selina Tsim, Katie Ferguson, Phil Reid, Philip Short, Mahendran Chetty, Carol Macgregor, Carolyn Macrae, Laura Macnaughton, Tracy Petrie, Susan Smyth, Jen Latham, Lynne Hunter, Rocco Bilancia, Alan Kirk, Craig Dick, Fiona Roberts, Elaine Macduff, Jill Slavin, Hemamalini Pitchamuthu, Gordon Cowell, Simon Sheridan, Mike Gronski, Laura Thomson., Colin Noble, Clinton Ali, Laura Kelly, Elizabeth Sage, Fiona Thomson, Helen Liddicoat, Elaine Smith, Anna Morton, Kevin Blyth
OA1561	**Qualitative study of patient priorities in the malignant pleural effusion pathway** Dinesh Addala (Oxford, United Kingdom), Beenish Iqbal, Poppy Denniston, Anand Sundaralingam, Eihab Bedawi, Rob Hallifax, John Wrightson, Najib Rahman
OA1562	**To study the efficacy of time dependant vs volume dependant chest drain removal protocol for talc slurry pleurodesis in patients with malignant pleural effusion** Richa Gupta (Vellore (Tamil Nadu), India), Sarah Koshy, Prince James, Ashwin Oliver
OA1563	**Does a novel Indwelling Pleural Catheter drainage system improve patient experience?** Hugh Welch (Bristol, United Kingdom), Eleanor Barton, Edward Beech, Sonia Patole, Louise Stadon, Nick Maskell
OA1564	**Pressurized Intra-Thoracic Aerosol Chemotherapy (PITAC): preliminary results in malignant pleural effusion** Maria Giovanna Mastromarino (Pisa, Italy), Fabrizia Calabrò, Gianmarco Elia, Diana Bacchin, Vittorio Aprile, Stylianos Korasidis, Marcello Carlo Ambrogi, Marco Lucchi
OA1565	**Discussion and Q&A** All Speakers

Yellow 1+2+3 Session 183 15:45 - 17:00

Oral presentation: Tissue modelling and remodelling

Disease(s) : Respiratory critical care Interstitial lung diseases Airway diseases

Method(s) : Transplantation Cell and molecular biology

Tag(s) : Basic science, Translational

Chairs : Niki Ubags (Epalinges, Switzerland), Sara Rolandsson Enes (Lund, Sweden)

OA1566	**Late Breaking Abstract - Single-cell landscape of bronchoalveolar cells in inflammatory and fibrotic post-COVID residual lung abnormalities** Puja Mehta (london, United Kingdom), Blanca Sanz-Magallón Duque De Estrada, Emma Denneny, Kane Foster, Carolin Turner, Andreas Mayer, Martina Milighetti, Manuela Plate, Kaylee Worlock, Masahiro Yoshida, Jeremy Brown, Marko Nikolic, Arjun Nair, Benjamin Chain, Mahdad Noursedeghi, Rachel Chambers, Joanna Porter, Gillian Tomlinson

OA1567	**Epithelial metabolic stress in IPF: Identifying intervention strategies using a preclinical murine SftpcI73T model of lung fibrosis** Luis Rodriguez (Philadelphia, United States), Aditi Murthy, Yaniv Tomer, Thalia Dimopoulos, Katrina Chavez, Michael Beers
OA1568	**Glycolysis regulates MMP-dependent tissue remodelling during Tuberculosis infection** Ramla Cusman (London, United Kingdom), Julia Kutschenreuter, Deborah L. W. Chong, Jon S. Friedland
OA1569	**Ex vivo tissue perturbations coupled to single-cell RNA-seq reveal multi-lineage cell circuit dynamics in human lung fibrogenesis** Niklas Jonathan Lang (Bamberg, Germany), Janine Gote-Schniering, Diana Porras-Gonzalez, Lin Yang, Laurens J. De Sadeleer, R. Christoph Jentzsch, Vladimir A. Shitov, Shuhong Zhou, Meshal Ansari, Ahmed Agami, Christoph H. Mayr, Baharak Hooshiar Kashani, Yuexin Chen, Lukas Heumos, Jeanine C. Pestoni, Emil Geeraerts, Vincent Anquetil, Laurent Saniere, Melanie Wögrath, Michael Gerckens, Rudolf Hatz, Nikolaus Kneidinger, Jürgen Behr, Wim A. Wuyts, Mircea-Gabriel Stoleriu, Malte D. Luecken, Fabian J. Theis, Gerald Burgstaller, Herbert. B. Schiller
OA1570	**Human induced pluripotent stem cell-derived type 2 alveolar epithelial cells – a novel platform to examine the effect of estrogen in Pulmonary Fibrosis** Anja Schweikert (Dublin, Ireland), Mari Ozaki, Irene Oglesby, Killian Hurley
OA1571	**Effect of AAT augmentation therapy on bronchiolitis obliterans development in mice model** Tomoyuki Nakagiri (Hannover, Germany), Sabina Janciauskiene Wallmark
OA1572	**Single-cell spatial proteomics depicts novel dynamics involving senescent progenitors in fibrotic lesions in COPD and IPF** Emanuela Elsa Cortesi (Leuven, Belgium), Asier Antoranz, Vincent Geudens, John E. Mc Donough, Bart Vanaudenaerde, Ghislaine Gayan-Ramirez, Marianne S. Carlon, Veerle Janssens, Wim A. Wuyts, Francesca M. Bosisio, Tania Roskams
OA1573	**Towards modelling Birt-Hogg-Dubé syndrome using hipsc-derived alveolar epithelial cells** Alejandro Rodriguez Ruiz (Leiden, Netherlands), Abilash Ravi, Dennis Ninaber, Bart Hoppe, Ruth Olmer, Ulrich Martin, Pieter Hiemstra, Anne Van Der Does
OA1574	**Airway epithelial wound healing is impaired in patients with severe asthma unable to down-titrate anti IL5 biologics** Marianne Baastrup Soendergaard (København N, Denmark), Louise Munkholm Andreasson, Ditte Kjærgaard Klein, Celeste Porsbjerg
OA1575	**A multi-omics approach identifies that human antigen R (HuR) controls multiple cellular pathways in idiopathic pulmonary fibrosis (IPF) pathogenesis** Quazi Islam (Montreal, Canada), Steven K. Huang, David Eidelman, Carolyn Baglole
OA1576	**Discussion and Q&A** All Speakers

PS-1 in poster area — Session 185 — 16:00 - 17:30

Poster session: Digital health interventions for chronic obstructive pulmonary disease and asthma

Disease(s) : Airway diseases

Method(s) : Epidemiology Public health General respiratory patient care Physiology Pulmonary function testing Imaging Palliative care Pulmonary rehabilitation

Tag(s) : Clinical

Chairs : Io Hui (Edinburgh (Edinburgh), United Kingdom), Holger Woehrle (Ulm, Germany)

PA1578	**Digital platforms may enhance asthma outcomes when integrated with virtual care** Leanne Kaye (San Diego, United States), Vy Vuong, Urvashi Patel, Douglas Mager, Meredith Barrett
PA1579	**Development of a registry to assess adherence and digital inhaler utilization in real-world patients with asthma (AURORA): a modified Delphi study** Mechteld Wiertz (Zwolle, Netherlands), Amber Eikholt, Anneke Ten Brinke, Els Weersink, Huib Kerstjens, Irene Van Weerdt, Johannes In 'T Veen, Kornelis Patberg, Martijn Goosens, Niels Chavannes, Sandra Been-Buck, Titia Klemmeier, Job Van Boven
PA1580	**Digital inhaler preferences of asthma patients and healthcare providers: a discrete choice experiment** Amber Eikholt (Zwolle, Netherlands), Job Van Boven, Tunn Ren Tay, Joy Lee, Mark Hew, Asia N Rashed, Christina Baggott, Sukeshi Makhecha, Louise Fleming, Richard Costello, Amy Chan
PA1581	**Descriptive analysis of conversational agent usage characteristics in an asthma app** Selahattin Çolakoğlu (Hertfordshire, United Kingdom), Anıl Başpınar, Aslı Yıldız, Mustafa Durmuş

PA1582	**Electronic peak flow in asthma – usefulness in pregnant and non-pregnant patients** Dorothy Ryan (Dublin 3, Ireland), Deirdre Long, Finbarr Harnedy, Rebecca Borton, Richard W. Costello
PA1583	**Accelerating asthma diagnosis and treatment optimisation through a technology enabled home assessment program** Megan Robshaw (Gloucester, United Kingdom), Helen Parrott, Emma Raywood, Dandi Qiao, Eric Harker
PA1584	**Addressing asthma management gaps with a respiratory digital ecosystem: A preliminary analysis** Christopher Licskai (London (ON), Canada), Joseph Cafazzo, Madonna Ferrone, Denise Ng, Anna Hussey, Quynh Pham, Cailey Ranot, Paul Mastoridis, Shumit Saha, Karen Mezzi
PA1585	**Evaluation of current self-management strategies in iOS and Android mobile applications on patients with asthma** Natsumi Nomura (Urayasu,Chiba, Japan), Jun Ueki, Emika Sano, Megumi Ikeda, Norihiro Harada, Hiroo Wada
PA1586	**Asthma-related goals to motivate adherence** Ayana Martins (Pfäffikon SZ, Switzerland), Giuseppe Ranieri
PA1587	**Effectiveness of mobile-based rehabilitation in COPD patients: feasibility study from rural Rajasthan** Neeti Rustagi (Jodhpur, India), Naveen Dutt, Suseendar S, Navratan Suthar
PA1588	**Quality and compliance to home-based spirometry in COPD patients** Malik A Althobiani (London, United Kingdom), Yatharth Ranjan, Joseph Jacob, Michele Orini, Richard Dobson, Joanna C Porter, John R Hurst, Amos A Folarin
PA1589	**Feasibility of wearable smart shirt technology for daily life physiology and symptom assessment in COPD** Hayley Lewthwaite (Merewether, Australia), Gennaro D'Elia, Sarah Johnson, Peter Gibson, Troy Cross, Vanessa M Mcdonald
PA1590	**A digital mindfulness-based intervention for COPD patients: a pilot study investigating the effects on psychological distress and stress** Florian Vafai-Tabrizi (Wien, Austria), Hannah Tschenett, Georg-Christian Funk, Urs Markus Nater
PA1591	**Telemonitoring and telerehabilitation in severe COPD patients awaiting lung transplant: a descriptive study** André Filipe Santos Nunes (Ponta Delgada, Portugal), Marta Santos, Cláudia Costa, Joana Barbosa, Cristina Santos, Fátima Rodrigues, Cristina Bárbara
PA1592	**Impact of symptoms and disease severity on digital mobility outcomes in COPD** Dimitrios Megaritis (Newcastle upon Tyne, United Kingdom), Joren Buekers, Tecla Bonci, Emily Hume, Lisa Alcock, Alison Yarnall, Encarna Mico Amigo, Philip Brown, Christopher Buckley, Silvia Del Din, Carlos Echevarria, Claudia Mazzà, Lynn Rochester, Judith Garcia-Aymerich, Ioannis Vogiatzis
PA1593	**Telemonitoring of Symptoms and Lung Function in COPD for Early Detection of Exacerbations** Mustafa Abdo (Grosshansdorf, Germany), Anne Kirsten, Hans Klose, Tim Oqueka, Barbara Karlsdorf, Erwin Junker, Daniel Drömann, Thomas Bahmer, Klaus.F Rabe, Henrik Watz
PA1594	**Change in COPD Assessment Test (CAT) score from a stable baseline has a high predictive capability for acute exacerbations** Henry Glyde (Bristol, United Kingdom), Alison M. Blythin, Tom M. Wilkinson, Ian T. Nabney, James W. Dodd
PA1595	**From high-resolution time series to a single, clinically-interpretable value - considerations for the aggregation of real world walking speed assessed by wearable sensors in patients with chronic obstructive pulmonary disease (COPD)** Sarah Koch (Vancouver, Canada), Joren Buekers, Inés Cobo, Jorge Lemos, José Marchena, Tecla Bonci, Brian Caulfield, Silvia Del Din, Heleen Demeyer, Anja Frei, Jeff M. Hausdorff, Anisoara Ionescu, Kamiar Aminian, Jochen Klenk, Enarna Mico Amigo, Paolo Piraino, David Singleton, Oleksandr Sverdlov, Lynn Rochester, Thierry Throosters, Judith Garcia-Aymerich
PA1596	**Quantification of smoking-related airway remodelling in COPD, using a novel fast-response capnometer** Rui Hen Lim (Cambridge, United Kingdom), Laura Wiffen, Henry Broomfield, Daniel Neville, Leeran Talker, Ahmed Selim, Julian C Carter, Scott T Weiss, Gabriel Lambert, Gail Hayward, Thomas Brown, Vijaykumar Elango, Anoop Chauhan, Ameera X Patel
PA1597	**Telemonitoring of patients with COPD: impact beyond hospital admissions** Élin Almeida (Guarda, Portugal), Filipa Jesus, Joana Ribeiro, José Manuel Silva, Luís Ferreira

PS-10 in poster area — Session 186 — 16:00 - 17:30

Poster session: Environment and respiratory health

Disease(s) : Airway diseases

Method(s) : Public health General respiratory patient care Epidemiology Cell and molecular biology Pulmonary function testing

Tag(s) : Translational

Chairs : Isabella Annesi Maesano (Montpellier, France), Giovanni Viegi (Pisa (PI), Italy)

PA1598	**Associations of long-term exposure to low-level air pollution and greenness with incidence of protracted cough: results from the RHINE study** Shanshan Xu (Bergen, Norway), Alessandro Marcon, Randi Jacobsen Bertelsen, Bryndis Benediktsdottir, Thorarinn Gislason, Jørgen Brandt, Lise Marie Frohn, Camilla Geels, Joachim Heinrich, Mathias Holm, Christer Janson, Rain Jogi, Iana Markevych, Hans Orru, Anna Oudin, Vivi Schlünssen, Torben Sigsgaard, Ane Johannessen
PA1599	**Air pollution and childhood asthma in Iceland – results from the Nordic WelfAir project.** Ane Johannessen (Bergen, Norway), Throstur Thorsteinsson, Camilla Geels, Lise Marie Frohn, Jørgen Brandt, Thorarinn Gislason
PA1600	**Human airway Immune homeostasis and lung function are altered with controlled exposure to model wildfire smoke: characterizing susceptibility factors and the secretome** Meghan Rebuli (Chapel Hill, United States), Morgan Nalesnik, Catalina Cobos-Uribe, Alexis Payton, Martha Almond, Carole Robinette, Neil Alexis, Julia Rager, David Peden, Ilona Jaspers
PA1601	**Green space during pregnancy and the development of asthma up to 27 years of age: The Espoo Cohort Study** Aino K. Rantala (Oulu, Finland), Ines Paciencia, Harri Antikainen, Jan Hjort, Timo Hugg, Maritta S. Jaakkola, Jouni J. K. Jaakkola
PA1602	**Greenness exposure: beneficial but multidimensional. A review.** Ane Johannessen (Bergen, Norway), Shanshan Xu, Achenyo Peace Abbah, Christer Janson
PA1603	**In vitro bioreactivity of tyre wear particles collected in real time on human alveolar epithelial cells** Khaled Alzahabi (London, United Kingdom), Toyosi Akande, Ayeh Alobaidi, Georgia May Gamble, Nick Molden, Marc Stettler, Teresa Tetley
PA1604	**Reduced bronchoalveolar phagocytosis after controlled short-term exposure to wood smoke in healthy humans** Alva Hansson (Umeå, Sweden), Gregory Rankin, Oskari Uski, Maria Friberg, Jamshid Pourazar, Robert Lindgren, Natxo García-López, Christoffer Boman, Thomas Sandström, Annelie Behndig, Ala Muala
PA1605	**Residential exposure to microbial emissions from livestock farms: implementation and evaluation of random forest land use models** Beatrice Cornu Hewitt (Utrecht, Netherlands), Lidwien A.M. Smit, Warner Van Kersen, Inge M. Wouters, Dick J.J. Heederik, Jules Kerckhoffs, Gerard Hoek, Myrna M.T. De Rooij
PA1606	**Joint association of air pollution exposure and inflammation-related proteins in relation to infant lung function** Shizhen He (Stockholm, Sweden), Björn Lundberg, Jenny Hallberg, Susanna Klevebro, Göran Pershagen, Kristina Eneroth, Erik Melén, Matteo Bottai, Olena Gruzieva
PA1607	**The role of biodiversity in the development of asthma and allergic sensitization: a systematic review and meta-analysis** Jouni J.K. Jaakkola (Oulu, Finland), Inês Paciência, Timo T. Hugg, Behzad Heibati, Aino K. Rantala, Maritta S. Jaakkola, Needhi Sharma, Wael K. Al-Delaimy
PA1608	**Spatially resolved air pollution models identify disparities in exposure by socioeconomic status (SES)** Meredith Barrett (Portland, United States), Shadi Aslebagh, Vy Vuong, Emma Yakutis, Leanne Kaye, Jason Su
PA1609	**Livestock farm exposures and lung function decline in neighboring residents: a 7-year follow up study** Warner van Kersen (Utrecht, Netherlands), Myrna De Rooij, Bernadette Aalders, Kaitlin Prins, Floor Borlée, Joris Yzermans, Joke Van Der Giessen, Dick Heederik, Mary Rice, Lidwien Smit
PA1610	**The relationship between COVID-19 mortality and socioeconomic status, air quality and housing density in Ankara, Turkiye** Elif Reyhan Sahin (Ankara, Turkey), M Omur Gungor, Ahmet U Demir, A Fuat Kalyoncu
PA1611	**Outdoor air pollution and asthma in low-and middle-income countries: a systematic review** Achenyo Abbah (Bergen, Norway), Shanshan Xu, Ane Johannessen
PA1612	**Chemical composition and the oxidative potential of particulate matter (PM) in source-specific areas around the globe** Constantinos Sioutas (Los Angeles, United States), Vahid Jalali Farahani, Abdulmalik Altuwayjiri
PA1613	**Household air pollution and lung health in children: A systematic review and meta-analysis** Om Prakash Kurmi (Coventry, United Kingdom), Sathya Swarup Aithal, Ishaan Sachdeva, Nagendra Chaudhary
PA1614	**Temporal evolution of PM2.5 levels in relation to Covid-19 mortality in Europe between early-2020 to end-2022 period** Isabella Annesi Maesano (Montpellier, France), Jean-Baptiste Renard, Jeremy Surcin, Eric Poincelet

PA1615 **Partial pressure of arterial oxygen in healthy at altitude - A systematic review**
Aglaia Forrer (Baar, Switzerland), Thomas Gaisl, Ahmet Sevik, Michelle Meyer, Luzi Senteler, Mona Lichtblau, Konrad Ernst Bloch, Silvia Ulrich, Michael Furian

PA1616 **Health risk perception profiles in Gela: a latent class analysis**
Giacomo Ilardo (Palermo, Italy), Alessandra Pandolfo, Velia Malizia, Giovanna Cilluffo, Salvatore Fasola, Giuseppe Piva, Liliana Cori, Giovanni Viegi, Stefania La Grutta

PA1617 **Assessing the prevalence of pressurized Metered-dose Inhalers among COPD patients & their eligibility to switch to Dry Powdered Inhalers.**
Archana Ganapathy (London, United Kingdom), Asif Khapedi, Kanwar Pannu, Mukherjee Dipak

PS-11 in poster area Session 187 16:00 - 17:30

Poster session: Preschool wheeze and asthma: viruses, environmental and other risk factors

Disease(s) : Airway diseases

Method(s) : Pulmonary function testing Cell and molecular biology Epidemiology Physiology Public health General respiratory patient care Respiratory intensive care

Tag(s) : Clinical, Translational

Chairs : Christiane Lex (Goettingen, Germany), Abigail Whitehouse (London, United Kingdom)

PA1618 **Outdoor air nitrogen dioxide augments exercise-induced bronchoconstriction in children**
Anna Pauliina Tikkakoski (Nokia, Finland), Antti Tikkakoski, Kalle Sipilä, Juho Kivistö, Mika Kahonen, Jussi Karjalainen, Lauri Lehtimäki

PA1619 **Rhinovirus-induced preschool wheeze in combination with allergic sensitization increases the risk of asthma in early adolescence**
Idun Holmdahl (Stockholm, Sweden), Sofia Lüning, Anna Asarnoj, Anastasia Filiou, Sabina Wärnberg Gerdin, Magnus Borres, Marianne Van Hage, Cilla Söderhäll, Jon R Konradsen

PA1620 **RSV (Respiratory Syncytial Virus) infection in infancy and its impact on childhood wheezing at 2-year, 4-year and 6-year age: A single center long term follow-up ARSVIAA study (ARSVIAA study-Association of RSV, IgE and atopy in childhood asthma)**
Shital Vishnu Patil (Latur (Maharashtra), India), Swati Shital Patil, Yogesh Utage, Abhijit Acharya, Sham Toshniwal

PA1621 **Real time mapping of particulate matter (PM) concentrations and paediatric asthma emergency department (ED) visits**
Karl Holden (Liverpool, United Kingdom), Alice Lee, Charlotte King, Olufemi Olajide, Dan Hawcutt, Jonathan Higham, Ian Sinha

PA1622 **Association of FCER2 gene polymorphisms with childhood asthma**
Azer Kiliç Baskan (Istanbul, Turkey), Berrak Nevin Oztosun, Huseyin Arslan, Ayşe Ayzıt Kılınc Sakallı, Haluk Cezmi Cokugras

PA1623 **Risk factors for asthma related hospital admissions in children and adolescents: Analysis of 205,000 patients in England**
Prasad Nagakumar (Birmingham (West Midlands), United Kingdom), Nikita Simms-Williams, Rasiah Thayakaran, Nicola Adderley, Krishnarajah Nirantarakumar, Adel Mansur, Shamil Haroon

PA1624 **Near Fatal and Fatal Asthma in children and young people associated with outdoor air pollution: A systematic review.**
Deepa Varghese (Glasgow, United Kingdom), Kathryn Ferris, Bohee Lee, Jonathan Grigg, Hilary Pinnock, Steve Cunningham

PA1625 **Increased innate immune responses in childen with acute asthma exacerbation**
Shahid Sheikh (Columbus, United States), Joshua Walum, Katie Heyob, Brandon Lewis, Aiman Khan, Karen Mccoy, Benjamin Kopp, Mitchell Grayson, Rodney Britt

PA1626 **Asthma and attention deficit hyperactivity disorder in childhood: birth cohort study**
Mohammad Talaei Pashiri, Panagiota Pagoni, Evie Stergiakouli, Seif O. Shaheen

PA1627 **Sex differences in childhood asthma is driven by a T2-high phenotype and mediated through sex hormone metabolites**
Laura Hesselberg (København N, Denmark), Nicklas Brustad, Rikke Bjersand Sunde, Min Kim, Ann-Marie Malby Schoos, Jakob Stokholm, Klaus Bønnelykke, Bo Chawes

PA1628 **Is your home impacting on your child's asthma?**
Abigail Whitehouse (London, United Kingdom), Charles Moorcroft, Jonathan Grigg

PA1629 **Pattern and risk factor of lower respiratory illness in children who survived meconium aspiration syndrome**
Kwang Hee Kim (Bucheon, Republic of Korea), Danbi Kim, Youngah Youn, Juyoung Lee, Hwan Soo Kim

PA1630 **Allergic sensitisation, respiratory tract infections and subsequent preschool lung function: evidence from an Australian birth cohort study**
Cassidy Du Berry (Melbourne, Australia), Rheanna Mainzer, Lawrence Gray, Louise King, Peter Sly, Peter Vuillermin, Sarath Ranganathan

PA1631 **MicroRNAs shuttled by extracellular vesicles released by adenoid derived PBMC in children**
Amelia Licari (Pavia (PV), Italy), Simona Taverna, Giuseppe Cammarata, Ilaria Brambilla, Lorenza Montagna, Anna Masucci, Velia Malizia, Gian Luigi Marseglia, Stefania La Grutta

PA1632 **Perturbed urinary eicosanoids levels in early life associate with risk of atopic diseases in childhood**
Liang Chen (Copenhagen, Denmark), Nicklas Brustad, Min Kim, Yang Luo, Tingting Wang, Mina Ali, Ann-Marie M Schoos, Jakob Stokholm, Morten A Rasmussen, Klaus Bønnelykke, Javier Zurita Pérez, Johan Kolmert, Craig E Wheelock, Jessica Lasky-Su, Bo Chawes

PA1633 **Lung function trajectories in persistent asthma: from preschool to the schoolchildren.**
Alberto Vidal (Santiago, Chile), Ramiro González, Selim Abara, Mónica Saavedra, Oscar Fielbaum, María Angelica Palomino, Alejandra Méndez

PA1634 **Consensus priorities for outcomes in oral corticosteroid treatment for preschool wheeze: a nominal group technique study with clinicians and parents**
Bohee Lee (Edinburgh, United Kingdom), Steve Turner, Jasmine Hine, Ann Mcmurray, Damian Roland, Meredith Borland, Péter Csonka, Jonathan Grigg, Theresa Guilbert, Tuomas Jartti, Abraham Oommen, Steff Lewis, Steve Cunningham

PA1635 **Efficacy of oral corticosteroids for preschool wheeze: a meta-analysis of individual participant data from seven randomised controlled trials**
Bohee Lee (Edinburgh, United Kingdom), Steve Turner, Meredith Borland, Péter Csonka, Jonathan Grigg, Theresa Guilbert, Tuomas Jartti, Abraham Oommen, Steff Lewis, Steve Cunningham

PA1636 **Preschool wheeze and response to Haemophilus influenzae type B conjugate vaccine**
Callum Tipton (Cambridge, United Kingdom), Theofilos Polychronakis

PS-12 in poster area Session 188 16:00 - 17:30

Poster session: Paediatric bronchology: new insights

Disease(s) : Airway diseases Thoracic oncology

Method(s) : Endoscopy and interventional pulmonology General respiratory patient care Public health Pulmonary function testing Imaging Pulmonary rehabilitation Cell and molecular biology Epidemiology

Tag(s) : Clinical

Chairs : Dirk Schramm (Düsseldorf, Germany), Laura Petrarca (Roma (RM), Italy)

PA1637 **Patients previously treated for childhood interstitial lung disease display an increased prevalence of cognitive deficits, depression and anxiety.**
Astrid Madsen Ring (Gentofte, Denmark), Martin Vestergaard, Ida Strøier Bøge, Frederik Fouirnaies Buchvald, Kim Gjerum Nielsen

PA1638 **Causes of stridor in children - the ten-year experience of a tertiary center**
Bojana Gojsina (Belgrade, Republic of Serbia), Milan Rodic, Jelena Visekruna, Mihail Basa, Aleksandar Sovtic

PA1639 **Subglottic stenosis in children – etiology and treatment**
Bojana Gojsina (Belgrade, Republic of Serbia), Milan Rodic, Jelena Visekruna, Mihail Basa, Aleksandar Sovtic

PA1640 **Bronchoalveolar lavage findings in children with chronic unexplained cough**
Ivan Pavic (Zagreb, Croatia), Manuela Radić, Roberta Šarkanji Golub, Draženka Ezgeta Karačić, Iva Hojsak

PA1641 **Role of impedance study in paediatric recurrent respiratory symptoms**
Kushalinii Hillson (London, United Kingdom), Surendran Thavagnanam, Chinedu Nwokoro, Sarah Brown, Abigail Whitehouse, Caroline Pao, Muna Dahabreh

PA1642 **Pneumothorax in childhood: A retrospective single center study**
Merve Aka (Ankara, Turkey), Merve Kasikci, Halime Nayır Buyuksahin, Dilber Ademhan Tural, Nagehan Emiralioglu, Ebru Yalcin, Deniz Dogru, Ugur Ozcelik, Nural Kiper

PA1643 **Alpha-1 antitrypsin deficiency (AATD)**
Michele Ghezzi (Bergamo, Italy), Alice Romero, Stefania Roncaglia, Sara L'Assainato, Enza D'Auria, Gian Vincenzo Zuccotti

PA1644	**Association between lung ultrasound findings, pulmonary function tests and chest radiography in children with cystic fibrosis** Didem Alboğa (Altındağ, Turkey), Nagehan Emiralioğlu, Berna Oğuz, Halime Nayır Büyükşahin, Ismail Güzelkaş, Birce Sunman, Meltem Akgül Erdal, Ebru Yalçın, Deniz Doğru, Uğur Özçelik, Nural Kiper
PA1645	**Complications of tracheobronchial foreign body aspiration in children** Alexandru Corlateanu (Chisihau, Republic of Moldova), Diana Rotaru-Cojocari, Victor Rascov, Iurie Simionica, Eva Gudumac, Svetlana Sciuca
PA1646	**Neutrophil lymphocyte ratio, mean platelet volume, and immunoreactive trypsinogen as early inflammatory biomarkers for cystic fibrosis in infancy: A retrospective cohort study** Tuğba Şişmanlar Eyuboglu (Ankara, Turkey), Ayşe Tana Aslan, Pelin Asfuroğlu, Nursima Kunt, Ali Ersoy, Mehmet Kose, Gökçen Ünal, Sevgi Pekcan
PA1647	**Evaluation of the efficacy of inhaled bronchodilators in infants with bronchiolitis through respiratory function testing: a pilot study** Laura Petrarca (Roma (RM), Italy), Raffaella Nenna, Maria Giulia Conti, Domenico Paolo La Regina, Enrica Mancino, Elio Iovine, Antonella Frassanito, Fabio Midulla
PA1648	**Mucoepidermoid Tumour of bronchus: Case report of a rare airway tumour & role of Interventional Pulmonology in management** Shubham Sharma (Jaipur (Rajasthan), India), Apar Jindal
PA1649	**Management of neurotypical children with recurrent aspiration** Priyanka Patel (Pinner, United Kingdom), Christine Lim, Simone Hadjisymeou-Andreou, Lauren Harwood, Samatha Sonnappa
PA1650	**Evaluation of Children with Stridor by Flexible Bronchoscopy** Merve nur Tekin (Ankara, Turkey), Mukaddes Agirtici, Gizem Özcan, Fazılcan Zirek, Secahattin Bayav, Nazan Çobanoğlu
PA1651	**Alexithymia in primary ciliary dyskinesia** Gökçen Unal (Konya, Turkey), Hanife Tugçe Çaglar, Sevgi Pekcan, Fatih Ercan, Aslı Turkut
PA1652	**Late Breaking Abstract - Are breath-actuated inhalers effective in managing acute asthma exacerbations in children?** Sowmya Arudi Nagarajan (Bangalore (Karnataka), India), Vaishali Naik, Meena Lopez, Jaideep Gogtay
PA1653	**Late Breaking Abstract - Metabolic Genealogy of Allergic Diseases in Childhood** Xiaolong Deng (Guangzhou, China), Yuanqi Wang, Cuilian Mo, Zhihui He, Baoqing Sun, Jiaying Luo
PA1654	**Late Breaking Abstract - RSV Prophylaxis for 29-34 Gestational Preemies: Lessons from an Israeli National Multi -center Off-seasonal Study** Keren Armoni Domany (Tel-Aviv, Israel), Avigdor Mandelberg, Inbal Tripto Golan, Nitzan Burrack, Kamal Masarweh, Mika Rochman, Moria Beer, Dario Prais, Moran Weinberger, Elias Nasrallah, Orli Megged, Rachel Shatzman Steuerman, Michal Stein, Zohar Steinberg, Shereen Shehadeh, Diana Tasher
PA1655	**Late Breaking Abstract - Burden of allergic rhinitis in children in the UK and Canada: A cross-sectional study** Mercedes Romano Rodriguez (Hørsholm, Denmark), Anne Sofie Ledgaard Loftager, Simone Dupont Bengtsson, Mette Bøgelund, Mark Aagren, Jose Maia E Costa, Elana Lavine
PA1656	**Late Breaking Abstract - Siblings as a risk factor to guide RSV prophylaxis in Korean infants** Ian Keary (Reading, United Kingdom), Ji-Man Kang, Xavier Carbonell-Estrany, Barry Rodgers-Gray, John Fullarton, Bosco Paes

PS-13 in poster area Session 189 16:00 - 17:30

Poster session: Nursing interventions and outcomes

Disease(s) : Airway diseases | Sleep and breathing disorders | Respiratory critical care

Method(s) : General respiratory patient care | Palliative care | Pulmonary rehabilitation | Public health | Epidemiology | Respiratory intensive care

Tag(s) : Clinical

Chairs : José Miguel dos Santos Castro Padilha (Porto, Portugal), Malin Axelsson (Malmö, Sweden)

PA1657	**Inhalation therapy:educational intervention to avoid complications** carla Barros (Vila Boa de Quires, Portugal), Mónica Pinheiro
PA1658	**Psychological vulnerability mediates the relationship between pain perception in stable COPD patients.** Maria Granados Santiago (Alcaudete, Spain), Julia Raya Benitez, Sofia Hernández Hernández, Alejandro Heredia Ciuró, Andrés Calvache Mateo, Miguel Hernández Serrano, Marie Carmen Valenza

PA1659	**Assessing health status of patients with COPD using CAT and HADS screening tools: A cross-sectional study** Helga Jonsdottir (Reykjavik, Iceland), Þ.Soley Ingadottir, Stella Stefansdottir
PA1660	**Impact of multimorbidity on depressive symptoms in self-reported COPD** Jungeun Lee (Kingston, United States)
PA1661	**Partnership-based nursing practice framework for patients with chronic obstructive pulmonary disease and their families** Helga Jonsdottir (Reykjavik, Iceland), Bryndis Halldorsdottir, Þ. Soley Ingadottir
PA1662	**Sputum colour as an indicator of quality of life in patients with bronchiectasis** Leticia Bueno Freire (Barcelona, Spain), Patricia Oscanoa, Victoria Alcaraz Serrano, Andrea Palomeque, Rubén López Aladid, Nil Vázquez, Roberto Cabrera, Rosanel Amaro, Laia Fernández Barat*, Antoni Torres*
PA1663	**Pulmonary Rehabilitation Intervention to Maintain Exercise Behavior (PRIMEb) – a motivational analysis.** Duarte Pinto (Matosinhos, Portugal), Nuno Macedo, Raquel Marques, Maria João Cunha, Sónia Rocha, Ana Carvalho, Jorge Encantado, Vânia Rocha, Paulino Sousa, Paulo Machado, Miguel Padilha
PA1664	**General practitioner's referencing habits to pulmonary rehabilitation in a Portuguese urban area** Liliana Silva (Matosinhos, Portugal), Tiago Maricoto, Paula Simão, Patrício Costa, José Miguel Padilha
PA1665	**A case study of a nurse-led maintenance pulmonary rehabilitation programme** Liliana Silva (Matosinhos, Portugal), Tiago Maricoto, Angela Mota, Lara Lemos, Mariana Santos, Inês Azevedo, Patrício Costa, José Miguel Padilha
PA1666	**How many patients with sleep apnoea experience pressure discomfort from the CPAP mask? How can pressure discomfort from the CPAP mask best be prevented?** Lonnie Sneistrup (Svendborg, Denmark), Anne Dichmann Sorknæs, Helle Guldager Corydon
PA1667	**Pressure injuries and respiratory devices: descriptive observational study** margherita beretta (Milano, Italy), Cristiana Piola, Francesco Blasi, Andrea Bellingeri, Enrico Maria Marone, Barbara Sappa
PA1668	**Repercussions of rehabilitation nurse's intervention on critical patients' ventilation with inspiratory muscle training** Luís Estevão (Matosinhos, Portugal), Maria José Gomes, Liliana Silva
PA1669	**Sex, functional impairment, lung injury, and rib fracture pattern impact on disability in patients with a longer hospital stay.** Maria Granados Santiago (Alcaudete, Spain), Julia Raya Benítez, Sofia Hernández Hernández, Javier Martín Nuñez, Laura López López, Irene Cabrera Martos, Marie Carmen Valenza
PA1670	**Correlation study between sleepiness while driving, and daytime sleepiness.** Alejandro Pastor Campo (Sant Boi de Llobregat (CT), Spain), Victoria Pastor Campo, Isabel Portela Ferreño
PA1671	**Patient education in self-care management of individuals with COPD in Turkey** Merve Kıymaç Sarı (Şişli, Turkey), Rahşan Çevik Akyıl, Gamze Oğuz, Zehra Durna
PA1672	**Assessment of respiratory disterss in small children** Majda Oštir (Ljubljana, Slovenia), Katarina Korenin, Magdalena Zupan, Uros Krivec
PA1673	**Safe discharge in a streamlined practice: A qualitative study of nurses' approach in ending courses of patients with COPD after admission to a medicinal pulmonary ward.** Nanna Vendelboe Gregersen (Aarhus N, Denmark), Dorthe Sørensen
PA1674	**What effect does home-based management have on patients with COPD hospital readmission rates?** Rita Corcoran (Westport, Ireland), Bridget Murray
PA1675	**Experiences of patients with advanced COPD affiliated with a cross-sectorial lung team.** Birgit Refsgaard (Aarhus V, Denmark), Anders Løkke, Vibeke Bregnballe, Lotte Rodkjaer

PS-14 in poster area Session 190 16:00 - 17:30

Poster session: COVID-19 treatments

Disease(s) : Respiratory critical care Airway diseases

Method(s) : Public health Respiratory intensive care Pulmonary function testing Cell and molecular biology General respiratory patient care Epidemiology

Tag(s) : Clinical

Chairs : Megan Crichton (Dundee (Angus), United Kingdom), Michal Shteinberg (Haifa, Israel)

PA1676	**Lactoferrin in Long COVID patients (LARGO): a randomized, double-blind, controlled trial** Anne-Lotte Redel (Rotterdam, Netherlands), Fatana Miry, Laurien Oswald, Gert-Jan Braunstahl
PA1677	**Post hoc analysis of a phase 3, cluster randomised clinical trial of peginterferon beta-1a to reduce transmission of SARS-CoV-2: effect of viral load on transmission and risk factors for hospitalisation** Samuel Montgomery (Leederville (WA), Australia), Yuliya Karpievitch, David Hancock, Stephen Stick, . On Behalf Of The Concord-19 Study Team
PA1678	**Bevacizumab in addition to standard of care did not shorten the time to improve hypoxemia in severe hypoxemic COVID-19 pneumonia in a prospective randomized controlled trial.** Jacques Cadranel (Paris Cedex 20, France), Camille Rolland-Debord, Vincent Labbe, Sophie Tuffet, Benjamin Planquette, Jean-Louis Teboul, Romain Jouffroy, Bertrand Guidet, Guillaume Voiriot, Raphael Hindre, Laurent Saval, Julien Schmidt, Michael Darmon, Jonathan Marey, Armand Mekontso-Dessap, Camille Taillé, Etienne Giroux-Leprieur, Florence Geny, Julien Mayaux, Guillaume Carteaux, Tabassome Simon, Antoine Parrot, Alexandra Rousseau, Muriel Fartoukh
PA1679	**Temporal development of non-pharmacological maximum therapies for COVID-19 inpatients** Sandhya Matthes (Solingen, Germany), Johannes Holl, Johannes Randerath, Marcel Treml, Lars Hagmeyer, Winfried Randerath
PA1680	**Virucidal efficacy of cetylpyridinium chloride lozenges against coronavirus and influenza virus** Tina Peiter (Heidelberg, Germany), Maren Goelzer, Tessa Stahl, Yetunde Kolade, Graça Coutinho, Maren Eggers
PA1681	**A comparative study of the effectiveness between pulse regimen methylprednisolone versus high dose dexamethasone as the initial treatment of moderate covid-19 pneumonia: an open-label randomized controlled trial** Jakkrit Laikitmongkhon (Bangkok, Thailand), Tanapat Tassaneyasin, Angsana Phuphuakrat, Sirawat Srichatrapimuk, Tananchai Petnak, Dararat Eksombatchai, Kanin Thammavaranucupt, Somnuek Sungkanuparph, Yuda Sutherasan
PA1682	**Antiviral and anti-inflammatory effects of Erdosteine and MET-1 in SARS-CoV-2 in vitro infection** Sergio Strizzi (Milan, Italy), Fiammetta Danzo, Claudia Vanetti, Mara Biasin, Dejan Radovanovic, Daria Trabattoni, Pierachille Santus
PA1683	**Impact of low molecular weight heparin (LMWH) on SARS-CoV2 Infection: HEPARIN SARS-CoV2 clinical trial.** Remedios Otero Candelera (Sevilla, Spain), Demetrio González-Vergara, Isabel Caparrós, Alberto García-Ortega, Consolación Rodriguez-Matute, Jorge Moisés, Lucía Marín-Barrera, Javier Rodríguez-Martorell
PA1684	**Lopinavir-ritonavir versus darunavir-norvir for hospitalized COVID-19 patients** Dóra Paróczai (Deszk, Hungary), András Bikov, Andreea Blidaru, Emanuel Bobu, Bianca Cerbu, Iosif Marincu, Stefan Mihaicuta, Stefan Frent
PA1685	**Inhaled corticosteroids for post-hospital rehabilitation treatment of patients with COVID-19** Nataliia Chaplynska (Ivano- Frankivsk, Ukraine), Victoriia Rudnyk
PA1686	**Remdesivir versus favipiravir in hospitalized patients with moderate COVID-19 pneumonia: A propensity score-matched retrospective cohort study.** Karuna Chavalertsakul (Bangkok, Thailand), Tanachai Petnak, Viboon Boonsarngsuk, Somnuek Sangkanuparph, Kanin Thammavaranucupt, Suppachok Kirdlarp, Yuda Sutherasan
PA1687	**Comparison of effectiveness between baricitinib and tocilizumab in severe COVID-19. A retrospective study.** Ioannis Tomos (Athens (P. Faliro), Greece), Ioannis Grigoropoulos, Chrysavgi Kosti, Serafeim Chrysikos, Antonia Digalaki, Konstantinos Thomas, Georgios Hillas, Dimitrios Boumpas, Anastasia Antoniadou, Dimitra Kavatha, Katerina Dimakou
PA1688	**Is Anakinra effective and safe for severe COVID-19 disease? A Comprehensive Systematic Review of 44 studies including 3179 patients** Aliae Abd Rabou Mohamed-Hussein (Assiut, Egypt), Reem Sayad, Abdelrahman Abdelshafi, Islam Abdelaal Hammam, Ahmed M. Kedwany, Shrouk Alaa Eldein Abdallah, Islam H. Ibrahim
PA1689	**Chronic COPD medications and CoViD-19 mortality- an observational study.** Anastasios Stringaris (HERAKLION, Greece), Georgios Makris, Theodoros Moschopoulos, Eirini Pasparaki, Myrto Plexousaki, Emmanouil Ferdoutsis, Georgios Meletis
PA1690	**Tozorakimab in patients hospitalised with COVID-19: a phase 2, randomised adaptive platform study (ACCORD-2)** Thomas Wilkinson (Southampton (Hampshire), United Kingdom), Miles Carroll, Clive Page, Hitesh Pandya, Rachel Moate, Fred Reid, Chris Kell, Ian C Scott, Dave Singh
PA1691	**Clinical trials of inhaled interferon beta-1a (SNG001) in COVID-19 patients in the home and hospital** Phillip D Monk (Southampton (Hampshire), United Kingdom), Jody Brookes, Victoria Tear, Toby Batten, Marcin Mankowski, Felicity Gabbay, Donna Davies, Chris Brightling, Monica Kraft, Ratko Djukanovic, Stephen Holgate, Tom Wilkinson

PA1692 **Effects of prolonged corticosteroid therapy on lung abnormalities and symptoms after severe COVID-19 pneumonia with prolonged respiratory insufficiency**
Nevenka Piskac Zivkovic (Zagreb, Croatia), Anja Ljilja Posavec, Nikola Zagorec, Daria Cvetković Kučić

PA1693 **Benefits of N-Acetylcysteine in the SARS-CoV-2 infection**
Mª Angeles Galindo-Andúgar (Alcázar de San Juan, Spain), Ángel Arias-Arias, Alfonso García-Guerra, Ana Bellido-Maldonado, Icíar Fernández-Visier, Antonio Cantillo-Berni, Sara Rodríguez-Fernández

PA1694 **The Effect of Inhaled Corticosteroid (ICS) Use in the Outcomes of COVID-19 Pneumonia among Patients 18 years old and Above Diagnosed with Asthma and COPD in a Tertiary Hospital: A Retrospective Cohort Study**
Jay Andrew Ilagan (Pasig, Philippines), Evelyn Victoria Reside

PS-15 in poster area Session 191 16:00 - 17:30

Poster session: The 3 Ts of lung cancer management: targets, treatment response and troubles

Disease(s) : Thoracic oncology Airway diseases

Method(s) : Cell and molecular biology General respiratory patient care Respiratory intensive care Epidemiology Surgery Public health Endoscopy and interventional pulmonology

Tag(s) : Clinical

Chairs : Chair to be confirmed

PA1695 **Biomarkers in non-small cell lung cancer patients: are they always worth looking for?**
Michele Barp (Feltre, Italy), Mariaenrica Tine, Federica Pezzuto, Francesca Scalvenzi, Lorenzo Ciarrocchi, Fiorella Calabrese, Mariaenrica Tine

PA1696 **Late Breaking Abstract - Probe-based Confocal Laser Endomicroscopy (pCLE) As A Tool In Lung Cancer Diagnosis In Ecuador**
EFRAIN SANCHEZ (guayaquil, Ecuador), Galo Chang, Elvis Matheus

PA1697 **Relationship between age and chemotherapy regimen for elderly patients with advanced lung cancer**
Ritsuya Shiiba, Yoshihito Kogure, Hiroto Murao, Yuki Takigawa, Atsushi Torii, Arisa Yamada, Yuka Shinohara, Hidemasa Niwa, Masahiro Sano, Chiyoe Kitagawa, Masahide Oki

PA1698 **Identification of predictive factors for early relapse in patients with unresectable stage III NSCLC receiving consolidation durvalumab after concurrent chemoradiation therapy**
Jung Hyun Nam (Seoul, Republic of Korea), Chang Dong Yeo, Chan Kwon Park, Sung Kyoung Kim, Ju Sang Kim, Yong Hyun Kim, Jin Woo Kim, Seung Joon Kim, Sang Haak Lee, Hye Seon Kang

PA1699 **Quantitative analysis of preoperative, intraoperative and postoperative circulating cell-free DNA in patients with resectable non-small cell lung cancer**
Stylianos Gaitanakis (Nikaia, Greece), Anna Papadopoulou, Eleni Kokkotou, Timothy Sakellaridis, Periklis Tomos, Lamprini Stournara, Maria Mani, Eleutheria Ntalakou, Andriani Charpidou, Dimitra Grapsa

PA1700 **Circulating tumor cells in patients with lung cancer universally indicate poor prognosis**
Fukang Jin (Mannheim, Germany), Lei Zhu, Jingbo Shao, Mina Yakoub, Lukas Schmitt, Christoph Reißfelder, Sonja Loges, Axel Benner, Sebastian Schölch

PA1701 **Significance of the Lung Immune Prognostic Index for Assessment of the Reliability of the Clinical Treatment Outcome for Advanced Non-Small-Cell Lung Cancer in Patients with COVID-19 Infection**
Kristina Krpina (Strmec Samoborski, Croatia), Ena Tolić, Dora Darapi, Ana Hećimović, Dina Mihelčić Korte, Miroslav Samaržija, Lara Batičić

PA1702 **CD8+ T cell trajectory subtypes determine clinical outcome and therapy response in LUAD**
Benteng Deng (München, Germany), Jianlong Jia, Lingru Kang, Lilith Trassl, Daniela Dietel, Dmytro Sirokha, Andrea Schamberger, Asma Snkar, Georgios Stathopoulos, Isis Fernandez

PA1703 **Extracellular vesicles derived from central nervous system suppresses antitumor immunity**
Jiaoli Wang (Hangzhou (Zhejiang), China), Man Luo, Li-Min Wang, Zhi-Jian Cai

PA1704 **The long-term outcome of epidermal growth factor receptor mutation in stage IV lung adenocarcinoma patients.**
Chung-Jen Huang (New Taipei city, Taiwan), Justin Chen, An-Chen Feng, Cynthia Lin

PA1705 **Prognostic implication of KRAS G12C mutation in a real-world KRAS mutated stage IV NSCLC cohort treated with immunotherapy in the Netherlands**
Anneloes L. Noordhof (Leeuwarden, Netherlands), Esther M. Swart, Ronald A.M. Damhuis, Lizza E.L. Hendriks, Peter W.A. Kunst, Mieke J. Aarts, Wouter H. Van Geffen

PA1706 **Exploration of anticancer drug response prediction model using patient derived organoids with ALK-positive lung cancer**
Hyeong Jun Cho (Seoul, Republic of Korea), Sang-Yun Lee, Dong Woo Lee, Seung Joon Kim, Chang Dong Yeo

PA1707 **Smoking status at time of diagnosis affects the efficacy of anti-PD-1/L1 therapy in patients with advanced non-small cell lung cancer**
Kim Kyu Yean (Seoul, Republic of Korea), Kim Jin Woo, Yeo Chang Dong

PA1708 **PD-L1 expression on NSCLC lung tumors is affected by the presence of COPD.**
Martina Maria Ferrara (Padova, Italy), Mariaenrica Tine, Umberto Semenzato, Giulia Frasson, Davide Biondini, Marco Damin, Federica Pezzuto, Fiorella Calabrese, Simonetta Baraldo, Manuel G. Cosio, Marina Saetta

PA1709 **Evaluation of adverse events of tremelimumab, a recently FDA-approved anti-CTLA-4 antibody for non-small cell lung cancer**
Jing Huang (Chong qing, China), Yibei Zhao, Long Meng

PA1710 **Possible Risk Factors for Immune Related Pneumonitis Relapses**
Lidia Mendez Mangas (Sant Joan Despi, Spain), Alfredo Marin Muñoz, Isabel Brao Perez, Monica Arellano Vengochea, Arturo Navarro Martin, Miriam Nuñez Fernandez, Ramon Palmero Sanchez, Ernest Nadal Alforja, Salud Santos Perez, Susana Padrones Sanchez, Samantha Aso Gonzalez

PA1711 **Clinical risk factors for checkpoint pneumonitis vs. other pneumonitis in lung cancer patients treated with checkpoint inhibitors**
Lukas Wehlte (München, Germany), Lea Daisenberger, Julia Walter, Lucie Heinzerling, Thomas Pfluger, Amanda Tufman

PA1712 **Exploiting the kynurenine pathway to combat platinum-resistant non-small cell lung cancer (NSCLC)**
Medhi Wangpaichitr (Miami, United States), Chunjing Wu, George Theodore, Sydney Spector, Dan Nguyen, Lynn Feun, Niramol Savaraj

PA1713 **Study of the efficacy of intravenous BCG in a metastatic lung adenocarcinoma mouse model.**
Claudia Guerrero (Zaragoza, Spain), Eduardo Moreo, Santiago Uranga, Ana Belen Gomez, Carlos Martín, Nacho Aguiló

PA1714 **Comparing the Effectiveness of Different Anti-angiogenetic Agents Combined with an EGFR-TKI in Metastatic Lung Adenocarcinoma**
Chung-Wen Huang (Kaohsiung, Taiwan), Chih-Jen Yang, Ming-Ju Tsai, Jen-Yu Hung, Inn-Wen Chong

PS-16 in poster area Session 192 16:00 - 17:30

Poster session: Pulmonary fibrosis: impact, diagnosis, and management

Disease(s) : Interstitial lung diseases

Method(s) : Epidemiology Imaging Public health Endoscopy and interventional pulmonology General respiratory patient care Pulmonary function testing Pulmonary rehabilitation Physiology Palliative care

Tag(s) : Clinical

Chairs : Sara Tomassetti (Florence, Italy), Lurdes Planas Cerezales (Barcelona, Spain)

PA1715 **Clinical use of telomere length in idiopathic pulmonary fibrosis**
Antoine Froidure (Bruxelles, Belgium), Trejsi Muça, Marie-Astrid Van Dievoet, Anabelle Decottignies

PA1716 **Screening of first-degree relatives of IPF patients with a telomere-related gene mutation**
Tinne Goos (Leuven, Belgium), Nathalie Veyt, Evelien Van Hoof, Karen Rosier, Stefan Gogaert, Marie Vermant, Lynn Willems, Frederik Staels, Ilse Van Raemdonck, Sam Thierie, Emanuela Elsa Cortesi, Laurens J De Sadeleer, Jonas Yserbyt, Nico De Crem, Joseph Jacob, Marianne S Carlon, Johny Verschakelen, Adriana Dubbeldam, Anniek Corveleyn, Stijn E Verleden, Sascha Vermeer, Wim A Wuyts

PA1717 **Familial interstitial pneumonia: survival is independent of interstitial lung disease aetiology**
Deborah Dos Reis Estrella (Belo Horizonte (MG), Brazil), Eliane Viana Mancuzo, Ricardo De Amorim Corrêa, Regina Célia Carlos Tibana, Maria Raquel Soares, Carlos Alberto De Castro Pereira

PA1718 **Barriers and facilitators when talking about personal values, wishes and needs nearing the end-of-life. A qualitative exploration of a patient and partner perspective**
Lian Trapman (Zoelmond, Netherlands), L.M. Dijksman, J.C. Grutters, E. De Graaf, S.C.C.M. Teunissen

PA1719 **The development of an integrative palliative care intervention for patients with progressive pulmonary fibrosis: application of SUPPORT™(USA) to the Dutch setting**
Lian Trapman (Zoelmond, Netherlands), L.M. Dijksman, E. De Graaf, S.C.C.M. Teunissen, J.C. Grutters, Kathleen Lindell

PA1720 **Mortality and Lung Function Decline of Idiopathic Pulmonary Fibrosis Patient with Ezetimibe and Pirfenidone**
Jinhyung Cho (Seoul, Republic of Korea), Chanho Lee, Se Hyun Kwak, Young Sam Kim

PA1721	**A new instrument to assess disease-related fears in Interstitial Lung Disease (ILD): The ILD-Anxiety-Questionnaire (IAQ)** Nina Piel (Berlin, Germany), Michael Kreuter, Klaus Kenn, Nikola Stenzel
PA1722	**Perspectives On Screening and early Treatment for Pulmonary Fibrosis: a qualitative study** Laura Fabbri (London, United Kingdom), Gisli Jenkins, Louise Doran, Manpreet Bains
PA1723	**Preclinical idiopathic pulmonary fibrosis (IPF): a retrospective cohort study** Tomohiro Bando (Seto, Japan), Reoto Takei, Jun Fukihara, Hajime Sasano, Yasuhiko Yamano, Toshiki Yokoyama, Toshiaki Matsuda, Kensuke Kataoka, Tomoki Kimura, Hiroto Hatabu, Junya Fukuoka, Takeshi Johkoh, Yasuhiro Kondoh
PA1724	**Impulse oscillometry assesses small airway disease and reveals peripheral lung pathology in pulmonary fibrosis** Athena Gogali (Ioannina, Greece), Georgia Gkrepi, Christos Kyriakopoulos, Konstantinos Tatsis, Konstantinos Exarchos, Hara Tselepi, Konstantinos Kostikas
PA1725	**Short-term evolution of nutritional status in patients with idiopathic pulmonary fibrosis** Giovanni Franco (Monza, Italy), Paola Faverio, Alessia Fumagalli, Sara Conti, Fabiana Madotto, Francesco Bini, Sergio Harari, Michele Mondoni, Tiberio Oggioni, Emanuela Barisone, Paolo Ceruti, Maria Chiara Papetti, Bruno Dino Bodini, Antonella Caminati, Angela Valentino, Stefano Centanni, Paola Lanzi, Matteo Della Zoppa, Silvia Crotti, Marco Grosso, Samir Giuseppe Sukkar, Denise Modina, Marco Andreoli, Roberta Nicali, Giulia Suigo, Sara Busnelli, Giuseppe Paciocco, Sara Lettieri, Lorenzo Giovanni Mantovani, Giancarlo Cesana, Alberto Pesci, Fabrizio Luppi
PA1726	**Shared multidisciplinary approach to the complex management of patients with pulmonary fibrosis and impact on time to multidisciplinary diagnosis, accessibility to antifibrotics and environment** Marium Naqvi (London, United Kingdom), Thomas Simpson, Alex West
PA1727	**Impact of pulmonary fibrosis on the lives of patients and carers in Ireland in 2022** Colin Edwards (Dublin, Ireland), Nicola Cassidy, Daniel Sheahan, Gemma O'Dowd, Lindsay Brown, Katherine O'Reilly
PA1728	**Nintedanib side effect risk stratification: targeting nurse support at a single UK prescribing centre** Carmine Ruggiero (Oxford, United Kingdom), Shakila Hussain, Karen Parsons, Sarah Poole, Michael Avoseh, Emily Fraser, Ling-Pei Ho, Peter Saunders, Rachel K. Hoyles
PA1729	**Factors associated with non-intervention with antifibrotic agents in IPF patients** Maki Asami (Ube (Yamaguchi), Japan), Kazuki Hamada, Takeshi Abe, Keiji Oishi, Tsunahiko Hirano, Yoshiyuki Asai, Kazuto Matsunaga
PA1730	**Trans-bronchial cryobiopsy is superior to forceps biopsy for diagnosing both fibrotic and non-fibrotic interstitial lung diseases** Ophir Freund (Tel Aviv, Israel), Ori Wand, Sonia Schneer, Nevo Barel, Tamar Shalmon, Sarah Borsekofsky, Tzlil Hershko, Evgeni Gershman, Yochai Adir, Amir Bar-Shai, David Shitrit, Avraham Unterman
PA1731	**Interest of transbronchial lung cryobiopsies in patients with a HRCT pattern of probable UIP** Charlotte Menigoz (Nantes, France), Antoine Moui, Christine Sagan, Frédérique Corne, Nathanaël Carlier, Valentin Patarin, Claire Defrance, Renan Liberge, Olivier Morla, Arnaud Cavailles, Laurent Cellerin, F.Xavier Blanc, Stéphanie Dirou
PA1732	**Impact of a nurse-led antifibrotic prescribing service at a single interstitial lung disease specialist centre in the UK.** Helen Morris (Manchester (Greater Manchester), United Kingdom), Katie Zakis, Jenna Swale, Annie Barker, Theresa Garfoot, Kate Newman, Holly Montgomery, Janet Johnson, Pilar Rivera-Ortega
PA1733	**A retrospective analysis assessing the impact of blood monitoring for antifibrotic therapy prescribed for idiopathic pulmonary fibrosis and progressive pulmonary fibrosis** Marium Naqvi (London, United Kingdom), Alexandra Lawrence, Annabel Healey, Joanne Dallas, Laura Chapman, Alex West
PA1734	**Correlation of pulmonary functional tests with data from thoracic high resolution tomography using lung texture analysis software in ILD.** Jacobo Sellares Torres (Barcelona, Spain), Elvis Paul Matheus Ramírez, Maria Noboa Sevilla, Maria Benegas Urteaga, Alejandro Frino Garcia, Juanissi Turaren Gonzalez, Nancy Perez Rodas, Fernanda Hernandez Gonzalez, Marcelo Sanchez Gonzalez

PS-17 in poster area — Session 193 — 16:00 - 17:30

Poster session: Sarcoidosis: challenges in disease assessment and management of complications

Disease(s) : Interstitial lung diseases | Airway diseases | Sleep and breathing disorders

Method(s) : Imaging | General respiratory patient care | Epidemiology | Pulmonary function testing | Physiology | Pulmonary rehabilitation | Public health

Tag(s) : Clinical

Chairs : Paolo Spagnolo (Padova (PD), Italy), Dominique Israel-Biet (Paris, France)

PA1735	**Long-term effectiveness of infliximab treatment in refractory sarcoidosis** Angéla Mikáczó (Nyírábrány, Hungary), Ildikó Horváth, László Brugós, Anna Sárközi
PA1736	**Lung Texture Analysis to phenotype Sarcoidosis** Andrew McCorkell (Belfast, United Kingdom), Cormac Mccool, Victoria Steele, Lisa Graham, Rory Kelly, Eoin Murtagh, Paul Minnis
PA1737	**Survival in sarcoidosis – 11 years of observation of 2625 patients.** Piotr Boros (Warszawa, Poland), Magdalena Martusewicz-Boros
PA1738	**Cardiac and brain involvement in Sarcoidosis, Data from the Austrian registry** Claudia Guttmann-Ducke (Wien, Austria), Christopher Milacek, Andreea-Nicoleta Avram, Dietrich Beitzke, Daniela Gompelmann, Marco Idzko
PA1739	**SARCOIDOSIS AND EMERGENCY HOSPITALIZATION : CAUSES AND PROGNOSIS** pierre gazengel (Bobigny, France), Florence Jeny, Sharon Mendes, Raphael Hindre, Julien Caliez, Olivia Freynet, Cecile Rotenberg, Morgane Didier, Frederic Adnet, Robin Dhote, Yves Cohen, Yurdagul Uzunhan, Diane Bouvry, Hilario Nunes
PA1740	**Pulmonary rehabilitation in sarcoidosis: a systematic review and meta-analysis** Estrella Caballeria Lamelas (Badalona (Barcelona), Spain), Xavier Alsina Restoy, Rodrigo Torres Castro, Elena Gimeno Santos, Lilian Solis Navarro, Joel Francesqui, Fernanda Hernández González, Manel Ramos Casals, Isabel Blanco, Jacobo Sellarès
PA1741	**Severe sarcoidosis: Management and prognosis** Rihab Jebali (Tunis, Tunisia), Soumaya Ben Saad, Amani Ben Mansour, Azza Slim, Hafaoua Daghfous, Fatma Tritar
PA1742	**Monitoring thoracic sarcoidosis with cardiopulmonary exercise test and spirometry, their insights to nuclear imaging inflammatory activity** Chiara Torregiani (Trieste (TS), Italy), Matia Reale, Marco Confalonieri, Barbara Ruaro, Guido Maiello
PA1743	**Characteristics of sarcoidosis patients admitted to hospital – one center experience** Karol Bączek (Łódź, Poland), Joanna Miłkowska-Dymanowska, Wojciech Piotrowski
PA1744	**Therapeutic doses of efzofitimod significantly improve multiple pulmonary sarcoidosis efficacy measures** Nelson Kinnersley (Harpenden, United Kingdom), Abhijeeth Chandrasekaran, Pavithra Ramesh, Vis Niranjan, Sanjay Shukla, Robert P Baughman
PA1745	**Multicenter, randomized, double-blind, phase 2 study to assess the efficacy and safety of OATD-01, an oral inhibitor of chitinase-1 for the treatment of active pulmonary sarcoidosis.** Zbigniew Zasłona (Warszawa, Poland), Theodore Charitos, Barbara Dymek, Tomasz Rejczak, Adam Gołebiowski, Piotr Iwanowski, Marta Dudek, Samson Fung
PA1746	**Prevalence of refractory pulmonary sarcoidosis in Ukraine** Ievgeniia Merenkova (Kyiv, Ukraine), Volodymyr Gavrysyuk, Yaroslav Dziublyk, Galyna Gumeniuk
PA1747	**Evaluation of bone mineral density and fracture risk in sarcoidosis population** Paolo Cameli (Siena (SI), Italy), Carla Caffarelli, Antonella Al Refaie, Elisa Giglio, Giulio Manzana, Caterina Mondillo, Yari Noacco, Carmela Olivieri, Laura Bergantini, Miriana D'Alessandro, Elena Bargagli, Stefano Gonnelli
PA1748	**Prevalence and evolution of airway obstruction in sarcoidosis** Gianmarco Gasparini (Jesi, Italy), Lara Letizia Latini, Federica Agosti, Federico Mei, Lina Zuccatosta, Francesco Maria Porcarelli, Francesca Gonnelli, Martina Bonifazi
PA1749	**Clinical characterisation of thoracic sarcoidosis in Spain** Joel Francesqui (Barcelona, Spain), Elena Bollo, Ana Villar, Pablo Flórez, Eva Balcells, Gema Castaño, Javier Pinillos, Raul Godoy, Belén López-Muñiz, María José Soler, Diego M. Castillo, Albert Rafecas, Pablo Mariscal, Paloma Millan, Karina Portillo, Jacobo Sellares
PA1750	**Sarcoidosis and Obstructive Sleep Apnoea: CPAP's impact on daytime sleepiness and fatigue** Lorena Gallotti (Naples, Italy), Jessica Esposito, Stefania De Marco, Lucia Abbagnale, Marta Coppola, Claudio Candia, Anna Agnese Stanziola
PA1751	**Prevalence of cardiac involvement in a cohort of patients with Sarcoidosis** Lorena Gallotti (Naples, Italy), Claudio Candia, Francesco Coppa, Santo Dellegrottaglie, Anna Agnese Stanziola
PA1752	**Clinical and radiological presentation of patients treated for sarcoidosis** Nicol Bernardinello (Trecenta (RO), Italy), Simone Petrarulo, India Sofia Dalla Rosa, Gioele Castelli, Elisabetta Cocconcelli, Elisabetta Balestro, Paolo Spagnolo

PA1753 **Prevalence of comorbidities in patients with sarcoidosis: a single center study**
Lorena Gallotti (Naples, Italy), Claudio Candia, Filomena Tafuro, Ciro Apicella, Ferdinando Damato, Anna Agnese Stanziola

PA1754 **Serum D-dimer levels as an activity marker in sarcoidosis**
Halil Yanardag (Istanbul, Turkey), Muammer Bilir, Cuneyt Tetikkurt, Emre Yanardag

PS-18 in poster area Session 194 16:00 - 17:30

Poster session: Physiology in pulmonary hypertension

Disease(s) : Pulmonary vascular diseases

Method(s) : Physiology Imaging Pulmonary function testing Pulmonary rehabilitation

Tag(s) : Clinical

Chairs : Anton Vonk Noordegraaf (Amsterdam, Netherlands), Stéphanie Saxer (Zürich, Switzerland)

PA1755 **Clinical relevance of exercise pulmonary arterial compliance**
Katarina Zeder (Graz, Austria), Chiara Banfi, Vasile Foris, Teresa Sassmann, Andrea Berghold, Horst Olschewski, Gabor Kovacs, Philipp Douschan

PA1756 **Is the estimation of peak oxygen consumption reliable using the six-minute walk test in patients with pulmonary hypertension?**
Estrella Caballeria Lamelas (Badalona (Barcelona), Spain), Rodrigo Torres Castro, Elena Gimeno Santos, Maria Caridad Mata Salvador, Agustín Roberto García, Xavier Alsina Restoy, Clara Martín Ontiyuelo, Ana María Ramírez Gallardo, Joan Albert Barberà, Isabel Blanco

PA1757 **A qualitative exploration of pulmonary hypertension patients' views and experience with a remotely delivered home-based exercise program**
Ciara McCormack (Navan, Ireland), Brona Kehoe, Niall Moyna, Sarah Cullivan, Brian Mccullagh, Sean Gaine, Sarah Hardcastle

PA1758 **The one-minute sit-to-stand test (1-min STST) and its relationship to quality of life (QoL) in patients with pulmonary hypertension (PH)**
Christina Kronberger (Vienna, Austria), Roya Anahita Mousavi, Begüm Öztürk, Robin Willixhofer, Roza Badr Eslam

PA1759 **Inspiratory muscle training in patients with pulmonary hypertension: a double-blind randomized controlled trial**
Elaine Vieira (Sao Caetano do Sul (SP), Brazil), João Vitor Rolim, Ivan Ivanaga, Priscila Sperandio, Eloara Ferreira, Jaquelina Ota-Arakaki, Luiz Eduardo Nery, Roberta Ramos

PA1760 **Reproducibility of CPET variables in subjects with pulmonary arterial hypertension: Preliminary data from ADVANCE CAPACITY**
Carrie Ferguson (Torrance, United States), Janos Porszasz, Louis Holdstock, Youlan Rao, David Yehle, Raymond Benza, Ronald Oudiz

PA1761 **A pilot study of a digital 1-Minute Walk Test as a novel decentralised endpoint in pulmonary hypertension research**
Joseph Newman (Cambridge, United Kingdom), Lucy Robertson, Jean Gosbee, Gary Polwarth, Shaun Clayton, Iain Armstrong, Elisa Ferrer-Mallol, Sandra Komarzynski, Elin Haf Davies, Mark Toshner

PA1762 **Perceived barriers to physical activity in pulmonary hypertension**
Layse Nakazato (Campinas, Brazil), Vitória Veronez, Tatiana Kiyota, Paulo Mendes, Marcos Moreira, Mônica Pereira

PA1763 **Usefullness of Heart Rate variability measurement during 6-MWT in Pulmonary Arterial Hypertension**
Andrea Lombi (Vedano al Lambro (MB), Italy), Chiara Milano, Giulia Pittalis, Marta Tundo, Lorenzo Volpiano, Riccardo Ripamonti, Paola Alfieri, Paola Faverio, Fabrizio Luppi, Giuseppe Paciocco

PA1764 **Correlation between lung vessel morphology and prognostic markers in pre-capillary pulmonary hypertension**
Michael Pienn (Graz, Austria), Roman J. Gertz, Felix Gerhardt, Jan R. Kröger, Hasan Zaytoun, Robert P. Reimer, Anil Kaplan, Max Wissmüller, Gabor Kovacs, Stephan Rosenkranz, Horst Olschewski, Alexander C. Bunck

PA1765 **Increased right ventricular myocardial strain in unaffected adults carrying gene mutations predisposing to pulmonary arterial hypertension**
Eszter Nóra Tóth (Amsterdam, Netherlands), Lucas Celant, Samara Jansen, Lilian Meijboom, Frances S De Man, Anton Vonk Noordegraaf, Harm Jan Bogaard

PA1766 **Impact of pulmonary arterial hypertension therapies on gas exchange in portopulmonary hypertension**
Thomas Lacoste-Palasset (Saint mande, France), Antoine Beurnier, Audrey Baron, Marie-Caroline Certain, Xavier Jaïs, Anne Roche, David Montani, Marc Humbert, Olivier Sitbon, Laurent Savale

PA1767 **The impact of tricuspid regurgitation on the non-invasive assessment of stroke volume derived from cardiac magnetic resonance in pulmonary hypertension**
Andrea Baccelli (Milano, Italy), Deepa Gopalan, Gulammehdi Haji, Rachel Davies, Michele Mondoni, Stefano Centanni, Luke Howard, Francesco Lo Giudice

PA1768 **Relationship between right ventricular longitudinal strain using cardiac magnetic resonance and haemodynamics in patients with pulmonary hypertension**
Yoshihiro Sato (Toyoake, Japan), Shigefumi Fukui, Hideki Kawai, Akira Yamada, Masayoshi Sarai, Hideo Izawa

PA1769 **Right ventricular strain-time curves in patients with pulmonary arterial hypertension – an exploratory analysis**
Julian Pott (Hamburg, Germany), Dora Csengeri, Jonna Ostermann, Hans Klose, Christoph Sinning, Lars Harbaum

PA1770 **Prognostic impact of RV-PA coupling in patients with mild-or exercise pulmonary hypertension**
Teresa Sassmann (Graz, Austria), Antonia Eger, Vasile Foris, Nikolaus John, Katarina Zeder, Manuel Richter, Khodr Tello, Horst Olschewski, Gabor Kovacs, Philipp Douschan

PA1771 **Right ventricular longitudinal strain using cardiac magnetic resonance for risk stratification in patients with pulmonary hypertension**
Yoshihiro Sato (Toyoake, Japan), Shigefumi Fukui, Hideki Kawai, Akira Yamada, Masayoshi Sarai, Hideo Izawa

PA1772 **Concordance of right ventricular evaluation by pocket ultrasound and transthoracic echocardiography in patients with pulmonary hypertension.**
Pamela Mercado velazquez (mexico city, Mexico), Estrella Jor Esteban Estrella, José Luis Hernández Oropeza, Ivette Buendía Roldán, Tatiana Sofía Rodríguez Reyna, Consuelo Orihuela Sandoval, Jesús Rodríguez Andoney

PA1773 **The effect of high altitude (2500m) on incremental cycling exercise in patients with pulmonary vascular disease. A randomized controlled cross-over trial**
Julian Müller (Zürich, Switzerland), Simon R. Schneider, Meret Bauer, Laura Mayer, Lea Lüönd, Tanja Ulrich, Michael Furian, Aglaia Forrer, Esther I. Schwarz, Konrad E. Bloch, Mona Lichtblau, Silvia Ulrich

PA1774 **Pulmonary arterial wedge pressure increase during exercise in patients with pulmonary vascular disease**
Julian Müller (Zürich, Switzerland), Laura Mayer, Simon R. Schneide, Anna Titz, Esther I. Schwarz, Stephanie Saxer, Michael Furian, Ekkehard Grünig, Silvia Ulrich, Mona Lichtblau

PS-19 in poster area Session 195 16:00 - 17:30

Poster session: Pleural interventions and beyond: what's new?

Disease(s) : Respiratory critical care | Thoracic oncology | Airway diseases | Interstitial lung diseases

Method(s) : Endoscopy and interventional pulmonology | General respiratory patient care | Physiology | Surgery

Tag(s) : Clinical

Chairs : Anand Sundaralingam (Oxford, United Kingdom)

PA1775 **Retrospective risk factor analysis for re-expansion pulmonary oedema after therapeutic pleural effusion drainage at a single centre**
Sharan Kumar (Cambridge, United Kingdom), Emilia Swietlik, Jurgen Herre

PA1776 **Bronchial fistulas complicating pneumonectomy: predictors and treatment**
selma madhi (Ariana, Tunisia), Imen Bouassida, Mahdi Abdennadher, Hazem Zribi, Sonia Ouerghi, Adel Marghli

PA1777 **Retrospective comparison of the clinical outcomes between low and standard starting doses of intrapleural tissue plasminogen activator in pleural infection**
Ka Pang Chan (Hong Kong, Hong Kong), Kwun Cheung Ling, Christopher Chan, Charlotte Ho Ying Lau, Ka Ching Ng, Lai Ping Lo, Wing Ho Yip, Jenny Chun Li Ngai, Kin Wang To, Fanny Wai San Ko, David Shu Cheong Hui

PA1778 **Preventing future chest drain related deaths**
Tanjila Khan (Harrow, United Kingdom), Clare Ross, Rudy Sinharay, Mirae Park, Anne O'Mahony, Christina Torrealba, Carl Reynolds

PA1779 **Treatment and clinical outcomes in pleural infection: preliminary results from a multi-centre study**
Chiara Fattori (Ancona, Italy), Luca Piergentili, Martina Bonifazi, Francesca Barbisan, Gaia Goteri, Lina Zuccatosta, Alessandro Di Marco Berardino, Michele Sediari, Francesca Gonnelli, Laura Cirilli, Francesco Maria Porcarelli, Piero Emilio Balbo, Elena Paracchini, Giovanna Elisiana Carpagnano, Stefano Gasparini, Giampietro Marchetti, Federico Mei

PA1780 **To determine the efficacy of autologous blood patch therapy in reducing air leak in secondary spontaneous pneumothorax.**
Jenny Chun Li Ngai (Hong Kong, Hong Kong), Wai Lam Law, Wai Kei Lam, Ka Pang Chan, Susanna Ss Ng, Wing Ho Yip, Rachel L.P Lo, Joyce K.C Ng, Chin Wing Yu, Fanny W.S Ko, Johnny W Chan, David S.C Hui, Y C G Lee

PA1781 **Safety of Ultrasound-guided Medical Thoracoscopy in Patients with Minimal Pleural Effusion**
Juei Yang Ma (Kaohsiung, Taiwan), Ying Ming Tsai, Wei An Chang, Pei Chien Tsai, Yen Lin Chiu, Ya-Ling Hsu, Yung-Chi Huang, Chai-Tung Ong

PA1782 **Intrapleural instillation of r-tPA in complicated parapneumonic effusion or empyema: a single center experience**
Ourania Papaioannou (Patras, Greece), Electra Koulousousa, Theodoros Karampitsakos, Panagiota Tsiri, Georgios Tsirikos, Vasilina Sotiropoulou, Eva Theochari, Ioannis Christopoulos, Matthaios Katsaras, Eirini Zarkadi, Elli Malakounidou, Fotios Sampsonas, Argyrios Tzouvelekis

PA1783 **Combination of erector spinae nerve block (ESP) and serratus plane nerve block (SPB) in opioid-free medical thoracoscopy (MT).**
Giuseppe Adamo (PALERMO, Italy), Marta Amata, Giuseppe Arcoleo, Maria Rosaria Bonsignore, Patrizia Mazzotta, Francesco Tarantino, Baldassare Renda

PA1784 **Implementation of a proforma for invasive pleural procedures at a district general hospital in the United Kingdom**
Swetha John (Finchampstead, United Kingdom), Nur Ilyana Aini Mohamed Jamil, Chung-Mei Maggie Cheung, Dipak Mukherjee, Kanwar Pannu

PA1785 **Diagnostic Utility of Medical Thoracoscopy in Undiagnosed Pleural effusion**
Ranganath Thippanahalli Ganga (Raipur (Chhattisgarh), India), Vikas Kumar, Ajoy Behera, Dibakar Sahu, Rakesh Gupta, Amit Rath, Saisoma Kiran

PA1786 **High flow oxygen vs standard management during medical thoracoscopy - a randomised controlled trial**
Andrei Darie (Basel, Switzerland), Leticia Grize, Kathleen Jahn, Anna Salina, Jonathan Röcken, Matthias Herrmann, Maria Pascarella, Vivian Suarez, Werner Strobel, Michael Tamm, Daiana Stolz

PA1787 **Regional review of practice in endobronchial stenting in central airways obstruction**
Daniel Crowle (Callington, United Kingdom), Parniya Arooj, Joel Eyekpegha, Osama Elzain, Mohammad Awan, Francesco Sellitri, Priyadharshanan Ariyaratnam, Joseph Rahamim, Adrian Marchbank, Cyrus Daneshvar

PA1788 **To evaluate diagnostic yield of small cup biopsy forceps for trans bronchial lung biopsy in adult patients of post viral fibrotic lung disease in post viral/covid era.**
Vijay Narain Tyagi (Meerut (Uttar Pradesh), India), Charul Dabral, Manya Narain Tyagi

PA1789 **A study of airway abnormalities and characterization of lesions at flexible bronchoscopy in Nepalese patients presenting with chronic cough with normal radiological imaging**
Rejina Shahi (dharan, Nepal), Deebya Raj Mishra, Narendra Bhatta, Avatar Verma, Gunjan Regmi

PA1790 **EBUS-TBNA in octogenarians: Diagnostic yield, sedation and safety. An 8 month, single center, experience**
Fotios Sampsonas (Patra, Greece), Georgios Tsirikos, Matthaios Katsaras, Theodoros Karampitsakos, Ourania Papaioannou, Panagiota Tsiri, Ilektra Koulousousa, Vasilina Sotiropoulou, Eirini Zarkadi, Elli Malakounidou, Argyrios Tzouvelekis

PA1791 **Conscious sedation in bronchoscopy:A randomized controlled trial**
Lenda Ben Hmida (Rades, Tunisia), Islam Mejri, Marwa Kacem, Selsabil Daboussi, Samira Mhamdi, Chiraz Aichaouia, Zied Moatemri

PA1792 **EBUS-TBNA for the diagnosis of lung parenchymal lesions: a 10 year analysis**
Abhimanyu Lal (Solihull (West Midlands), United Kingdom), Isobel Dugdale, See Ling Tan, Muhammad Niazi

PA1793 **Diagnostic yield and safety of EBUS-TBNA: single centre experience over 10 years**
Abhimanyu Lal (Solihull (West Midlands), United Kingdom), Isobel Dugdale, See Ling Tan, Muhammad Niazi

PS-2 in poster area Session 196 16:00 - 17:30

Poster session: Respiratory muscle function and rehabilitation

Disease(s) : Interstitial lung diseases | Sleep and breathing disorders | Airway diseases | Pulmonary vascular diseases

Method(s) : Imaging | Physiology | Pulmonary function testing | Pulmonary rehabilitation | Cell and molecular biology | General respiratory patient care | Palliative care

Tag(s) : Clinical

Chairs : Christina M. Spengler (Zürich, Switzerland), Mathieu Marillier (Echirolles, France)

PA1794 **Breathing Under Pressure: An exploratory analysis of differences in respiratory muscle activity and work of breathing during exercise in COPD and ILD**
Jeferson George Ferreira (São Paulo (SP), Brazil), Vinícius Carlos Iamonti, Mayra Caleffi Pereira, Renata Pletsch-Assunção, Marcelo Ceneviva Macchione, Pauliane Vieira Santana, Letícia Zumpano Cardenas, Pedro Caruso, Carlos Roberto Ribeiro Carvalho, André Luis Pereira Albuquerque

PA1795 **Muscle oxidative capacity is not impaired in smokers with preserved ratio impaired spirometry**
Alessandra Adami (Kingston, United States), Robert A. Calmelat, Richard Casaburi, Harry B. Rossiter

PA1796	**Effect of beta-alanine supplementation on histidine-containing dipeptides in persons with COPD.** Jana De Brandt (Umeå, Sweden), Thibaux Van Der Stede, Jan Spaas, Sarah De Jager, Chris Burtin, Martijn A. Spruit, Wim Derave
PA1797	**High muscle quality index in early follow up predicts 1 year recovery following hospitalisation for COVID-19** Hamish Mcauley (Leicester, United Kingdom), Cara Flynn, Lorna Latimer, George Mills, Molly Baldwin, Charlotte E Bolton, Christopher E Brightling, Omer Elneima, Paul L Greenhaff, William D-C Man, Sally J Singh, Michael Steiner, Louise V Wain, Janet M Lord, Rachael A Evans, Neil J Greening
PA1798	**Diaphragm mobility in patients with systemic sclerosis** Anja Ljilja Posavec (Zagreb, Croatia), Boris Karanović, Ivana Ježić, Renata Huzjan Korunić, Josip Tečer, Stela Hrkač, Joško Mitrović, Nevenka Piskač Živković
PA1799	**A simplified method of twitch mouth pressure measurement for the diagnosis of diaphragmatic dysfunction** Georgia Mitropoulou (Prilly, Switzerland), Maura Prella, Raphaël Heinzer
PA1800	**Sarcopenic muscle extracellular matrix dictates muscle adaptations in a 3D-engineered muscle model of COPD** Davina C M Simoes (Newcastle upon Tyne, United Kingdom), Efpraxia Kritikaki, Gerasimos Terzis, Ioannis Vogiatzis
PA1801	**Can 05 minutes of daily 'Om' chanting increase the respiratory muscle endurance?** NEERJA SHASTRI (Jaipur, India), Ketaki Poorey, Vishwas Mahajan
PA1802	**Muscle oxidative capacity is not different in COPD with and without treated chronic respiratory failure** Alessandra Adami (Kingston, United States), Michele Vitacca, Harry B. Rossiter, Alessandro Cavicchia, Carla Simonelli, Massimo Venturelli, Mara Paneroni
PA1803	**Effect of PEP therapy on lung volumes and health outcomes in adults with chest trauma: a systematic review and meta-analysis** Kerrie Saliba (Hammondville, Australia), Felicity Blackstock, Bredge Mccarren, Clarice Tang
PA1804	**Blunted vascular response to pulmonary rehabilitation in COPD patients and impaired exercise-induced mobilization of endothelial-colony forming cells** Elodie Desplanche (Montpellier, France), Léo Blervaque, Sven Günther, Maxime Gruest, Aurélien Philippe, Jeanne Rancic, Nicolas Gendron, Christophe Hédon, Antonia Perez-Martin, Anne Virsolvy, Olivier Cazorla, Yves Dauvilliers, Maurice Hayot, Arnaud Bourdin, Elisa Rossi, David Smadja, Farès Gouzi
PA1805	**The effect of rehabilitation on total lung volume and blood vessel volumes in long covid** Wendel Dierckx (Kontich, Belgium), Kris Ides, Yinka De Meyer, Erik Franck, Eline Lauwers, Benjamin Lavon, Jan De Backer, Bita Hajian, Wilfried De Backer
PA1806	**Effect of Exercise Training on Prognosis in Community-Acquired Pneumonia: A Randomised Controlled Trial** Camilla Koch Ryrsø (Frederiksberg, Denmark), Daniel Faurholt-Jepsen, Christian Ritz, Maria Hein Hegelund, Arnold Matovu Dungu, Bente Klarlund Pedersen, Rikke Krogh-Madsen, Birgitte Lindegaard
PA1807	**Positional Changes in Respiratory Mechanics in Patients with Severe Obesity** Michael Cheng (Broadway (NSW), Australia), Anne Rossel, Amanda Piper, Patrick Murphy, Nicholas Hart, Joerg Steier
PA1808	**Dissociation between dyspnea grade and maximum oxygen consumption** Mercedes Carrasco Sánchez (Móstoles, Madrid, Spain), Valentina Pérez Méndez, Anna Rebeca Hernández González, Javier Carrillo Hernández-Rubio, Angelika Szabó, Estefanía Llopis Pastor, Mercedes García-Salmones Martín
PA1809	**Acute mountain sickness in women – A pilot study** Aijan Taalaibekova (Bishkek, Kyrgyzstan), Michelle Meyer, Stefanie Ulrich, Gulzada Mirzalieva, Maamed Mademilov, Talant M. Sooronbaev, Silvia Ulrich, Konrad E. Bloch, Michael Furian
PA1810	**On the beneficial effects of supplemental O2 in fibrotic interstitial lung disease: did we forget the brain?** Mathieu Marillier (Echirolles, France), Mathieu Gruet, Anne-Catherine Bernard, Benoit Champigneulle, Samuel Vergès, Onofre Moran-Mendoza, J. Alberto Neder
PA1811	**Impact of oxygen therapy and noninvasive ventilation on sympathetic drive in COPD patients.** Binaya Regmi (Aachen, Germany), Faniry Ratsimba, Benedikt Jörn, Mehdi Senol, Oscar Gorol, Lukas Niekrenz, Ayham Daher, Vaughan Macefield, Michael Dreher, Jens Spiesshoefer
PA1812	**Impact of blunted cerebral oxygenation on COPD patients' functional performance** Afroditi Boutou (Thessaloniki, Greece), Marieta Theodorakopoulou, Aggelos Koutlas, Andreas Zafeiridis, Panteleimon Sarafidis, Konstantina Dipla
PA1813	**Late Breaking Abstract - Inspiratory muscle strength training improves dyspnea related to diaphragm muscle weakness in patients with long COVID-19** Jens Spiesshoefer (Aachen, Germany), Binaya Regmi, Rainer Glückl, Michael Dreher

PS-20 in poster area Session 197 16:00 - 17:30

Poster session: Ultrasound in respiratory medicine

Disease(s) : Interstitial lung diseases | Respiratory critical care | Sleep and breathing disorders | Thoracic oncology | Airway diseases

Method(s) : Imaging | Respiratory intensive care | General respiratory patient care | Pulmonary rehabilitation | Endoscopy and interventional pulmonology | Epidemiology | Public health | Surgery

Tag(s) : Clinical

Chairs : Maged Hassan (Alexandria, Egypt), Casper Falster (Odense, Denmark)

PA1814	**Validity evidence of the 2022 ERS thoracic ultrasound Objective Structured Clinical Examination (OSCE)** Pia Iben Pietersen (Odense C, Denmark), Rahul Bhatnagar, Freja Andreasen, Lars Konge, Christian Laursen, Najib M. Rahman, Anders B. Nielsen
PA1815	**DIAPHRAGMATIC CONTRACTION SPEED AT FOLLOW-UP OF PATIENTS ADMITTED FOR MYASTHENIA GRAVIS** Santos Ferrer Espinosa (Valencia, Spain), Antonio Quezada Reynoso, Jesus Sancho Chinesta, Juan Carbonell Asins, Jaime Signes-Costa Miñana
PA1816	**Use of Diaphragmatic Ultrasound to evaluate respiratory function in patients with Amyotrophic Lateral Sclerosis** Isabel Martínez González-Posada (Oviedo, Spain), Juan Cascón Hernández, Pablo Lozano Cuesta, Ramón Fernández Alvarez, Lucía García Alfonso, Francisco Julián López González, Miguel Ariza Prota, Inés Ruiz Álvarez, Ina Guerassimova, Ángela Lanza Martínez, Laura Martínez Vega, Juan Nieves Salceda, Laura Abad Chamorro, Eduardo Sanchez Vázquez, Patricia Álvarez Alvarez, Maria Rodil Riera
PA1817	**Survey on lung ultrasound usage by portuguese pulmonologists** Maria Beatriz Dias Ferraz (Porto, Portugal), Bruno S. Silva, Filipa Correia, Maria Inês Costa, Maria Esteves Brandão, Nuno Cortesão
PA1818	**Pleural irregularity and diaphragm mobility among patients with systemic sclerosis** Anja Ljilja Posavec (Zagreb, Croatia), Boris Karanović, Ivana Ježić, Renata Huzjan Korunić, Nevenka Piskač Živković, Josip Tečer, Stela Hrkač, Joško Mitrović
PA1819	**Lung ultrasound based prediction of CT-scan Severity Score in COVID-19** Panaiotis Finamore (Roma (RM), Italy), Emanuele Gilardi, Moises Muley, Tommaso Grandi, Silvia Navarin, Michela Orrù, Chiara Bucci, Simone Scarlata, Francesco Travaglino, Federica Sambuco
PA1820	**Comparison of lung ultrasound findings in patients with pulmonary tuberculosis and lobar pneumonia: a case-control study.** Uma Devaraj (Bangalore (Karnataka), India), Priya Ramachandran, Kavitha Venkatnarayan, Chitra Veluthat, Uma Maheswari K
PA1821	**Role of Lung Ultrasound in detection and assessment of severity of ILD in patients with Systemic sclerosis** Richa Gupta (Vellore (Tamil Nadu), India), Davis Joseph K J, Avinash Nair, John Mathew, Manisha Mane
PA1822	**Diaphragm sonography as an educational aid in CPAP and NIMV treatment** Angelo Longoni (Mariano Comense (CO), Italy), Carla Bassino, Tiziana Cappelletti, Francesca Frassanito, Lorenza Fusetti, Giacomo Concas, Mariele Vago, Antonio Paddeu
PA1823	**US training system for ultrasound-guided thoracic interventions** Ana Belén Llanos Gonzalez (La Orotava, Spain), Natalia Arteaga-Marrero, Enrique Villa, Orlando Acosta Fernández, Juan Bautista Ruiz-Alzola, Javier González-Fernández
PA1824	**Diagnostic accuracy of lung ultrasound with elastography in predicting malignant origin of pleural effusions in an emergency department** Rune Wiig (Odense C, Denmark), Casper Falster, Niels Jacobsen, Stefan Posth, August Emil Licht, Christian Laursen
PA1825	**Quantitative US echogenicity to differentiate exudate from transudate pleural effusion** Alaa Amin (Alexandria, Egypt), Mona El Hoshy, Maged Hassan
PA1826	**Difference in strain elastosonography between benign and malignant peripheral lung lesions** Ahmed Farag Abouelnour (Alexandria, Egypt), Mona Saeed El-Houshy, Essam Gouda Hassanein, Ayman Ibrahim Baess, Rania Ahmad Sweed, Doaa Mokhtar Emara
PA1827	**A retrospective review of the sonographic features of rheumatoid pleuritis.** Hui Guo (Northcote (VIC), Australia), Beenish Iqbal, Dinesh Addala, Anand Sundaralingam, Poppy Denniston, Najib Rahman
PA1828	**Replacing fluoroscopy with ultrasound to evaluate diaphragm excursion? A method comparative study.** Søren Helbo Skaarup (Aarhus C, Denmark), Peter Juhl-Olsen, Brian Bridal Løgstrup

PA1829 **Assessing the accuracy of pleural puncture sites as determined by clinic-radiological examination versus Lung Ultrasound- a prospective study.**
Naveen Dutt (Jodhpur (Rajasthan), India), Shahir Asfahan, Nishant Kumar Chauhan, Ramniwas -, Mahendra Kumar Garg, Pawan Kumar Garg, Gopal Krishna Bohra, Nitin Kumar Bajpai

PA1830 **Point-of-care ultrasound for the assessment of subglottic and cervical tracheal stenosis: A Prospective, Multicenter, Exploratory Study**
Gang Hou (Beijing, China), Jieru Lin, Mingming Deng

PA1831 **Validation of transthoracic shear-wave ultrasound elastography in diagnosing pleural lesions**
Yao-Wen Kuo (Taipei City, Taiwan), Yen-Lin Chen, Huey-Dong Wu, Hao-Chien Wang

PA1832 **Evaluation Of Atherosclerosis As A Risk Factor in COPD Patients By Measuring The Carotis Tunica Intima-Media Thickness.**
Ali Firincioglulari (Nicosia, Cyprus), Hakan Ertürk, Mujgan Firincioglulari, Cigdem Biber

PA1833 **Comparison of diagnostic yield and complications in ultrasound-guided thoracocentesis versus non-ultrasound guided thoracocentesis in a Level 3 Hospital**
Niamh Boyle (Celbridge, Ireland), Jack Mccarthy, Caitlyn Paclibar, Colm Quigley

PS-3 in poster area Session 198 16:00 - 17:30

Poster session: New insights and biomarkers in chronic obstructive pulmonary disease and epithelial disorders

Disease(s) : Airway diseases Thoracic oncology Interstitial lung diseases

Method(s) : Cell and molecular biology Epidemiology Pulmonary function testing General respiratory patient care Physiology

Tag(s) : Clinical, Translational

Chairs : Anita Somborac Bačura (Zagreb, Croatia), Chair to be confirmed

PA1834 **Exercise improves muscle function in COPD by affecting MSTN expression**
Lijiao Zhang (Kunming, China), Jingge Qu, Danyang Li, Yafei Rao, Yongchang Sun

PA1835 **Genetic predisposition for low functional status in COPD**
Rui Marçalo (Aveiro, Portugal), Guilherme Rodrigues, Miguel Pinheiro, Sonya Neto, Sofia L. Marques, Paula Simão, Vitória Martins, Lília Andrade, Maria Aurora Mendes, Vera Afreixo, Gabriela Moura, Alda Marques

PA1836 **Clinically blind proteomic clustering is able to identify COPD exacerbations**
César Jessé Enriquez-Rodríguez (Barcelona, Spain), Carme Casadevall, Sergi Pascual-Guardia, Diego Rodríguez-Chiaradia, Esther Barreiro, Joaquin Gea

PA1837 **Identification of genes and master regulators driving COPD progression**
Sobia Idrees (Sydney, Australia), Prabuddha Pathinayake, Alen Faiz, Peter Wark, Philip Hansbro

PA1838 **D-dimer in COPD out-patients: Distribution, association with mortality and effect modification by anticoagulant therapy. A preplanned, published protocol cohort study.**
Peter Kamstrup (Hellerup, Denmark), Pradeesh Sivapalan, Christian Rønn, Ema Rastoder, Daniel Modin, Anna Kjær Kristensen, Elisabeth Bendstrup, Rikke Sørensen, Tor Biering-Sørensen, Charlotte Ulrik, Jørgen Vestbo, Jens-Ulrik S. Jensen

PA1839 **Smoking-dependent association of serum brain-derived neurotrophic factor (BDNF) with the pulmonary function test parameters in COPD**
Elina Aleksandrova (Stara Zagora, Bulgaria), Dimo Dimov, Tanya Tacheva, Kahan Celik, Tatyana Vlaykova

PA1840 **Identification of a panel of circulating miRNAs for the detection of COPD**
Noemi Cerón Pisa (Palma, Illes Balears, Spain), Amanda Iglesias, Aina Martín-Medina, Meritxell López, Josep Luis Valera, Angel Rios, Rocío Martínez, Aarne Fleischer, Nuria Toledo, Jaume Sauleda

PA1841 **Identification of novel Hedgehog signalling modulators altered in COPD patients**
Laure M. G. PETIT (Reims, France), Randa Belgacemi, Julien Ancel, Pauline Mulette, Audrey Brisebarre, Myriam Polette, Gaëtan Deslée, Jeanne-Marie Perotin, Valérian Dormoy

PA1842 **Increasing the diagnostic yield in Primary Ciliary Dyskinesia via whole gene sequencing**
Lizi Briggs (Chelsea, United Kingdom), Cátia Brandao, Andrew Fleming, Matthew Edwards, Steven Müller, Ellen Quinn, Wilkinson Sam, Andrew Rogers, Ranjit Rai, Thomas Burgoyne, Siobahn Carr, Claire Hogg, Ricardo Jose, Michael Loebinger, Amelia Shoemark, Hannah M Mitchinson, Shibu John, Deborah Morris-Rosendahl

PA1843	**Combined approaches including long-read sequencing address the diagnostic challenge of HYDIN in primary ciliary dyskinesia** Deborah Morris-Rosendahl (London, United Kingdom), Andrew Fleming, Miranda Galey, Lizi Briggs, Claire Hogg, Matthew Edwards, Shibu John, Sam Wilkinson, Ellie Quinn, Ranjit Rai, Tom Burgoyne, Andy Rogers, Mitali Patel, Paul Griffin, Steven Muller, Siobhan Carr, Michael Loebinger, Jane Lucas, Anand Shah, Ricardo Jose, Hannah Mitchison, Amelia Shoemark, Danny Miller
PA1844	**Primary cilium (PC) associated BBSome gene 1, 7 and 9 expression during the 2D and 3D culture of mesothelial cells under oxidative stress.** Rajesh Jagirdar (Larissa, Greece), Erasmia Rouka, Eleanna Pitaraki, Sotiris Sinis, Eleftherios Papazoglou, Ourania Kotsious, Chrissy Hatzoglou, Sotirios Zarogiannis, Konstantinos Gourgouliannis
PA1845	**The utility of RNA and transcriptome analysis in improving diagnostics and understanding disease mechanism in Primary Ciliary Dyskinesia** Jelmer Legebeke (Solna, Sweden), John Holloway, Jane Lucas, Diana Baralle
PA1846	**Variants in CEP164 cause PCD: expanding the spectrum of primary and motile ciliopathy overlap.** Janice Coles (Southampton (Hampshire), United Kingdom), Claire L. Jackson, Laura A. Devlin, James Thompson, N. Simon Thomas, Woolf T. Walker, Ben Green, Miguel Barroso-Gil, Ruxandra Neatu, Colin G. Miles, Gabrielle Wheway, John A. Sayer, Jane S. Lucas
PA1847	**Uncovering unique gene signatures for COPD through integrating human airway datasets** Rashad Mohammad Mahbub (Sydney, Australia), Corry-Anke Brandsma, Maarten Van Den Berge, Alen Faiz
PA1848	**A new method to estimate human bronchial epithelial cells ciliary beat frequency** Stefano Palea (Labege, France), Sekou Diarra, Alain Kamgoué
PA1849	**Late Breaking Abstract - Knocking-down FAM13A during lung epithelial differentiation alters the development of cilia** Linda Yrlid (Gothenburg, Sweden), Jenny Horndahl, Rebecka Svärd, Lynda Hogström, Russel Hamilton, Ilaria Furlan, Fredrik Karlsson, Linda Sundström, Felix Gnerlich, Stefan Vollmer
PA1850	**Late Breaking Abstract - P-cresol sulfate acts on epithelial cells to reduce allergic airway inflammation** Rhiannon Grant (Melbourne, Australia), Matthew Macowan, Carmel Daunt, Olaf Perdijk, Benjamin Marsland
PA1851	**Late Breaking Abstract - Thromboinflammation a common signature across age in chronic lung disease** Anne Hilgendorff (München, Germany), Isis Fernandez, Ivette Bastidas, Alida Kindt, Anastassia Akhalkatsi, Kai Förster, Andreas W. Flemmer, Christoph Hübener, Marion Frankenberger, Nikolaus Kneidinger, Teresa Kauke, Rudolf Hatz, Stefan Karrasch, Annette Peters, Rainer Kaiser, Juergen Behr
PA1852	**Late Breaking Abstract - Sex-specific Differences in COPD Presentation Are Associated with Sphingolipids Metabolism** Elisabetta Granato (Naples, Italy), Ida Cerqua, Jeff Kue, Renata Esposito, Joselyn Rojas-Quintero, Fiorentina Roviezzo, Francesca Polverino

PS-4 in poster area Session 199 16:00 - 17:30

Poster session: Cutting-edge approaches to model and treat lung disease

Disease(s) : Airway diseases, Interstitial lung diseases

Method(s) : Cell and molecular biology

Tag(s) : Basic science, Translational

Chairs : Mareike Lehmann (Marburg, Germany), Thomas Wilkinson (Southampton (Hampshire), United Kingdom)

PA1853	**Development of a huPCLS platform to explore IL-33 biology and test novel therapies** Josquin Nys (Cambridge (Cambridgeshire), United Kingdom), Katherine Stephenson, Aoife Kelly, Claire Hollins, Sofia Koch, Tina Baker, Yoichiro Ohne, Jingjing Li, Xavier Romero Ros, Suzanne Cohen
PA1854	**MicroRNA transfection of 3D lung tissue model is possible** Joanna Nowakowska (Poznań, Poland), Wojciech Langwiński, Iran Augusto Neves Silva, Nika Gvazava, Aleksandra Szczepankiewicz, Darcy E Wagner
PA1855	**Single-cell RNA sequencing reveals defective bronchial epithelial cell differentiation in patients with severe COPD in 3-dimensional organoid cultures** Kingsley Okechukwu Nwozor (Vancouver, Canada), Tillie-Louise Hackett, Chen Xi Yang, Aurore C. A. Gay, Jelmer Vlasma, Martin Banchero, Marissa Wisman, Mubeen Khan, Djoke V. Gosliga, Tessa Kole, Dirk-Jan Slebos, Karin Klooster, Maarten V. D. Berge, Martijn C. Nawijn, Corry-Anke Brandsma, Irene H. Heijink

PA1856	**Rat-to-human translation of an antigen-specific, CD4+ T-cell-induced model of airway myocyte hyperplasic remodeling** Eder Fredy Mateus Medina (Barcelona, Spain), Nadia S. Brienza, Santiago Sánchez-Cabús, Vicente Plaza, David Ramos Barbon
PA1857	**Tridimentional microscopy unravels distal architecture of IPF** Youri Bertrand (Woluwe Saint-Pierre, Belgium), Thomas Planté-Bordeneuve, Marylène Lecocq, Caroline Bouzin, Charles Pilette, Antoine Froidure
PA1858	**Additional effects of oral prednisolone following mepolizumab on the nasal transcriptome** Imran Howell (Oxford, United Kingdom), Freda Yang, Jennifer Cane, John Busby, Liam G Heaney, Peter Howarth, Ian D Pavord, Chris E Brightling, Timothy Sc Hinks, Rekha Chaudhuri
PA1859	**Development of a Xenopus-based assay for high-throughput evaluation of mucociliary flow** Maria Chatzifrangkeskou (Nicosia, Cyprus), Ioanna Antoniades, Andria Koulle, Panayiotis Kouis, Timothea Konstantinou, Panayiotis K Yiallouros, Paris Skourides
PA1860	**Development of a high throughput primary human fibroblast-to-myofibroblast transition assay** Elisabeth Bäck (Molndal, Sweden), Mei Ding, Johan Jirholt, Jessica Reijer, Stefan Tångefjord
PA1861	**Establishing the Conditionally Reprogrammed Cell Technology for precision medicine in PCD** Ruth Maria Urbantat (Berlin, Germany), Anita Balázs, Marika Drescher, Kathrin Seidel, Alexander Rohrbach, Maria Daniltschenko, Aditi Kuppe, Tihomir Rubil, Simon Gräber, Julia Dürr, Stephanie Thee, Mehrak Yoosefi, Jobst Röhmel, Marcus A. Mall
PA1862	**Proteomic profiling of air-liquid-interface (ALI)-cultured primary ciliary dyskinesia (PCD) nasal epithelia** Katie L Horton (Eastleigh, United Kingdom), Janice L Coles, Claire L Jackson, Alistair Bailey, Paul J Skipp, David W Cleary, Raymond N Allan, Jane S Lucas
PA1863	**PDE4B inhibitor BI1015550 improves lung fibrosis, modulates transcriptome in bleomycin-treated rats, and attenuates fibrotic markers in human lung fibroblasts and epithelial cells** Dennis Reininger (Biberach, Germany), Franziska Elena Herrmann, Peter Nickolaus, Lutz Wollin, Baerbel Laemmle, Karsten Quast, Katrin Fundel-Clemens
PA1864	**IL-6 trans-signaling implicated in bronchial epithelial SERPIN B3/B4 mediated fibrogenesis and epithelial disruption in severe asthma** Chih-Chieh Tseng (Taipei City, Taiwan), Chun-Liang Chou, Han-Pin Kuo
PA1865	**Investigating miRNA regulation of PTEN in Cystic Fibrosis using airway epithelial cells derived from patient specific iPSC** Irene Oglesby (Beaumont, Ireland), Arlene Glasgow, Catherine Greene, Killian Hurley
PA1866	**Early immune development in the human fetal lung** L. Jia (Leiden, Netherlands), Nannan Guo, M. Fernanda Pascutti, Susana M. Chuva De Sousa Lopes, Pieter S. Hiemstra, Jan Stolk, Frits Koning, Padmini P. S. J. Khedoe
PA1867	**Characterisation of airway epithelial cells from survivors of very preterm birth reveal barrier defects at one year of age.** Denby Evans (Nedlands, Australia), Samantha Mclean, Shannon Simpson, Anthony Kicic
PA1868	**Highly selective furin inhibition as a therapeutic approach for chronic obstructive pulmonary disease** Lisa Douglas (Belfast, United Kingdom), James A Reihill, Tatjana Odrljin, S Lorraine Martin
PA1869	**Targeting deubiquitinases for the treatment of COPD** Amy Hendren (Belfast, United Kingdom), James Reihill, Richard Wilkinson, Ian Lobb, Lorraine Martin

PS-5 in poster area — Session 200 — 16:00 - 17:30

Poster session: Sleep-disordered breathing in other respiratory diseases and nocturnal hypoventilation

Disease(s) : Sleep and breathing disorders | Thoracic oncology | Airway diseases

Method(s) : Epidemiology | Surgery | Public health | General respiratory patient care | Physiology | Pulmonary function testing | Imaging

Tag(s) : Clinical

Chairs : Chair to be confirmed

PA1870	**Assessment of sleep quality in Chronic obstructive pulmonary disease patients with emphysema** amal chennoufi (tunis, Tunisia), Moussa Chirine, Rouis Houda, Ghourabi Asma, Khattab Amel, Khouaja Ibtihel, Mhiri Fatma, Bayahi Leila, Zendah Ines, Maalej Sonia
PA1871	**Prevalence of sleep disorders and disturbances related risk factors among patients with Chronic Obstructive Pulmonary Disease:A systematic review.** Stephanie Palacios (Iloilo, Philippines), Glenford Refre, Patricio Palmes, Ronnie Samoro
PA1872	**Association between preserved ratio impaired spirometry and indices of obstructive sleep apnea (OSA) severity** Michail Fanaridis (Heraklion, Greece), Izolde Bouloukaki, Georgios Stathakis, Konstantina Lyroni, Stiliani Viziriannaki, Georgios Pitsidianakis, Nikolaos Tzanakis, Sophia Schiza
PA1873	**Smoking-induced disturbed sleep: A Distinct Sleep-Related Disorder -experience on 4347 patients** Athanasia Pataka (Thessaloniki, Greece), Ioanna Grigoriou, Paschalia Skalisti, Ioanna Papagiouvanni, Anastasia Michailidou, Konstantinos Charalambidis, Serafeim – Chrysovalantis Kotoulas, Konstantinos Porpodis, Dionysios Spyratos
PA1874	**THE FORECAST OF THE COURSE OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE WITH OBSTRUCTIVE-APNOEA SYNDROME DURING SLEEP** Khayrillo Rajabov (Tashkent, Uzbekistan), Irina Liverko
PA1875	**THE PHENOTYPES OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE WITH COMORBIDITY OF OBSTRUCTIVE SLEEP APNEA SYNDROME.** Khayrillo Rajabov (Tashkent, Uzbekistan), Irina Liverko
PA1876	**Effect of CPAP treatment on serum 25(OH)D levels in patients with COPD-OSA overlap syndrome** Paschalis Steiropoulos (Alexandroupolis, Greece), Athanasios Voulgaris, Kostas Archontogeorgis, Kostas Bonelis, Michail Fanaridis, Sofia Schiza
PA1877	**Epidemiology of obstructive sleep apnea in patients with severe asthma under treatment with biologics** Lorenzo Cirri (Chur, Switzerland), Thomas Rothe, Tsogyal Daniela Latshang
PA1878	**Evaluation of sleep disordered breathing and related factors in primary ciliary dyskinesia patients** Nagehan Emiralioğlu (Ankara, Turkey), Merve Begum Ozturk, Halime Büyükşahin, Ismail Guzelkas, Dilber Ademhan, Beste Ozsezen, Ebru Yalçın, Deniz Doğru, Nural Kiper, Uğur Özçelik
PA1879	**Sleep disordered breathing and snoring in patients investigated for exercise induced laryngeal obstruction: A service evaluation** Keir E. J. Philip (London, United Kingdom), Zander Williams, Emil S Walsted, Julia Kelly, Alanna Hare, James H Hull
PA1880	**Determinants of Nocturnal Hypoxaemia in Patients with Chronic Tromboembolic Pulmonary Hypertension and Sleep-Related Breathing Disorder** Caner Çınar (istanbul, Turkey), Şehnaz Olgun Yıldızeli, Baran Balcan, Bedrettin Yıldızeli, Bülent Mutlu, Yüksel Peker
PA1881	**Changes in the sleep-disordered breathing from the acute to the stable phase of pulmonary embolism. The ESAET study** Grace Jacqueline Oscullo Yepez (Valencia, Spain), Alberto García Ortega, Eva Mañas Baena, Thais Beauperthuy Levy, Jose Gomez Olivas, Aldara García Sanchez, Irene Cano Pumarega, Amina Bekki, Marina Inglés Azorín, Juan José Jiménez Aguilella, Alba Cerveró Rubio, Pilar Calvillo Batllés, Sergio Mompean Rodríguez, David Jiménez Castro, Miguel Ángel Martínez García
PA1882	**Impact of intermittent and sustained nocturnal hypoxemic burden on the postoperative course in patients after anatomical lung resection** Svenja Schröder (Regensburg, Germany), Clemens Wiest, Christian Schulz, Hans-Stefan Hofmann, Michael Ried, Michael Arzt
PA1883	**Are the anthropometric and arterial blood gas parameters predictors of obesity-hypoventilation syndrome in an apneic population** Mohamed Bougrida (Constantine, Algeria), Fouzia Abdelouahab, Bouchra Benzouid, Mahdi Martani, Mohamed Kheireddine Bourahli
PA1884	**Bicarbonate as predictor of sleep-related hypoventilation** Joël Julien Herzig (Zürich, Switzerland), Sanja Pocrncic, Esther Irene Schwarz
PA1885	**Prevalence and predictors of obesity hypoventilation syndrome in patients with obstructive sleep apnea in a tertiary care institution in South India** Barney Isaac (Vellore (Tamil Nadu), India), Chithra Alexander, Roselin John, Anitha Barney, Balamugesh Thangakunam, Devasahayam Christopher
PA1886	**Starting home mechanical ventilation associates with reduced rate of hospitalization in people with obesity hypoventilation syndrome: The population-based DISCOVERY study** Jonas Einarsson (Lund, Sweden), Andreas Palm, Zainab Ahmadi, Magnus Ekström

PA1887 **Comparison of physical activity and quality of life between obese individuals with OSAS or OHS**
Afroditi Boutou (Thessaloniki, Greece), Antonios Baxtsevanidis, Anastasia Chasiotou, Diamantis Chloros, Dimitra Mamaletzi, Evangelia Kouidi

PA1888 **Hypoventilation in patients with Prader-Willi syndrome across the pediatric age**
Catherine Chen (Bron, France), Iulia Ioan, Marine Thieux, Marc Nicolino, Patricia Franco, Laurianne Coutier

PA1889 **Definition of diaphragmatic sleep disordered breathing in Duchenne Muscular Dystrophy**
Federica Trucco (Genova (GE), Italy), Matthew Davies, Alberto Zambon, Deborah Ridout, Francois Abel, Francesco Muntoni

PS-6 in poster area Session 201 16:00 - 17:30

Poster session: Real-life studies in asthma: all the way to clinical remission

Disease(s) : Airway diseases Pulmonary vascular diseases

Method(s) : General respiratory patient care Pulmonary function testing Physiology Public health Epidemiology

Tag(s) : Clinical

Chairs : Celeste Michala Porsbjerg (Copenhagen, Denmark), Andrea Portacci (Taranto, Italy)

PA1890 **Treatment Patterns of Patients Who Initiate Biologics for Severe Asthma Across USA, Japan, & Europe**
Joshua Harvey (Upper Providence, United States), Samantha N Valliant, Shiyuan Zhang, George Mu, Kelechi Emeanuru, Karina Brunini Pitta Palhares, Marine Andre, Takeo Ishii, Takeo Suzuki, Hideaki Kunishige, Rafael Alfonso-Cristancho

PA1891 **Clinical remission following biologic initiation in severe asthma: results of the International Severe Asthma Registry (ISAR)**
Tham T. Le (Clarksburg, United States), Ghislaine Scelo, Trung N. Tran, Malin Faregås, Neil Martin, Andrew N. Menzies-Gow, Wang Eileen, Michael Wechsler, Giorgio Walter Canonica, Enrico Heffler, Liam G. Heaney, David J. Jackson, Paul E Pfeffer, John Busby, Celeste M. Porsbjerg, Mark Hew, Matthew Peters, Peter G. Gibson, Mona Al-Ahmad, Celine Bergeron, Mohsen Sadatsafavi, Luis Perez-De-Llano, Borja G Cosio, Piotr Kuna, Diahn-Warng Perng, Takashi Iwanaga, Carlos A. Torres-Duque, Désirée Larenas-Linnemann, Bassam Mahboub, Riyad Al-Lehebi, João A. Fonseca, Chin Kook Rhee, Jorge Máspero, Mariko Koh Siyue, George C Christoff, Todor A. Popov, Justin Kwiatek, Victoria Carter, Celine Goh, Lakmini Bulathsinhala, Aaron Beastall, David Price

PA1892 **Characteristics associated with clinical remission in patients with severe asthma who initiate biologics**
Luis Pérez De Llano (Lugo, Spain), Ghislaine Scelo, Trung N Tran, Tham T. Le, Neil Martin, Malin Fagerås, Andrew N. Menzies-Gow, Eileen Wang, Michael E. Wechsler, Giorgio Walter Canonica, Enrico Heffler, Liam G. Heaney, David J. Jackson, Paul E. Pfeffer, John Busby, Celeste M. Porsbjerg, Mark Hew, Matthew Peters, Peter G. Gibson, Mona Al-Ahmad, Celine Bergeron, Mohsen Sadatsafavi, Borja G. Cosio, Piotr Kuna, Diahn-Warng Perng, Takashi Iwanaga, Carlos A. Torres-Duque, Désirée Larenas-Linnemann, Bassam Mahboub, Nikolaos G. Papadopoulos, Riyad Al-Lehebi, João A. Fonseca, Chin Kook Rhee, Jorge Máspero, Mariko Siyue Koh, George C. Christoff, Todor A. Popov, Justin Kwiatek, Victoria Carter, Celine Goh, Lakmini Bulathsinhala, Aaron Beastall, David Price

PA1893 **Asthma medication use in New Zealand following publication of national asthma guidelines**
Lee Hatter (Wellington, New Zealand), Allie Eathorne, Pepa Bruce, Tom Hills, Claire Houghton, Mark Weatherall, Richard Beasley

PA1894 **Real world biologic treatment response in severe asthma: an analysis of the International Severe Asthma Registry (ISAR)**
Tham T. Le (Clarksburg, United States), Ghislaine Scelo, Trung N.. Tran, Malin Faregås, Neil Martin, Andrew N. Menzies-Gow, Wang Eileen, Michael Wechsler, Giorgio Walter Canonica, Enrico Heffler, Liam G. Heaney, David J. Jackson, Paul E. Pfeffer, John Busby, Celeste M. Porsbjerg, Mark Hew, Matthew Peters, Peter G. Gibson, Mona Al-Ahmad, Celine Bergeron, Mohsen Sadatsafavi, Luis Perez-De-Llano, Borja G. Cosio, Piotr Kuna, Diahn-Warng Perng, Takashi Iwanaga, Carlos A. Torres-Duque, Désirée Larenas-Linnemann, Bassam Mahboub, Nikolaos G. Papadopoulos, Riyad Al-Lehebi, João A. Fonseca, Chin Kook Rhee, Jorge Máspero, Mariko Koh Siyue, George C. Christoff, Todor A. Popov, Justin Kwiatek, Victoria Carter, Celine Goh, Lakmini Bulathsinhala, Aaron Beastall, David Price

PA1895 **Patients' knowledge, perspectives and attitudes towards treatment goals and clinical remission in severe asthma**
Shiyuan Zhang (Collegeville, United States), Alejandro Raimondi, Olivia Fulton, Vanessa M Mcdonald, Ratko Djukanovic, Matthew Masoli, Peter Howarth, Waseem Ahmed, Tom Keeley, Josh Barazetti-Scott, Rafael Alfonso

PA1896 **Long-term weight changes after starting anti-interleukin-5/5Ra biologics in severe asthma**
Lianne ten Have (Leeuwarden, Netherlands), Edith Visser, Jacob K. Sont, Kim De Jong, Johannes A. Kroes, Anneke Ten Brinke

PA1897	**Real-world associations between outcomes and biomarkers in severe asthma patients treated with biologics** John Townend (Norwich, United Kingdom), Trung N Tran, Neil Martin, Andrew N. Menzies-Gow, Eileen Wang, Michael E. Wechsler, Giorgio Walter Canonica, Enrico Heffler, Luis Perez-De-Llano, Borja G. Cosio, Mark Hew, Matthew Peters, Peter G. Gibson, Sinthia Bosnic-Anticevich, Liam G. Heaney, David J. Jackson, Paul E. Pfeffer, John Busby, Sundeep Salvi, George C. Christoff, Todor A. Popov, Celeste M. Porsbjerg, Carlos A. Torres-Duque, Riyad Al-Lehebi, Mona Al-Ahmad, Diahn-Warng Perng, Celine Bergeron, Mohsen Sadatsafavi, Bassam Mahboub, Takashi Iwanaga, Jorge Maspero, Piotr Kuna, Kook Rhee Chin, Désirée Larenas-Linnemann, Nikolaos G. Papadopoulos, Andriana I. Papaioannou, João A. Fonseca, Mariko Siyue Koh, Richard W. Costello, David Price
PA1898	**Efficacy of benralizumab and mepolizumab in treating severe eosinophilic asthma: A one-year study on clinical remission and response** Anna Núñez (Barcelona, Spain), Maria Basagaña, Toni Zapata, Alan Junior Solis, Borja Domingo, Ignasi Garcia Olivé, Clara Padró, Albert Roger, Jorge Abad, Antoni Rosell, Carlos Martínez Rivera
PA1899	**An evaluation of factors associated with asthma remission for individuals on biologic therapy** Sarah Rhoads (Denver, United States), Michael Wechsler
PA1900	**Real-world experience of mepolizumab in severe eosinophilic asthma – five-year outcomes** Amy Nuttall (Liverpool, United Kingdom), Fred Fyles, Hannah Joplin, Hassan Burhan, Laura Watkins
PA1901	**Real-world patient-level cost-effectiveness analysis of omalizumab in patients with severe allergic asthma** Ipek Kıvılcım Oğuzülgen (Ankara, Turkey), Deniz Tugay, Mehmet Top, Ömür Aydın, Sevim Bavbek, Ebru Damadoğlu, Ferda Öner Erkekol, Ilkay Koca Kalkan, A. Fuat Kalyoncu, Gül Karakaya, Haluk Türktaş, Ivo Abraham
PA1902	**Real-life data of ten years with omalizumab treatment** Gökçen Ömeroğlu Şimşek (Izmir, Turkey), Damla Gündüz Karayazı, Can Sevinç
PA1903	**Early response to benralizumab in severe, eosinophilic asthma: a real-world study in Switzerland** Claudio Schuoler (Zug, Switzerland), Peter Van Iperen, Daiana Stolz, Florian Charbonnier, Pierre-Olivier Bridevaux, Peter Jandus, René Fiechter, Jörg D. Leuppi, Thomas Hauser, Nikolay Pavlov, Thomas Scherer, Michael Huber, Andrea Azzola, Andreas Piecyk, Thomas Rothe
PA1904	**Attitudes and experiences of patients and healthcare practitioners towards asthma medication prescription and adherence in the UK** Xiubin Zhang (London, United Kingdom), Erin Tomaszewski, Mina Khezrian, Tim Harrison, Jennifer K Quint
PA1905	**Multicentric real life experience of mepolizumab in bronchiectasis concomitant to severe asthma.** Juan Luis García Rivero (Argoños (Cantabria), Spain), David Bañas Conejero
PA1906	**Clinical remission (CR) in a real-world study to evaluate mepolizumab effectiveness in treating severe eosinophilic asthma (SEA) in Taiwan (REMIT)** Aldo Navarro (, Peru), Xiaomeng Xu, Shiyuan Zhang, Diahn-Warng Perng, Shih-Lung Cheng, Rafael Alfonso, Dominique Milea
PA1907	**Multi-country self-controlled study of exacerbation rates in severe asthma patients treated with mepolizumab: NEST interim analysis** Sevim Bavbek (Ankara, Turkey), Patricia Fernandez, Bassam Mahboub, Riyad Omar Al-Lehebi, Venkata Nagarjuna Maturu, Diana Jimena Cano Rosales, Claudia Soares, Debora Dos Santos, Gabriela Abreu, Patricia Menezes, Ronan Valladares, Juliana Queiroz, Alejandro Raimondi, Fayaz Aziz, Maria Laucho-Contreras, Emilio Pizzichini, Saeed Noibi
PA1908	**Benralizumab effectiveness in severe eosinophilic asthma and co-presence of bronchiectasis: a "real-world" retrospective study.** Raffaele Campisi (Portopalo (SR), Italy), Santi Nolasco, Pietro Impellizzeri, Maria D'Amato, Corrado Pelaia, Andrea Portacci, Luisa Ricciardi, Giulia Scioscia, Nunzio Crimi, Girolamo Pelaia, Giovanna Elisiana Carpagnano, Claudia Crimi
PA1909	**Real-life oral corticosteroid sparring effects of biologic treatment on eosinophilic asthma, five years of follow-up** Soran Peshbahar (Risskov, Denmark), Anne Sofie Bjerrum

PS-7 in poster area Session 202 16:00 - 17:30

Poster session: Chronic cough

Disease(s) : Airway diseases Interstitial lung diseases

Method(s) : Cell and molecular biology Epidemiology General respiratory patient care Public health Physiology Pulmonary function testing

Tag(s) : Clinical

Chairs : Alyn Hugh Morice (Cottingham, United Kingdom), Federico Lavorini (Firenze (FI), Italy)

PA1910	**Oscillometry parameters in chronic cough** Hazim Abozid (Wien, Austria), Chiara Veneroni, Sylvia Hartl, Robab Breyer- Kohansal, Marie-Kathrin Breyer, Otto C Burghuber, Pasquale Pio Pompilio7, Emiel Fm Wouters
PA1911	**Prevalence And Characterization of Cough-Related Urinary Incontinence in A Refractory Chronic Cough Population Enrolled in A Phase 2b Trial of The P2X3 Antagonist, Camlipixant** Lorcan McGarvey (Belfast, United Kingdom), Surinder S. Birring, Peter Dicpinigaitis, Jaclyn Smith, Vivek N. Iyer, Sylvain Lanouette, Ronghua Yang, Laurent Harvey, Margaret Garin, Catherine M. Bonuccelli
PA1912	**Chronic cough characteristics in CANVAS** Barnaby Hirons (london, United Kingdom), Riccardo Curro, Hisham Abubakar-Waziri, Katie Rhatigan, Bianca Rugginini, Joseph Shaw, Harini Kesavan, Robert D M Hadden, Caroline Jolley, Jim H Hull, Peter S P Cho, Andrea Cortese, Surinder S Birring
PA1913	**Relationship between measures of type II inflammation and patient reported cough severity and quality of life outcomes in patients with chronic cough** Nermin Diab (Toronto, Canada), Danica Brister, Mustafaa Wahab, Yoshihisa Tokunaga, Christiane Whetstone, Elena Kum, Caitlin Obminski, Jennifer Wattie, Lesley Wiltshire, Karen Howie, Kieran Killian, Jaclyn Smith, Roma Sehmi, Gail Gauvreau, Paul M O'Byrne, Imran Satia
PA1914	**Airway inflammation, bronchial hyperresponsiveness, and anti-asthma therapy responses in cough variant asthma and classic asthma with FEV1%≥80% predicted** Xue Zhang (shanghai, China), Chengjian Lv, Huijuan Hao, Jingwang Lin, Xue Tian, Min Zhang
PA1915	**Refractory and unexplained chronic cough: burden and cost of care** Jacky Smith (Manchester (Greater Manchester), United Kingdom), Norman Stein, Sylwia Migas, Sue Bokowski, Claire Williams, Patricia Baker, John New, Jonathan Schelfhout, Eileen Fonseca, Haya Langerman
PA1916	**Association between central obesity and chronic cough in the general adult population.** Johnmary T. Arinze (Rotterdam, Netherlands), Katia M.C. Verhamme, Fernando Rivadeneira, Guy Brusselle
PA1917	**Blood eosinophils in a cohort of Chronic Cough Patients consecutively admitted to a dedicated outpatient clinic: a retrospecitive case note analysis** Carlo Barbetta (Ferrara (FE), Italy), Anna Del Colle, Marco Caminati, Rachele Vaia, Gianenrico Senna, Donato Lacedonia, Umberto Zuccon, Rossana Roncato
PA1918	**A novel questionnaire describing sensations and triggers associated with refractory and unexplained chronic cough** James Wingfield Digby (Manchester (Greater Manchester), United Kingdom), Chelsea Sawyer, Shannon Galgani, Jenny King, Holt Kimberley, Rachel Dockry, Joanne Mitchell, Jacky Smith, Paul Marsden, Janelle Yorke
PA1919	**Patient global impression of severity in chronic cough; repeatability and responsiveness** Katie Rhatigan (Denmark Hill, United Kingdom), Barnaby Hirons, Harini Kesavan, Miten Sudra, Candice Ebelthite, Richard Turner, Caroline Jolley, James Hull, Surinder Birring, Peter Cho
PA1920	**Correlation of visual analogue scale with Leicester Cough questionnaire in patients with refractory/unexplained chronic cough** Christian Domingo Ribas (Sabadell (Barcelona), Spain), Ignacio Dávila, Santiago Quirce, Astrid Crespo-Lessmann, Miguel Diaz-Palacios, Antonio Pereira-Vega, Maria Luisa Nieto, Juan Luis Rodriguez-Hermosa, Luis Cea-Calvo, Pilar López-Cotarelo, Marta Sanchez Jareño, Luis Puente-Maestu
PA1921	**The long-term prognosis of chronic cough** Jinkyeong Park (Seoul, Republic of Korea), Yee Hyung Kim, Myung Jae Park, Cheon Woong Choi
PA1922	**Burden of chronic dry and productive cough on social participation, healthcare resource utilisation and activities of daily living from the Canadian Longitudinal Study on Aging (CLSA)** Imran Satia (Hamilton, Canada), Alexandra Mayhew, Nazmul Sohel, Om Kurmi, Kieran Killian, Paul O'Byrne, Parminder Raina
PA1923	**Chronic cough in sarcoidosis** Barnaby Hirons (london, United Kingdom), Katie Rhatigan, Harini Kesavan, Richard Turner, Caroline Jolley, Katherine Myall, Surinder S Birring, Pete S P Cho
PA1924	**Stress urinary incontinence in women with chronic cough: impact on cough-related quality of life** Luis Puente Maestu (Madrid, Spain), Santiago Quirce, Ignacio Dávila, Ebymar Arismendi, Eva Martínez-Moragón, Javier Sola-Martínez, Alfredo De Diego, Francisco Javier González-Barcala, Luis Cea-Calvo, Cristina Rivas-Pardinas, Marta Sanchez Jareño, Christian Domingo-Ribas
PA1925	**Relationship between subjective cough outcomes and activity impairment in patients with chronic cough** Mustafaa Wahab (Hamilton, Canada), Chaoqun (Cherry) Xu, Elena Kum, Nermin Diab, Danica Brister, Caitlin Obminski, Jennifer Wattie, Lesley Wiltshire, Karen Howie, Sue Beaudin, Kieran Killian, Jaclyn Smith, Gordon Guyatt, Roma Sehmi, Gail Gauvreau, Paul O'Byrne, Imran Satia

PA1926 **Serum Ige levels and blood eosinophils as potential Th2 inflammation biomarkers and target to address Chronic Cough: a retrospective analysis**
Carlo Barbetta (Ferrara (FE), Italy), Anna Del Colle, Umberto Zuccon, Alessio De Massimi, Vittorio Giacomarra, Maria Elisabetta Conte, Alberto Fantin, Marco Contoli, Alberto Papi, Antonella Serafini, Gelindo Cappellato, Marco Caminati, Gianenrico Senna, Rachele Vaia, Francesco Saverio Serino, Rossana Roncato

PA1927 **Work productivity and activity impairment among chronic cough patients after a guideline-based treatment in the McMaster Cough Clinic**
Mustafaa Wahab (Hamilton, Canada), Chaoqun (Cherry) Xu, Elena Kum, Nermin Diab, Danica Brister, Caitlin Obminski, Jennifer Wattie, Lesley Wiltshire, Karen Howie, Sue Beaudin, Kieran Killian, Jaclyn Smith, Gordon Guyatt, Roma Sehmi, Gail Gauvreau, Paul O'Byrne, Imran Satia

PA1928 **Late Breaking Abstract - Frequent Productive Cough associates with an increased risk of cardiopulmonary outcomes in a real-life cohort of patients with COPD (NOVELTY study)**
Hana Müllerová (Cambridge, United Kingdom), Eleni Rapsomaniki, Rod Hughes, Jonathan Marshall, Alberto Papi, Helen Reddel, Mehul Patel

PA1929 **Late Breaking Abstract - Automated cough analysis: The value of own data vs open sound databases**
Össur Ingi Emilsson (Uppsala, Sweden), Carl Andersson, Henrik Johansson, Thomas Schön

PS-8 in poster area Session 203 16:00 - 17:30

Poster session: Advances in diagnosis and biomarker identification in airways disease

Disease(s) : Airway diseases

Method(s) : Epidemiology Public health Cell and molecular biology Transplantation General respiratory patient care Physiology

Tag(s) : Translational

Chairs : Rachel Nadif (Villejuif, France), Chair to be confirmed

PA1930 **Blood eosinophil count and its determinants in a Chinese population-based cohort**
Mei Yang (Chengdu, China), Shijie Tang, Yongchun Shen, Lei Chen, Fuqiang Wen

PA1931 **Surface receptor expression on circulating and airway eosinophils after inhaled allergen challenge**
Christiane Whetstone (Hamilton, Canada), John-Paul Oliveria, Karen Howie, Caitlin Obminski, Imran Satia, Nermin Diab, Danica Brister, Jennifer Wattie, Lesley Wiltshire, Paul O'Byrne, Roma Sehmi, Gail Gauvreau

PA1932 **Eosinophil phenotypes in circulation and airways of asthmatics after inhaled allergen challenge.**
Christiane Whetstone (Hamilton, Canada), John-Paul Oliveria, Karen Howie, Caitlin Obminski, Imran Satia, Nermin Diab, Dancia Brister, Jennifer Wattie, Lesley Wiltshire, Paul O'Byrne, Roma Sehmi, Gail Gauvreau

PA1933 **Association of complement pathway activation with severe eosinophilic asthma in the C-BIOPRED asthma cohort**
QingLing Zhang (Guangzhou, China), Cong Dong, Zhen An Deng, Chang Xing Ou, Xin Hua Fu, Chang Zheng Wang, Hua Hao Shen, Mei Ling Jin, Nkouibert Pryseley Assam, Wei Jiang, Ali Versi, Kian Fan Chung, Qing Ling Zhang, Nan Shan Zhong

PA1934 **Sputum type 2 markers could predict remission in severe asthma after anti interleukin-5.**
Catherine Moermans (Liège, Belgium), Chloé Brion, Grégory Bock, Sophie Graff, Sara Gerday, Halehsadat Nekoee, Christophe Poulet, Noémie Bricmont, Monique Henket, Virginie Paulus, Françoise Guissard, Renaud Louis, Florence Schleich

PA1935 **Expression of serum periostin and impaired quality of life in asthma patients with and without allergic rhinosinusitis**
Somruetai Matupumanon (Bangkok, Thailand), Theerasak Kawamatawong, Putthapoom Lumjiaktase

PA1936 **Late Breaking Abstract - Urinary nickel level is associated with blood immunoglobulin E among asthma patients.**
Chung Shu Lee (Taipei, Taiwan), Chih Hao Chang, Li Chung Chiu

PA1937 **Clinical asthma phenotypes linked to sputum proteome from Chinese C-BIOPRED cohort**
QingLing Zhang (Guangzhou, China), Chanxing Ou, Zhenan Deng, Lingna Xue, Jian Kang, Yunhui Zhang, Mao Huang, Jinfu Xu, Kewu Huang, Qiang Li, Kian Fan Chung, Nanshan Zhong, Jiaxing Xie

PA1938 **Plasma IL-36 subfamily levels impact on clinical manifestations of asthma**
Yuki Hoshino (Saitama, Japan), Tomoyuki Soma, Tatsuhiko Uno, Reina Ishii, Kazuki Katayama, Hidetoshi Iemura, Erika Naitou, Takahiro Uchida, Shun Sinomiya, Sachiko Miyauchi, Yoshitaka Uchida, Kazuyuki Nakagome, Hidetoshi Nakamura, Makoto Nagata

PA1939 **Possible multiple signalling of MMP-10 in atopic asthma**
Nikolaos Tsolakis (Uppsala, Sweden), Andrei Malinovschi, Jörgen Syk, Kjell Alving

PA1940 **12-LOXs-12(s)-HETE-GPR31 signaling axis mediates immune homeostasis in allergic asthma**
Peiyan Zheng (Guangzhou (Guangdong), China), Baoqing Sun

PA1941	**Investigating allergen-induced acute lung inflammation in asthmatic individuals using breath biopsies** Agnieszka Smolinska (Maastricht, Netherlands), Imran Satia, Christiane E Whetstone, Maral Ranjbar, Mustafaa Wahab, Karen J Howie, Caitlyn Stevens, Lesley Wiltshire, Jennifer Wattie, Chad Schaber, Federico Ricciardi, Tilly Woodland, Ahmed Tawfike, Samuel Thompson, Atashia Gonsalves, Natalie Tett, Ben Taylor, Rune Kragsberger, Rory Stallard, Howard Kartstein, Daniel Mead, Lara Pocock, Billy Boyle, Max Allsworth, Gail Gauvreau
PA1942	**Effects of Sex Hormones on Asthma Control in Postmenopause** Samia Aissani (Algiers, Algeria), Houria Haouichat, Ali Zitouni
PA1943	**Sensitization to Staphylococcus aureus toxins in Severe Asthma. The Belgian IgE (BEIgE) study.** Florence Schleich (Liège, Belgium), Eleonore Maury, Claus Bachert, Mieke Jansen, Sandra Gurdain, Jan Van Schoor
PA1944	**Developing and validating clinical models to identify candidates for allergic rhinitis pre-exposure prophylaxis** Wenting Luo (Guangzhou (Guangdong), China)
PA1945	**Associations between sputum cell counts and healthcare use across Ontario patients with asthma or COPD** Kimball Zhang (Toronto, Canada), Teresa To, Sylvia Lauks, Melanie Kjarsgaard, Jingqin Zhu, Emilie Terebessy, Parameswaran Nair
PA1946	**Type 2 inflammation signature using sputum transcriptomics is associated with COPD clinical characteristics** Yuqiong Yang (Guangzhou, China), Junhao Yang, Fengyan Wang, Weijuan Shi, Martin Stampfli, Jeffrey Curtis, Bradley Drummond, Nanshan Zhong, Zhang Wang, Zhenyu Liang, Rongchang Chen
PA1947	**Proteasome function as a biomarker for severe COPD endotypes** Claudia Flexeder (Neuherberg, Germany), Ilona Kammerl, Stefan Karrasch, Frauke Pedersen, Claus Vogelmeier, Jürgen Behr, Sandra Söhler, Henrik Watz, Annette Peters, Holger Schulz, Silke Meiners
PA1948	**ADAM17 sheddase substrates in airway and blood samples of COPD, asthma, and healthy subjects** Carin Larsson (Rydsgård, Sweden), Nicole Van Der Burg, Jaro Ankerst, Leif Bjermer, Ellen Tufvesson
PA1949	**A practical approach to handling missing sputum samples in airways disease research** Laurits Frøssing (Copenhagen V, Denmark), Susanne Hansen, Morten Hvidtfeldt, Asger Sverrild, Celeste Porsbjerg

PS-9 in poster area Session 204 16:00 - 17:30

Poster session: Pulmonary function, lung function trajectories and other respiratory conditions

Disease(s) : Airway diseases Thoracic oncology

Method(s) : Epidemiology Public health Pulmonary function testing General respiratory patient care Cell and molecular biology Imaging

Tag(s) : Translational

Chairs : Arne Drews (Grimma, Germany), Chair to be confirmed

PA1950	**Epigenetic features in newborns associated with preadolescence lung function and asthma acquisition during adolescence** Mohammad Nahian Ferdous Abrar (Memphis, United States), Hongmei Zhang, Wilfried Joachim Jurgen Karmaus, John Holloway, Hasan Arshad, Yu Jiang
PA1951	**Lung function trajectories and their associations with comorbidity markers.** Sigrid Anna Aalberg Vikjord (TRONDHEIM, Norway), James P Allinson, Arnulf Langhammer, Lowie Etienne Vanfleteren
PA1952	**Lung development genes, adult lung function and cognitive traits** Mohammad Talaei Pashiri, Laura Portas, Sheena Waters, Benjamin M Jacobs, Charles R Marshall, Cosetta Minelli, Seif O. Shaheen
PA1953	**Type-2 inflammation is associated with accelerated lung function decline in individuals with chronic airway disease from the general population** Yunus Çolak (Espergærde, Denmark), Shoaib Afzal, Jacob L. Marott, Børge G. Nordestgaard, Peter Lange
PA1954	**Advanced glycation end products (AGEs) in relation to COPD and lung function: the Rotterdam Study** Tianqi Lu (Rotterdam, Netherlands), Lies Lahousse, Sara Wijnant, Jinluan Chen, Guy Brusselle, Mandy Van Hoek, M. Carola Zillikens
PA1955	**Clinical relevance of lung function trajectory clusters in middle-aged and older adults** Xander Bertels (Gent, Belgium), James Ross, Rosa Faner, Michael Cho, Guy Brusselle, Lies Lahousse
PA1956	**Impact of low lung function in atherosclerotic cardiovascular disease** Shoaib Afzal (Herlev, Denmark), Børge G. Nordestgaard, Yunus Colak

PA1957	**Diet quality, ventilatory function and respiratory impairment in Colombian adults – preliminary findings from the Cartagena Cohort Study** Maria Stephany Ruiz-Diaz (Cartagena de Indias, Colombia), Gustavo Mora-Garcia, Ana Luiza De Lima Curi Hallal, Ziyi Xu, Diana Mena-Yi, Francisca De Castro-Mendes, Elmer Fernandez, Carla Tarazona-Meza, Fernando Manzur-Jattin, Amileth Suarez-Causado, Edgar Vergara-Dagobeth, Nerlis Pajaro-Castro, German Otero-Marrugo, Federico Prada, Rodrigo Villegas, Vanessa Garcia-Larsen
PA1958	**Mortality by cause of death, spirometric pattern and sex - the OLIN COPD study** Ann Lindberg (Boden, Sweden), Helena Backman, Sami Sawalha, Ulf Nilsson, Linnea Hedman, Caroline Stridsman, Nikolai Stenfors, Eva Rönmark
PA1959	**The effects of body mass index on lung vital capacity in healthy Chinese adults** Siyu Dai (Hangzhou, China), Feng Chen, Fanjing Meng, Le Wang, Lingxiao Ye, Jianping Wang, Dingbo Shu, Meiqi Li, Yajiao Chen, Xiaochen Liu, Wanzhen Yao, Xiangyue Xiao, Yanjing Zhang, Yong Chen, Jie Liu, Yufei Hua, Jianping Ding
PA1960	**A reference range of FEV1 change rate calculated from a longitudinal analysis of a 15 years' spirometry dataset of a health check-up clinic of Japan** Tetsuo Kimura (Saku, Japan), Satoru Yanagisawa, Satoshi Wasamoto, Nariaki Ohura, Nobutoshi Morozumi
PA1961	**Small airways and decline in pulmonary diffusing capacity for carbon monoxide in an 8-year follow-up population-based study** Francesco Pistelli (Pisa (PI), Italy), Sara Maio, Anna Angino, Giuseppe Sarno, Ilaria Stanisci, Sandra Baldacci, Patrizia Silvi, Laura Carrozzi, Giovanni Viegi
PA1962	**Spirometry and cause-specific mortality. A community 26 years follow-up of young men.** Lucia Cestelli (Bergen, Norway), Amund Gulsvik, Ane Johannessen, Knut Stavem, Rune Nielsen
PA1963	**The war in Ukraine and the spread of tuberculosis in Europe** Ihor Semianiv (Chernivtsi, Ukraine), Liliia Todoriko, Olena Pidverbetska, Inga Yeremenchuk, Yana Toderika
PA1964	**Current etiologies of hemoptysis in a tuberculosis-endemic country.** Meriem Mjid (Tunis, Tunisia), Asma Zargouni, Khadija Euchi, Mouna Aouini, Yacine Ouahchi, Sana Cheikhrouhou, Sonia Toujani, Abir Hedhli, Besma Dhahri
PA1965	**Identification of rhinitis phenotypes using an unsupervised approach in the Constances cohort** Marine Savouré (Paris, France), Jean Bousquet, Laurent Orsi, Marcel Goldberg, Bénédicte Leynaert, Mohamed Nadif, Céline Ribet, Marie Zins, Bénédicte Jacquemin, Rachel Nadif
PA1966	**bronchogenic carcinoma in women** Chaimae Belhaj (Casablanca, Morocco), Hajar Arfaoui, Hasnae Jabri, Wiam El Khattabi, Hicham Afif
PA1967	**Diagnostic difficulties in tuberculous pleural effusion in adults** Tatiana Osipov (Chisinau, Republic of Moldova), Iulia Ghelis, Adriana Niguleanu
PA1968	**Prevalence of respiratory symptoms and lung diseases in lung cancer screening program** Jelena Djekic Malbasa (Novi Sad, Republic of Serbia), Tomi Kovacevic, Ana Milenković, Bojan Zaric, Goran Stojanovic, Darijo Bokan

17:30-19:00
INDUSTRY EVENING SYMPOSIUM SEE PAGE 1

17:30-19:00
INDUSTRY EVENING MINI SYMPOSIUM SEE PAGE 1

08:00-08:45
INDUSTRY SKILLS LAB WORKSHOP SEE PAGE 1

Amber 1+2 Session 217 08:00 - 10:20

Skills workshop: SW4 Interpretation of cardiopulmonary exercise tests
Tips and pitfalls in cardiopulmonary exercise testing assessment

Aims : to identify typical patterns of responses to cardiopulmonary exercise testing and demonstrate how to discriminate these from anomalous response profiles, which can cause misinterpretation of test results.

Disease(s) : Airway diseases | Interstitial lung diseases | Pulmonary vascular diseases

Method(s) : Physiology | Pulmonary function testing | Pulmonary rehabilitation

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Paediatrician, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist, Respiratory therapist

Chairs : Pierantonio Laveneziana (Paris, France)

08:00	**Introduction** All Speakers	**2033**
08:00	**Relationship between oxygen uptake and work rate** Paolo Palange (Rome, Italy)	**2034**
08:00	**Anaerobic/lactate threshold** William Stringer (Long Beach, United States)	**2035**
08:00	**Ventilatory efficiency** J. Alberto Neder (Kingston (ON), Canada)	**2036**
08:00	**Breathing pattern and dynamic hyperinflation** Michele Schaeffer (Leuven, Belgium)	**2037**

Amber 3+4 Session 218 08:00 - 10:20

Skills workshop: SW7 Practicalities of spirometry and whole-body plethysmography

Aims : to help attendees gain the technical expertise needed to perform spirometry and whole-body plethysmography according to both best practice and the latest recommendations that are supported by experts in the field; to explain the measurements of spirometry, static lung volumes, airway resistance and resistance-volume loops via whole-body plethysmography; to discuss the technical aspects of the body box, standardisation of test performance, reporting and case study interpretation.

Disease(s) : Airway diseases | Paediatric respiratory diseases

Method(s) : Physiology | Pulmonary function testing

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Medical Student, Nurse, Paediatrician, Physician in Pulmonary Training, Physiologist

Chairs : Karl Sylvester (Cambridge (Cambridgeshire), United Kingdom)

08:00	**Introduction** All Speakers	**2038**
08:00	**Performing spirometry** Aisling McGowan (Dublin 15, Ireland)	**2039**
08:00	**Standardised static lung volume measurement using whole-body plethysmography** Frans H.C. De Jongh (Enschede, Netherlands)	**2040**
08:00	**Measurement of airway resistance and resistance-volume loops using whole-body pethysmography** Mart N. van der Plas (Monster, Netherlands)	**2041**
08:00	**Reporting and interpretation of case studies** Maximillian Thomas (, United Kingdom)	**2042**

PS-1 in poster area Session 219 08:00 - 09:30

Poster session: Clinical problems in tuberculosis and other respiratory infections

Disease(s) : Respiratory critical care | Interstitial lung diseases | Airway diseases

Method(s) : Public health | Cell and molecular biology | Imaging | Palliative care | Physiology | Pulmonary rehabilitation | Respiratory intensive care | General respiratory patient care | Epidemiology

Tag(s) : Clinical

Chairs : Christian Niels Meyer (Roskilde, Denmark), Priti Meshram (Mumbai (Maharashtra), India)

PA2043	**Predictors of pulmonary tuberculosis relapse** Selsabil Daboussi (Tunis, Tunisia), Améni Naaroura, Samira Mhamdi, Safa Marzouki, Houda Snoussi, Chiraz Aichaouia, Zied Moetemri
PA2044	**Pseudotumor tuberculosis: a rare form** Sofia El hanafy (casablanca, Morocco)
PA2045	**Errors in the diagnosis of tuberculosis in children under the conditions of the COVID-19 pandemic.** Cristina Liscinscaia (Chisinau, Republic of Moldova), Stela Kulciţkaia, Constantin Iavorschi, Iulia Ghimisli
PA2046	**Mortality of tuberculosis patients due to associated diseases and other causes** Igor Ivanes (Chisinau, Republic of Moldova), Aurelia Ustian, Vasile Popa, Anastasia Ivanes
PA2047	**Mortality in tuberculosis** Fettal Nadia (Sidi Bel Abbes, Algeria), akram Benhaddad
PA2048	**Correlation between imaging in non-cystic fibrosis bronchiectasis and prognosis scores** Donia Jeridi (Ariana, Tunisia), Houda Rouis, Chirine Moussa, Chaima Turki, Oumaima Aggouni, Hana Dhifallah, Ibtihel Khouaja, Ines Zendah, Sonia Maalej
PA2049	**COPD as a post-tuberculosis lung disease: multicenter retrospective cohort study** YEJIN LEE (SEOUL, Republic of Korea), Dong-Hyun Joo, Sooim Sin, Hyerin Kang, Jin Hwa Song
PA2051	**Impact of tuberculosis on the evolution of pregnancy, delivery and perinatal outcomes** Igor Ivanes (Chisinau, Republic of Moldova), Ecaterina Evstrati, Stela Kulciţkaia, Anastasia Ivanes
PA2052	**Post-COVID-19 pulmonary complications in the chest clinic of Oran, Algeria** Abdelmajid Snouber (Oran, Algeria), Siham Benzait, Nesrine Azzi, Nesrine Bouchra Bourouis, Mustapha Benammar, Karima Boualem
PA2053	**Radiological pulmonary manifestations in patients with achalasia** Jelena Jankovic (Beograd, Republic of Serbia), Branislava Milenkovic, Zlatan Bojic, Nikola Colic
PA2054	**Retrospective observational study looking at inpatient burden of winter respiratory viral illness in a district general respiratory unit** Usman Zafar Kahara (Birmingham, United Kingdom), Gagandeep Aulakh, Abhimanyu Lal, See Ling Tan
PA2055	**In-hospital mortality by different CURB type severity scores of community-acquired pneumonia** Hyonsoo Joo (Seoul, Republic of Korea), Mira Cho, Seohyun Kim, Yunhee Lee, Jun-Pyo Myong, Jae Jeong Shim, Tai Joon An, Hyoung Kyu Yoon
PA2056	**Prevalence of newly acquired conditions and impact on quality of life one year after hospital discharge for COVID-19** Rachael A. Evans (Leicester (Leicestershire), United Kingdom), Andrew Ibbetson, Linzy Houchen-Wolloff, Archie Walters, Louise Wain, Chris Brightling, Michael Marks, Andrew Briggs
PA2057	**Phenotypes in 'Long COVID' presenting as 'tsunami of multisystem syndrome' of this decade: Is it really preventable or occurs as natural course of disease?** Shital Vishnu Patil (Latur (Maharashtra), India), Swati Shital Patil, Sham Toshniwal, Gajanan Gondhali, Rajesh Patil, Utreshvar Dhumal, Abhijit Acharya, Shubhangi Khule, Deepak Patil
PA2058	**Efferent therapy in complex treatment of patients with coronavirus associated pneumonia** Oksana Viltsaniuk (Vinnytsya, Ukraine), Yuriy Mostovoy
PA2059	**90-Day outcomes in patients with severe COVID-19 treated with invasive mechanical ventilation.** Masamichi Mineshita (Kawasaki (Kanagawa), Japan), Satoshi Tanaka, Yusuke Shinozaki, Junko Shibuya, Hajime Tsuruoka, Shin Matsuzawa, Hiromi Muraoka, Atsuko Ishida, Hirotaka Kida, Hiroshi Handa, Naoki Furuya, Hiroki Nishine
PA2060	**COVID-19 as endothelial dysfunction trigger** Nataliia Habshydze (Dnipro, Ukraine), Tetiana Pertseva, Lyudmyla Konopkina, Yuliia Hyba, Mariia Krykhtina

PA2061	**Theranostic algorithm to prevent post-COVID-19 pulmonary fibrosis** Nathalie De Vos (Bruxelles, Belgium), Marie Bruyneel, Cécile Duterme, Alain Roman, Hafid Dahma, Stephane Alard, Stephanie Andre, Dragos Barglazan, Audrey Chirumberro, Frederic Cotton

PS-10 in poster area Session 220 08:00 - 09:30

Poster session: Burden, determinants, and management of asthma

Disease(s) : Airway diseases

Method(s) : Epidemiology Cell and molecular biology Public health

Tag(s) : Clinical

Chairs : Jonathan Grigg (London, United Kingdom), Malin Axelsson (Malmö, Sweden)

PA2062	**Characteristics of patients with asthma in China by blood eosinophil level** Victoria S. Benson (Uxbridge (Middlesex), United Kingdom), Ark Ye, Zhiliu Tang, Adam Haq, Mark Small, James Siddall, Rafael Alfonso-Cristancho, Anna Richards
PA2063	**World-wide variation in the proportion of patients eligible for asthma biologics: a systematic review** Freda Yang (London, United Kingdom), Justin D Salciccioli, Marcus Mcclean, Chloe Bloom
PA2064	**Uncontrolled asthma associates age-dependently with biomarkers and comorbidities in adult-onset asthma** Katja Warm (Rockneby, Sweden), Linnea Hedman, Caroline Stridsman, Anne Lindberg, Eva Rönmark, Helena Backman
PA2065	**Risk for asthma and allergic rhinitis depends on earliness and multiplicity of allergic sensitization, involved allergens, and allergen-specific IgE levels** Stephan Gabet (Lille, France), Fanny Rancière, Nathalie Seta, Isabelle Momas
PA2066	**Association between asthma and allergic diseases and school absenteeism among Indian adolescents** Smriti Debnath (Khejurbagan, India), Prasun Haldar, Dwiptirtha Chattopadhyay, Judith Garcia-Aymerich, Isabella Annesi-Maesano, Paige Lacy, Saibal Moitra, Subhabrata Moitra
PA2067	**Association between allergy and asthma experience and awareness among adolescents: a structural equation modelling approach** Prasun Haldar (Kolkata, India), Smriti Debnath, Dwiptirtha Chattopadhyay, Judith Garcia-Aymerich, Isabella Annesi-Maesano, Paige Lacy, Saibal Moitra, Subhabrata Moitra
PA2068	**In-hospital Mortality and Hospital outcomes Among Adults Hospitalized for Exacerbations of Asthma and COPD in Thailand (2017-2021): A population-based Stud** Narongwit Nakwan (Songkhla, Thailand), Kanittha Suansan
PA2069	**Causal risk factors for asthma in Mendelian randomization studies: A systematic review and meta-analysis** Heidi Mikkelsen (Køge, Denmark), Eskild M. Landt, Marianne Benn, Børge G. Nordestgaard, Morten Dahl
PA2070	**Hospital admissions among asthmatic children in Tizi-Ouzou city before and during the COVID-19 pandemic** Salim Sadi (Tizi-Ouzou, Algeria), Idir Ramdani, Dihia Hadj-Said, Toufik Djerboua, Nabila Yata, Nadia Bensaadi, Belaid Bouazza
PA2071	**Role of circadian typology in health-related quality of life in asthma** Subhabrata Moitra (Edmonton, Canada), Prasun Haldar, Augustus Anderson, Metin Akgün, Amanda Brickstock, Allie Eathorne, Ali Farshchi Tabrizi, Linda Henderson, Aditya Jindal, Surinder Jindal, Bugra Kerget, Lyle Melenka, Saibal Moitra, Rahul Mukherjee, Nicola Murgia, Alex Semprini, Alice Turner, Paige Lacy, Ana Adan
PA2072	**Obesity increases all-cause and cardiovascular mortality in adults with asthma** Helena Backman (Lulea, Sweden), Axel Sturesson, Caroline Stridsman, Anne Lindberg, Eva Rönmark, Linnea Hedman
PA2073	**Asthma and asthma-like symptoms as associated with endometriosis and menstrual pain** Sanjay Gyawali (Bergen, Norway), Marianne Lønnebotn, Ane Johannessen, Eva Lindberg, Lars Modig, Vivi Schlünssen, Thorarinn Gislason, Cecilie Svanes, Francisco Gómez Real
PA2074	**Global, regional, and national trends in incidence of asthma: findings from the Global Burden of Disease Study 2019** Yuhan Xing (Hong Kong, Hong Kong), Yingzhao Jin, Cui Guo, Lai Shan Tam, Dongze Wu
PA2075	**Agreement between self-reported and registered age at asthma diagnosis** Elias Nurmi (Tampere, Finland), Iida Vähätalo, Pinja Ilmarinen, Heidi Andersén, Leena Tuomisto, Anssi Sovijärvi, Helena Backman, Lauri Lehtimäki, Linnea Hedman, Arnulf Langhammer, Bright Nwaru, Päivi Piirilä, Hannu Kankaanranta
PA2076	**Respiratory tract infections associated with asthma exacerbation** Yong Il Hwang (Anyang, Republic of Korea), Ki-Suck Jung, Seung Hun Jang, Kwang Ha Yoo, Jung Hyun Chang

PA2077 **Blood inflammatory phenotypes and clinical characteristics as determinants of persistent asthma in the Constances cohort**
Tajidine Tsiavia (Villejuif, France), Joseph Henny, Marcel Goldberg, Celinie Ribet, Marie Zins, Nicolas Roche, Laurent Orsi*, Rachel Nadif*

PA2078 **Obesity and migration factors are associated with asthma in ethnic populations**
Jonathan Pham (London, United Kingdom), Mark Hew, Michael J Abramson, Caroline J Lodge, Aung K Win, Shuai Li, Shyamali C Dharmage

PA2079 **Quality of life and its determinants in asthma patients in the Fez-Meknes region, Morocco**
Nassiba Bahra (Fez, Morocco), Soukaina El Yaagoubi, Hind Bourkhime, Nabil Tachfouti, Mohamed Amine Berraho, Mounia Serraj, Mohammed Chakib Benjelloun, Bouchra Aamara, Samira El Fakir

PA2080 **Genetic Association of HDL-C and LDL-C with Risk of Asthma: Two-Sample Mendelian Randomization Analysis**
Tsu-Nai Wang, Yi-Shian Liu, Yu-Chun Lin, Meng-Chih Lin, Chao-Chien Wu

PA2081 **Mendelian randomization revealed the impact of GERD on asthma risk**
Haoyu Wang (Chengdu, China), Ruiyuan Yang, Dan Liu, Weimin Li

PS-11 in poster area Session 221 08:00 - 09:30

Poster session: Development and treatment of severe asthma

Disease(s) : Airway diseases

Method(s) : Epidemiology General respiratory patient care Pulmonary function testing Cell and molecular biology Physiology Imaging

Tag(s) : Translational

Chairs : Carmen Cornelia Maria de Jong (Stettlen, Switzerland), Eckard Hamelmann (Bielefeld, Germany)

PA2082 **Severe asthma (SA) in children: data from the Italian society for paediatric respiratory diseases (SIMRI) database**
Silvia Carraro (Padova (PD), Italy), Michele Piazza, Francesco Carella, Bianca Cinicola, Anna Del Colle, Maria Elisa Di Cicco, Valentina Fainardi, Grazia Fenu, Simone Fontijn, Michele Ghezzi, Mattia Giovannini, Ahmad Kantar, Amelia Licari, Sara Manti, Angelo Mazza, Raffaella Nenna, Antonio Augusto Niccoli, Marta Piotto, Massimiliano Raso, Laura Tenero, Chiara Trincianti, Andrea Francavilla, Franca Rusconi

PA2083 **PEDIATRIC SEVERE ASTHMA: HIGH-RESOLUTION CT FEATURES**
Amelia Licari (Pavia (PV), Italy), Maria De Filippo, Salvatore Fasola, Martina Votto, Maria Sole Prevedoni Gorone, Gian Luigi Marseglia, Stefania La Grutta

PA2084 **A real-life study on children with severe asthma starting biologicals: results of the PANDA study**
Yoni Van Dijk (Badhoevedorp, Netherlands), Milou A. Brandsen, Simone Hashimoto, Niels Rutjes, Kornel Golbski, Frederique Vermeulen, Suzanne Terheggen-Lagro, Bart Van Ewijk, Anke-Hilse Maitland-Van Der Zee, Susanne Vijverberg

PA2085 **Association between airway dimension, the clinical severity of bronchiolitis and the development of pre-school wheezing**
Greta Di Mattia (Roma (RM), Italy), Laura Petrarca, Enrica Mancino, Luigi Matera, Maria Giulia Conti, Silvia Bloise, Antonella Frassanito, Domenico Paolo La Regina, Elio Iovine, Margherita Di Jorgi, Enea Bonci, Raffaella Nenna, Fabio Midulla

PA2086 **Asthma exacerbations in severe asthmatic children: Association with clinical scores, FeNO and lung function.**
María Belen Lucero (CABA, Argentina), Gabriela Peláez, Verónica Aguerre, Juan Manuel Figueroa, Verónica Giubergia

PA2087 **Mepolizumab in children and adolescents with severe eosinophilic asthma not eligible for Omalizumab: a single centre experience**
Yu Ting Lim (Glasgow, United Kingdom), Thomas Williams, Ross Langley, Elise Weir

PA2088 **Ezrin: potential biomarker of airway epithelial repair and wheeze morbidity in children**
Thomas Iosifidis (Perth (WA), Australia), Ingrid Laing, Andre Schultz, Joseph Ho, Alphons Gwatimba, Siew-Kim Khoo, Sherlynn Ang, Peter Le Souef, Yuliya Karpievitch, Anthony Kicic, Stephen Stick

PA2089 **The soluble form of the receptor for advanced glycation end products (sRAGE) in infants with first and recurrent episodes of wheezing in correlation with lung ultrasound findings**
Sirma Mileva (Sofia, Bulgaria), Gergana Petrova, Polina Kostova, Snejina Mihailova, Venelin Alexiev

PA2090 **Dupilumab improves lung function responder rates in children with type 2 asthma in the VOYAGE study**
Theresa Guilbert (Cincinnati, United States), Alessandro G. Fiocchi, Kevin R. Murphy, Eckard Hamelmann, Kristie Ross, Atul Gupta, Changming Xia, Rebecca Gall, Olivier Ledanois, Amr Radwan, Juby A. Jacob-Nara, Paul J. Rowe, Yamo Deniz

PA2091 **Long-term dupilumab effect on lung function in paediatric patients with uncontrolled asthma**
Leonard Bacharier (Nashville, United States), Theresa W. Guilbert, Adnan Custovic, Arman Altincatal, Olivier Ledanois, Rebecca Gall, Harry Sacks, Juby A. Jacob-Nara, Yamo Deniz, Paul J. Rowe

PA2092 **A retrospective multi-center chart review study on the timely administration of systemic corticosteroids in children with moderate-to-severe asthma exacerbations**
Luna Antonino (Edegem, Belgium), Eva Goossens, Josefien Van Olmen, Ann Bael, Johan Hellinckx, Isabelle Van Ussel, An Wouters, Tijl Jonckheer, Tine Martens, Sascha Van Nuijs, Carolin Van Rossem, Yentl Driesen, Nathalie Jouret, Eva Ter Haar, Sabine Rozenberg, Els Vanderschaeghe, Suzanne Van Steijn, Stijn Verhulst, Kim Van Hoorenbeeck

PA2093 **Factors associated with severe asthma exacerbation in children**
Mohamed aymen Jebali (tunis, Tunisia), Sabrine Louhaichi, Synda Derouiche, Siwar Rejeb, Farah Garci, Houneida Ben Zekri, Jamel Ammar, Besma Hamdi, Agnes Hamzaoui

PA2094 **Comparing functional surrogacy in the upper and lower airway epithelium**
Thomas Iosifidis (Perth (WA), Australia), Ingrid Laing, Alphons Gwatimba, Joseph Ho, Eda Pui, Loanne Harrison, Rebecca Watkinson, Samuel Montgomery, Kevin Looi, Siew-Kim Khoo, Peter Le Souef, Yuliya Karpievitch, Stephen Stick, Anthony Kicic

PA2095 **Elevated Neutrophil-to-Lymphocyte ratio is associated with severe asthma exacerbation in children**
Noga Arwas (Beer Sheva, Israel), Sharon Uzan Shvartzman, Aviv Goldbart, Romi Bari, Itay Hazan, Amir Horev, Inbal Golan Tripto

PA2096 **Blood hypereosinophilia in childhood asthma: impact on disease severity**
Siwar Rejeb (tunis, Tunisia), Hamdi Besma, Jebali Aymen, Derouich Synda, Garci Farah, Ammar Jamel, Louhaichi Sabrine, Agnés Hamzaoui

PA2097 **Adherence to inhaled steroids in children on asthma biologics; prescription uptake for inhaled steroids in children treated with asthma biologic therapy.**
Susan Frost (Birmingham (West Midlands), United Kingdom), Laura Morris, Leanne Illife, Isobel Brookes, Benjamin Davies, Priti Kenia, Satish Rao, Prasad Nagakumar

PA2098 **Predicting aerosol deposition in children with severe asthma and small airways disease**
Hettie M. Janssens (Rotterdam, Netherlands), Wytse van den Bosch, E.J. Ruijgrok, H.A.W.M. Tiddens

PA2099 **Portable oscillometry in preschool children attending the Emergency Department with wheezing**
Senali Y Seneviratne (Leicester, United Kingdom), Saxon Law-Gleen, Damian Roland, Erol Gaillard

PA2100 **Impedance and spirometry measurements compared in paediatric outpatients with recurrent respiratory symptoms**
Maria Cristina Mazzuca (roma, Italy), Giorgia Raponi, Sara Mascambroni, Carla Trovato, Melania Evangelisti, Maria Alejandra Valderrama, Pasquale Parisi, Mario Barreto

PA2101 **Dupilumab reduces systemic corticosteroid exposure in children with uncontrolled moderate-to-severe asthma regardless of prior exacerbations**
Eckard Hamelmann (Bielefeld, Germany), Antoine Deschildre, Francine M. Ducharme, Lawrence D. Sher, Ines De Mir, Changming Xia, Rebecca Gall, Olivier Ledanois, Juby A. Jacob-Nara, Harry Sacks, Paul J. Rowe, Yamo Deniz

PS-12 in poster area Session 222 08:00 - 09:30

Poster session: Evaluation of lung function techniques and sleep studies in paediatrics.

Disease(s) : Sleep and breathing disorders Airway diseases

Method(s) : General respiratory patient care Physiology Pulmonary function testing Respiratory intensive care Epidemiology Imaging

Tag(s) : Clinical

Chairs : Nicole Beydon (Paris, France), Chair to be confirmed

PA2102 **Detecting pediatric breathing: How do CPAP/NIV devices work?**
Emeline Fresnel (Bois-Guillaume, France), Meryl Vedrenne-Cloquet, Marius Lebret, Lucie Griffon, Brigitte Fauroux, Sonia Khirani

PA2103 **Can ventilator's built-in software predict hypercapnia or desaturation in children on chronic non-invasive ventilation? A retrospective study**
Jolien Paulussen (Molenbeek-Wersbeek, Belgium), Xante Mentens, Janne Vanhees, Sophie Installé, Anse Van Ostaeyen, Kris Ides, Nathalie Jouret, Kim Van Hoorenbeeck, Stijn Verhulst

PA2104 **A comparison of machine generated AHI to ODI measured by pulse oximetry in paediatric patients on CPAP**
Natalie Blyth (Nottingham, United Kingdom), Joe Madge, Prakash Patel, Tahera Doctor, Molla Imaduddin Ahmed

PA2105	**Paediatric long-term noninvasive respiratory support in children with central nervous system disorders: a French cross-sectional study.** Marion Carrara (Paris, France), Guillaume Aubertin, Sonia Khirani, Brigitte Fauroux, Jessica Taytard
PA2106	**Long term continuous positive airway pressure and noninvasive ventilation in children with OSA-I and OSA-II in France** Chiara Tommesani (Milano, Italy), Sonia Khirani, Lucie Griffon, Brigitte Fauroux
PA2107	**Comparison of Demographic, Respiratory, and Polysomnography-Capnography Results of Patients with Duchenne Muscular Dystrophy** Mine Kalyoncu (Istanbul, Turkey), Yasemin Gokdemir, Cansu Yılmaz Yeğit, Mürüvvet Yanaz, Aynur Gulieva, Merve Selçuk, Şeyda Karabulut, Neval Metin Çakar, Pınar Ergenekon, Ela Erdem Eralp, Gülten Öztürk, Olcay Ünver, Dilşad Türkdoğan, Fazilet Karakoç, Bulent Karadağ
PA2108	**Transition from tracheostomy to Non-Invasive Ventilation in children with Congenital Central Hypoventilation Syndrome** Jenny Taylor (London, United Kingdom), Alice Crawshaw, Garry Rendle, Vasileios Patelis, Martin Samuels, Elaine Chan
PA2109	**Optical coherence tomography angiography evaluation of choriocapillaris and retinal vessel density in children with obstructive sleep apnea syndrome** Melania Evangelisti (Roma (RM), Italy), Solmaz Abdolrahimzadeh, Marta Arpinelli, Marco Del Pozzo, Gianluca Scuderi, Mario Barreto, Giovanni Di Nardo, Pasquale Parisi, Maria Pia Villa
PA2110	**Oxidative stress in children with obstructive sleep apnea syndrome** Melania Evangelisti (Roma (RM), Italy), Marta Arpinelli, Manuela Cecili, Martina Forlani, Maurizio Simmaco, Giovanni Di Nardo, Pasquale Parisi, Maria Pia Villa
PA2111	**Hyperventilation provocation test in children: what is more frequent, symptoms or hypocarbia?** Nicole Beydon (Paris, France), Corentin El Jammal, Houda Saleh-Guillo, Marc Koskas, Lucia Maingot, Noria Medjahdi, Marie-Claude La Rocca
PA2112	**Applicability of the Global Lung Function Initiative (GLI)-2012 equations to Hong Kong Chinese children** Ching Ching Kate Chan (Hong Kong, Hong Kong), Huichen Zhu, Chun T Au, Hoi M Yuen, Hui Y Chin, Michelle Yu, Magnum Yu, Albert M Li
PA2113	**Impact of new Guidelines on the Quality of Spirometry in Paediatrics** Carolina Arez Constant (Lisboa, Portugal), Ana M Silva, Ângela Drago, Andreia Descalço, Ângela Martins, Teresa Bandeira
PA2114	**Criteria For Bronchodilator Responsiveness Testing In Children. The Most Adequate Is…** Carolina Arez Constant (Lisboa, Portugal), Andreia Descalço, Ângela Drago, Ângela Martins, Ana M Silva, Teresa Bandeira
PA2115	**Lung Clearance Index (LCI) is sensitive to CF lung disease and normal result is reassuring.** Kenneth A. Macleod (Edinburgh (Edinburgh), United Kingdom), Heather Dowle, Taylor Gilchrist, Kellie Moffat, Jody Forster, Don S Urquhart
PA2116	**Automated quality control for spirometry as a tool for faster and more objective results** Xenia Bovermann (Bern, Switzerland), Léa Ho Dac, Marion Curdy, Nadine Meuwly, Carmen Streibel, Bettina Frauchiger, Philipp Latzin
PA2117	**In-vitro comparison of infant SF6-multiple-breath washout setups** Marc-Alexander Oestreich (Bern, Switzerland), Robin Hänni, Florian Wyler, Blaise Etter, Anne-Christianne Kentgens, Dominik Obrist, Philipp Latzin, Kathryn Ramsey, Sophie Yammine
PA2118	**Leg muscle function and exercise capacity in adolescents living with obesity** Larry C. Lands (Montréal (QC), Canada), Juliano Colapelle, Julie St-Pierre, Julius Erdstein
PA2119	**A comparison of CPET protocol selection methods in a Leicestershire paediatric cohort** Natalie Blyth (Nottingham, United Kingdom), Joe Madge, Prakash Patel, Molla Imaduddin Ahmed
PA2120	**Late Breaking Abstract - New aerosol based method detects enlarged distal airspaces in adolescents that were born preterm** Jakob Löndahl (Lund, Sweden), Hugo Öhrneman, Frida Lindström, Cecilia Hagman, Madeleine Petersson Sjögren, Jenny Rissler, Per Wollmer, Ellen Tufvesson
PA2121	**Late Breaking Abstract - Pulmonary small and large vessel blood volume in severe bronchopulmonary dysplasia** Marielle W.H. Pijnenburg (Rotterdam, Netherlands), Merlijn Bonte, Joana Costa, Liesbeth Duijts, Patrick Muchmore, Charles Mussche, Irwin Reiss, Pierluigi Ciet

PS-13 in poster area Session 223 08:00 - 09:30

Poster session: Respiratory monitoring and management in neonatal and paediatric intensive care

Disease(s) : Respiratory critical care | Airway diseases | Interstitial lung diseases | Pulmonary vascular diseases

Method(s) : Physiology | Respiratory intensive care | Pulmonary function testing | Imaging | Surgery | Cell and molecular biology | Public health | General respiratory patient care

Tag(s) : Translational

Chairs : Emanuela Zannin (Milano (MI), Italy), Anna Lavizzari (Milano (MI), Italy)

PA2122	**Fetal breathing patterns in a lamb model of tracheal occlusion for antenatal treatment of congenital diaphragmatic hernia** Mar Janna Dahl (Salt Lake City, United States), Chiara Veneroni, Stefano Robbiani, Francesco Tarantini, Lorenzo Ventura, Anna Lavizzari, Peter Noble, Lorenza Draghi, Jane Pillow, Raffaele Dellaca
PA2123	**Nasal High-Flow Therapy versus Low-Flow Oxygen Therapy post-discharge in infants with Bronchopulmonary Dysplasia: a retrospective observational study.** Anna Lavizzari (Milano (MI), Italy), Alessia Mariani, Elisabetta Ghezzi, Nicola Pesenti, Marijke Ophorst, Silvana Gangi, Mariarosa Colnaghi, Fabio Mosca
PA2124	**A morphometric lung model for studying lung aeration at birth** Chiara Veneroni (Milano (MI), Italy), Enrico Conca, Davide Bizzotto, Alberto Tosi, Kenneth Lutchen, Raffaele Dellacà
PA2125	**Lung function response to postnatal corticosteroids in very preterm infants** Emanuela Zannin (Milano (MI), Italy), Camilla Rigotti, Sofia Chiaraluce, Maria Luisa Ventura
PA2126	**Reduced lung function during childhood after fetal growth restriction in discordant identical twins** Jip Anne Spekman (Leiden, Netherlands), Joël Israëls, Ilja De Vreede, Mady Los, J J Miranda Geelhoed, Monique C Haak, Arno A W Roest, Jeanine M M Van Klink, Enrico Lopriore, Sophie G Groene
PA2127	**Pulmonary Function by Impulse Oscillometry System and Outcomes in Children Born Extremely Preterm at 4 Years of Age** Celine Delestrain (Creteil, France), Kenza Tahiri, Floriane Sauvage, Kamel Halitim, Xavier Durrmeyer, Houmam El Jurdi, Camille Jung, Isabelle Hau, Manon Tauzin, Fabrice Decobert, Christophe Delacourt, Ralph Epaud, Fouad Madhi
PA2128	**Can breathing pattern assessment predict the need for ventilatory support in treated Spinal muscular atrophy type 1 (SMA1) infants?** Antonella LoMauro (Milano (MI), Italy), Chiara Mastella, Mariacristina Scoto, Francesco Muntoni, Elaine Chan, Lisa Edel, Andrea Aliverti, Giovanni Baranello
PA2129	**Lung biopsies in infants and children in critical care situation** Nadia Nathan (Paris, France), Yael Levy, Lauren Bitton, Chiara Sileo, Jerôme Rambaud, Yohan Soreze, Marie Legendre, Camille Louvrier, Harriet Corvol, Erik Hervieux, Pierre-Louis Leger, Blandine Prevost, Aurore Coulomb L'Herminé
PA2130	**Rates of BPD in extremely preterm survivors in Sweden, 2014-1016 vs. 2004-2007** Petra Johanna Um-Bergström (Sollentuna, Sweden), Linn Löfberg, Thomas Abrahamsson, Magnus Domellöf, Aijaz Farooqi, Christian Gadsbøll, Anders Elfvin, Stellan Håkansson, Karin Källén, David Ley, Mikael Norman, Erik Normann, Fredrik Serenius, Richard Sindelar, Karin Sävman, Lena Hellström Westas, Ulrika Ådén, Lars Björklund
PA2131	**Comparing the effect on lung surfactant function of high-frequency oscillatory ventilation and conventional mechanical ventilation in piglets** Paula Losada-Oliva (Madrid, Spain), Chiara Autilio, Noelia González-Pacheco, Cristina Ramos-Navarro, Ana Rodríguez-Sánchez De La Blanca, Martín Santos, Bárbara Olmeda Lozano, Jesús Pérez-Gil, Manuel Sánchez-Luna
PA2132	**Circulatory adaptation to dexamethasone for severe lung disease in extremely preterm infants: An echocardiographic study** Arvind Sehgal (Melbourne (VIC), Australia), Marcel Nold, Calum Roberts, Samuel Menahem
PA2133	**Dose-dependent impact of human milk feeding on tidal breathing flow-volume loop-parameters across the first two years of life in extremely low-birth-weight infants.** Anna Lavizzari (Milano (MI), Italy), Benedetta Esposito, Nicola Pesenti, Giulia Vizzari, Marijke Ophorst, Silvana Gangi, Mariarosa Colnaghi, Fabio Mosca, Maria L Gianni
PA2134	**Optimization of albuterol delivery via an anesthesia bag in pediatric critical care** Sebastien Tessier (Winnipeg, Canada), Louise Chartrand, Andrew Halayko, Victoria Plowsay
PA2135	**Associations between ethnicity, oxygenation and oxidative stress in preterm infants** Ourania Kaltsogianni (London, United Kingdom), Sara Zaidi, Ravindra Bhat, Anne Greenough, Theodore Dassios

PA2136 **Effects of a Spontaneous Breathing Trial In Children With Tracheostomy And Long-Term Mechanical Ventilation**
Gregory Villarroel Silva (Santiago, Chile), Yorschua Jalil-Contreras, Eduardo Moya-Gallardo, Ignacio Oyarzún Aguirre, Gonzalo Moscoso Altamira, Claudia Astudillo M, L.Felipe Damiani

PA2137 **The hypoxic challenge test in preterm born infants**
Stephanie J.A. Balink (Rotterdam, Netherlands), Andre A. Kroon, Liesbeth Duijts, Renate M.C. Swarte, Beatrijs Bartelds, Laurens P. Koopman, Irwin K.M. Reiss, Marielle W.H. Pijnenburg

PA2138 **Epithelial lining fluid Surfactant Protein-D levels in extremely preterm neonates in the first hours of life**
Chiara Autilio (Madrid, Spain), Daniele De Luca, Raquel Arroyo, Antonio Picerno, Paul Kingma

PA2139 **Feasibility and acceptability of pulse oximeter (PO) in Integrated Management of Neonatal and Childhood Illnesses (IMNCI) services by public health facilities - Qualitative study.**
Dhiraj Agarwal (Pune (Maharashtra), India), Manisha Gore, Anand Kawade, Sudipto Roy, Ashish Bavdekar, Harish Nair, Sanjay Juvekar, Girish Dayma

PA2140 **Developing a Priority Setting Partnership for preterm lung health (on behalf of PELICAN CRC)**
Naomi Hemy (ASHFIELD, Australia), Amber Bates, Belinda Frank, Anne Mc Kenzie, Shannon Simpson

PA2141 **Late Breaking Abstract - MRI identifies functional and structural BPD characteristics in preterm infants at five years of age**
Anne Hilgendorff (München, Germany), Kathrin Strobl, Kai Foerster, Alida Kindt, Friederike Häfner, Benjamin Schubert, Florian Heinen, Andreas Flemmer, Olaf Dietrich, Sophia Stöcklein

PS-14 in poster area Session 224 08:00 - 09:30

Poster session: Cystic fibrosis in adults: a changing scene

Disease(s) : Airway diseases Interstitial lung diseases

Method(s) : Pulmonary function testing General respiratory patient care Transplantation Imaging Cell and molecular biology Palliative care Physiology

Tag(s) : Clinical

Chairs : Andrea Gramegna (Milano (MI), Italy), Maria Do Pilar Azevedo De Almeida Cardim (Lisboa, Portugal)

PA2142 **Impact of CFTR modulators on lung transplant trends in people with cystic fibrosis in the US**
Christian Merlo (Baltimore, United States), Grace R. Lyden, David P. Schladt, Matthew J. Camiolo, Lisa Mcgarry, Zailong Wang, Jessica Morlando Geiger

PA2143 **Long-term clinical outcomes of Elexacaftor/Tezacaftor/Ivacaftor therapy in adults with cystic fibrosis and severe lung disease**
Daniela Savi (Rome, Italy), Francesca Lucca, Marisol Ocampo Barao, Ilaria Meneghelli, Francesca Pauro, Monica Signorini, Marco Cipolli

PA2144 **Lung Clearance Index (LCI) and BMI are consistent with functional improvement in adult CF patients (pwCF) after elexacaftor/tezacaftor/ivacaftor (ETI) treatment**
Francesca Lucca (Verona, Italy), Sonia Volpi, Cecilia Brignole, Giulia Cucchetto, Giulia Paiola, Anna Pegoraro, Sara Tomezzoli, Marco Cipolli

PA2145 **The impact of CFTR modulator therapy on body composition in patients with cystic fibrosis and advanced lung disease**
Andrea Vukić Dugac (Zagreb, Croatia), Lucija Josić, Martina Jelavić, Marko Banić, Ivan Bambir, Duška Tješić-Drinković

PA2146 **Real-Life Adverse Effects of the New Cystic Fibrosis Modulator Therapy**
Amélia Simas Ribeiro (Lisboa (Lisboa), Portugal), Pilar Azevedo, Carlos Lopes

PA2147 **Structural changes in lung morphology after modulating therapy with elexacaftor/tezacaftor/ivacaftor in patients with cystic fibrosis**
Valentina Fainardi (Parma (PR), Italy), Kaltra Skenderaj, Andrea Ciuni, Gianluca Milanese, Michela Deolmi, Francesco Longo, Nicola Sverzellati, Susanna Esposito, Giovanna Pisi

PA2148 **Lung volumes as possible factors explaining the heterogeneity in the response to elexacaftor/tezacaftor/ivacaftor in patients with cystic fibrosis and advanced lung disease**
Chiara Premuda (Milano, Italy), Andrea Gramegna, Sofia Misuraca, Gianfranco Alicandro, Francesca Lucca, Mariangela Retucci, Francesco Amati, Sonia Volpi, Stefano Aliberti, Marco Cipolli, Francesco Blasi

PA2149 **Evaluation of the therapeutic response to CFTR protein modulator treatments, in the management of patients with cystic fibrosis by lung ultrasound.**
Sabrina Duval (Le Havre, France), Nicolas Mazellier, Marion Dupuis, Marlène Murris-Espin, Benoit Douvry, Thomas Flament, Magali Dupuy-Grasset, Julia Ballouhey, Damien Basille, Baptiste Arnouat, André Gillibert, Hélène Morisse-Pradier, Gilles Mangiapan, Elise Artaud-Macari

PA2150	**Effect of ETI on the degree of adherence to inhaled medication in adults with CF: a multi-center study in Greece.** Aikaterini Manika (Pylaia (Thessaloniki), Greece), Filia Diamantea, Anna Tsakona, Alexandros Kakolyris, Athina Sopiadou, Maria Sionidou, Serafeim Chrysovalantis Kotoulas, Sirmo Stiliani Kirvasili, Marija Hadji-Mitrova, Eleni Papadaki, Elisavet-Anna Chrysochoou, Elpis Hatziagorou
PA2151	**Decreased mucolytic prescriptions in Phe508del homozygous Cystic Fibrosis Adults on Elexacaftor-tezacaftor-ivacaftor (Kaftrio/Trikafta)** Mohammed Azib Zahid (LONDON, United Kingdom), James Hartley, Akangsha Sur Roy, Clare Lau, Frederick Jarvis, Komal Mukhtar, Malik Khan
PA2152	**Pulmonary function and quality of life in adults with cystic fibrosis: a cross-sectional analysis from the InSPIRE:CF trial** Natalia Smirnova (Atlanta, United States), Jane Lowers, William Hunt, Matthew Magee, Pedro Lamothe, Sara Auld, Dio Kavalieratos
PA2153	**Quality of life (QOL) of Tunisian patients with Cystic Fibrosis (CF)** Asma Knaz (Sousse, Tunisia), Aissa Sana, Kacem Amani, Handous Rayhane, Ben Bedira Baraa, Ben Jazia Rahma, Gargouri Imen, Benzarti Wafa, Abdelghani Ahmed
PA2154	**Lower levels of bacterial aerobic respiration in sputum from people with cystic fibrosis with chronic lung infection** Mette Kolpen (København, Denmark), Peter Østrup Jensen, Pernille Olsen, Arnold Matovu Dungu, Birgitte Lindegaard, Frederik Boëtius Hertz, Thomas Bjarnsholt, Daniel Faurholt-Jepsen
PA2155	**Clinical follow up after SARS-COV2 infection in Cystic Fibrosis patients** Ana Gomez Ortiz (Seville, Spain), Laura Carrasco Hernández, Lucas Román Rodríguez, Esther Quintana Gallego
PA2156	**Nasal potential difference (NPD) and extended genetic analysis improve classification of CF and CFTR-related disorders: outcomes from a national difficult CF diagnosis (DCFD) service** Elif S. Agaoglu (London, United Kingdom), Deborah J Morris-Rosendahl, Michael D Waller, Ellie Quinn, Winston Banya, Imogen Felton, Rachel Robinson, Eric W Alton, Jane C Davies, Nicholas J Simmonds
PA2157	**Sweat Chloride Concentration as a Surrogate Marker of CFTR Modulator Therapy Response** Amélia Simas Ribeiro (Lisboa (Lisboa), Portugal), Pilar Azevedo, Carlos Lopes, Patrícia Veloso
PA2158	**Forced oscillation technique for monitoring the respiratory status of adult cystic fibrosis patients** Anamarija Štajduhar (Zagreb, Croatia), Martina Batarilo Hadar, Ivona Markelić, Matea Škoro, Ivan Bambir, Duška Tješić-Drinković, Andrea Vukić Dugac
PA2159	**Cystic Fibrosis and Fit-to-Fly (CYFF Study)** Aina Akerø (Oslo, Norway), Elisabeth Edvardsen, Pål Finstad, Bjørn Skrede, Mia Østerhaug, Sofia Backman, Anne Edvardsen, Ole Henning Skjønsberg
PA2160	**Real-life experience using intravenous Fosfomycin in patients with Cystic Fibrosis and non-Cystic Fibrosis bronchiectasis** Luca Riberi (Torino (TO), Italy), Letizia Valsecchi, Andrea Falco, Nausicaa Scopelliti, Chiara Mossetto, Simone Soccal, Sara Demichelis, Alberto Perboni, Barbara Messore
PA2161	**Clinical outcome of aminoglycoside therapy in Cystic Fibrosis patients, a single center experience.** Merlin Thomas (Doha, Qatar), Mousa Hussein, Dana Bakdach, Reem El-Ajez, Anam Elarabi, Mansoor Hameed, Aisha Aladab, Abdullah Arshad, Mona Allangawi

PS-15 in poster area — Session 225 — 08:00 - 09:30

Poster session: Advances in the diagnosis and treatment of non-tuberculous mycobacterial lung disease

Method(s) : General respiratory patient care Pulmonary rehabilitation Cell and molecular biology Epidemiology Imaging Physiology Public health

Tag(s) : Clinical

Chairs : Jakko van Ingen (Nijmegen, Netherlands), Dirk Wagner (Freiburg, Germany)

PA2162	**Non tuberculous mycobacterial pulmonary disease: a single center experience analysis** Nicola Baio (Pavia, Italy), Simone Montini, Francesco Rocco Bertuccio, Lucrezia Pisanu, Valentina Ferroni, Vittorio Chino, Vincenzo Sanci, Paolo Cosseta Reposi, Alessandro Cascina, Valentina Conio, Angelo Guido Corsico
PA2163	**Incremental hospitalization burden of nontuberculous mycobacterial lung disease in patients with asthma in Japan** Ping Wang (Bridgewater, United States), Kozo Morimoto, Naoki Hasegawa, Emily Xie, Mariam Hassan

PA2164	**Epidemiological Trends in Nontuberculous Mycobacterial Infection among People with Cystic Fibrosis in Germany** Mathis Steindor (Essen, Germany), Sylvia Hafkemeyer, Christian Ruckes, Florian Stehling, Lutz Naehrlich, Felix C. Ringshausen
PA2165	**The role of gut microbiota dysbiosis in nontuberculous mycobacterial lung disease: possible causal relationship and pathogenesis** Chin-Chung Shu (Taipei, Taiwan), Tzu-Lung Lin, Hsin-Chih Lai
PA2166	**Patient-reported burden of nontuberculous mycobacterial lung disease - results from a European patient survey** Roald van der Laan (Huijbergen, Netherlands), Christian Hoening, Roger Legtenberg, Andreas Reimann, Marko Obradovic
PA2167	**Our experience in the treatment of non-tuberculous mycobacteria** Andrea Expósito Marrero (San Cristobal A La Laguna, Spain), Jesús Rodríguez González, Carmen Palacios Clar, Nuria Castejon Pina, Adrian Baeza Ruiz, Jose Luis Trujillo Castilla
PA2168	**Understanding patients at risk of NTM-PD using a modified Delphi process** Michael Loebinger (London, United Kingdom), Stefano Aliberti, Charles S Haworth, Mateja Jancovic Makek, Christophe Lange, Natalie Lorent, Eva Polverino, Apostolos Papavasieiou, Gernot Rohde, Nicolas Veziris, Dirk Wagner, Jakko Van Ingen
PA2169	**Disseminated mycobacterial infection in patients on ruxolitinib for myleodysplastic disorders** sophie roberts (London, United Kingdom), Philip Gothard, Hanif Esmail, Michael Brown, Johnathan Lambert, Holly Theaker, Ana Garcia-Mingo, Stephen Morris-Jones, Moerida Belton, Lusha Kellgren, Santino Capocci
PA2170	**NTM pulmonary disease in a referral center: treatment adherence and outcomes in a retrospective cohort.** Natalie Lorent (Leuven, Belgium), Julie De Man, Nele Adriaenssens, Pascal Van Bleyenbergh, Michiel Happaerts, Emmanuel André
PA2171	**Single cells RNA sequencing of peripheral blood mononuclear cells reveals that hyperinflammatory monocytes are associated with the risk of Mycobaterium abscessus pulmonary disease** Nicola Ivan Lore' (Milano (MI), Italy), Stefano De Pretis, Federico Di Marco, Andrea Gramegna, Fabio Saliu, Francesca Giannese, Francesco Blasi, Daniela Maria Cirillo
PA2172	**Changes in sputum microbiota during treatment period in nontuberculous mycobacterial pulmonary disease** Bo-guen Kim (Seoul, Republic of Korea), Noeul Kang, Su-Young Kim, Dae Hun Kim, Sang-Heon Kim, Byung Wo Jhun
PA2173	**Real-life experience of inhaled liposome amikacin in NTM patients from a tertiary referral hospital in Greece** Angeliki Loukeri (Nikaia (Piraeus), Greece), Evgenia Papathanassiou, Charalampos Moschos, Christos Kampolis, Apostolos Papavasileiou
PA2174	**Clinical characteristics of non-tuberculous mycobacterial pulmonary disease patients according to respiratory microorganisms** BEOMSU SHIN (Wonju, Republic of Korea), Seong Mi Moon
PA2175	**Physical activity and possible sarcopenia in patients with nontuberculous mycobacterial pulmonary disease** Young Ae Kang (Seoul, Korea, Republic of Korea), Eun Ki Chung, Youngmok Park, Dong-Hyuk Park, Justin Y. Jeon
PA2176	**Addressing an unmet need in the management of nontuberculous mycobacterial infections in Belgium: 1 year experience of the NTM consilium** Natalie Lorent (Leuven, Belgium), Nele Adriaenssens, Samira Boarbi, Yannick Vande Weygaerde, Peter Bomans, Maja Kiselinova, Benedicte De Muynck, Maria Gabrovska, Eva Van Braeckel, Steven Callens, Maya Hites, Bénédicte Delaere, Sophie Gohy, Pascal Van Bleyenbergh, Leen Rigouts, Julie De Man, Laurens Ceulemans, Emmanuel André
PA2177	**Association between physical activity and cough and sputum symptoms in patients with nontuberculous mycobacteria pulmonary disease** Kazuki Ono (Tokyo, Japan), Mitsuru Tabusadani, Hideaki Senjyu, Ryo Kozu
PA2178	**Unravelling the pathogenicity of Mycobacterium abscessus cystic fibrosis clinical isolates in respiratory infection models** Fabio Saliu (Milan, Italy), Federico Di Marco, Francesca Nicola, Andrea Spitaleri, Amleto Fiocchi, Caterina Oneto, Francesca Giannese, Beatrice Silvia Orena, Lisa Cariani, Daniela Maria Cirillo, Nicola Ivan Lorè
PA2179	**Deaths from Tuberculosis: Differences between Tuberculosis-related and Non-tuberculosis-related Deaths** yunjeong jeong (Goyang-Si, Republic of Korea), Jae Seuk Park, Hyung Woo Kim, Jinsoo Min, Yousang Ko, Jee Youn Oh, Eun Hye Lee, Bumhee Yang, Jung Hyun Chang, Min Ki Lee, Yun Seong Kim, Yangjin Jegal, Sung Soon Lee, Ju Sang Kim, Hyeon-Kyoung Koo

PA2180 **Late Breaking Abstract - Predictive factors of microbiological negativization from Atypical Pulmonary Mycobacteriosis in a cohort from southeastern Italy**
Vitaliano Nicola Quaranta (, Italy), Manuela Rollo, Viviana Turchiarelli, Vincenza Giorgio, Maria Grazia Tummolo, Ina Ali, Cristian Locorotondo, Francesca Montagnolo, Giuseppe Cassano, Irene Annamaria Di Pierro, Mariangela Tedone, Vito Liotino, Sonia Santamaria, Giuseppe Guida, Silvano Dragonieri, Andrea Portacci, Giovanna Elisiana Carpagnano

PS-16 in poster area Session 226 08:00 - 09:30

Poster session: Fungal infections and infections in airway disease

Disease(s) : Airway diseases Respiratory critical care

Method(s) : Epidemiology Cell and molecular biology General respiratory patient care Public health Respiratory intensive care

Tag(s) : Translational

Chairs : Charles Haworth (Cambridge, United Kingdom), Chair to be confirmed

PA2181 **Identifying core domains of health-related quality of life in chronic pulmonary aspergillosis.**
Dareen Marghlani (London, United Kingdom), Lisa Nwankwo, Darius Armstrong-James, Melody Ni, Anand Shah

PA2182 **Accelerated evolution of azole resistant Aspergillus fumigatus by diesel particles**
Valentina Huang (London, United Kingdom), Leah Daly, Kirstie Lucas, Kazuhiro Ito

PA2183 **Accuracy of BAL galactomannan and Aspergillus-PCR in diagnosing chronic pulmonary aspergillosis**
Animesh Ray (Kolkata (West Bengal), India), Mohit Chowdhury, Gagandeep Singh, Sanjeev Sinha, Immaculata Xess, Naveet Wig

PA2184 **A prospective study of the impact of a Fungal Multi-Disciplinary Team meeting on patient management at a Tertiary Referral Centre**
Tanjila Khan (Harrow, United Kingdom), Nadiya Sultana, Karan Gour, Sarah Sheard, Laura Martin, Anan Ghazy, Joanna Peters, Richard Wilson, Renuka Palanicawandar, Mark Gilchrist, Darius Armstrong-James, Meg Coleman, Lydia Finney

PA2185 **MANAGMENT OF ABPA WITH AZOLES AND STEROID THERAPY**
Francesco Bini (Pavia (PV), Italy), Bruno Dino Bodini, Stefano Carlo Zucchetti, Paola Faverio

PA2186 **Fighting aspergillosis using biocontrol bacteria**
Niki Ubags (Epalinges, Switzerland), Aurélien Trompette, Apiha Shanmuganathan, Julie Pernot, Fabio Palmieri, Eric Bernasconi, Christophe Von Garnier, Janick Stucki, Nina Hobi, Pilar Junier, Angela Koutsokera

PA2187 **Dry powder aerosol of amphotericin b for treatment of pulmonary fungal disease**
Matthew Reed (Albuquerque, United States), Craig Davies-Cutting, David Revelli, Amr Hefnawy, Hugh Smyth, Daniel Moraga-Espinoza, Philip Kuehl, Matthew Fergusson

PA2188 **Environmental Aspergillus fumigatus associates with COPD exacerbations**
Pei Yee Tiew (Singapore, Singapore), Micheal Mac Aogain, Tavleen Kaur Jaggi, Fransiskus Xaverius Ivan, Augustine Tee, Huiying Xu, Mariko Siyue Koh, Thun How Ong, John A. Abisheganaden, Stephan C. Schuster, Sanjay H. Chotirmall

PA2189 **The impact of bacterial and fungal co-infections in patients with severe COVID – 19: a retrospective analysis**
Pavel Yordanov (Varna, Bulgaria), Figen Mustafa, Vanya Kostadinova, Tanya Dobreva, Nadezhda Ilieva, Velislava Tasheva, Rositsa Krasteva, Konstantin Kapitanov, Pavlina Peneva, Darina Miteva, Valentina Dimitrova, Diana Petkova

PA2190 **Retrospective review of fungal lung disease management, Brighton UK**
Syra Dhillon (Wokingham, United Kingdom), Emma Rivera, Aoife Hendrick, Gillian Jones, Vanessa Kahr, Katharine Hurt

PA2191 **Asthma and bronchial infection**
Tarekk Cherif (Ariana, Tunisia), Amani Ben Mansour, Soumaya Ben Saad, Azza Slim, Hafaoua Daghfous, Fatma Tritar

PA2192 **Impact of duration of inhaled antibiotic treatment in COPD patients with chronic bronchial infection by Pseudomonas**
Miguel Angel Leal García (Terrassa, Spain), Roser Costa Solà, Andrea Hernández Rizo, Annie Navarro Rolón, Cristina Esquinas López, Jose Sanz Santos, Marc Miravitlles

PA2193 **Mucus, microbiomes, and lung function decline in COPD**
Oliver Ward Meldrum (Singapore, Singapore), Gavin C. Donaldson, Jayanth Kumar Narayana, Fransiskus Xaverius Ivan, Tavleen Kaur Jaggi, Micheál Mac Aogáin, James P. Allinson, Jadwiga A. Wedzicha, Sanjay H. Chotirmall

PA2194 **Tolerance to inhaled antibiotic therapy in COPD patients and chronic bronchial infection by Pseudomonas**
Miguel Angel Leal García (Terrassa, Spain), Roser Costa Solà, Annie Navarro Rolon, Andrea Hernandez Rizo, Cristina Esquinas Lopez, Jose Sanz Santos, Marc Miravitlles

PA2195 **Chronic obstructive pulmonary disease in Denmark: Nationwide yearly proportion of patients with at least one moderate or severe pneumonia from 1995 to 2018**
Allan Klitgaard (Vejle, Denmark), Rikke Ibsen, Ole Hilberg, Anders Løkke

PA2196 **Pseudomonas aeruginosa predicts exacerbation frequency in Severe Asthma**
Fransiskus Xaverius Ivan (Singapore, Singapore), Pei Yee Tiew*, Tavleen Kaur Jaggi, Kai Xian Thng, Pee Hwee Pang, Thun How Ong, John A Abisheganaden, Mariko Siyue Koh, Sanjay H Chotirmall

PA2197 **Impact of smoking in acute community acquired lung disease: severity and mortality**
Hadhemi Rejeb (Sousse, Tunisia), SABRINE ELFIDHA, Nouha Guedri, Hanen Smadhi, Hajer Abdelghaffar, Hela Hassene, Dorra Greb, Ines Akrout, Leila Fekih, Hela Kammoun, Mohamed Lamine Megdiche

PA2198 **Late Breaking Abstract - Development of a Novel Scoring System to Predict Survival of Acute Invasive Fungal Rhinosinusitis Patients**
Minhae Park (Seoul, Republic of Korea), Hyo Yeol Kim

PA2199 **Late Breaking Abstract - The blood transcriptional response in ICU-acquired pneumonia**
Justin de Brabander (Amsterdam, Netherlands), Erik H. A. Michels, Joe M. Butler, Tom D. Y. Reijnders, Tjitske S. R. Van Engelen, Giuseppe G. F. Leite, Fleur P. Paling, Marc J. M. Bonten, Leen Timbermont, Surbhi Malhotra-Kumar, Jan A. J. W. Kluytmans, Hessel Peters-Sengers, Tom Van Der Poll

PA2200 **Late Breaking Abstract - Flagellin as an adjunctive to antibiotic treatment of MDR-Klebsiella pneumonia in mice**
Christine C. A. van Linge (Amsterdam, Netherlands), Osoul Chouchane, Jean-Claude Sirard, Wil H. F. Goessens, Alex F. De Vos, Tom Van Der Poll

PS-17 in poster area Session 227 08:00 - 09:30

Poster session: Translating lung cancer: mechanisms, mutations, and prediction

Disease(s) : Airway diseases Interstitial lung diseases Thoracic oncology

Method(s) : Cell and molecular biology Surgery Epidemiology Pulmonary function testing General respiratory patient care Endoscopy and interventional pulmonology Public health

Tag(s) : Translational

Chairs : Andriani Charpidou (Athens, Greece), Daniela Xhemalaj (Tirana, Albania)

PA2201 **Cancer-related mutations in non-tumoral respiratory epithelium: long-term prognosis.**
Roberto Chalela Rengifo (Barcelona, Spain), Emanuel Carmona, Albert Sánchez-Font, Víctor Curull, Pedro Rocha, Diana Badenes, Raquel Longarón, Joaquín Gea, Ignacio Sánchez-Guerri, Beatriz Bellosillo

PA2202 **Prognostic impact of reactive oxygen species modulator 1 (Romo1) in resected EGFR-mutant lung adenocarcinoma**
Tae Woo Kim (Seoul, Republic of Korea), Myung Jae Park, Seung Hyeun Lee

PA2203 **Late Breaking Abstract - Factors affecting recurrence in early stage lung adenocarcinoma**
Fatma Canbay (Nicosia, Cyprus), Ayperi Merzi Öztürk, Sema Canbakan, Funda Demirağ, Hakan Ertürk

PA2204 **IL-17A promotes tumorigenesis and upregulate PD-L1 expression in Non-small cell lung cancer**
Hua Liao (GuangZhou, China), Hangming Dong

PA2205 **Crosstalk between Metformin and angiogenesis in lung cancer model**
Jiun-Long Wang (Taichung, Taiwan), Chuan-Mu Chen

PA2206 **Changes of lung microbiota composition in patients with non-small cell lung cancer**
Vytautas Ankudavicius (Kaunas, Lithuania), Darja Nikitina, Rokas Lukosevicius, Jurgita Skieceviciene, Juozas Kupcinskas, Skaidrius Miliauskas, Marius Zemaitis

PA2207 **Sphingolipid metabolism in the pathogenesis of advanced non-small cell lung cancer**
Lilla Büdi (Budapest, Hungary), Dániel Hammer, Rita Varga, Veronika Müller, Adám Domonkos Tárnoki, Dávid László Tárnoki, Martina Mészáros, András Bikov, Péter Horváth

PA2208 **Association of DNA repair gene O6-Methylguanine-DNA Methyltransferase (MGMT) expression with aberrant promoter methylation in Lung Cancer Progression**
Supriya Karpathak (Lucknow, India), Rajiv Garg, Mohammad Kaleem Ahmad, Anand Srivastava, Neelam Misra, Anurag Kumar Srivastav

PA2209 **Late Breaking Abstract - Higher radiation dose in chemoradiotherapy followed by immunotherapy with durvalumab in patients with stage III non-small cell lung cancer does not increase risk for pneumonitis.**
Felix Schragel (Wien, Austria), Melanie Matousek, Christoph Resl, Peter Errhalt, Klaus Hackner

PA2210 **Understanding BRAF mutation in non-small cell lung cancer patients**
Giulia Squarzoni (Italy, Italy), Mariaenrica Tine, Davide Ortolan, Federica Pezzuto, Fiorella Calabrese

PA2211 **Next-generation sequencing in stage I-IIl vs stage IV non-small cell lung cancer**
Miguel Trigueiro Rocha Barbosa (Viana do Castelo, Portugal), Joana Ribeiro, Raquel Paulinetti, Telma Sequeira, Paulo Mota, Cristina Albuquerque, Teresa Almodovar

PA2212 **Evaluation of PD-1 T lymphocytes in bronchoalveolar lavage in lung cancer compared to benign lung diseases**
Barbara Hammer (Borstel, Germany), Christina Bal, Maximilian Gysan, Sonja Zehetmayer, Silvana Geleff, Andreas Zech, Markus Kramer, Seda Ayazseven, Marco Idzko, Mir Alireza Hoda, Daniela Gompelmann

PA2213 **Prognostic significance of the IASLC Pathology Committee grading system for lung adenocarcinoma among Filipino patients**
Aprille Anne Octaviano (Quezon City, Philippines), Ma. Janeth Samson, Rex Michael Santiago

PA2214 **Spread through air spaces prognostic value in adenocarcinoma**
Mara Daniela Silva Sousa (Vizela, Portugal), Mariana Gonzalez Ribeiro, Catarina Sousa, Hélder Novais-Bastos, David Araújo, Gabriela Fernandes, Adriana Magalhães, André Carvalho, Susana Guimarães, Conceição Souto Moura, Venceslau Hespanhol, Cláudia Freitas

PA2215 **COMPARATIVE ANALYSIS ACCORDING TO ALPHA-1 ANTITRYPSIN GENOTYPE IN A COHORT OF PATIENTS WITH LUNG CANCER IN NORTHWEST SPAIN**
Ramon Antonio Tubio Perez (Vigo, Pontevedra, Spain), Esmeralda Garcia Rodriguez, Ana Priegue Carrera, María Torres Durán, Carlos Vilariño Pombo, Raquel Dacal Quintas, Isaura Parente Lamelas, Raquel Barbosa Lorenzo, Alberto Fernandez Villar

PA2216 **COPD patients with NSCLC respond better to immune checkpoints inhibitors**
Augustin Boudoussier (Bordeaux, France), Iban Larrouture, Pauline Henrot, Remi Veillon, Claire Bardel, Camille Chautemps, Pierre Schilfarth, Maeva Zysman

PA2217 **Machine Learning Predicts metastasis of cT1 solid lung cancer**
Li Yang (, China), Jing Huang, Jie Lan, Weiyi Li, Junhao Mu, Min Ao, Longke Ran

PS-18 in poster area Session 228 08:00 - 09:30

Poster session: Sarcoidosis: disease mechanisms and pathogenesis

Disease(s) : Interstitial lung diseases

Method(s) : General respiratory patient care Cell and molecular biology Pulmonary function testing Endoscopy and interventional pulmonology Epidemiology

Tag(s) : Translational

Chairs : Marcel Veltkamp (De Meern, Netherlands), Natalia V. Rivera (Stockholm, Sweden)

PA2218 **How informed are patients with pulmonary sarcoidosis about their disease?**
Michael Kreuter (Heidelberg, Germany), Katharina Buschulte, Philipp Höger, Claudia Ganter, Marlies Wijsenbeek, Nicolas Kahn, Katharina Kriegsmann, Finn Moritz Wilkens, Bernd Stachetzki, Markus Polke, Sarah El-Hadi, Christoph Lederer, Felix Herth

PA2219 **T follicular helper cell subsets in sarcoidosis patients: a comparison between three anatomical compartment.**
Matteo Fanetti (Siena, Italy), Miriana D'Alessandro, Sara Gangi, Laura Bergantini, Fabrizio Mezzasalma, Vittoria Ventura, Sara Croce, Gaia Fabbri, Giusy Montuori, Marco Spalletti, Marta Abbritti, Stefano Baglioni, Paolo Cameli, Elena Bargagli

PA2220 **Late Breaking Abstract - HLA-DR immunopeptidomics on cells from bronchoalveolar lavage**
Benedikt Zöhrer (Stockholm, Sweden), Ákos Végvári, Johan Grunewald, Åsa M. Wheelock

PA2221 **T helper and T cytotoxic cells subsets in peripheral, alveolar and lymph nodes of sarcoidosis patients**
Maddalena Messina (Siena, Italy), Miriana D'Alessandro, Sara Gangi, Laura Bergantini, Fabrizio Mezzasalma, Magda Viani, Marco Guerrieri, Lucia Cassai, Elena Pordon, Sara Croce, Marta Abbritti, Stefano Baglioni, Paolo Cameli, Elena Bargagli

PA2222 **CD4+ T cells from EBUS/TBNA samples express different immunomodulatory molecules in patients with sarcoidosis.**
Agata Raniszewska (Warszawa, Poland), Elżbieta Rutkowska, Iwona Kwiecień, Piotr Miklusz, Karina Jahnz-Różyk, Piotr Rzepecki

PA2223 **RESPISAM: Type 1 inflammation biomarkers from bronchial mucosal lining fluid in parenchymal versus nodal sarcoidosis.**
Osman Hatem (London, United Kingdom), Hannah Jarvis, Ryan Thwaites, Kavina Manalan, Tanushree Tunstall, Joan Nanan, Mica Tolosa-Wright, Ishita Marwah, Ak Reuschl, Trevor Hansel, Ajit Lalvani, Onn Min Kon

PA2224 **Alveolar nitric oxide concentration as a potential biomarker of fibrosis in pulmonary sarcoidosis: a pilot study**
Stefano Levra (Moncalieri, Italy), Fabiana Giannoccaro, Maria Chernovsky, Francesca Bertolini, Vitina Carriero, Elisa Arrigo, Flavio Crosa, Paolo Carlo Ghio, Giuseppe Guida, Fabio Luigi Massimo Ricciardolo

PA2225 **CD56dimCD16bright in peripheral blood, lung lymph node and bronchoalveolar lavage from sarcoidosis patients**
Vittoria Ventura (Siena, Italy), Lucia Cassai, Elena Pordon, Sara Gangi, Laura Bergantini, Fabrizio Mezzasalma, Baglioni Stefano, Marta Abbritti, Elena Bargagli, Miriana D'Alessandro

PA2226 **Retrospective analysis of BeLPT over 20 years**
Louis Jouanjan (Freiburg, Germany), Charlott Terschluse, Gernot Zissel, Caroline Quartucci, Joachim Müller-Quernheim, Daiana Stolz, Björn Christian Frye

PA2227 **Defining serum TNF-α concentration related endotype of sarcoidosis- A Polish real-life retrospective observational study**
Anna Goljan Geremek (Warszawa, Poland), Piotr Radzinski, Elzbieta Puscinska, Urszula Demkow

PA2228 **Change in bone mineral density in Danish patients with sarcoidosis**
Janne Møller (Skanderborg, Denmark), Lars Rejnmark, Elisabeth Bendstrup

PA2229 **Evaluation of Xpert MTB/RIF Ultra in differentiating tuberculosis from sarcoidosis in patients with mediastinal lymphadenopathy**
Sahajal Dhooria (Chandigarh, India), Kusum Sharma, Inderpaul Singh Sehgal, Ritesh Agarwal, Ashutosh Nath Aggarwal

PA2230 **Is the internet a sufficient source of information on Sarcoidosis?**
Michael Kreuter (Heidelberg, Germany), Katharina Buschulte, Philipp Höger, Claudia Ganter, Marlies Wijsenbeek, Nicolas Kahn, Katharina Kriegsmann, Finn Moritz Wilkens, Felix Herth

PA2231 **An analysis of seasonality of sarcoidosis in Turkey**
Emre Yanardag (Istanbul, Turkey), Muammer Bilir, Cuneyt Tetikkurt, Halil Yanardag

PA2232 **PD-1/TIGIT axis: a novel therapeutic target?**
Sara Gangi (siena, Italy), Simona Luzzi, Laura Bergantini, Paolo Cameli, Elena Bargagli, Miriana D'Alessandro

PA2233 **Late Breaking Abstract - Transcriptomic profiling identifies pro-fibrotic macrophages under ferroptotic stress in silicosis**
Christian Aloe (Bundoora, Australia), Nicole Soo Leng Goh, Jonathan Mcqualter, Reshma Pujari, Rhoda Cameron, Julie Teague, Paris Papagianis, Simon Hall Apte, Brendan O'Sullivan, Ross Vlahos, Christine Faye Mcdonald, Ryan Francis Hoy, Daniel Charles Chambers, Tracy Li-Tsein Leong, Steven Bozinovski

PA2234 **Late Breaking Abstract - Tetrandrine alleviates silica-induced pulmonary fibrosis through PI3K/AKT pathway**
Qiao Ye (Beijing, China), Ruimin Ma, Xiaoxi Huang, Di Sun, Jingwei Wang, Changjiang Xue

PA2235 **Late Breaking Abstract - Targeting acid sphingomyelin/ceramide signaling to alleviate silica-induced pulmonary fibrosis**
Qiao Ye (Beijing, China), Ruimin Ma, Di Sun, Jingwei Wang, Xiaoxi Huang, Na Wu

PS-19 in poster area — Session 229 — 08:00 - 09:30

Poster session: Pulmonary embolism: acute and long-term management (2)

Disease(s) : Pulmonary vascular diseases | Respiratory critical care | Interstitial lung diseases | Airway diseases

Method(s) : Pulmonary rehabilitation | General respiratory patient care | Epidemiology | Imaging | Pulmonary function testing | Public health | Cell and molecular biology

Tag(s) : Clinical, Translational

Chairs : Luis Jara-Palomares (Sevilla, Spain), Chair to be confirmed

PA2236 **Exploring the efficacy of D-dimers in ruling out PE in high-risk individuals by Wells score**
Cara M Gill (Dublin, Ireland), Helen O'Brien, Brian Gaffney, John Duignan, Marcus W Butler, Michael P Keane, Jonathan D Dodd, David J Murphy, Cormac Mc Carthy, Alessandro N Franciosi

PA2237 **An Australian study on factors impacting the length of stay for acute pulmonary embolism**
Xinxin Hu (Sydney, Australia), Ming-Yan Teo, Mohan Nagarajah

PA2238 **INPATIENT EXPERIENCE AVOIDANCE, PHYSICAL ACTIVITY, AND PERCEIVED DISABILITY AFTER A PULMONARY THROMBOEMBOLISM**
Alejandro Heredia Ciuró (Granada, Spain), Ana Belén Gámiz Molina, Julia Raya-Benítez, Miguel Hernández Serrano, Carmen Lidia Félix Seguro, Javier Martin Núñez, Marie Carmen Valenza

PA2239 **HANDGRIP STRENGTH AS PREDICTOR OF SYMPTOM SEVERITY AND HOSPITAL LENGTH OF STAY AFTER A PULMONARY THROMBOEMBOLISM**
Alejandro Heredia Ciuró (Granada, Spain), Julia Raya-Benitez, Ana Belén Gámiz-Molina, Miguel Hernández-Serrano, Carmen Lidia Félix-Segura, Maria Granados-Santiago, Marie Carmen Valenza

PA2240	**Prognostic value of Shock Index in patients with hemodynamic unstable pulmonary embolism** Ivana Vujovic (Novi Sad, Republic of Serbia), Dušanka Obradović, Stanislava Sovilj Gmizić, Maja Banjac, Nemanja Kuštrimović
PA2241	**Protective effect of early anticoagulation for renal function in normotensive pulmonary embolism patients with right ventricular dysfunction** Dingyi Wang (Beijing, China), Guohui Fan, Xiaomao Xu, Qin Luo, Jun Wan, Peiran Yang, Zhenguo Zhai
PA2242	**Prognostic Impact of Acute Kidney Injury Compared with Estimated Glomerular Filtration in Patients with Acute Pulmonary Embolism: Analysis from a Large Nationwide Registry** Dingyi Wang (Beijing, China), Yishan Li, Guohui Fan, Zhenguo Zhai, Chen Wang
PA2243	**MicroRNAs expression before and after exercise in patients with persistent lung perfusion defects after pulmonary embolism** Remedios Otero Candelera (Sevilla, Spain), Berenice Brown Arreola, David Hervás Marín, Noelia Sola Idígora, Ezequiel Juan Saborido, María Dolores Nuñez Ollero, María Rosario Ruiz Serrano De La Espada, Cándido Fernández García, Teresa Elías Hernández, Luis Jara Palomares, Virginia Almadana Pacheco, Patricia Guerrero Zamora, Julia Oto Martínez, Pilar Medina Badenes, Pilar Cejudo Ramos, Verónica Sánchez Lopez
PA2244	**Cardiopulmonary exercise test to identify pulmonary arterial hypertension in patients with symptoms after acute pulmonary thromboembolism** Jose Belda Ramirez (Valencia, Spain), Maria Luisa Nieto Cabrera, Paula Pla Rodríguez
PA2245	**Competing risks analysis of recurrent venous thromboembolism (VTE) and bleeding on anticoagulation in patients with cancer-associated VTE** Francis Couturaud (Brest, France), David Simon, Raphael Le Mao, Leela Raj, Benjamin Espinasse, Claire De Moreuil, Cécile Tromeur, Marie Guégan, Elise Poulhazan, Emmanuelle Le Moigne, Karine Lacut, Christophe Leroyer, Isabelle Mahé, Emmanuel Nowak
PA2246	**Circulating, extracellular vesicle-associated tissue factor in cancer patients with and without venous thromboembolism** Valentina Lami (Pisa, Italy), Roberta Pancani, Andrea Sbrana, Tommaso Neri, Chiara Boccaccio, Alessandro Cipriano, Mario Gattini, Alessandro Celi, Dario Nieri
PA2247	**Risk factors for hospital outcomes in pulmonary embolism: a retrospective cohort study.** Giorgia Lüthi-Corridori (Liestal, Switzerland), Maria Boesing, Cedrine Kueng, Stéphanie Giezendanner, Munachimso Kizito Mbata, Anne Barbara Leuppi-Taegtmeyer, Philipp Schuetz, Joerg Daniel Leuppi
PA2248	**Particularities of Pulmonary embolism in young adults** Manel khedhri (beja, Tunisia), Haifa Zaibi, Khouloud Chaabi, Emna Ben Jemia, Ella Nemsi, Jihen Ben Amar, Hichem Aouina
PA2249	**Sex differences in venous thromboembolism risk and outcomes after COVID-19: a population-based retrospective cohort study** Jason Weatherald (Edmonton, Canada), Grace Y. Lam, Michael K. Stickland, Chuan Wen, Ron W. Damant, Maeve P. Smith, Lesley Jj. Soril, Zuying Zhang, Adam G. D'Souza, Elissa Rennert-May, Jenine Leal
PA2250	**Covid-19 infection and chronic thromboembolic pulmonary disease: screening role of transthoracic echocardiography 2 years after hospitalization for interstitial pneumonia** Giuseppe Paciocco (Monza (MI), Italy), Marta Tundo, Andrea Lombi, Chiara Milano, Martina Messa, Lorenzo Volpiano, Riccardo Ripamonti, Paola Alfieri, Giulia Pittalis, Fabrizio Luppi, Paola Faverio
PA2251	**Cardiopulmonary complications after pulmonary thrombosis (PT) in COVID-19.** Joaquín María Martínez Menéndez (Oviedo, Spain), Alberto Alonso Fernández, Carla Suárez Castillejo, Nuria Toledo Pons, Francisco De Borja García-Cosío Piqueras, Luisa Ramon Clar, Belén Núñez Sánchez, Néstor Calvo Rado, Luminita Noje Noje, Jaume Pons Llinares, Antonieta Bellesteros Vizoso, Paula Argente Del Castillo Rodriguez, Daniel Morell Garcia, Luisa Martin Pena, Juan A Palmer Sancho, Jaume Sauleda, Ernest Sala
PA2252	**Pulmonary thrombosis (PT) in patients with covid-19 pneumonia: is it pulmonary thromboembolism or thrombosis in situ?** Carla Suarez Castillejo (Palma de Mallorca, Spain), Nestor Calvo, Aina Millan, Nuria Toledo, Amanda Iglesias, Joaquin Maria Martinez, Luminita Preda, Luisa Ramon, Danieal Morell, Josep Miquel Bauça, Belen Nuñez, Jaume Sauleda, Ernest Sala-Llinás, Alberto Alonso
PA2253	**Is acute pulmonary embolism a predictor of Post COVID-19 syndrome ?** Mariem Friha (Ariana, Tunisia), Hajer Racil, Mariem Chaabane, Sarra Maazaoui, Ameny Touil, Sonia Habibech, Nawel Chaouch
PA2254	**Diagnostic Performance of Clinical Probability Scores for Pulmonary Embolism in COVID** Haifa Zaibi (Tunis, Tunisia), Khouloud Chaabi, Hend Ouertani, Safia Othmani, Emna Ben Jemia, Jihen Ben Amar, Hana Hedhli, Hichem Aouina

PA2255 **Late Breaking Abstract - Development and validation of machine learning model for automatically predicting acute pulmonary embolism in-hospital patients**
Ji-Eun Park (Suwon-si, Republic of Korea), Sangchul Hahn, Young Sam Kim, Hyun Ah Lee, Ji Won Park, Kyung Soo Chung

PS-2 in poster area Session 230 08:00 - 09:30

Poster session: New features and outcomes of chronic obstructive pulmonary disease

Disease(s) : Airway diseases | Pulmonary vascular diseases | Interstitial lung diseases | Respiratory critical care

Method(s) : Physiology | General respiratory patient care | Pulmonary function testing | Pulmonary rehabilitation | Imaging | Epidemiology

Tag(s) : Clinical, Translational

Chairs : Camille Rolland-Debord (clermont-ferrand, France)

PA2256 **Tobacco-associated lung microangiopathy in symptomatic smokers without chronic obstructive pulmonary disease: A randomized, double-blinded and controlled clinical trial with Sildenafil.**
Paulo Müller (Campo Grande (MS), Brazil), Tiago Augusto, Gisele Barbosa, Ricardo Gass, Danilo Berton, Leandro Goelzer

PA2257 **THE IMBALANCE BETWEEN SUBPOPULATIONS OF REGULATORY T (TREG) CELLS AT DIFFERENT STAGES OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)**
Francine Maria Almeida (São Paulo (SP), Brazil), Luan Henrique Vasconcelos Alves, Juliana Tiyaki Ito A, Luana Mendonça De Oliveira, Iolanda Lopes Calvo Tibério, Rafael Stelmach, Maria Notomi Sato, Fernanda Degobbi Tenorio Quirino dos Santos Lopes

PA2258 **Influence of lung hyperinflation on the acceleration of the aging of the oxygen transport chain in COPD patients**
Mohamed Bougrida (Constantine, Algeria), Mahdi Martani, Mohamed Kheireddine Bourahli, Naouel Chibout, Helmi Bensaad

PA2259 **Amount of physical activity and pulmonary rehabilitation in patients with COPD**
Yu Liu (shanghai, China), Kai Zhang, Huaqi Guo, Cuixia Zheng

PA2260 **Lung physiology and 129Xe MRI data driven clustering of patients with asthma and/or COPD**
Helen Marshall (Sheffield (South Yorkshire), United Kingdom), Alberto Biancardi, Laurie Smith, Guilhem Collier, Ho-Fung Chan, Paul Hughes, Martin Brook, Joshua Astley, Ryan Munro, Smitha Rajaram, Andy Swift, Dave Capener, Jody Bray, Jimmy Ball, Olly Rodgers, Demi Jakymelen, Ian Smith, Bilal Tahir, Madhwesha Rao, Graham Norquay, Nick Weatherley, Leanne Armstrong, Latife Hardaker, Titti Fihn-Wikander, Rod Hughes, Jim Wild

PA2261 **Exercise Oscillatory Breathing in patients with coexisting chronic obstructive pulmonary disease and Heart Failure**
Cássia Goulart (São Carlos, Brazil), Rebeca Nunes Silva, Piergiuseppe Agostoni, Frits Franssen, Jonathan Myers, Ross Arena, Audrey Borghi-Silva

PA2262 **Postural balance assessment in fallers individuals with COPD before and after physical effort**
Caroline Maschio de Censo (São Paulo, Brazil), Viviane Vieira Passini, Bárbara Aparecida Teodoro Alcantara Verri, Regina Maria De Carvalho Pinto, Rafael Stelmach, Rafaella Fagundes Xavier, Geraldo Lorenzi-Filho, Celso Ricardo Fernandes De Carvalho

PA2263 **Mortality in COPD Patients – Long-term Follow-up and Outcomes**
Roman Kalinov (Plovdiv, Bulgaria), Blagoi Marinov, Georgi Belev, Spas Kitov, Vladimir Hodzhev, Stefan Kostianev

PA2264 **Association of testosterone with lung function in patients with chronic obstructive lung disease**
Abir Hedhli Ep Cherni (tunis, Tunisia), Nourelhouda Khézami, Azza Slim, Hajtaeib Sonia, Khadija Echi, Sana Cheikhrouhou, Yassine Ouahchi, Sonia Toujani, Mariem Mjid, Besma Dhahri

PA2265 **Differences in cardiopulmonary exercise test outcomes between asthma-COPD overlap and COPD alone**
Alex Jenkins (Nottingham (Nottinghamshire), United Kingdom), Jaycie Triandafilou, Wan Tan, Jean Bourbeau, Dennis Jensen

PA2266 **The impact of overweight on the quality of life of patients with COPD GOLD III**
Nadiia Korzh (Ivano-Frankivsk, Ukraine), Mykola Ostrovskyy, Galyna Korzh, Oleksandr Varunkiv, Iryna Savelikhina, Mariana Kulynych-Miskiv, Kostiantyn Shvets, Iryna Makoida, Olga Melnyk-Sheremeta

PA2267 **Triaxial accelerometer-derived nighttime postural changes do not differ among smokers with and without COPD, and never smokers**
Alessandra Adami (Kingston, United States), Jakob Melone, Robert A. Calmelat, Richard Casaburi, Harry B. Rossiter

PA2268 **Gait differences between adults with COPD and healthy controls: systematic review and meta-analyses**
Joren Buekers (Barcelona, Spain), Laura Delgado Ortiz, Dimitrios Megaritis, Ashley Polhemus, Nikolaos Chynkiamis, Sara C. Buttery, Sofie Breuls, Sarah Koch, Elena Gimeno-Santos, Heleen Demeyer, Nick S. Hopkinson, Ioannis Vogiatzis, Thierry Troosters, Anja Frei, Judith Garcia-Aymerich

PA2269 **Respiratory morbidity and exacerbations in patients with COPD diagnosed with the fixed ratio and the lower limit of normal**
Aslı Görek Dilektaşlı (Bursa, Turkey), Busra Yigitliler, Nilufer Ozturk, Funda Coskun, Esra Uzaslan, Mehmet Karadag

PA2270 **Differences between interpretation strategies of lung function tests in alpha-1 antitrypsin deficiency patients**
Diana Sofia Moreira Sousa (Santo Tirso, Portugal), Diogo Ferreira, Ricardo Lima, Raquel Marçôa, Fernanda Rodrigues, Miguel Guimarães

PA2271 **Correlation between spirometry and diaphragmatic excursions by ultrasonography in COPD patients and developing a prediction formula of FEV1**
Jacob Baby (rochester, United Kingdom), Anjaly Chandrakumar

PA2272 **Impact of simulated obstructive apneas on sympathetic drive in COPD patients.**
Jens Spiesshoefer (Aachen, Germany), Binaya Regmi, Faniry Ratsimba, Benedikt Jörn, Mehdi Senol, Oscar Gorol, Mustafa Elfeturi, Lukas Niekrenz, Ayham Daher, Vaughan Macefield, Michael Dreher

PA2273 **Greater Enrichment of Biological Pathways in Circulating Extracellular Vesicles of Controls than COPD Following Exercise**
Asghar Abbasi (Torrance, United States), Elizabeth Hutchins, Bessie Meechoovet, Megan Hall, Krystine Garcia-Mansfield, April Soriano, Robert Calmelat, Carrie Ferguson, Kendall Jensen, Patrick Pirrotte, Janos Porszasz, Richard Casaburi, William Stringer, Harry Rossiter

PA2274 **Emphysema Severity Index (ESI): a novel spirometry-derived parameter in patients with COPD**
Luca Paita (Firenze, Italy), Letizia Dal Bosco, Greta Insalata, Matteo Paoletti, Mariaelena Occhipinti, Gianna Camiciottoli, Massimo Pistolesi, Federico Lavorini

PA2275 **Assessment of five-year emphysema progression in the COPDGene study by Emphysema Severity Index (ESI), a novel spirometry-derived parameter**
Massimo Pistolesi (Firenze (FI), Italy), Matteo Paoletti, Mariaelena Occhipinti, Federico Lavorini, Elizabeth A Regan, David A Lynch, Edwin K Silverman, James D Crapo

PS-20 in poster area Session 231 08:00 - 09:30

Poster session: Deep learning, new technologies and biomarkers in imaging

Disease(s) : Airway diseases | Interstitial lung diseases | Pulmonary vascular diseases

Method(s) : Imaging Pulmonary function testing Epidemiology

Tag(s) : Translational

Chairs : Chair to be confirmed

PA2276 **Deep learning enables non-invasive estimation of mean pulmonary arterial pressure from PREFUL-MRI**
Maximilian Zubke (Hannover, Germany), Marius Wernz, Till F Kaireit, Tawfik Moher Alsady, Andreas Voskrebenzev, Robin A Mueller, Karen M Olsson, Frank Wacker, Marius M Hoeper, Jens Vogel-Claussen

PA2277 **Correlation between ventilation heterogeneity and virtual scintigraphy through Functional Respiratory Imaging (FRI)**
Hosein Sadafi (Kontich, Belgium), Maarten Lanclus, navid Monshi Tousi, Stijn Bonte, Jan De Backer

PA2278 **CT-based assessment of alveolar collapse using attenuation histograms in inspiration and expiration: Evaluation as a prognostic imaging marker in IPF patients**
Sarah Scharm (Hannover, Germany), Cornelia Schaefer-Prokop, Anton Schreuder, Jonathan Ehmig, Jan Fuge, Frank Wacker, Antje Prasse, Hoen-Oh Shin

PA2279 **PCD-AID: artificial intelligence diagnosis of primary ciliary dyskinesia**
Mathieu Bottier (London, United Kingdom), Andreia Lucia Do Nascimento Pinto, Britt J Van Akker, Oliver Hamilton, Ioannis Katramados, Amelia Shoemark, Claire Hogg, Thomas Burgoyne

PA2280 **Increased volume of pulmonary veins on CT associates independently with higher mortality in smokers with and without COPD**
Tjeerd van der Veer (Amsterdam, Netherlands), Anastasia Kimberley Ay-Lan Kwee, Leticia Gallardo Estrella, Elrozy R. Andrinopoulou, Jean Paul Charbonnier, Stephen M. Humphries, Pim A. De Jong, David A. Lynch, Harm A. W. M. Tiddens, Esther Pompe

PA2281 **Dynamic chest radiography evaluation of the effects of tiotropium/olodaterol combination therapy in COPD: EMBODY study protocol**
Jun Ikari (Chiba, Japan), Megumi Katsumata, Takuro Imamoto, Yuri Suzuki, Akira Nishiyama, Hajime Yokota, Yoshihito Ozawa, Eiko Suzuki, Naoko Kawata, Seiichiro Sakao, Koichiro Tatsumi, Takuji Suzuki

PA2282 **The comparison of quantitative CT features of COPD and pre-COPD: results from a real-life study**
Selin Ercan (Gothenburg, Sweden), Aylin Ozgen Alpaydin, Ali Canturk, Emre Ruhat Avci, Saliha Selin Ozuygur Ermis, Gozde Tokatli, Gökçen Omeroglu Simsek, Pinar Balci, Naciye Sinem Gezer

PA2283 **Multisite implementation of 129Xe-MRI assessment of COPD disease progression: XeCITE early results**
Laura C. Bell (South San Francisco, United States), Alexandre Fernandez Coimbra, Yixuan Zou, Colin Dimond, Jaime Mata, John Muglar, Yun Michael Shim, David Mummy, Bastiaan Driehuys, Yuh-Chin Huang, Peter Niedbalski, Mario Castro, Yonni Friedlander, Norm Konyer, Sarah Svenningsen, Parameswaran Nair, Terence Ho, Andrew Hahn, Sean Fain, Eric A. Hoffman, Guilhem J. Collier, Jim M. Wild, Robert Thormen, Talissa Altes, Paula Belloni

PA2284 **CT-quantified pulmonary artery volume associates independently with higher mortality in smokers with and without COPD**
Tjeerd van der Veer (Amsterdam, Netherlands), Anastasia Kimberley Ay-Lan Kwee, Leticia Gallardo Estrella, Elrozy R. Andrinopoulou, Jean Paul Charbonnier, Stephen M. Humphries, Pim A. De Jong, David A. Lynch, Harm A. W. M. Tiddens, Esther Pompe

PA2285 **Quantitative computed tomography assessment of pulmonary structure in cannabis smokers**
sukhraj virdee (georgetown, Canada), James Hogg, Jean Boudreau, Wan Tan, Miranda Kirby

PA2286 **Can tracheobronchial tree and luminal descriptors be used as objective imaging biomarkers in COPD?**
Rodrigo Nava (Cambridge, United Kingdom), François-Xavier Blé, Cosma Mirella Spalluto, Karl Staples, Tom Wilkinson, Kristoffer Ostridge

PA2287 **Computational fluid dynamics analysis of computed tomography images in asthma**
So Ri Kim (Jeonju, Republic of Korea), Nguyen Quoc Hung, Kum Ju Chae, Gong Yong Jin, Sanghun Choi

PA2288 **Machine learning applied to chest x-rays to support the diagnosis of pulmonary tuberculosis**
Marcelo Fouad Rabahi (Goiânia (GO), Brazil), Poliana Parreira, Afonso Fonseca, Fabrizzio Soares, Marcus Barreto Conte

PA2289 **Effect of benralizumab on small airway dysfunction using functional respiratory imaging in patients with severe eosinophilic asthma**
Lennart Conemans (Maastricht, Netherlands), Mieke Crutsen, Wendel Dierckx, Sami Simons, Martijn Spruit, Bita Hajian

PA2290 **Imaging of human airways by endoscope-compatible dynamic microscopic optical coherence tomography**
Mario Pieper (Lübeck, Germany), Cornelia Holzhausen, Hinnerk Schulz-Hildebrandt, Martin Ahrens, Klaus Rabe, Heike Biller, Mustafa Abdo, David Ellebrecht, Sönke Von Weihe, Christoph Fraune, Stefan Steurer, Gereon Hüttmann, Peter König

PA2291 **Use of dynamic chest radiographic measurements to estimate total lung capacity in patients with respiratory disease**
Fred Fyles (Liverpool, United Kingdom), Ryan Robinson, Thomas Fitzmaurice, Rachel Burton, Amy Nuttall, Ram Bedi, Hassan Burhan

PA2292 **Differentiating diffuse cystic lung disease and emphysema cases from normal using Artificial Intelligence**
Ronan Hearne (Dublin, Ireland), Katie Noonan, Brian Gaffney, Brian Sheehy, Niall Mcveigh, Yasuhito Sekimoto, Ali Ataya, Nishant Gupta, Francis Mccormack, Raphaël Borie, Francesco Bonella, David Murphy, Kathleen Curran, Cormac Mccarthy

PA2293 **Utilising computer vision artificial intelligence to identify defects in airway ciliary motility and mucociliary clearance**
Mathieu Bottier (London, United Kingdom), Andreia Lucia Do Nascimento Pinto, Emily Howieson, Britt J Van Akker, Oliver Hamilton, Ioannis Katramados, Jane Davies, Amelia Shoemark, Claire Hogg, Thomas Burgoyne

PA2294 **Bioradiomic SPECT-CT quantification of active lung inflammation is influenced by heterogeneity of lung tissue**
Benjamin Welham (Whitchurch, United Kingdom), Michael Bennett, Kristoffer Ostridge, Matthew Guy, Clint Zvavamwe, Francis Sundram, Tom Wilkinson

PA2295 **Using CT to detect large airway collapse in severe asthma: worth the extra effort?**
Wei Ling Chia (London, United Kingdom), James Hull, David Watchorn

PS-3 in poster area — Session 232 — 08:00 - 09:30

Poster session: COVID-19

Disease(s) : Interstitial lung diseases | Respiratory critical care | Pulmonary vascular diseases

Method(s) : Respiratory intensive care | Epidemiology | General respiratory patient care | Pulmonary function testing | Endoscopy and interventional pulmonology | Imaging

Tag(s) : Clinical

Chairs : Ana Cysneiros (Lisboa, Portugal), Jacobo Sellares Torres (Barcelona, Spain)

PA2296 **Neurofilament light in predicting clinical outcomes in critically Ill COVID-19 patients.**
Patrick Smeele (Amsterdam, Netherlands)

PA2297	**Phenotyping of Pulmonary Oedema in COVID-19 ARDS** Job Schippers (Amsterdam, Netherlands), Leila Atmowihardjo, Lieuwe Bos, Harm Jan Bogaard, Jurjan Aman
PA2298	**ROX index on 3rd day as a best predictor of treatment failure in severe COVID-19 patients** Luca Novelli (Bergamo, Italy), Stefano Centanni, Fabrizio Luppi, Stefano Aliberti, Paola Rogliani, Claudio Micheletto, Marco Contoli, Alessandro Sanduzzi Zamparelli, Federico Raimondi, Simone Pappacena, Luca Malandrino, Giorgio Lorini, Greta Carioli, Fabiano Di Marco
PA2299	**Prognostic value of respiratory compliance course on mortality in COVID-19 patients with veno-venous ECMO** Simon Valentin (Nancy, France), Mathieu Amalric, Guillaume Granier, Benjamin Pequignot, Christophe Guervilly, Kevin Duarte, Nicolas Girerd, Bruno Levy, Paul Dunand, Matthieu Koszutski, Hadrien Roze, Antoine Kimmoun
PA2300	**Impact of the COVID-19 Epidemic on Healthcare Utilization and Death Among Critically Ill Patients** Hye Jin Jang (Seoul, Republic of Korea), Soyul Han, Sungho Won, Bora Lee, Young Sam Kim
PA2301	**Previous physical activity level and the functional and physical performance at ICU discharge in COVID-19 patients: an observational study** Carolina Fu (São Paulo (SP), Brazil), Danilo Prereira Dos Santos, Leda Tomiko Yamada Da Silveira, Heloisa Francelin, Debora Stripari Schujmann Nogueira
PA2302	**Aging predictive factors for oxygenation response and mortality in COVID-19 and acute respiratory distress syndrome (ARDS) patients exposed to prone position: A multicenter cohort study** Marieta Cabral Amaral Cunha (São Paulo, Brazil), Adriana C Lunardi, Jociane Schardong, Natiele C Righi, Guadalupe N Sant'Anna, Larissa P Isensee, Rafaela F Xavier, Jose E Pompeu, Ranata M Weigert, Darlan L Matte, Rozana A Cardoso, Ana C V Abras, Antonio M V Silva, Camila C Dorneles, Roberta W Werle, Ana C Starke, Rodrigo D M Plentz, Juliana C Ferreira, Celso R F Carvalho
PA2303	**Impact of COVID 19 and MRAB infection on mortality in ICU** Bogun kho (Gwangju, Republic of Korea), Hong-Joon Shin
PA2304	**The Influence of respiratory mechanics on the outcome of hospitalization of obese patients admitted to the Covid-19 ICU** Ada Clarice Gastaldi (Ribeirao Preto (SP), Brazil), Larissa Perossi, Jéssica Perossi, Daniele Oliveira Dos Santos, Anibal Basile Filho
PA2305	**Comparison of pulse versus conventional steroid treatment for hospitalized COVID-19 patients** Paolo Cameli (Siena (SI), Italy), Tommaso Pianigiani, Marco Guerrieri, Valerio Alonzi, Gaia Fabbri, Elena Pordon, Maddalena Messina, Vittoria Ventura, Sara Croce, Martina Meocci, Beatrice Perea, Felice Perillo, Fabrizio Mezzasalma, Behar Cekorja, Elena Bargagli
PA2306	**Determining influences on ventilatory decision-making in COVID-19 ARDS** Kenki Matsumoto (London, United Kingdom), Hannah Malcolm, William Thomson, Magda Osman, Zudin Puthucheary, John Prowle, Timothy Stephens
PA2307	**The utility of lung ultrasound in COVID-19 pneumonia in the intensive care unit in real life settings.** Dimitrios Toumpanakis (Athens, Greece), Anna Kyriakoudi, Evangelia Akoumianaki, Eleni Apostolakou, Iliana Ioannidou, Evangelos Kaimakamis, Evangelos Kaniaris, Paschalina Kontou, Magdalini Kyriakopoulou, Efstathia Potamianou, Charalambos Psarologakis, Vasiliki Soulountsi, Nektaria Xirouchaki, Antonia Koutsoukou, Konstantinos Pontikis
PA2308	**Awake prone position in COVID-19 patients: a report of experience in a medical ICU** Dhouha Ben Braiek (Sousse, Tunisia), Hend Zorgati, Yosri Ben Ali, Imen Mighri, Nadine Boukadida, Arij Hammedi, Rahma Ben Jazia, Ameni Kacem, Anis Maatallah, Jihene Ayachi
PA2309	**Role of JAK-inhibitors in management of Long COVID-19 syndrome: A Case-Control Study.** Lokesh Kumar Lalwani (Alwar, India), Pawan Kumar Singh, Vinod Sharma, Dhruva Chaudhry
PA2310	**PaO2/FiO2 ratio measured on room air or during supplemental oxygen predicts 28-day mortality in Covid- 19 pneumonia: a large multicenter retrospective study.** Angela Tramontano (Maddaloni, Italy), Maria Luisa Nicolardi, Paola Scarano, Annalisa Boscolo, Roberto Dongilli, Domenico Luca Grieco, Lara Pisani, Tommaso Tonetti, Paolo Palange
PA2311	**In Taiwan increasing ARDS Severity by Berlin Definition Reflects Overall Illness Severity.** Chang Yujen (Taichung City, Taiwan)
PA2312	**ICU admission for COVID-19 patients: is it safe?** Dhouha Ben Braiek (Sousse, Tunisia), Hend Zorgati, Yosri Ben Ali, Sourour Bel Haj Youssef, Azer Yaacoub, Ines Sebri, Rahma Ben Jazia, Ameni Kacem, Anis Maatallah, Jihene Ayachi
PA2313	**Clinical course and outcome of the COVID 19 infection between vaccinated and unvaccinated patients admitted to the Intensive Care Unit** Figen Mustafa (Varna, Bulgaria), Pavel Yordanov, Pavlina Peneva, Anton Antonov, Petur Georgiev, Valentina Dimitrova

PA2314 **Changes in patient profile with COVID19 admitted to IRCU**
Pau Cruzado Boix (Castelldefels, Spain), Cristina Bellver Asperilla, Yolanda Ruiz Albert, Ester Cuevas Sales, Ana Córdoba Izquierdo, Salud Santos Pérez, Mercè Gasa Galmes

PA2315 **Risk factors and effect on mortality of superinfections in a newly established COVID-19 respiratory sub-intensive care unit at University Hospital in Rome**
ALESSANDRA IACOVELLI (Bellegra, Italy), Alessandra Oliva, Guido Siccardi, Angela Tramontano, Daniela Pellegrino, Angelo Petroianni, Claudio Maria Mastroianni, Mario Venditti, Paolo Palange

PS-4 in poster area Session 233 08:00 - 09:30

Poster session: New mechanistic insights into acute and chronic epithelial lung disorders

Disease(s) : Respiratory critical care Airway diseases

Method(s) : Cell and molecular biology Epidemiology General respiratory patient care Physiology Respiratory intensive care

Tag(s) : Translational

Chairs : Abilash Ravi (Leiden, Netherlands), Nicole van der Burg (Lund, Sweden)

PA2316 **miR-155 and miR-221 expression in serum exosomes of Iranian moderate-severe asthmatic patients**
Esmaeil Mortaz (Tehran, Islamic Republic of Iran), Neda Dezfuli, Atefeh Fakharian, Ian Adcock

PA2317 **The link between the Gln27Glu polymorphism of the β2-adrenoceptor gene and the severity of the asthma course**
Vladyslava Kachkovska (Sumy, Ukraine), Anna Kovchun, Lyudmyla Prystupa

PA2318 **The X and Y of inflammation, fibrosis and cell death in asthma**
Karosham (Diren) Reddy (Glebe, Australia), Dikaia Xenaki, Senani Rathanyake, Sobia Idrees, Fia Boedijono, Matthew Padula, Maarten Van Den Berge, Alen Faiz, Brian Oliver

PA2319 **Differential miRNA expression could identify responders to biologic therapy in severe uncontrolled asthma**
Amanda Iglesias Coma (Palma, Spain), Hanaa Shafiek, Josep Muncunill, Aarne Fleischer, Josep Luis Valera, Meritxell López, Rocío Martínez, Aina Martin, Laura Canaves, Lluc Riera, Mar Mosteiro, Inés Escribano, Luis Pérez De Llano, Borja G Cosío

PA2320 **MEG3 SNP variants are associated with the risk of asthma**
Kuo-Liang Chiu (Taichung, Taiwan), Wen-Shin Chang, Chia-Wen Tsai, Mei-Chin Mong, Te-Chun Hsia, Da-Tian Bau

PA2321 **IL18 as a severity locus for COVID-19**
Verónica Pulito-Cueto (Santander, Spain), Sara Remuzgo-Martínez, Fernanda Genre, Diego Ferrer, María Sebastián Mora-Gil, Pilar Alonso-Lecue, Sandra Tello-Mena, Beatriz Abascal-Bolado, Sheila Izquierdo, Juan Jose Ruiz-Cubillan, Carlos Armiñanzas, Ricardo Blanco, Raquel López-Mejías, José M. Cifrián, Miguel A. González-Gay

PA2322 **Evaluation of TGF-β isoforms based on selected clinical parameters in asthmatic patients.**
Marcelina Koćwin (Lodz, Poland), Mateusz Jonakowski, Alicja Majos, Janusz Szemraj, Piotr Kuna, Michał Panek

PA2323 **T-cell immune dysfunction of severe COVID-19 in asthma defined by single-cell RNA sequencing**
Youlim Kim (Seoul, Republic of Korea), Mira Cho, Hyun Lee, Sang Hoon Lee, Siyoung Lee, Minjun Choi, Byeongchan Lee, Seong Yong Lim, Kwang Ha Yoo

PA2324 **MicroRNA-197-3p attenuates house dust mite-induced inflammation by targeting NDP52 mitophagy receptor and Interleukin 13 in human bronchial epithelial cells**
Vahid Arabkari (SE-405 30, Sweden), Lina Rönnebjerg, Madeleine Rådinger

PA2325 **Transcriptomic characterization of type 2 innate lymphoid cells from asthma patients in response to prostaglandin D2 metabolites**
Christina Gress (Hannover, Germany), Jens M. Hohlfeld, Meike Müller

PA2326 **A plasma microRNA panel strengthens the early prediction of ICU mortality: A multicenter COVID-19 study**
Manel Perez-Pons (Lleida, Spain), Ivan D Benítez, Marta Molinero, Nadia García-Mateo, Alicia Ortega, Tamara Postigo, María C. García-Hidalgo, Thalía Belmonte, Carlos Rodríguez-Muñoz, Jessica González, Gerard Torres, Clara Gort-Paniello, Anna Moncusí-Moix, Angel Estella, Luis Tamayo Lomas, Amalia Martínez De La Gándara, Lorenzo Socias, Yhivian Peñasco, Maria Del Carmen De La Torre, Elena Bustamante-Munguira, Elena Gallego Curto, Ignacio Martínez Varela, María Cruz Martín Delgado, Pablo Vidal-Cortés, Juan López Messa, Felipe Pérez-García, Jesus Caballero, José M. Añón, Ana Loza-Vázquez, Nieves Carbonell, Judith Marin-Corral, Ruth Noemí Jorge García, Carmen Barberà, Adrián Ceccato, Laia Fernández-Barat, Ricard Ferrer, Dario Garcia-Gasulla, Jose Ángel Lorente-Balanza, Rosario Menéndez, Ana Motos, Oscar Peñuelas, Jordi Riera, Jesús F. Bermejo-Martin, Antoni Torres, Ferran Barbé, David De Gonzalo-Calvo

PA2327 **LSC - 2023 - “Clinical and immunological phenotypes” in ‘Long COVID’: The tsunami of multisystem syndrome o f this decade!**
Shital Vishnu Patil (Latur (Maharashtra), India), Swati Patil, Sham Toshniwal, Gajanan Gondhali, Rajesh Patil, Abhijit Acharya, Deepak Patil

PA2328 **Serum and sputum proteomic biomarkers of eosinophilic and neutrophilic asthma phenotypes**
Khezia Asamoah (London, United Kingdom), Kian Fan Chung, Nazanin Zounemat Kermani, Pankaj Bhavsar, Barbara Bodinier, Ian Adcock, Dragana Vuckovic, Marc Chadeau Hyam

PA2329 **Role of CD39 in COVID-19 severity: dysregulation of purinergic signaling and thromboinflammation**
Elena Díaz García (Madrid, Spain), Sara García-Tovar, Enrique Alfaro Garcia, Ester Zamarrón, Alberto Mangas, Raúl Galera, José Juan Ruiz-Hernández, Jordi Solé-Violán, Carlos Rodríguez-Gallego, Ana Van-Den-Rym, Rebeca Pérez-De-Diego, Kapil Nanwani-Nanwani, Eduardo López-Collazo, Francisco García-Río, Carolina Cubillos-Zapata

PA2330 **The influence of rs1799752 ACE indel variant and serum ACE enzyme activity in patients with severe COVID-19 and post-COVID-19**
Ingrid Fricke-Galindo (Mexico City, Mexico), Ivette Buendía-Roldán, Daniel I Ponce-Aguilar, Gloria Pérez-Rubio, Leslie Chávez-Galán, Rafael De Jesús Hernández-Zenteno, Ramcés Falfán-Valencia

PA2331 **Endothelial progenitors exhibit a senescent and prothrombotic phenotype post COVID-19 disease**
Koralia Paschalaki (London, United Kingdom), Daisy Gresham, Anand Shah, Peter Kelleher, Anna Reed, Aran Singanayagam, Vassilis Gorgoulis, Peter J. Barnes, Anna Randi, Charis Pericleous, Peter George

PA2332 **IFNL4 ss469415590 variant is associated with the course of COVID-19 among children**
Tetiana Harashchenko (Kyiv, Ukraine), Tetiana Umanets, Volodymyr Lapshyn, Tetiana Kaminska, Ludmila Livshits, Yuriy Antipkin

PA2333 **Immune dysregulation, Th1/Th2 switch failure and Rheumatological predisposition after COVID-19: Certainty and Reality!!**
Shital Vishnu Patil (Latur (Maharashtra), India), Swati Shital Patil, Sham Toshniwal, Abhijit Acharya, Gajanan Gondhali, Rajesh Patil, Shubhangi Khule, Deepak Patil

PA2334 **Interspecies analysis to dissect transcriptomic signatures of humans and hamsters in COVID-19.**
Peter Pennitz (Berlin, Germany), Vincent D. Friedrich, Emanuel Wyler, Julia M. Adler, Dylan Postmus, Sandro Andreotti, Luiz Gustavo Teixeira Alves, Julia Kazmierski, Fabian Pott, Thomas Hoefler, Cengiz Goekeri, Markus Landthaler, Christine Goffinet, Jakob Trimpert, Markus Scholz, Martin Witzenrath, Holger Kirsten, Geraldine Nouailles

PA2335 **Understanding the extracellular immunoproteasome in ARDS**
Michael C. McKelvey (Cullybackey, United Kingdom), Chloe M. Mckee, Thea Mawhinney, Rebecca C. Coll, Cecilia M. O'Kane, Daniel F. Mcauley, Sinead Weldon, Clifford C. Taggart

PS-5 in poster area — Session 234 — 08:00 - 09:30

Poster session: Precision medicine and novel biomarkers in lung disease

Disease(s) : Airway diseases | Thoracic oncology | Interstitial lung diseases

Method(s) : Cell and molecular biology | Physiology | Public health | General respiratory patient care

Tag(s) : Translational

Chairs : Janine Gote-Schniering (Bern, Switzerland), Chair to be confirmed

PA2336 **Epithelial to mesenchymal transition (EMT) changes in patients with non-small cell lung cancer (NSCLC)**
Wenying Lu (Newnham, Australia), Collin Chia, Josie Larby, Greg Haug, Ashutosh Hardikar, Gurpreeet Kaur Singhera, Tillie L. Hackett, Iain Robertson, Mathew Suji Eapen, Sukhwinder Singh Sohal

PA2337 **Proteomic analysis in idiopathic pulmonary fibrosis with presence of anti-modified protein antibodies**
Dimitrios Kalafatis (Stockholm, Sweden), Vijay Joshua, Monika Hansson, Linda Mathsson-Alm, Linda Elowsson, Gunilla Westergren-Thorsson, Aase Hensvold, Magnus Sköld

PA2338 **Comparison of extracellular vesicle-associated tissue factor between acute exacerbators and stable patients with chronic obstructive pulmonary disease**
Miriam De Francesco (Pisa, Italy), Roberta Gaeta, Camilla Morani, Mariapia Niceforo, Marta Daniele, Erica Bazzan, Mariella De Santis, Marianna Minniti, Alessandro Congedo, Ilaria Berardi, Alberto Papi, Alessandro Celi, Tommaso Neri, Dario Nieri

PA2339 **Usefulness of RE-LYMP and AS-LYMP parameter in diagnosis of COVID-19 and sarcoidosis patients.**
Elżbieta Rutkowska (Warsaw, Poland), Agata Raniszewska, Iwona Kwiecień, Karina Jahnz- Różyk, Piotr Rzepecki, Andrzej Chciałowski

PA2340 **Olfactomedin-4 correlates with sputum neutrophil protease activity and clinical markers of active inflammation in adult bronchiectasis: Data from the EMBARC-BRIDGE study**
Emma Johnson (Paisley (Renfrewshire), United Kingdom), Megan Crichton, Holly R Keir, Merete Long, Morven Shuttleworth, Erin Cant, Miguel Barbosa, Anthony De Soyza, Katerina Dimakou, Michal Shteinberg, Arietta Spinou, Felix Ringshausen, Natalie Lorent, Pieter Goeminne, Michael Loebinger, Sanjay Chotirmall, Raja Dhar, Charles Haworth, Josje Altenburg, Francesco Blasi, Tobias Welte, Oriol Siblia, Stefano Aliberti, Amelia Shoemark, James D Chalmers

PA2341	**Assessment of humoral immune function in chronic obstructive pulmonary disease (COPD) patients** Zil Patel (Ottawa, Canada), Shawn Aaron, Vanessa Luks, William Cameron, Sunita Mulpuru, Juthaporn Cowan
PA2342	**Proteinase 3 as a marker of clinical severity in bronchiectasis: Data from the EMBARC-BRIDGE study** Emma Johnson (Paisley (Renfrewshire), United Kingdom), Megan L Crichton, Holly R Keir, Merete Long, Morven Shuttleworth, Erin Cant, Anthony De Soyza, Katerina Dimakou, Michal Shteinberg, Arietta Spinou, Felix Ringshausen, Natalie Lorent, Pieter Goeminne, Michael Loebinger, Sanjay Chotirmall, Raja Dhar, Charles Haworth, Josje Altenburg, Francesco Blasi, Tobias Welte, Oriol Siblia, Stefano Aliberti, Amelia Shoemark, James D Chalmers
PA2343	**Sphingolipids contribute to sex-specific differences in COPD pathologies** Elisabetta Granato (Naples, Italy), Ida Cerqua, Giuseppina Rea, Fiorentina Roviezzo, Francesca Polverino
PA2344	**Plasma inflammatory proteins and transcriptome profiles of neutrophils in COPD patients with PiMM and PiZZ alpha1-antitrypsin treated or non-treated with augmentation therapy** Urszula Lechowicz (Warsaw, Poland), Aneta Zdral, Adriana Rozy, Adam Szpechcinski, Beatriz Martinez-Delgado, Beata Olejnicka, Sabina Janciauskiene, Joanna Chorostowska-Wynimko
PA2345	**Collagen Remodelling in COPD: A new paradigm** Alex Chia Wei Kong (SOUTHAMPTON (Hampshire), United Kingdom), Tom Havelock, Cosma Mirella Spalluto, Ashley Heinson, Graham Belfield, Maria Belvisi, Damla Etal, Daniel Muthas, Lisa Oberg, Adam Platt, Karl Staples, Kristoffer Ostridge, Tom Wilkinson
PA2346	**TGF-β1, pSmad-2/3, Smad-7, and β-catenin are augmented in IPF pulmonary arteries: potential role in driving endothelial to mesenchymal transition (EndMT)** Wenying Lu (Newnham, Australia), Archana Vijay Gaikwad, Collin Chia, Josie Larby, Greg Haug, Surajit Dey, Prem Bhattarai, Jade Jaffar, Glen Westall, Gurpreet Kaur Singhera, Tillie L. Hackett, Mathew Suji Eapen, Sukhwinder Singh Sohal
PA2347	**Biomarkers of autoimmune processes in COPD.** Gulchekhra Tashmetova (Tashkent, Uzbekistan), Irina Liverko
PA2348	**Characterization of the immunophenotype of circulating neutrophils in bronchiectasis** Evangelia Koukaki (SALAMINA, Greece), Efthymia Theofani, Nikolaos Paschalidis, Georgina Xanthou, Nikoletta Rovina
PA2349	**The association of the expression of programed cell death ligand 1 (PD-L1) in dendritic cells (DCs) and its subtypes with chronic obstructive pulmonary disease (COPD) phenotypes** Kuan-Yuan Chen (New Taipei City, Taiwan), Kang-Yun Lee, Po-Hao Feng
PA2350	**Immunohistochemical analysis in biopsies from patients with COPD.** Marcos Páramo Pérez (Ciudad de México, Mexico), Robinson Robles Hernández
PA2351	**Piezo expression and function in airway smooth muscle in chronic obstructive pulmonary disease.** Nataliya Migulina (Groningen, Netherlands), Theo Borghuis, Ben Roos, Wim Timens, Christina Pabelick, Corry-Anke Brandsma, Janette Burgess, Y.S. Prakash
PA2352	**Distinct Lung miRNAs Are Associated with the Control of Cell Proliferation in NSCLC and COPD** Renata Esposito (Caserta, Italy), Davida Mirra, Giuseppe Spaziano, Francesca Polverino, Bruno D'Agostino
PA2353	**Comprehensive analysis of bronchoalveolar lavage fluid by validating ELISA and MSD systems for 22 biomarkers** Saskia Carstensen (Hannover, Germany), Jens M. Hohlfeld, Meike Müller
PA2354	**Extensive biomarker analysis in a European cohort study of patients suffering from COVID-19: a perspective from the DRAGON consortium** Julien Guiot (Liège, Belgium), Marie Ernst, Nathalie Maes, Monique Henket, Anna Peired, Benoit Ernst, Sara Tomassetti, Etienne Cavalier
PA2355	**A plasma biomarker of neutrophilic activity correlates with COPD severity** Mugdha M. Joglekar (Groningen, Netherlands), Jannie M. B. Sand, Diana J. Leeming, Frank Klont, Russell P. Bowler, Barbro N. Melgert, Simon D. Pouwels, Janette K. Burgess

PS-6 in poster area — Session 235 — 08:00 - 09:30

Poster session: Translational approaches in fibrotic lung diseases: from bench to bedside

Disease(s) : Interstitial lung diseases | Airway diseases

Method(s) : Cell and molecular biology | Imaging | Physiology

Tag(s) : Translational

Chairs : Isis Enlil Fernandez (München, Germany), Carlos Esteban Machahua Huamani (Bern, Switzerland)

PA2356	**Effect of the HDACs inhibitor, Panobinostat, in a rat model of pulmonary fibrosis** Vanessa Pitozzi (Parma (PR), Italy), Paola Caruso, Francesca Ruscitti, Silvia Pontis, Maria Gloria Pittelli, Giancarlo Aquino, Roberta Volta, Barbara Pioselli, Maria Laura Faietti, Maurizio Civelli, Marcello Trevisani
PA2357	**Resolvin E3 inhibits phosphorylation of p38 MAPK signaling pathway leading to the reduction of TGF-β1 production on macrophage** Masakiyo Yatomi (Maebashi, Japan), Yasuhiko Koga, Haruka-Aoki Saito, Makiko Sato, Yosuke Miura, Hiroaki Tsurumaki, Noriaki Sunaga, Toshitaka Maeno, Satoshi Shuto, Takeshi Hisada
PA2358	**Effects of macrophage transplantation in bleomycin-induced pulmonary fibrosis in mice** Jun Ikari (Chiba, Japan), Eiko Suzuki, Megumi Katsumata, Masaki Suzuki, Ayako Shimada, Nozomi Tanaka, Keiko Yamamoto, Ayumi Sekine, Yoshitoshi Kasuya, Koichiro Tatsumi, Takuji Suzuki
PA2359	**Succinate aggravates pulmonary fibrosis through the succinate/SUCNR1 axis.** Rishi Rajesh (Graz, Austria), Reham Atallah, Ilse Lanz, Wolfgang Platzer, Stefano Angiari, Leigh Marsh, Thomas Bärnthaler, Akos Heinemann
PA2360	**Lower proportion of collagen type XIV in lung tissue of patients with Idiopathic Pulmonary Fibrosis (IPF)** Mehmet Nizamoglu (Groningen (GR), Netherlands), Maunick Lefin Koloko Ngassie, Rhode A. Meuleman, Martin Banchero, Theo Borghuis, Wim Timens, Martijn C. Nawijn, Barbro N. Melgert, Irene H. Heijink, Corry-Anke Brandsma, Janette K. Burgess
PA2361	**Real-life experience using nintedanib as a reference item in a preclinical rat model of bleomycin-induced fibrosis** Pan Filis (Edinburgh, United Kingdom), Angela Marsden, Susan Sammels, James Baily, Mary McElroy
PA2362	**Dexamethasone restores TNFα-induced epithelial barrier dysfunction in primary rat alveolar epithelial cells** Naokata Kutsuzawa (Isehara, Japan), Yoko Ito, Shizuko Kagawa, Hiroto Takiguchi, Koichiro Asano
PA2363	**Extracellular vesicles regulate fibroblasts to myofibroblasts transition in chronic lung diseases** xu bai (sydney, Australia), Hui Chen, Brian Oliver
PA2364	**Sigma-1 receptor agonist mitigates bleomycin-induced pulmonary fibrosis in mice** Adam Hosszu (Budapest, Hungary), Dora Bianka Balogh, Akos Roland Toth, Kata Cseko, Judit Hodrea, Zsuzsanna Helyes, Attila J. Szabo, Andrea Fekete
PA2365	**Late Breaking Abstract - GTX-011 alleviates inflammatory, cardiovascular and pulmonary disfunction in a rat model of bleomycin-induced pulmonary fibrosis.** Eugenia Ruiz-Canovas (Barcelona, Spain), Javier Milara, Paula Montero, Inés Roger, Consol Farrera, Cristina Fernández-Asensio, Silvia Sánchez-Díez, Julio Cortijo
PA2366	**Interalveolar pores and association with (pre-)COPD stage and small airways** Stijn Verleden (Leuven, Belgium), Cindy Mai, Annemiek Snoeckx, Annelies Janssens, Senada Koljenovic, Paul Van Schil, Veronique Verplancke, Johanna Kwakkel-Van-Erp, Hanne Voet, Therese Lapperre, Jeroen Hendriks
PA2367	**Late Breaking Abstract - Calcaratarin D, a labdane diterpenoid, attenuates TGF-β1-induced airway epithelial -mesenchymal transition and lung fibroblast activation** Wupeng Liao (Singapore, Singapore), Winnie Teo, W.S. Fred Wong
PA2368	**Late Breaking Abstract - Investigation of cKIT driven bone marrow toxicity and translation to human** Marie Larsson (Molndal, Sweden), Sonja Gill, Carmen Pin, Fiona Pachl, Kainat Khan, James Cartwright, Ruth Macdonald, Jonathan Rose, Benjamin Clayton, Emilyanne Leonard, Jorrit Hornberg, Anna Ollerstam
PA2369	**Role of apoptosis signal-regulating kinase-1 (ASK1) in the development of pulmonary fibrosis** Martina Korfei (Gießen, Germany), Julie Antoine, Azam Mohammadi, Stefan Hadzic, Ingrid Henneke, Poornima Mahavadi, Ekaterina Krauss, Clemens Ruppert, Werner Seeger, Andreas Guenther
PA2370	**Loss of cofilin 1 in the airway epithelium of COPD causes mitochondrial dysfunction** Venkataramana Sidhaye (Baltimore, United States), Baishakhi Ghosh, Bonnie Yeung-Luk, Vaishnavi Karanam, Shreeti Thapa
PA2371	**Elastase inhibitory activity (EIA) in Chronic Obstructive Pulmonary Disease (COPD) and Alpha-1 Antitrypsin Deficiency (AATD)** Georgina Farago (Barcelona, Spain), Gerard Orriols, Alexa Núñez, Cristina Esquinas, Galo Granados, Pablo Gabriel-Medina, Cristina Aljama, Miriam Barrecheguren, Francisco Rodriguez-Frías, Marc Miravitlles
PA2372	**Targeting lung fibroblast senescence to restore ECM regulation in COPD** Roy R. Woldhuis (Groningen, Netherlands), Maarten Van Den Berge, Wierd Kooistra, Wim Timens, Corry-Anke Brandsma

PA2373 **The role of prostaglandin E2 (PGE2) on fibroblast - extracellular matrix (ECM) interaction in idiopathic pulmonary fibrosis (IPF): A pilot study**
David Shitrit (Kfar Saba, Israel), Noa Moskovitz, Gali Epstein Shochet, Hadas Gilboa

PS-7 in poster area Session 236 08:00 - 09:30

Poster session: Inhaler devices: environmental impact, technique, and adherence

Disease(s) : Airway diseases

Method(s) : General respiratory patient care Pulmonary function testing Public health Epidemiology

Tag(s) : Clinical

Chairs : Omar S. Usmani (London, United Kingdom), Dimitrios Toumpanakis (Athens, Greece)

PA2374 **Impact of extrafine formulation single-inhaler triple therapy on health-related quality of life after three months of treatment in patients with asthma: the TriMaximize study**
Rembert Koczulla (, Germany), Berktan Akyildiz, Charlotte Suppli Ulrik, Detlef Nachtigall, Richard Russell, Valentina Bogoevska, Wolfgang Pohl, Tanja Borucki, Maurice-Dominique Martini, Christian Gessner

PA2375 **TRITRIAL study - TRIple Therapy in Real life: Impact on Adherence and HeaLth status in COPD patients in Italy.**
Ulrica Scaffidi Argentina (PARMA, Italy), Luca Richeldi, Pietro Schino, Elena Bargagli, Alberto Ricci, Alberto Rocca, Francesca Marchesani, Alfio Pennisi, Gianna Camiciottoli, Mariella D'Amato, Francesco Macagno, Elena Garavelli, Eleonora Ingrassia, Alessio Piraino

PA2376 **Change in treatment adherence after three months of treatment with extrafine formulation single-inhaler triple therapy in patients with asthma: the TriMaximize study**
Frederik Trinkmann (Heidelberg, Germany), Berktan Akyildiz, Charlotte Suppli Ulrik, Detlef Nachtigall, Wolfgang Pohl, Valentina Bogoevska, Richard Russell, Veronika Grickschat, Christian Gessner

PA2377 **Change in asthma control after three months of treatment with extrafine formulation single-inhaler triple therapy in patients with asthma: the TriMaximize study**
Timm Greulich (Marburg, Germany), Berktan Akyildiz, Wolfgang Pohl, Detlef Nachtigall, Richard Russell, Valentina Bogoevska, Charlotte Suppli Ulrik, Renata Slawinska, Christian Gessner

PA2378 **Effect on asthma control in patients with asthma and concomitant COPD after three months of treatment with extrafine formulation single-inhaler triple therapy – TriMaximize study**
Hartmut Timmermann (Hamburg, Germany), Berktan Akyildiz, Valentina Bogoevska, Richard Russell, Detlef Nachtigall, Wolfgang Pohl, Charlotte Suppli Ulrik, Andreas Wendt, Christian Gessner

PA2379 **Impact of extrafine formulation single-inhaler triple therapy on lung function after three months of treatment in patients with asthma: the TriMaximize study**
Christian Gessner (Leipzig, Germany), Berktan Akyildiz, Richard Russell, Detlef Nachtigall, Charlotte Suppli Ulrik, Valentina Bogoevska, Wolfgang Pohl, Björn Licht, Carl-Peter Criée

PA2380 **Are people with airways disease aware of the environmental impact of inhalers?**
Maeve Savage (London, United Kingdom), Maeve Savage, Alicia Piwko, Taheera Ali, Rachael Ehikioya, Gráinne D'Ancona

PA2381 **Trends in inhaler use and associated carbon footprint: a sales data-based study in Europe**
Alexander Wilkinson (Hertfordshire, United Kingdom), Ville Vartiainen, Christer Janson, Hanna Hisinger-Mölkänen, Lauri Lehtimäki

PA2382 **Socioeconomic disparities in the carbon footprint of asthma care in the UK: results from SABINA CARBON**
Ekaterina Maslova (Reading, United Kingdom), Alexander J K Wilkinson, Christer Janson, Vasanth Radhakrishnan, Jennifer K Quint, Nigel Budgen, Trung N Tran, Yang Xu, Andrew Menzies-Gow, John P Bell

PA2383 **Choice of Salbutamol Metered Dose Inhaler (MDI) type and use of a Spacer Impact Drug Delivery and Carbon Emissions**
Mark Nagel (London (ON), Canada), Jason Suggett

PA2384 **A Real-World Evaluation of a Digital Self-Management and Adherence Support System in Patients with Severe Asthma**
Laura Wiffen (Portsmouth, United Kingdom), Lynn Elsey, Thomas Brown, Milan Chauhan, Ina Kostakis, Stephen Fowler, Anoop J Chauhan

PA2385 **Switching inhaler treatment from pMDI to DPI in real-world; reduction of carbon footprint**
Lauri Lehtimäki (Tampere, Finland), Christer Janson, Ville Vartiainen, Hanna Hisinger-Mölkänen

PA2386 **Carbon footprint of as-needed budesonide-formoterol in mild asthma: a post hoc analysis**
Lee Hatter (Wellington, New Zealand), Pepa Bruce, Allie Eathorne, Mark Holliday, Mark Weatherall, Richard Beasley

PA2387	**An Algerian study on patient's attitude towards inhalers** Redouene Sid Ahmed Benazzouz (Alger, Algeria), Safia Benazzouz, Azeddine Mekideche, Massinissa Benyagoub, Halima Chati, Aicha Djadj, Hassiba Benferhat, Mounir Ould Setti
PA2388	**Preserving treatment for asthma and COPD patients while minimizing carbon footprint: relative lung bioavailability and total systemic exposure of a medium dose formulation of BDP/FF/GB MDI with novel propellant** François Rony (Bois-Colombes, France), Jelle Klein, Arnaud Valent, Alessandro Guasconi, Gianluigi Poli
PA2389	**Have we taken any steps to reduce the environmental impacts of inhalers? A perspective from a specialist respiratory team in a deprived area of the UK** Djeyapraba Kadar (Liverpool, United Kingdom), Katie Fitzsimmons, Elaine Gossage, Sarah Sibley, Denis Wat, David Barber, Emma Rickards, Samantha Hayes
PA2390	**The trascendence of capsule transparence in dry powder inhalation devices in the treatment of COPD.** Rocio Reinoso Arija (Sevilla, Spain), Rosario Ruiz-Serrano De La Espada, María Dolores Nuñez Ollero, Laura Carrasco Hernandez, María Esther Quintana Gallego, Jose Luis López-Campos Bodineau
PA2391	**Towards minimizing carbon footprint of triple fixed dose MDIs for severe asthmatic patients: relative lung bioavailability and total systemic exposure of a high dose formulation of BDP/FF/GB with novel propellant** François Rony (Bois-Colombes, France), Frédéric Vanhoutte, Arnaud Valent, Rabab Abbadi, Alessandro Guasconi, Gianluigi Poli
PA2392	**Adherence to single and multiple inhaler triple therapies among patients with COPD in the real world in Japan** Kieran J. Rothnie (London, United Kingdom), Sandra Joksaite, Robert P. Wood, Akiko Mizukami, Lucinda J Camidge, Alexandrosz Czira, Thomas Jennison, Takeo Ishii, Olivia Massey, Kenichi Hashimoto, Rad Siddiqui, Masao Yarita, Chris Compton, Raj Sharma, Afisi S Ismaila
PA2393	**Characteristics and treatment pathways of COPD patients initiating single-inhaler dual or triple therapy in England** Stephen G Noorduyn (Mississauga, Canada), Robert P Wood, Kieran J Rothnie, Kiran K Rai, Monica Seif, Lucy Massey, Chris Compton, Afisi S Ismaila

PS-8 in poster area — Session 237 — 08:00 - 09:30

Poster session: Clinical aspects in chronic airway diseases

Disease(s) : Airway diseases | Pulmonary vascular diseases

Method(s) : Pulmonary function testing | Epidemiology | General respiratory patient care | Public health | Imaging | Pulmonary rehabilitation

Tag(s) : Clinical

Chairs : Mina Gaga (Athens, Greece), Ildikó Horváth (Budakeszi, Hungary)

PA2394	**Phenotypic differences of persistent airflow obstruction in young vs old subjects in the general population** Caspar Schiffers (Vienna, Austria), Rosa Faner, Marie-Kathrin Breyer, Sylvia Hartl, Robab Breyer-Kohansal, Alvar Agusti
PA2395	**Neglecting the neglected: Tobacco cessation support is 'essential' for the management of asthma and COPD** Dilek Karadoğan (Rize, Turkey), Ilknur Kaya, Merve Yumrukuz Şenel, Esin Bilgin Konyalıhatipoğlu, Tahsin Gökhan Telatar, Metin Akgün
PA2396	**Burden of obstructive airway diseases (OADs) in 618 post-pulmonary TB patients across India.** Raja Dhar (Kolkata (West Bengal), India), Virendra Singh, Malay Sarkar, Arti Shah, Devasahayam J Christopher, Girija Nair, Arpan Shah, Sonali Trivedi, Suryakant Tripathi, Babaji Ghewade, Aleemuddin N. M, Saurabh Karmakar, Srivinivas Rajgopala, Mohankumar Thekkinkattil, Rajesh Swarnakar, Arunakumari Badam, Kripesh Sarmah, Srikanth Krishnmurthy, Suresh Anantraj, J. Ram, Archana B, Zuber Ahmed, Sapna Madas, Priyanka Dhumal, Swapnil Gadhave, Sundeep Salvi
PA2397	**Recovery and health related quality of life (HRQoL) in patients with pre-existing airways diseases: results from a prospective UK cohort (PHOSP-COVID)** Omer Elneima (Leicester, United Kingdom), Hamish J C Mcauley, John R Hurst, Samantha Walker, Salman Siddiqui, Petr Novotny, Jenni K Quint, Paul Pfeffer, Aziz Sheikh, Jeremy S Brown, Manu Shankar-Hari, Carlos Echevarria, Rachael A Evans, Louise V Wain, Liam G Heaney, Anthony De Soyza, Chris E Brightling
PA2398	**IN COVID-19 LONG-TERM IMPAIRMENT OF PULMONARY GAS-EXCHANGE IS DOMINATED BY THE VASCULAR COMPONENT** Luca Novelli (Bergamo, Italy), Gianluca Imeri, Chiara Allegri, Anna Caroli, Alberto Arrigoni, Roberta Trapasso, Roberta Biza, Marisa Anelli, Carlo Catani, Simone Bonetti, Francesco Caglioni, Caterina Conti, Fabiano Di Marco
PA2399	**Association between changes in thoracic muscle mass assessed by high resolution computed tomography and static lung volumes in patients with COPD** Mia Solholt Godthaab Brath (Vadum, Denmark), Sisse Dyrman Alsted, Esben Bolvig Mark, Rasmus Brath Christensen, Pernille Veiss-Pedersen, Henrik Højgaard Rasmussen, Jens Brøndum Frøkjær, Lasse Riis Østergaard, Ulla Møller Weinreich

PA2400	**Understanding COPD underdiagnosis in the post-COVID era** ELENA AVALOS PEREZ-URRIA (Madrid , Spain), María Rodrigo-García, Adrián Peláez, Laura Castellanos López, Alberto Martínez De Lara, Elena García Castillo, Tamara Alonso Pérez, Celeste Marcos, Rosa María Girón Moreno, Claudia Valenzuela, Julio Ancochea, Joan B Soriano
PA2401	**The impact of a multidisciplinary assessment on COPD hospitalisations** Finbarr Harnedy (Cork, Ireland), Jack Allen, Michele Cuddihy, Eimear Ward, Maeve Sorohan, Imran Sulaiman, Breda Cushen
PA2402	**Dynamic pulmonary hyperinflation induced by 6 and 12minute walk test in patients with COPD: a crossover study** Angelo Petroianni (Roma (RM), Italy), Silvia Magliulo, Marco Bezzio, Alessandra Iacovelli, Federica Olmati, Luigi Panza, Paolo Palange
PA2403	**Poor asthma control in schoolchildren may lead to lower lung function trajectory from childhood to early adulthood: A japanese cohort study** Shingo Tsuneyoshi (Chikushino-city, Japan), Takashi Kinoshita, Ryo Yano, Chiyo Matama, Jun Sasaki, Masanobu Matsuoka, Tomotaka Kawayama, Tomoaki Hoshino
PA2404	**Poor perception of symptom - cause of exacerbation of Bronchial Asthma** Chinkita Agrawal (, India), Rajesh Agrawal, Rajat Agarwal
PA2405	**Low healthcare utilization among patients with chronic respiratory disease in Korea** Seon Cheol Park (Goyang-si, Republic of Korea), Kang Ju Son, Ji Ye Jung, Sang Chul Lee, Hyun Woo Ji, Jung Mo Lee, Chang Hoon Han, Cheong Ju Kim, Sun Min Lee
PA2406	**A pilot study of cognitive disorders, depression and anxiety in obstructive lung disease** Iulian-Laurentiu Buican (Craiova, Romania), Victor Gheorman, Cristina Călărașu, Andreea Mihai, Costin-Teodor Streba
PA2407	**Evaluation of asthma control in Tunisia: Correlation between GINA guidelines and asthma control test** Chaima Turki (ariana tunis, Tunisia), Houda Rouis, Chirine Moussa, Oumayma Aggouni, Donia Jeridi, Hana Dhifallah, Ibtihel Khouaja, Ines Zendah, Sonia Maalej
PA2408	**Metabolic Syndrome in a COPD Population: Frequency and Significance** KHALED DEGHDEGH (Annaba, Algeria), Ouafa Guellati, Feriel Atoui, Randa Yakoubi, Fouad Khalloufi
PA2409	**Asthma with fixed airflow obstruction has comparable small airway dysfunction with asthma-COPD overlap** Toshihiro Shirai (Shizuoka, Japan), Keita Hirai, Yasuhiro Gon
PA2410	**Clinical characteristics of female patients with COPD: a multicenter cross-sectional CAP study in Japan** Tasuku Yamamoto (Ube, Japan), Keiji Oishi, Ryo Suetake, Syuichiro Ohata, Yoriyuki Murata, Yoshikazu Yamaji, Kenji Sakamoto, Maki Asami-Noyama, Nobutaka Edakuni, Tsunahiko Hirano, Kazuto Matsunaga
PA2411	**Analysis of the relationship between cardiovascular disease and the degree of control of chronic obstructive pulmonary disease (COPD) with the development of possible future adverse cardiovascular events.** Natalia González Florido (Málaga, Spain), Esperanza Doña, Ana Muñoz, Adolfo Domenech
PA2412	**COPD and tuberculosis: friends or foes?** NADA Boutbagha (Agadir, Morocco), Sofia Farhat, Hanane Ikrou, Younes Essaid, Abdelkarim Khannous, Aboubakr Imzil, Abdelmajid Oulhbib, Fatiha Bounoua, Khadija Aitnasser, Houssame Ennaceri, Oussama Halloumi, Houda Moubachir, Hind Serhane
PA2413	**Alpha- Antitrypsin Deficiency as a cystic lung disease** Aishath Fazleen (Southampton, United Kingdom), Ausami Abbas, Jonathan Dunbar, Benjamin Welham, Alex Kong, Tom Wilkinson

PS-9 in poster area — Session 238 — 08:00 - 09:30

Poster session: Monitoring in chronic airway disease (2)

Disease(s) : Airway diseases

Method(s) : Physiology Pulmonary function testing General respiratory patient care Public health Epidemiology

Tag(s) : Clinical

Chairs : Marieann Högman (Uppsala, Sweden), Chair to be confirmed

PA2414	**Title: Prevalence and predictors of suboptimal PIFR in patients with COPD** Madhuri Batyala (Tirupati, India), Ashwini Chawhan, Lancelot Pinto, Bony Francis, Nisha Chandra Shekar, Dhara Thakrar

PA2415	**Assessing heaLth Effects of aiR pollution by non-invasive exhaled breaTh analysis – baseline characteristics of the ALERT study** Laila Truyen (Wilrijk, Belgium), Stijn Verresen, Eline Galle, Jan Van Meerbeeck, Roeland Samson, Thérèse Lapperre, Kevin Lamote
PA2416	**A scoping review of co-creation practice in the development of non-pharmacological interventions for people with chronic obstructive pulmonary disease** Qingfan An (Umeå, Sweden), Marlene Sandlund, Danielle Agnello, Lauren Mccaffrey, Sebastien Chastin, Ragnberth Helleday, Karin Wadell
PA2417	**Trends in lung transplantation in Spain. the influence of the pandemic of covid-19.** Katiuska Herminia Liendo Martinez (madrid, Spain), Stephany Ivonne Briones Alvarado, Crsithian Alonso Correa Gutierrez, Zichen Ji, Luis Puente Maestu, Javier De Miguel-Diez
PA2418	**Cluster analysis applied to 142 Algerian patients with COPD** Karim KHENNOUF (ALGIERS, Algeria), Abdelkarim Saadi, Souad Souilah, Yacine Benbetka, Samya Tarigh t
PA2419	**Clinical significance of symptoms in smokers with preserved pulmonary function: a cross-sectional study** Allabyergyen Myeryemkhaan (Ulaanbaatar, Mongolia), Byambatseren Boldbaatar, Otgonjargal Gurragchaa, Amartuvshin Ganbold, Ichinnorov Dashtseren
PA2420	**Analysis of the relation between tidal and forced spirometric curves** Rob Hagmeijer (Enschede, Netherlands), Rutger Hebbink, Judith Elshof, Marieke Duiverman, Peter Wijkstra
PA2421	**The effectiveness of monitoring adherence to regular inhaled corticosteroid alone or in combination with a long-acting β2-agonist using electronic methods: a narrative systematic review** Mohammed Almutairi (Birmingham, United Kingdom), John Marriott, Adel Mansur
PA2422	**Guideline-modified asthma control test (GmACT): improving monitoring of disease control** Enrico Schiavi (Roma, Italy), Maria Parmigiani, Francesca Cefaloni, Cristina Boccabella, Luca Richeldi, Matteo Bonini
PA2423	**Changes in obstruction classification using different interpretation strategies** Martijn Cuijpers (Roermond, Netherlands), Monique Hardy, Herman Jan Pennings
PA2424	**Lack of association between self-perceived social support and treatable traits in COPD patients with resident loved ones** Anna Stoustrup (Gandrup, Denmark), Daisy J.A. Janssen, Nienke Nakken, Emiel F.M Wouters, Ulla M Weinreich, Martijn A Spruit
PA2425	**Defining restrictive spirometry and PRISm using LLN versus %pred: does it matter?** Caspar Schiffers (Vienna, Austria), Emiel F.M. Wouters, Tobias Lorenz Mraz, Marie-Kathrin Breyer, Otto C. Burghuber, Sylvia Hartl, Robab Breyer-Kohansal
PA2426	**Impulse oscillometry: a useful toll for the air trapping detection.** María Rodil Riera (LANGREO, Spain), Ramón Fernández Álvarez, Marta Íscar Urrutia, María José Vázquez López, Gemma Rubinos Cuadrado, Isabel Martinez González-Posada, Ángela Lanza Martínez, Laura Martínez Vega, Eduardo Sánchez Vázquez, Juan Francisco Nieves Salceda, Laura Abad Chamorro, Patricia Álvarez Álvarez, Marta María García Clemente
PA2427	**Past acute exacerbations predict future relapses in patients with chronic hypercapnic COPD receiving long-term non-invasive ventilation** Balázs Csoma (Budapest, Hungary), Zsófia Lázár, Joshua Hilton, Ellie Walker, Kelly Sharman, Jorgen Vestbo, Andrew Bentley, Andras Bikov
PA2428	**Desaturation during exercise in patients with chronic obstructive pulmonary disease: new predictive factors for nocturnal desaturation** Elena Lesaga López (Córdoba (Córdoba), Spain), Antonio Jurado García, Cristina Muñoz Corroto, Pablo García Lovera, Marta Dominguez Gómez, Roberto Martín De León, Nuria Feu Collado, Bernabe Jurado Gamez
PA2429	**A survey about knowledge of exhaled nitric oxide use among Southern Italian pulmonologists and trainees.** Silvano Dragonieri (Bari (BA), Italy), Alessio Marinelli, Andrea Portacci, Leonardo Maselli, Ernesto Lulaj, Ilaria Iorillo, Francesca Montagnolo, Flogerta Sana, Ruben Infantino, Giovanni Dalena, Giovanna Elisiana Carpagnano
PA2430	**Small airways impairment and hyperinflation in patients with bronchiectasis; preliminary data from a tertiary center.** Nikolaos Lazarinis (Stockholm, Sweden), Pia Ghosh, Malin Sande, Ann Sofie Lantz, Eva Wallen Nielsen, Barbro Dahlen, Apostolos Bossios

PA2431	**Pulmonary function evaluation on Asthma-COPD overlap from ELSA-Brasil cohort study.** Francine Maria Almeida (São Paulo (SP), Brazil), Roselaine Maria Oliveira, Vitoria Caroline Queiroz, Clarice Rosa Olivo, Beatriz Mangueira Saraiva-Romanholo, Paulo A Lotufo, Isabela Bensenor, Itamar Souza Santos, Iolanda Fátima Lopes Calvo Tibério
PA2432	**Automated quantification of QT-intervals by an algorithm: A validation study in patients with COPD** Dario Kohlbrenner (Copenhagen, Denmark), Maya Bisang, Sayaka S. Aeschbacher, Emanuel Heusser, Silvia Ulrich, Konrad E. Bloch, Michael Furian
PA2433	**A novel e-Health oscillometry approach: low-cost, open-source App-driven device** Ramón Farré Ventura (Barcelona, Spain), Jan-Elliot Gonzalez, Miguel-Angel Rodriguez, Eduardo Caballero, Antonio Pardo, Santiago Marco

Gold — Session 239 — 08:30 - 10:00

Guidelines session: Management of adults with spontaneous pneumothorax/what's new in the management of severe community-acquired pneumonia

1) ERS/EACTS/ESTS clinical practice guidelines on adults with spontaneous pneumothorax and 2) ERS/ESICM/ESCMID/ALAT guidelines for the management of severe community-acquired pneumonia

Aims : to discuss two new published guidelines, namely, ERS/EACTS/ESTS clinical practice guidelines on adults with spontaneous pneumothorax and ERS/ESICM/ESCMID/ALAT guidelines for the management of severe community-acquired pneumonia (sCAP) ; to present an overview of new evidence in the management of spontaneous pneumothorax and sCAP; to outline the recommendations identified in the guidelines on pneumothorax and sCAP; to provide pragmatic guidance for specialists on how to best manage spontaneous pneumothorax and sCAP.

Method(s) : Endoscopy and interventional pulmonology General respiratory patient care Surgery

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Patient, Physician in Pulmonary Training, Thoracic surgeon

Chairs : Walter De Wever (Leuven, Belgium), Daiana Stolz (Freiburg, Germany), Amanda Dandanell Juul (Odense S, Denmark)

08:30	**The medical management of spontaneous pneumothorax** Steven Walker (Bristol (Avon), United Kingdom)	**2434**
08:45	**The surgical management of spontaneous pneumothorax** Giuseppe Cardillo (Roma (RM), Italy)	**2435**
09:00	**Discussion and Q&A** All Speakers	**2436**
09:15	**What's new in sCAP** Ignacio Martin-Loeches (Dublin, Ireland)	**2437**
09:30	**Coadjuvants in sCAP** Antoni Torres Marti (Barcelona, Spain)	**2438**
09:45	**Discussion and Q&A** All Speakers	**2439**

Silver — Session 240 — 08:30 - 10:00

Symposium: Pulmonary hypertension and interstitial lung diseases: dilemmas in diagnosis and the conundrum of treatment

Aims : to provide the latest updates on pulmonary hypertension (PH) due to interstitial lung disease (ILD), including screening/diagnosis, treatment and future research directions. PH often complicates many forms of advanced lung disease, including pulmonary fibrosis; to discuss the main novel achievements (pathophysiology, diagnosis and management) in the field of PH when patients have CLDs; to strengthen understanding of PH due to lung diseases and to improve the care and quality of life of affected patients.

Disease(s) : Airway diseases Interstitial lung diseases Pulmonary vascular diseases

Method(s) : Cell and molecular biology Imaging Physiology

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Patient, Radiologist, Scientist (basic, translational)

Chairs : Katerina Antoniou (Heraklion, Greece), Marc Humbert (Le Kremlin-Bicêtre, France), Thomas Koudstaal (Rotterdam, Netherlands)

08:30	**What do we know about the mechanisms of PH in ILD: translational research** Soni Savai Pullamsetti (Giessen, Germany)	**2440**

08:45	**From screening to phenotypes in PH-ILDs: the impact of new guidelines** Lucilla Piccari (Barcelona, Spain)	**2441**
09:00	**Pro: it is time to treat PH in ILD** Oksana Shlobin (Falls Church, United States)	**2442**
09:15	**Con: it is not time to treat PH in ILD** Stephen Wort (London, United Kingdom)	**2443**
09:30	**Discussion and Q&A** All Speakers	**2444**

Coral 4+5 Session 241 08:30 - 10:00

State of the art session: Sleep and breathing disorders

Sleep-disordered breathing and the heart. What is next?

Aims : to discuss the latest data about sleep-disordered breathing in association with cardiovascular disease; to present and discuss new evidence in the field that will contribute to the management of sleep-disordered breathing.

Disease(s) : Sleep and breathing disorders

Method(s) : General respiratory patient care Respiratory intensive care

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Respiratory critical care physician, Patient, Journalist

Chairs : Winfried J. Randerath (Solingen, Germany), Sophia E. Schiza (Heraklion, Greece), Matteo Bradicich (Zollikerberg, Switzerland)

08:30	**Antihypertensive drugs vs. positive pressure. Which one is better to reduce hypertension?** Silke Ryan (Dublin, Ireland)	**2445**
08:45	**Heart failure in sleep-disordered breathing: is positive airway pressure therapy meaningful?** Douglas Bradley (Toronto (ON), Canada)	**2446**
09:00	**Is sleep-disordered breathing a risk factor or phenotype of cardiovascular disease?** Manuel Sanchez De La Torre (Lleida, Spain)	**2447**
09:15	**New kids on the blocks: pharmacologic treatment of sleep-disordered breathing also for cardiovascular patients?** Elisa Perger (Milano, Italy)	**2448**
09:30	**Discussion and Q&A** All Speakers	**2449**

Coral 3 Session 242 08:30 - 10:00

Hot topics: Non-invasive high-flow nasal therapy or positive pressure ventilation in acute and chronic respiratory care

Aims : to discuss the mechanisms, evidence for clinical effectiveness and cost-effectiveness of non-invasive positive pressure ventilation and high-flow nasal therapy in acute and chronic respiratory failure.

Disease(s) : Airway diseases Respiratory critical care Sleep and breathing disorders

Method(s) : General respiratory patient care Respiratory intensive care

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Medical Student, Medical Technical Assistant, Nurse, Respiratory critical care physician, Paediatrician, Patient, Physiologist, Respiratory physiotherapist

Chairs : Peter J. Wijkstra (Groningen, Netherlands), Heleen Demeyer (Leuven, Belgium)

08:30	**Flow treatment in acute respiratory care** Lara Pisani (Bologna (BO), Italy)	**2450**
08:45	**Pressure treatment in acute respiratory care** Claudia Crimi (Catania (CT), Italy)	**2451**
09:00	**Flow treatment in chronic respiratory care** Rebecca D'Cruz (London, United Kingdom)	**2452**
09:15	**Pressure treatment in chronic respiratory care** Wolfram Windisch (Cologne, Germany)	**2453**

09:30	**Discussion and Q&A** All Speakers	**2454**

Coral 1 Session 243 08:30 - 10:00

Hot topics: What did you always want to know about omics analyses for clinical practice?

Aims : to discuss the rapid advances in omics technology and the molecular phenotyping of asthma and COPD cohorts that now permit large-scale evaluation of genetic, transcriptomic, proteomic and metabolic biomarkers.

Disease(s) : Airway diseases

Method(s) : Cell and molecular biology

Tag(s) : Translational

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Medical Student, Respiratory critical care physician, Physician in Pulmonary Training, Scientist (basic, translational)

Chairs : Niki L. Reynaert (Maastricht, Netherlands), Christopher E. Brightling (Leicester (Leicestershire), United Kingdom), Sara Cuevas Ocaña (Nottingham, United Kingdom)

08:30	**Transcriptomics in chronic airway diseases: when, how and why?** Martijn C. Nawijn (Groningen, Netherlands)	**2455**
08:45	**Spatial omics: a cutting-edge tool to navigate the airway map** Francesca Polverino (Houston, United States)	**2456**
09:00	**Proteomics in airway diseases: current approaches and future directions** Ian M. Adcock (London, United Kingdom)	**2457**
09:15	**Integration of omics in clinical cohorts: unrolling Ariadne's thread** Rosa Faner Canet (Barcelona, Spain)	**2458**
09:30	**Discussion and Q&A** All Speakers	**2459**

Coral 2 Session 244 08:30 - 10:00

Clinical cases: Clinical challenges beyond guidelines

Aims : to describe the controversial aspects of the current guidelines for the environmental health prevention and air pollution standards, management of adult bronchiectasis, diagnosis and treatment of Langerhans cell histiocytosis in adults and treatment of stage I non-small cell lung cancer; to discuss data underpinning nonadherence and alternative approaches to current recommendations; to propose evidence-based substitute management recommendations for clinicians; to identify areas of concern; to highlight the need for further research.

Disease(s) : Airway diseases Respiratory infections Interstitial lung diseases Thoracic oncology

Chairs : Albert Osterhaus (Hannover, Germany), Michael Loebinger (London, United Kingdom), Sara Tomassetti (Florence, Italy)

08:30	**Management of adult bronchiectasis, including Q&A** Eva Van Braeckel (Ghent, Belgium)	**2460**
08:52	**Environmental health prevention and standards on air pollution, including Q&A** Isabella Annesi Maesano (Montpellier, France)	**2461**
09:14	**Diagnosis and treatment of Langerhans cell histiocytosis in adults, including Q&A** Sergio Alfonso Harari (Milano (MI), Italy)	**2462**
09:36	**Treatment of stage I non-small cell lung cancer, including Q&A** Georgia Hardavella (Athens, Greece)	**2463**

Purple Session 245 08:30 - 10:00

Mini symposium: Exercise training, physical activity and self-management at home

Aims : to identify the core components, efficacy, strengths, limitations, evidence gaps and research necessary to guide the future delivery of home-based care and pulmonary rehabilitation; to describe patient and outcome assessment, exercise training, physical activity and self-management at home.

Disease(s) : Airway diseases Interstitial lung diseases Thoracic oncology

Method(s) : General respiratory patient care Pulmonary rehabilitation Surgery

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Nurse, Physician in Pulmonary Training, Respiratory physiotherapist, Thoracic oncologist, Thoracic surgeon, Respiratory therapist

Chairs : Joana Cruz (Leiria, Portugal), Christian Karagiannidis (Cologne, Germany), Jellien Makonga-Braaksma (Woudenberg, Netherlands)

08:30	**Patient and outcome assessment for care and rehabilitation at home** Narelle Cox (Melbourne (VIC), Australia)	**2464**
08:45	**Exercise training and physical activity intervention at home** Marc Spielmanns (Wald, Switzerland)	**2465**
09:00	**Education, self-management and other components of home-based care and rehabilitation** Jean Bourbeau (Montréal (QC), Canada)	**2466**
09:15	**Discussion and Q&A** All Speakers	**2467**

Studio (White) Session 246 08:30 - 08:45

News from the studio: News from the studio

Chairs : Federica Meloni (Pavia (PV), Italy), Tobias Welte (Hannover, Germany)

08:30	**Discussion and Q&A** All Speakers	**2468**

Studio (White) Session 247 08:45 - 09:30

Pro-Con debate: Age limit for lung transplant in 2023: is there a barrier?

Aims : to clarify the clinical and ethical issues associated with the age limit and the outcomes of lung transplant in older patients.

Method(s) : Transplantation

Target audience : Adult pulmonologist/Clinician, Patient, Thoracic surgeon

Chairs : Federica Meloni (Pavia (PV), Italy), Tobias Welte (Hannover, Germany)

08:45	**Pro: age of 65 years is no longer a barrier for lung transplant candidacy** Konrad Hoetzenecker (Wien, Austria)	**2469**
09:00	**Con: age still matters in candidate selection for lung transplantation** Are Martin Holm (Oslo, Norway)	**2470**
09:15	**Discussion and Q&A** All Speakers	**2471**

Brown 3 Session 250 09:30 - 10:45

Oral presentation: COVID-19: diagnosis and treatments

Disease(s) : Airway diseases Respiratory critical care

Method(s) : Epidemiology General respiratory patient care Public health Cell and molecular biology Pulmonary function testing Pulmonary rehabilitation Respiratory intensive care

Tag(s) : Clinical

Chairs : Tony De Soyza (Newcastle-upon-Tyne, United Kingdom), Gareth Hynes (Oxford (Oxfordshire), United Kingdom)

OA2483	**Late Breaking Abstract - INNA-051 prophylaxis enhances innate immune responses confirming accelerated viral clearnace in a human influenza challenge model.** Francesca Mercuri (Melbourne, Australia), Hayley Mcquilten, Nicholas West, Ping Zhang, Scott White, Bruce.E Miller, Ruth Tal-Singer, Christophe Demaison	
OA2484	**The impact of the COVID-19 pandemic in deaths due to respiratory diseases: A comparative analysis of 2021 and 2020 vs background rates in 2019 in Spain** Joan B Soriano (Madrid, Spain), Adrián Pelaez, Esteve Fernandez, Julio Ancochea	
OA2485	**LSC - 2023 - Longitudinal proteomic profiling reveals early onset increase in collagens and (auto-)antibodies i n COVID-19 patients** Anna Semenova (Munich, Germany), Taylor Alexander Poor, Philipp Geyer, Ali Oender Yildirim, Theodore S. Kapellos, Alexander V Misharin, Gr Scott Budinger, Herbert B. Schiller	
OA2486	**Diagnosis of COVID-19 with enhanced real-time mass spectrometry breath analysis** Stanislas Grassin Delyle (Montigny le Bretonneux, France), Camille Roquencourt, Hélène Salvator, Emmanuelle Bardin, Elodie Lamy, Eric Farfour, Naline Emmanuel, Philippe Devillier	

OA2487	**Abnormal immune response in patients with persistent lung sequelae after COVID-19** Tamara Cruz Santa Cruz (Barcelona, Spain), Nuria Mendoza, Nuria Albacar, Lidia Perea, Pau Marrades, Carolina Panadero, Odette Viñas, Estibaliz Ruiz, Alvar Agusti, Jacobo Sellares, Oriol Sibila, Rosa Faner
OA2488	**Plasma proteomics of critical COVID-19 patients and the effect of imatinib treatment** Erik Duijvelaar (Amsterdam, Netherlands), Jack Gisby, James E Peters, Harm Jan Bogaard, Jurjan Aman
OA2489	**Expression patterns of Interleukin-33 and its receptor ST2 in severe COVID-19** Caroline Lindö (Lund, Sweden), Natália De Souza Xavier Costa, Premkumar Siddhuraj, Jimmie Jönsson, Jamie M Orengo, Matthew A Sleeman, Sandra Lindstedt, Cecilia Andersson, Luiz Fernando Silva, Armaro Nunes Duarteneto, Paulo Hilario Nascimento Saldiva, Caroline Sandén, Thais Mauad, Jonas Erjefält
OA2490	**DIURNAL RHYTHMS IN COVID-19 VACCINE EFFICACY** Guy Hazan (Dvira, Israel), Or Duek, Hillel Alapi, Huram Mok, Alex Ganninger, Elaine Ostendorf, Carrie Gierasch, Gabriel Chodick, David Greenberg, Jeffrey Haspel
OA2491	**Post-Hospitalisation COVID-19 (PHOSP-COVID): a prospective multi-centre UK cohort study** Omer Elneima (Leicester, United Kingdom), Hamish J C Mcauley, Olivia C Leavy, James D Chalmers, Ling-Pei Ho, Alexander Horsley, Michael Marks, Betty Raman, Krisnah Poinasamy, Amisha Singapuri, Rachael A Evans, Chris E Brightling, Louise V Wain
OA2492	**Subtle Pulse Electro-biological Recovery Apparatus (SPERA) as anti-inflammatory treatment for COVID-19 – A Proof of Concept Study** Stefan-Marian Frent (Timisoara, Romania), Graham Giles, Dora Paroczai, Voicu Tudorache, Iosif Marincu, Oana Raduna, Sorin Herban, Marius Marcu, Flavius Pater, Fergus Law, Martin Wise, Cristian Oancea
OA2493	**Discussion and Q&A** All Speakers

Brown 1+2 Session 251 09:30 - 10:45

Oral presentation: Pathways and mechanisms governing the pathogenesis of asthma and chronic obstructive pulmonary disease

Disease(s) : Airway diseases Respiratory critical care

Method(s) : Epidemiology Cell and molecular biology Physiology General respiratory patient care

Tag(s) : Clinical, Translational

Chairs : Gert-Jan Braunstahl (Rotterdam, Netherlands), Astrid Aardenburg - van Huisstede (Alkmaar, Netherlands)

OA2494	**Late Breaking Abstract - Effect of MMP-12 inhibitor, Adermastat-(FP-025), on allergen-induced late response in asthmatic subjects** Zuzana Diamant (Lund, Sweden), Yisheng Lee, Wenjin Yang, Ben Chien, Bassem Elmankabadi, David Lau, Khalid Abd-Elaziz, Arjen Pelgrom, Aeilko Zwinderman, René Lutter
OA2495	**Late Breaking Abstract - Dynamics of the blood innate lymphoid cell compartment in patients with severe asthma undergoing type 2 biologics treatment: Initial findings in the BIOCROSS study** Lorenz Wirth (Huddinge, Sweden), Valentyna Yasinska, Christopher Andrew Tibbitt, Whitney Weigel, Thomas Hochdörfer, Lars I. Andersson, Maria Sparreman-Mikus, Barbro Dahlén, Sven-Erik Dahlén, Jenny Mjösberg
OA2496	**Late Breaking Abstract - Stability of type 2 inflammation in a 12-year adult-onset asthma follow-up study** Ella Flinkman (Tampere, Finland), Iida Vähätalo, Leena Tuomisto, Onni Niemelä, Madeleine Rådinger, Bright Nwaru, Pinja Ilmarinen, Hannu Kankaanranta
OA2497	**Polygenic and transcriptional risk scores identify chronic obstructive pulmonary disease subtypes** Matthew Moll (Boston, United States), Julian Hecker, John Platig, Auyon Ghosh, Katherine Pratte, Davin Hill, Iain Konigsberg, Joe Chiles, Craig Hersh, Peter Castaldi, Kimberly Glass, Jennifer Dy, Don Sin, Ruth Tal-Singer, Majd Mouded, Stephan Rennard, Gary Anderson, Russell Bowler, Jeffrey Curtis, Merry-Lynn Mcdonald, Edwin Silverman, Michael Cho, Brian Hobbs
OA2498	**Effect of anti-ST2 on blood leukocyte and serum protein levels: insight from a phase IIa, placebo-controlled trial of astegolimab (COPD-ST2OP).** Adam Wright (Leicester (Leicestershire), United Kingdom), Matthew Richardson, Seid Mohammed, Claudia Micieli, Dorothy Cheung, David Cousins, Ahmed Yousuf, Neil Greening, Michele Grimbaldeston, David Choy, Christopher Brightling
OA2499	**Prediction of severe asthma clinical phenotypes using molecular profiles of urine eicosanoids** Johan Kolmert (Stockholm, Sweden), Maria Sparreman-Mikus, Bertrand De Meulder, Lars I Andersson, Ian Adcook, Ratko Djukanovic, Sven-Erik Dahlén, Craig E. Wheeelock

OA2500	**Infertility in women with asthma – does asthma also exist in the uterus?** Anne Vejen Hansen (København NV, Denmark), Casper Tidemandsen, Henriette Svarre Nielsen, Reza Serizawa, Antje Johanne Katrine Stubsgaard, Elisabeth Juul Gade, Pia Egerup, Lea Langhoff Thuesen, Paul S Foster, Vanessa M Mcdonald, Peter G Gibson, Charlotte Suppli Ulrik, Nina Cour Freiesleben, Vibeke Backer
OA2501	**Zinc plays an essential role in type 2 cytokine production from ILC2s in asthma** Hiroki Kabata (Tokyo, Japan), Misato Irie, Rie Baba, Yoshitaka Shirasaki, Takashi Kamatani, Mai Yamagishi, Koichi Fukunaga
OA2502	**Innate lymphoid cells type 2 and CD8+ T cells are perturbed in overweight and obese individuals with asthma** Chris Tibbitt (Stockholm, Sweden), Sofia Björkander, Paul Maier, Maura Kere, Simon Kebede Merid, Lorenz Wirth, Whitney Weigel, Jenny Mjösberg, Erik Melén
OA2503	**Charcot-Leyden crystals are associated with airway autoimmune responses in severe asthma** Kiho Son (Hamilton (ON), Canada), Kayla Zhang, Raquel Lopez, Aswathi Nair, Emily Volfson, Katherine Radford, Nicola Calma, Melanie Kjarsgaard, Chynna Huang, Parameswaran Nair, Manali Mukherjee
OA2504	**Discussion and Q&A** All Speakers

Blue 1+2 Session 252 09:30 - 10:45

Oral presentation: Paediatric bronchology: next generation

Disease(s) : Interstitial lung diseases Respiratory critical care

Method(s) : Endoscopy and interventional pulmonology General respiratory patient care Epidemiology Pulmonary function testing Transplantation Cell and molecular biology

Tag(s) : Clinical

Chairs : Raffaella Nenna (Rome, Italy), Nadine Freitag (Krefeld, Germany)

OA2505	**Childhood interstitial lung disease in Turkey: First data from the national registry** Halime Nayır Büyükşahin (Ankara, Turkey), Nagehan Emiralioğlu, Ayşe Ayzıt Kılınç, Saniye Girit, Ebru Yalçın, Tuğba Şişmanlar Eyüboğlu, Nazan Çobanoğlu, Güzin Cinel, Sevgi Pekcan, Yasemin Gökdemir, Berna Oğuz, Diclehan Orhan, Deniz Doğru, Uğur Özçelik, Azer Kılıç Başkan, Hüseyin Arslan, Haluk Çokuğraş, Zeynep Reyhan Onay, Sinem Can Oksay, Deniz Mavi Tortop, Ayşe Tana Aslan, Handan Kekeç, Fazılcan Zirek, Merve Nur Tekin, Figen Gülen, Bahar Girgin Dindar, Sanem Eryılmaz Polat, Salih Uytun, Aslı Imran Yılmaz, Gökçen Ünal, Ela Erdem Eralp, Bülent Karadağ, Melih Hangül, Mehmet Köse, Beste Özsezen, Erkan Çakır, Ayşen Bingöl, Mina Gharibzadeh Hızal, Gökçen Oztürk, Zeynep Seda Uyan, Tuğba Ramaslı Gürsoy, Derya Ufuk Altıntaş, Nural Kiper, . Child-Turkey-Collaboration
OA2506	**Analysis of risk factors for protracted bacterial bronchitis in infancy and long-term sequelae** Anne Schlegtendal (Bochum, Germany), Karen Brückner, Jan Hermann, Stefanie Dillenhöfer, Christoph Maier, Folke Brinkmann, Cordula Koerner-Rettberg
OA2507	**The effect of nutritional parameters on the prognosis of childhood interstitial lung diseases** Nagehan Emiralioğlu (Ankara, Turkey), Tugba Ramasli Gursoy, Matthias Griese, Elias Seidl, Nicolaus Schwerk, Julia Carlens, Martin Wetzke, Steve Cunningham, Joanna Lange, Katarzyna Krenke, Zsolt Szepfalusi, Florian Stehling, Winfried Baden, Susanne Hämmerling, Silvija-Pera Jerkic, Marijke Proesmans, Nicola Ullmann, Deborah Snijders, Frederik Buchvald, Antonio Moreno Galdo, Nadia Nathan, Ralph Epaud, Andy Bush, Ayse Tana Aslan, Nazan Cobanoglu, Nural Kiper
OA2508	**Paediatric lung transplantation for children with interstitial lung disease: A 12-year single-center analysis of underlying ChILD diagnoses and outcome** Julia Carlens (Hannover, Germany), Nicolaus Schwerk, Carsten Müller, Katharina Schütz, Florian Länger, Gesine Hansen, Jawad Salman, Dmitry Bobylev, Fabio Ius
OA2509	**Lung function and respiratory complications in children and young people born with oesophageal atresia and/or tracheoesophageal fistula: a 20 year experience** Katie Rose (Liverpool (Merseyside), United Kingdom), Philip Lawrence, Jonathan Ducey, Fiona Murphy, Rebecca Thursfield
OA2510	**Serum biomarkers in persistent tachypnea of infancy (CRC chILD-EU)** Honorata Marczak (Warszawa, Poland), Joanna Peradzyńska, Magdalena Paplińska-Goryca, Paulina Misiukiewicz-Stępień, Małgorzata Proboszcz, Katarzyna Krenke
OA2511	**Respiratory response to chronic aspirations in children** Nadine Freitag (Krefeld, Germany), Thi Minh Thao Lea Nguyen, Katrin Krug
OA2512	**Flexible bronchoscopy in pediatric patients with Down syndrome: a case-control study of the indications, findings, and complications** Noga Arwas (Beer Sheva, Israel), Aviv Goldbart, Micha Aviram, Yotam Dizitzer, Itay Pansky, Inbal Golan- Tripto

OA2513	**IgG4-related respiratory disease: a retrospective study of 115 patients** Shoko Matsui (Toyama, Japan), Hiroshi Yamamoto, Seijiro Minamoto, Tomohiro Handa, Yuko Waseda, Aki Matsui, Masamichi Komatsu, Seisuke Okazawa, Akira Hebisawa, Motohisa Yamamoto, Hiroki Takahashi, Masataka Umeda, Tomoki Origuchi, Takako Saeki
OA2514	**Discussion and Q&A** All Speakers

Yellow 1+2+3 — Session 253 — 09:30 - 10:45

Oral presentation: Micro- and macro-environments and respiratory health

Disease(s) : Airway diseases

Method(s) : Cell and molecular biology Epidemiology Public health Pulmonary function testing General respiratory patient care

Tag(s) : Basic science, Translational

Chairs : Rafael E. de la Hoz (New York, United States), Sara De Matteis (Cagliari, Italy)

OA2515	**Late Breaking Abstract - Biomarker profiles differ between lung function trajectories in adults with airway obstruction** Helena Backman (Lulea, Sweden), Jonas Eriksson-Ström, Anders Lundquist, Caroline Stridsman, Linnea Hedman, Eva Rönmark, Anders Blomberg, Anne Lindberg
OA2516	**Antimicrobial resistance genes in the upper respiratory tract of COPD patients and controls in relation to air pollution from livestock farms** Beatrice Cornu Hewitt (Utrecht, Netherlands), Alex Bossers, Warner Van Kersen, Myrna De Rooij, Lidwien A.M. Smit
OA2517	**Association between indoor bacterial communities, lung function and airway inflammation** Randi Bertelsen (Bergen, Norway), Hesham Amin, Christine Cramer, Christine Drengenes, Kai Finster, Francisco Gomez Real, Thorarinn Gislason, Mathias Holm, Christer Janson, Nils Oskar Jögi, Rain Jogi, Andrei Malinovschi, Ian P.G. Marshall, Lars Modig, Dan Norbäck, Rajesh Shigdel, Torben Sigsgaard, Cecilie Svanes, Hulda Thorarinsdottir, Inge M. Wouters, Tina Šantl-Temkiv, Vivi Schlünssen
OA2518	**Ambient air pollution exposure linked to long COVID among Swedish young adults** Zhebin Yu (solna, Sweden), Sandra Ekström, Tom Bellander, Petter Ljungman, Göran Pershagen, Kristina Eneroth, Inger Kull, Anna Bergström, Antonios Georgelis, Massimo Stafoggia, Olena Gruzieva, Erik Melén
OA2519	**The residential green environment and lung function into adolescence in European birth cohorts. A CADSET initiative** Carlos Valencia-Hernandez (London, United Kingdom), Ulrike Gehring, Gerard H. Koppelman, Marie Standl, Claudia Flexeder, Tamara Schikowski, Sara Kress, Erik Melén, Olena Gruzieva, Judith Garcia-Aymerich, Sara Koch, Chloe I. Bloom, Elaine Fuertes
OA2520	**Air pollution modifies the association between greenness and the development of allergic rhinitis up to 27 years of age: The Espoo Cohort Study** Inês Paciência (Oulu, Finland), Aino K. Rantala, Harri Antikainen, Jan Hjort, Timo T. Hugg, Maritta S. Jaakkola, Jouni J.K. Jaakkola
OA2521	**Long-term exposure to air pollution and the risk of obstructive lung disease in a Danish nationwide analysis** Rina So (London, United Kingdom), Youn-Hee Lim, Jiawei Zhang, Laust Mortensen, Kees De Hoogh, Steffen Loft, George Napolitano, Thomas Cole-Hunter, Stéphane Tuffier, Marie Bergmann, Matija Maric, Bert Brunekreef, Gerard Hoek, Zorana Andersen
OA2522	**Long-term exposure to ambient ozone and lung function decline over 20 years in a prospective cohort of adults: The ECRHS study** Joachim Heinrich (München, Germany), Tianyu Zhao
OA2523	**Influence of improved cookstove in rural Rwanda on indoor air pollution and lung function** Henning Kothe (Hamburg, Germany), Andrea Cuesta, Leizel Madueno, Mira Pöhlker, Alan Mubiru, Christine Muhongerva, Jan Rupp
OA2524	**Economic and environmental impact of the non-clinical change of inhaler devices for COPD and asthma in Spain** Joan B Soriano (Madrid, Spain), Míriam Solozabal-Coll, Jose Vicente Galindo, Oriol Solà-Morales
OA2525	**Discussion and Q&A** All Speakers

Studio (White) — Session 254 — 10:00 - 10:50

Experts interview: Preparing for the next pandemic/respiratory physiotherapy in children

Tag(s) : Clinical

Chairs : Sejal Saglani (London, United Kingdom), Ioannis Vogiatzis (Blyth, United Kingdom)

10:00	**Preparing for the next pandemic: zoonoses and global epidemics** Speaker to be confirmed	**2526**
10:15	**Discussion and Q&A** All Speakers	**2527**
10:25	**Respiratory physiotherapy in children** Kris Ides (Antwerpen, Belgium)	**2528**
10:40	**Discussion and Q&A** All Speakers	**2529**

Gold Session 255 10:15 - 11:45

Clinical cases: Imaging of environment-induced changes in the lung

Imaging in the era of air pollution

Aims : to explain which common respiratory disorders are related to air pollution and environmental changes, and to explain when imaging is necessary in these cases and the associated imaging findings.

Disease(s) : Airway diseases | Interstitial lung diseases | Respiratory infections

Method(s) : General respiratory patient care | Imaging | Public health

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Respiratory critical care physician, Paediatrician, Pathologist, Patient, Physician in Pulmonary Training, Physiologist, Radiologist, Scientist (basic, translational), Thoracic oncologist, Thoracic surgeon, Journalist

Chairs : Walter De Wever (Leuven, Belgium), Daiana Stolz (Freiburg, Germany), Amanda Dandanell Juul (Odense S, Denmark)

10:15	**Hypersensitivity pneumonitis, including Q&A** Speaker to be confirmed	**2530**
10:37	**Asthma, rhinosinusitis and COPD, including Q&A** Anna Kerpel-Fronius (Budapest, Hungary)	**2531**
10:59	**Environmental exposure: pneumoconosis, including Q&A** Johny Verschakelen (Leuven, Belgium)	**2532**
11:21	**Respiratory infection in the era of a changed climate, including Q&A** Eva Polverino (Barcelona, Spain)	**2533**

Silver Session 256 10:15 - 11:45

Symposium: Difficult treatment decisions in pulmonary hypertension

Aims : to discuss different treatment possibilities for pulmonary hypertension (PH) patients with right heart failure, including the use of catecholamines, the impact of mechanical ventilation and the use of extracorporeal membrane oxygenation; to describe the risks of pregnancy in patients with pulmonary arterial hypertension (PAH), including the risks in delivery and the postpartum period; to discuss different clinical approaches to pregnancy in PAH patients; to discuss the difficulties in treating elderly PAH patients with multiple comorbidities; to highlight care of end-stage PAH patients and options for palliative care.

Disease(s) : Pulmonary vascular diseases | Respiratory critical care

Method(s) : Palliative care | Respiratory intensive care

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, General practitioner, Medical Student, Nurse, Respiratory critical care physician, Patient, Respiratory therapist

Chairs : Marc Humbert (Le Kremlin-Bicêtre, France), Katerina Antoniou (Heraklion, Greece), Thomas Koudstaal (Rotterdam, Netherlands)

10:15	**Managing PH patients with right heart failure in the intensive care unit** Laurent Savale (Le Kremlin-Bicêtre, France)	**2534**
10:30	**Pregnancy and PAH** Silvia Ulrich (Zurich, Switzerland)	**2535**
10:45	**Idiopathic PAH patients with risk factors for heart and lung disease** Harm Jan Bogaard (Amsterdam, Netherlands)	**2536**

11:00	**Palliative care in pulmonary hypertension** Wendy Gin-Sing (London, United Kingdom)	**2537**
11:15	**Discussion and Q&A** All Speakers	**2538**

Coral 4+5 Session 257 10:15 - 11:45

Symposium: New insights into diagnostic aspects of sleep-disordered breathing

Aims : to describe new insights from recent clinical trials and meta-analyses about the diagnosis of sleep-disordered breathing (SDB); to address different important aspects such as new diagnostic tools, including cardiovascular parameters and artificial intelligence, and their technical standards and clinical implications; to evaluate the pathophysiological traits of SDB from routine polysomnography or polygraphy signals and their role in the evaluation of SDB severity; to discuss the importance of new biomarkers and the diagnostic approach in patients with excessive daytime sleepiness.

Disease(s) : Respiratory critical care | Sleep and breathing disorders

Method(s) : Epidemiology | Physiology | Public health

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Respiratory critical care physician, Paediatrician, Patient, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist

Chairs : Winfried J. Randerath (Solingen, Germany), Sophia E. Schiza (Heraklion, Greece), Matteo Bradicich (Zollikerberg, Switzerland)

10:15	**New diagnostic tools for SDB: from technical standards to artificial intelligence and clinical implications** Renata L. Riha (Edinburgh (Edinburgh), United Kingdom)	**2539**
10:30	**Biochemical biomarkers: do they have a role in the diagnosis of SDB?** Malcolm Kohler (Zürich, Switzerland)	**2540**
10:45	**Pathophysiological traits: how to determine in routine polysomnography/polygraphy and translate into clinical decisions?** Winfried J. Randerath (Solingen, Germany)	**2541**
11:00	**Diagnostic approach of excessive daytime sleepiness** Maria Rosaria Bonsignore (Palermo, Italy)	**2542**
11:15	**Discussion and Q&A** All Speakers	**2543**

Coral 3 Session 258 10:15 - 11:45

Hot topics: Emerging evidence to improve quality of survival after critical illness

How can we best manage the rehabilitation needs of intensive care unit survivors?

Aims : to address issues pertaining to the optimal frequency, modality and timing of early rehabilitation in critically ill patients based on the results of a recent landmark multicentre trial; to discuss the role of respiratory muscle conditioning in improving weaning outcomes and functional recovery of mechanically ventilated patients based on the results of the recent IMPROVE randomised trial; to increase awareness of the complicated and persistent morbidity and resulting rehabilitation needs that follow critical illness, reviewing recent studies on outcomes after critical illness; to provide experts with guidance on how to design a personalised rehabilitation program for intensive care unit survivors.

Disease(s) : Airway diseases | Interstitial lung diseases | Respiratory critical care

Method(s) : General respiratory patient care | Pulmonary rehabilitation | Respiratory intensive care

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Medical Student, Medical Technical Assistant, Nurse, Respiratory critical care physician, Paediatrician, Pathologist, Patient, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist, Thoracic surgeon, Respiratory therapist

Chairs : Peter J. Wijkstra (Groningen, Netherlands), Heleen Demeyer (Leuven, Belgium)

10:15	**Lessons from the TEAM trial on early mobilisation of critically ill patients** Sabrina Eggmann (Bern, Switzerland)	**2544**
10:30	**Effectiveness of respiratory muscle training for improving weaning outcomes and functional recovery in mechanically ventilated patients** Daniel Langer (Leuven, Belgium)	**2545**
10:45	**Patient's perspective** Speaker to be confirmed	**2546**

10:53	**Multidimensional disability after critical illness: implications for rehabilitation** MICHELE VITACCA (Lumezzane (Brescia), Italy)	**2547**
11:08	**How to build a personalised rehabilitation program for intensive care unit survivors?** Carolyn Rochester (New Haven, United States)	**2548**
11:23	**Discussion and Q&A** All Speakers	**2549**

Coral 1 — Session 259 — 10:15 - 11:45

Symposium: Exocited: the importance of extracellular vesicles in lung disease

Aims : to present leading avenues of investigation that will enhance the participants' understanding of extracellular vesicle research in different lung diseases, their contribution to (patho)physiology and therapeutic strategies employing/targeting extracellular vesicles; to focus on current advances in our knowledge of extracellular vesicles; to discuss how the integration of cutting-edge technologies can help increase understanding of their contribution to lung diseases; to discuss preclinical development of therapeutic strategies harnessing extracellular vesicles as a therapeutic target or biomarker, together with scientific advancements that may direct current and future therapeutic development. to describe proper isolation techniques for extracellular vesicles and the need for associated quality control parameters; to discuss the potential for developing therapies and biomarkers based on extracellular vesicles and opportunities for future studies; to explain the roles of extracellular vesicles in chronic obstructive pulmonary disease, idiopathic pulmonary fibrosis and COVID-19.

Disease(s) : Airway diseases | Interstitial lung diseases | Respiratory infections

Method(s) : Cell and molecular biology

Tag(s) : Basic science, Translational

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Medical Student, Respiratory critical care physician, Paediatrician, Pathologist, Physician in Pulmonary Training, Physiologist, Scientist (basic, translational), Journalist

Chairs : Niki L. Reynaert (Maastricht, Netherlands), Christopher E. Brightling (Leicester (Leicestershire), United Kingdom), Sara Cuevas Ocaña (Nottingham, United Kingdom)

10:15	**Deciphering extracellular vesicle cargo and its implications for pulmonary fibrosis** Olivier Burgy (Dijon, France)	**2550**
10:30	**Extracellular vesicles as a biomarker in ageing-related lung disease** Louise Donnelly (London, United Kingdom)	**2551**
10:45	**An extracellular vesicle-based vaccine against SARS-CoV-2** Kenneth Witwer (Baltimore, United States)	**2552**
11:00	**Mesenchymal stem cell-derived extracellular vesicles as executers of host cell reprogramming in acute respiratory distress syndrome** Anna Krasnodembskaya (Belfast (Belfast), United Kingdom)	**2553**
11:15	**Discussion and Q&A** All Speakers	**2554**

Coral 2 — Session 260 — 10:15 - 11:45

Respiratory medicine meets other disciplines: Acute respiratory infections: what's new?
A jointERS/European Scientific Working Group on Influenza (ESWI) session

Aims : to provide an update about the latest data on the evolution, epidemiology, pathogenesis, prevention and treatment of influenza, COVID-19 and other respiratory virus infections; to discuss the disease pathogenesis with a focus on systemic and mucosal biomarkers; to discuss strategies to prevent infection by vaccination and management of viral infections.

Disease(s) : Respiratory critical care | Respiratory infections

Method(s) : Epidemiology General respiratory patient care

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, General practitioner, Nurse, Respiratory critical care physician, Scientist (basic, translational)

Chairs : Albert Osterhaus (Hannover, Germany), Michael Loebinger (London, United Kingdom), Sara Tomassetti (Florence, Italy)

10:15	**The pathogens: worldwide evolution and epidemiology of acute respiratory viruses** Collin Russell (Amsterdam, Netherlands)	**2555**
10:30	**The host response: pathogenesis of disease focusing on systemic and mucosal biomarkers** Peter Openshaw (London, United Kingdom)	**2556**

10:45	**Prevention: strategies to prevent infection by vaccination and other measures** Hanna Nohynek (Helsinki, Finland)	**2557**
11:00	**Treatment: should we manage all viral infections like COVID? Proning, continuous positive airway pressure and steroids** Maxime Patout (Paris, France)	**2558**
11:15	**Discussion and Q&A** All Speakers	**2559**

Purple — Session 261 — 10:15 - 11:45

Mini symposium: Rise of the machines: advances in home mechanical ventilation

Aims : to describe the advances in home mechanical ventilation that are important for inpatient and outpatient treatment.

Disease(s) : Respiratory critical care | Sleep and breathing disorders

Method(s) : General respiratory patient care

Target audience : Adult pulmonologist/Clinician, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Respiratory critical care physician, Patient, Respiratory physiotherapist, Respiratory therapist

Chairs : Joana Cruz (Leiria, Portugal), Christian Karagiannidis (Cologne, Germany), Jellien Makonga-Braaksma (Woudenberg, Netherlands)

10:15	**Advances in physiology of chronic respiratory failure** Wolfram Windisch (Cologne, Germany)	**2560**
10:30	**Do we need new modes of home mechanical ventilation in COPD?** Patrick B. Murphy (Oxted (Surrey), United Kingdom)	**2561**
10:45	**The good, the bad and the ugly of home mechanical ventilation telemonitoring** Marieke L. Duiverman (Groningen, Netherlands)	**2562**
11:00	**Discussion and Q&A** All Speakers	**2563**

10:30-11:15
INDUSTRY SKILLS LAB WORKSHOP SEE PAGE 1

ERS Stand/World Village — Session 264 — 10:30 - 11:30

Patient: Coffee and clean air -2

Amber 1+2 — Session 265 — 10:40 - 13:00

Skills workshop: SW5 Interpretation of cardiopulmonary exercise tests

Tips and pitfalls in cardiopulmonary exercise testing assessment

Aims : to identify typical patterns of responses to cardiopulmonary exercise testing and to demonstrate how to discriminate these from anomalous response profiles, which can cause misinterpretation of test results.

Disease(s) : Airway diseases | Interstitial lung diseases | Pulmonary vascular diseases

Method(s) : Physiology Pulmonary function testing Pulmonary rehabilitation

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Paediatrician, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist, Respiratory therapist

Chairs : William Stringer (Long Beach, United States)

10:40	**Introduction** All Speakers	**2569**
10:40	**Relationship between oxygen uptake and work rate** Paolo Onorati (Alghero (SS), Italy)	**2570**
10:40	**Anaerobic/lactate threshold** Luis Puente Maestu (Madrid, Spain)	**2571**

10:40	**Ventilatory efficiency** Andrew Ramsook (Rochester, United States)	**2572**
10:40	**Breathing pattern and dynamic hyperinflation** Pierantonio Laveneziana (Paris, France)	**2573**

Amber 3+4 Session 266 10:40 - 13:00

Skills workshop: SW8 Practicalities of spirometry and whole-body plethysmography

Aims : to help attendees gain the technical expertise needed to perform spirometry and whole-body plethysmography according to both best practice and the latest recommendations that are supported by experts in the field; to explain the measurements of spirometry, static lung volumes, airway resistance and resistance-volume loops via whole-body plethysmography; to discuss the technical aspects of the body box, standardisation of test performance, reporting and case study interpretation.

Disease(s) : Airway diseases Paediatric respiratory diseases

Method(s) : Physiology Pulmonary function testing

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Medical Student, Nurse, Paediatrician, Physician in Pulmonary Training, Physiologist

Chairs : Frits M.E. Franssen (Horn, Netherlands)

10:40	**Introduction** All Speakers	**2574**
10:40	**Performing spirometry** Matthew Rutter (Cambridge (Cambridgeshire), United Kingdom)	**2575**
10:40	**Standardised static lung volume measurement using whole-body plethysmography** Monique Wapenaar - De Korver (Vlaardingen, Netherlands)	**2576**
10:40	**Measurement of airway resistance and resistance-volume loops using whole-body plethysmography** Mart N. van der Plas (Monster, Netherlands)	**2577**
10:40	**Reporting and interpretation of case studies** Gregory King (Sydney (NSW), Australia)	**2578**

Red 1+2 Session 267 11:00 - 12:15

Oral presentation: Novel treatment options for pulmonary fibrosis

Disease(s) : Interstitial lung diseases Sleep and breathing disorders

Method(s) : General respiratory patient care Cell and molecular biology Physiology

Tag(s) : Clinical, Translational

Chairs : Julien Guiot (Liège, Belgium), Elisabetta Renzoni (London, United Kingdom)

OA2579	**Late Breaking Abstract - A KIF15 missense variant is associated with a distinct prognostic clinical phenotype in idiopathic pulmonary fibrosis** Mari Ainola (Helsinki, Finland), Maria Hollmén, Atte Laaka, Juulia Partanen, Jukka Koskela, Eva Sutinen, Riitta Kaarteenaho, Marjukka Myllärniemi	
OA2580	**Late Breaking Abstract - Efficacy and safety of DANAZOL for pulmonary fibrosis associated with telomere related gene mutation** Raphaël Borie (Paris, France), Flore Sicre De Fontbrune, Stephane Jouneau, Vincent Cottin, Gregoire Prevot, Hilario Nunes, Louis Terriou, Sylvain Marchand-Adam, Bruno Crestani, Anne Bergeron, Ambroise Marcais, Aurelie Plessier, Elodie Lainey, Caroline Kannengiesser, Matthieu Resche-Rigon, The Orphalung Network	
OA2581	**A Novel Interleukin-11 Receptor Antibody, LASN01 Is Well Tolerated and Demonstrates Target Engagement in Phase 1** Puneet Arora (Redwood City, United States), Jason Lickliter, Barbara Richardson, James Swaney, Toni Jun, Deborah Harris, Jeffrey Hartung, Matias Portela, David King	
OA2582	**Nebulised pirfenidone in idiopathic pulmonary fibrosis (IPF): first look at FVC data** Alex West (London, United Kingdom), Alexandra Lawrence, Hao Bao, Deepthi Nair, Courtney Thompson, Felix Woodhead	

OA2583	**Post hoc pooled analyses of open-label and randomized controlled trials of senolytics dasatinib and quercetin in Idiopathic Pulmonary Fibrosis** Dean Kellogg (San Antonio, United States), Anoop Nambiar, Jaime Justice, Martin Goros, Jonathan Gelfond, Rodolfo Pascual, Shahrukh Hashmi, Michal Masternak, Larissa Prata, Nathan Lebrasseur, Andrew Limper, Steven Kritchevsky, Nicholas Musi, Tamar Tchkonia, James Kirkland
OA2584	**Effect of BI 1015550, a preferential PDE4B inhibitor, on gene expression profiles and lung function in IPF** Luca Richeldi (Roma, Italy), Janine Roy, Ramona Schmid, Christian Hesslinger, Toby M. Maher
OA2585	**Safety and efficacy study of ACT001 in IPF and fILD patients** Ian Glaspole (Melbourne (VIC), Australia), Dongpo Cai, Dan Chambers
OA2586	**Treatment of obstructive sleep apnoea in patients with interstitial lung disease improves quality of life and survival** Katherine Myall (London, United Kingdom), Alex West, Jennifer Martinovic, Zhe Wu, Toby M Maher, Philip Molyneaux, Eui-Sik Suh, Brian D Kent
OA2587	**A feasibility, wait-list design randomised controlled trial of a complex breathlessness intervention in idiopathic pulmonary fibrosis (BREEZE-IPF)** Dominic Sykes (Hull, United Kingdom), Caroline Wright, Simon P Hart, Victoria Allgar, Anne English, Flavia Swan, Judith Dyson, Gerry Richardson, Maureen Twiddy, Judith Cohen, Andrew Simpson, Chao Huang, Miriam Johnson, Michael G Crooks
OA2588	**A Randomized, Embedded, Multifactorial Adaptive Platform trial for ILD (REMAP-ILD): The conceptual design** Tejaswini Kulkarni (Homewood, United States), Leticia Kawano-Dourado, Kerri Johannson, Sydney Montesi, Pilar Rivera-Ortega, Wendy Adams, Maria Molina, Nazia Chaudhuri, Christopher J. Ryerson, Gary M. Hunninghake, Anne E. Holland, Steven D. Nathan, Lucilla Piccari, Sally Singh, Michael Kreuter, Gisli R. Jenkins
OA2589	**Discussion and Q&A** All Speakers

Brown 3 Session 268 11:00 - 12:15

Oral presentation: Interventional pulmonology: exploring new frontiers

Disease(s) : Thoracic oncology Airway diseases

Method(s) : Endoscopy and interventional pulmonology Pulmonary rehabilitation Surgery

Tag(s) : Clinical

Chairs : Jouke T. Annema (Amsterdam, Netherlands), Michela Bezzi (Brescia, Italy)

OA2590	**Late Breaking Abstract - Post-removal pneumothorax with and without chest tube clamping in patients with pleural disease: a randomized controlled trial** Sebastian Rodriguez Llamazares (Ciudad de México, Mexico), Pablo Olivas Melendez, Ivan Armando Osuna Padilla, Luis Joel Arroyo Hernandez, Maximiliano Diaz Menindez, Fabiana Georgina Muñoz Bastidas, Paulina Velasco Riestra, Esmeralda Gordillo Valdés
OA2591	**Diagnostic efficacy of cryobiopsy for peripheral pulmonary lesions: a propensity score-matched analysis** Hideaki Furuse (Tokyo, Japan), Yuji Matsumoto, Keigo Uchimura, Tatsuya Imabayashi, Takaaki Tsuchida
OA2592	**Safety and feasibility of the Lung Volume Reduction Reverser System (LVR-R) in patients with severe emphysema: preliminary results after 1 year follow up** Konstantina Kontogianni (Heidelberg, Germany), Susanne Dittrich, Judith Brock, Franziska Trudzinski, Claus Peter Heussel, Ralf Eberhardt, Felix J Herth
OA2593	**Bronchoscopic Thermal Vapor Ablation (BTVA) in patients with severe upper lobe predominant emphysema: 36 months follow-up results from a prospective registry** Konstantina Kontogianni (Heidelberg, Germany), Arschang Valipour, Stephan Eisenmann, Joachim H. Ficker, Daniel P. Franzen, Wolfgang Gesierich, Christian Grah, Martin Hetzel, Peter Hammerl, Felix J. Herth, Kaid Darwiche
OA2594	**Bronchial Rheoplasty for Chronic Bronchitis: 6-Month Results from the European Registry Study** Judith Brock (Heidelberg, Germany), Felix Herth, Kaid Darwiche, Ralf-Harto Hübner, Dirk Skowasch, Björn Schwick, Wolfgang Gesierich, Christian Schumann, Arschang Valipour
OA2595	**Lung volume reduction with one-way valves in patients with a very low FEV1: Assessment of efficacy and safety up to 6 months with results from the German Lung emphysema registry (LE-R)** Thomas Sgarbossa, Franz Stanzel, Angelique Holland, Christian Grah, Wolfgang Gesierich, Andreas Gebhardt, Joachim Ficker, Stephan Eggeling, Stefan Andreas, Bernd Schmidt, Stephan Eisenmann, Björn Schwick, Karl-Josef Franke, Andreas Fertl, Ralf-Harto Hübner

OA2596	**Treatable traits in advanced emphysema patients eligible for bronchoscopic lung volume reduction** Rein Posthuma (Maastricht, Netherlands), Marieke C. Van Der Molen, Jorine E. Hartman, Martijn A. Spruit, Dirk-Jan Slebos, Lowie E.G.W. Vanfleteren, Anouk W. Vaes
OA2597	**First European Results: Shape-Sensing Robotic Assisted Bronchoscopy for Biopsy of Peripheral Lung Nodules** Judith Brock (Heidelberg, Germany), Susanne Dittrich, Konstantina Kontogianni, Mavi Schellenberg, Claus-Peter Heussel, Laura Klotz, Hauke Winter, Felix Herth
OA2598	**A multi-center, prospective study of transbronchial radiofrequency ablation for peripheral lung tumors: study progress and initial results** Shi-Yue Li (Guangzhou, China), Chang-Hao Zhong, Jia-Yuan Sun, Zhu-Quan Su, En-Guo Chen, Di-Fei Chen, Feng Wang, Xiao-Ping Wang, Guang-Nan Liu, Xiao-Ju Zhang, Feng-Ming Luo, Nan Zhang, Hong-Wu Wang, Long-Yu Jin, Fa Long, Chun-Fang Liu, Shi-Man Wu, Qing Geng, Xiang Wang, Chun-Li Tang, Felix Herth
OA2599	**Diagnostic Yield of Shape Sensing Robotic-Assisted Bronchoscopy for Pulmonary Nodules Less than 2cm Pre and Post-3D Fluoroscopy** David Abia-Trujillo (St Johns, United States), Alejandra Yu Lee-Mateus, Alanna Barrios-Ruiz, Fabiana Diaz-Churion, Neal M. Patel, Britney N. Hazelett, Ryan M. Chadha, Sebastian Fernandez-Bussy
OA2600	**Discussion and Q&A** All Speakers

Brown 1+2 Session 269 11:00 - 12:15

Oral presentation: New mechanisms and novel insights in chronic obstructive pulmonary disease and chronic cough

Disease(s) : Airway diseases

Method(s) : Cell and molecular biology General respiratory patient care Physiology Imaging Epidemiology Public health Pulmonary rehabilitation

Tag(s) : Clinical, Translational

Chairs : Alexander Mathioudakis (Stockport, United Kingdom), Lies Lahousse (Ghent, Belgium)

OA2601	**Late Breaking Abstract - A first-in-human study of ARO-RAGE, an RNAi therapy designed to silence pulmonary RAGE expression** Mark O'Carroll (Auckland, New Zealand), John Huetsch, James Hamilton, Lindsey Moser, Sudar Alagarsamy, Matthias Salathe
OA2602	**Inhaled Ensifentrine, decreased healthcare research utilization and reduced moderate exacerbation rate and risk in COPD over 24 Weeks** Henrik Watz (Großhansdorf, Germany), Tara Rheault, Thomas Bengtsson, Kathleen Rickard
OA2603	**Vitamin K status is associated with CT-quantified emphysema severity: results from COSYCONET** Ianthe Piscaer (Maastricht, Netherlands), Rob Janssen, Robert Bals, Jürgen Biederer, Christian Herr, Rudolf Jörres, Leon Schurgers, Claus Vogelmeier, Emiel Wouters, Peter Alter, Frits Franssen
OA2604	**The effect of different inhaled corticosteroids on airway bacterial load and the microbiome in COPD: a randomized controlled trial** Hollian Richardson (Dundee, United Kingdom), Holly R Keir, Clare Clarke, Daniela Alferes De Lima, Abirami Veluchamy, Petra Rauchhaus, Thomas Pembridge, Megan Crichton, Jennifer Pollock, Simon Finch, Alison J Dicker, Pauline Billingham, Furrah Hussain, Margaret Band, Andrew Smith, Manish Patel, Mohammad Paracha, Gourab Choudhury, Devesh Dhasmana, Rekha Chaudhuri, Philip M Short, James D Chalmers
OA2605	**Oral corticosteroid use and sarcopenia-related traits in older people with chronic airway disease.** Lies Lahousse (Ghent, Belgium), Elizabeth Benz, Johnmary Arinze, Sara Wijnant, Maria De Ridder, Fernando Rivadeneira, Guy Brusselle, Bruno Stricker
OA2606	**Lifestyle interventions to reduce particulate matter exposure in patients with COPD** Jieun Kang (Goyang, Republic of Korea), Ji Ye Jung, Hyun Woo Ji, Hwan-Cheol Kim, Sei Won Lee
OA2607	**Blood eosinophil counts in younger smokers from the Early COPD Development Partnership** Augusta Beech (Manchester, United Kingdom), Andrew Ritchie, Andras Bikov, Gavin C Donaldson, Luana Alves-Moreira, Peter Calverley, Jørgen Vestbo, Jadwiga A Wedzicha, Dave Singh
OA2608	**Blood eosinophil count (BEC) measured before starting inhaled corticosteroids (ICS) is better associated with treatment response to ICS in COPD.** Alexander Mathioudakis (Stockport, United Kingdom), Sebastian Bate, Pradeesh Sivapalan, Jens-Ulrik Jensen, Dave Singh, Jørgen Vestbo

OA2609	**Improvements in Leicester Cough Questionnaire Subdomains in a Phase 2b Trial of Camlipixant in Refractory Chronic Cough** Surinder S. Birring (London, United Kingdom), Jaclyn Smith, Alyn Morice, James Hull, Mandel Sher, Sylvain Lanouette, Ronghua Yang, Laurent Harvey, Margaret Garin, Catherine M. Bonuccelli
OA2610	**Gefapixant efficacy and safety in participants with history of refractory or unexplained chronic cough for ≥1 vs <1 year** Imran Satia (Hamilton, Canada), Surinder S. Birring, Lorcan Mcgarvey, Jaclyn A. Smith, Susan Lu, Allison Martin Nguyen, Jin Xu, Paul Reyfman, Eduardo Urdaneta, George Philip, Carmen La Rosa
OA2611	**Discussion and Q&A** All Speakers

Blue 1+2 Session 270 11:00 - 12:15

Oral presentation: Best abstracts in respiratory physiotherapy

Disease(s) : Interstitial lung diseases | Airway diseases | Respiratory critical care | Sleep and breathing disorders

Method(s) : General respiratory patient care | Pulmonary rehabilitation | Respiratory intensive care | Physiology

Tag(s) : Clinical

Chairs : Martijn A. Spruit (Horn, Netherlands), Cristina Isabel Oliveira Jácome (Viatodos, Portugal)

OA2612	**Late Breaking Abstract - Contributing factors of fatigue in COPD: results from the FAntasTIGUE study** Maarten Van Herck (Horn, Netherlands), Yvonne M. J. Göertz, Zjala Ebadi, Chris Burtin, Jeannette B. Peters, Melissa S. Y. Thong, Jean W. M. Muris, Emiel F. M. Wouters, Judith Prins, Mirjam A. G. Sprangers, Jan H. Vercoulen, Daisy J. A. Janssen, Martijn A. Spruit
OA2613	**Longtime follow-up on exercise capacity and quality of life in people with Cystic Fibrosis receiving Elexacaftor, Tezacaftor and Ivacaftor – a Copenhagen cohorte** Lue Katrine Drasbæk Philipsen (copenhagen, Denmark)
OA2614	**Effects of core stabilization exercises on respiratory muscle strength in children with cystic fibrosis** Kübra Kılıç (Ankara, Turkey), Naciye Vardar-Yagli, Deniz Dogru, Melda Saglam, Ebru Calik-Kutukcu, Nagehan Emiralioglu, Ebru Yalcin, Ugur Ozcelik, Nural Kiper, Deniz Inal-Ince
OA2615	**Inspiratory muscle training for dyspnea management in people with unilateral diaphragm dysfunction** Michele Schaeffer (Leuven, Belgium), Zafeiris Louvaris, Antenor Rodrigues, Diego Poddighe, Ghislaine Gayan-Ramirez, Tin Gojevic, Linde Geerts, Elise Heyndrickx, Marine Van Hollebeke, Luc Janssens, Rik Gosselink, Dries Testelmans, Daniel Langer
OA2616	**Comparison of respiratory muscle activations in different dyspnea reduction positions in individuals with COPD** Ceyhun TOPCUOGLU (ANKARA, Turkey), Eylem Tütün Yümin, Melda Sağlam, Tamer Çankaya, Suat Konuk, Emine Özsarı, Merve Başol Göksülük
OA2617	**Exertional Desaturation During the 6-Minute Walking Test Versus Daily Life in People with Fibrotic Interstitial Lung Disease** Mariana Hoffman (Melbourne (VIC), Australia), Nick Wong, Angela T. Burge, Anne E. Holland
OA2618	**Heart rate and oxygen consumption post-exercise recovery kinetics before and after eight weeks of resistance training in people with COPD versus matched controls** Andre Nyberg (Umeå, Sweden), Joren Buekers, Jana De Brandt, Lori Desroches, Didier Saey, Mickael Martin, Francois Maltais
OA2619	**Effects of pulmonary rehabilitation during acute exacerbations of COPD** Ana Filipa Machado (Senhora da Hora, Porto, Portugal), Cíntia Dias, António Pedro Gonçalves, Chris Burtin, Alda Marques
OA2620	**Effects of intrapulmonary percussive ventilation in critical care patients: A randomised controlled trial** Anwar Hassan (Glenmore Park, Australia), Fiona Fitzsimons, Deepa Shetty, Richard Evans, Jennifer Alison, Stephen Huang, Maree Milross
OA2621	**Paediatric MI-E therapy; three treatment strategies' impact on comfort and cough flows** Brit Hov (Oslo, Norway), Tiina Andersen, Michel Toussaint, Cathrine Brunborg, Ingvild Bruun Mikalsen, Maria Vollsæter, Vegard Hovland
OA2622	**Discussion and Q&A** All Speakers

Yellow 1+2+3 Session 271 11:00 - 12:15

Oral presentation: Innovations in pulmonology

Disease(s) : Airway diseases | Respiratory critical care | Interstitial lung diseases

Method(s) : Cell and molecular biology | Imaging | Physiology

Tag(s) : Basic science, Translational

Chairs : Nahal Mansouri (Lausanne, Switzerland), Raquel Guillamat Prats (Badalona, Spain)

OA2623	**Late Breaking Abstract - Claudin-1 is a potential airway-centric therapeutic target for pulmonary fibrosis** Geoffrey Teixeira (Allschwil, Switzerland), Emanuela Elsa Cortesi, Vincent Anquetil, Elisa Polini, Sven Blüme, Hussein El Saghire, Laurent Mailly, Thomas Baumert, Antje Prasse, Alberto Toso, Markus Meyer, Stephen Toovey, Luigi Manenti, Roberto Iacone, Frauke Christ, Bart Vanaudenaerde, Marianne Carlon, Wim Wuyts
OA2624	**Spatiotemporal analysis of inflammaging and senescence programs in lung fibrosis using time-resolved single-cell transcriptomics and multiplexed immunofluorescence** Janine Gote-Schniering (Bern, Switzerland), Janine Gote-Schniering, Mareike Lehmann, Meshal Ansari, Konstantin Wiedemann, M. Camila Melo-Narváez, Carina Steinchen, R. Christoph Jentzsch, Christoph Mayr, Yuexin Chen, Niklas Lang, Ahmed Agami, Ilias Angelidis, Shuhong Zhou, Melanie Königshoff, Fabian Theis, Herbert Schiller
OA2625	**Modelling the support function of vascularized lung endothelial cells for alveolar progenitor function using an alveolus-on-chip** Abilash Ravi (Leiden, Netherlands), Tarek Gensheimer, Xinhui Wu, Jill R. Johnson, Martin C. Harmsen, Reinoud Gosens, Pieter S. Hiemstra, Andries D. Van Der Meer, Anne M. Van Der Does
OA2626	**A spatially resolved extracellular matrix proteome atlas of the distal human lung** Yuexin Chen (München, Germany), Janine Gote-Schniering, Michaela Müller, Pascal Albanese, Andris Jankevics, R. Christoph Jentzsch, Aleksandra Tata, Meshal Ansari, Laurens De Sadeleer, Lin Yang, Lukas Heumos, Ahmed Agami, Shuhong Zhou, Christoph H. Mayr, Rudolf Hatz, Christian P. Schneider, Jürgen Behr, Anne Hilgendorff, Ali Oender Yildirim, Mircea-Gabriel Stoleriu, Peter Dorfmüller, Fabian J. Theis, Purushothama Rao Tata, Malte D. Luecken, Richard A. Scheltema, Herbert B. Schiller
OA2627	**Single cell spatial analysis of lungs from patients with fatal COVID-19 reveals a cellular network marked by inflammatory foci of immature neutrophil and CD8 T cells localised to alveolar progenitor cells** Ling-Pei Ho (Oxford (Oxfordshire), United Kingdom), Praveen Weeratunga, Laura Denney, Joshua Bull, Emmanouela Repapi, Martin Sergeant, Chaitanya Vuppusetty, C Cosmic Consortium, Helen Byrne, Stephen Taylor
OA2628	**Pulmonary acute lung injury causes behavioral changes, oxidative stress imbalance, and reduced brain nicotinic receptors expression** Stephanie Nonato de Castro (Santos, Brazil), Priscila S Barbosa, Vitoria C De Queiroz, Nathalia M Pinheiro- Menegasso, Beatriz M Fujihara, José Ivo A Beserra, Ana Claúdia Custódio, Iolanda De Fátima Lc Tibério, Rodrigo P Ureshino, Rafael H Lambertucci, Ayman K Hamouda, Roberta Ss Yamaguchi, Alessandra M Ribeiro, Carla M Prado
OA2629	**Pulmonary endothelial cells support human alveolar epithelial repair and regeneration** Abilash Ravi (Leiden, Netherlands), Britte F. Van Der Vliet, Xinhui Wu, Anne M. Van Der Does, Andries D. Van Der Meer, Jill R. Johnson, Martin C. Harmsen, Reinoud Gosens, Pieter S. Hiemstra
OA2630	**Humanized mouse lung can be infected by SARS-CoV-2** Wei Zuo (Shanghai, China), Yueqing Zhou, Yuanfei Zhu, Gaowei Hu, Shujuan Du, Yu Zhao, Qiao Wang, Qiang Deng
OA2631	**Combined treatments promoting the functional integrity of cystic fibrosis airway epithelia** Emmanuelle Brochiero (Montréal (QC), Canada), Damien Adam, Sarah Moustadraf, Benjamin Orcese, Émilie Maillé, Manon Ruffin, Geoffrey Mckay, Guillaume Millette, François Malouin, Christelle Coraux, Dao Nguyen
OA2632	**Elementary, my lung fibrosis: unravelling elemental aspects in IPF pathology** Bryan Falcones (Malmö, Sweden), Maik Kahnt, Barbora Michaliková, Ulf Johansson, Linda Elowsson, Karina Thånell, Gunilla Westergren-Thorsson
OA2633	**Discussion and Q&A** All Speakers

Studio (White) Session 272 11:15 - 12:45

Online skills lab: Oscillometry and spirometry

Aims : to demonstrate the measurement of lung function with simple (handheld) and/or professional spirometers, including how to prepare the equipment and perform an optimal test; to demonstrate forced oscillometry measurements and to highlight techniques that ensure accuracy; to discuss the interpretation of results, the clinical relevance of measurements and the advantages/disadvantages of the two techniques. All this will be achieved with live demonstrations, case studies of adults and children and interactive questions/discussion.

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Physician in Pulmonary Training, Respiratory physiotherapist, Physiologist, Nurse, Respiratory therapist, Medical Technical Assistant

Chairs : Omar S. Usmani (London, United Kingdom), Frans H.C. De Jongh (Enschede, Netherlands), Rachel Ong-Salvador (Amsterdam, Netherlands)

11:15	**Introduction** Omar S. Usmani (London, United Kingdom), Frans H.C. De Jongh (Enschede, Netherlands)	**2634**
11:20	**Spirometry procedure** Frans H.C. De Jongh (Enschede, Netherlands), Rachel Ong-Salvador (Amsterdam, Netherlands)	**2635**
11:30	**Oscillometry procedure** Frans H.C. De Jongh (Enschede, Netherlands), Rachel Ong-Salvador (Amsterdam, Netherlands)	**2636**
11:50	**Case discussion (Spirometry paediatric, adult, oscillometry)** Frans H.C. De Jongh (Enschede, Netherlands), Rachel Ong-Salvador (Amsterdam, Netherlands), Chung-Wai Chow (Toronto (ON), Canada)	**2637**

12:15-13:15
INDUSTRY LUNCHTIME SYMPOSIUM SEE PAGE 1

PS-1 in poster area — Session 282 — 12:30 - 14:00

Poster session: Advances in telemonitoring/telerehabilitation and post-COVID conditions

Disease(s) : Airway diseases Interstitial lung diseases

Method(s) : Epidemiology General respiratory patient care Public health Pulmonary rehabilitation Physiology

Tag(s) : Clinical

Chairs : Heleen Demeyer (Leuven, Belgium), Chair to be confirmed

PA2681	**Frailty during 1 year after hospitalisation for COVID-19: risk factors and outcomes from the PHOSP-COVID study** Hamish Mcauley (Leicester, United Kingdom), Rachael A Evans, Charlotte E Bolton, Christopher E Brightling, Omer Elneima, Paul L Greenhaff, William D-C Man, Matthew Richardson, Sally J Singh, Michael Steiner, Louise V Wain, Miles D Witham, Janet Lord, Neil J Greening	
PA2682	**Late Breaking Abstract - Dynamic hyperinflation and ventilatory reserve in long COVID: a cross-sectional study** Isabela Aziz (Niteroi, Brazil), Isabela Serpa, Jessica Oliveira, Renan Campos, Thiago Mafort, Agnaldo Lopes	
PA2683	**Activity limitations and healthcare use in people with long COVID-19** Diana C Sanchez-Ramirez (Winnipeg, Canada), Adriana Angarita-Fonseca, Vicente Andres Benavides Cordoba, Santiago Larrateguy, Santos Chero, Bricia Hernandez Lopez, Rafael Salazar, Mauricio Morales Satan, Rodrigo Torres	
PA2684	**Six-month outcomes following comprehensive pulmonary rehabilitation post-COVID-19 infection** Nurasyikin Kamarudin (Limerick, Ireland), Philip Tonge, Nicola Jackson, Sarah O'Beirne	
PA2685	**Pulmonary telerehabilitation in patients after severe COVID-19: comparison between fully remote versus hybrid supervision** Bruna Scharlack Vian (Campinas, Brazil), Ana Lúcia Cavallaro Baraúna Lima, Laís Bacchin De Oliveira, Luciana Castilho De Figueirêdo, Hugo Ceccato, Julian Silva, Pedro Maximink Esteves Villar, Evelyn Regina Couto, Paulo Mendes, Lucieni De Oliveira Conterno, Mariângela Ribeiro Resende, Lígia Roceto Ratti, Mônica Corso Pereira	
PA2686	**Quadriceps weakness pre- and post-COVID-19 rehabilitation: associations with exercise capacity and quality of life** George Mills (Leicester, United Kingdom), Linzy Houchen-Wolloff, Sally Singh, Samuel Briggs-Price, Enya Daynes	
PA2687	**The feasibility, safety, and repeatability, of the incremental shuttle walk test in post-COVID survivors** Molly M Baldwin (Leicester, United Kingdom), Enya Daynes, Urvee Karsanji, Hamish Mcauley, Rachael A Evans, Sally J Singh, P Hosp-Covid Collaborative Group	
PA2688	**The clinical outcome of patients with post Covid-19 condition who underwent pulmonary telerehabilitation in Lung Center of the Philippines** Nichol John Aliac (Manila, Philippines), Angelica Joy Arafag, Glynna Ong-Cabrera	
PA2689	**Effect of tele-rehabilitation program with weekly monitoring in post COVID-19 pneumonia patients** Wutthichai Sae Chen (Bangkok, Thailand), Chalermdej Prapinpairoj, Timporn Vitoonpong, Worawan Sirichana, Amornpun Wongkarnjana	
PA2690	**Can further positive effects be expected from the addition of two to three months of post-COVID rehabilitation in a day hospital+hospital? Monitoring of exercise stress parameters.** Janos Tamas Varga (Budapest, Hungary), Dora Kolozsvari, Renata Pinter, Katica Anna Kup, Zsofia Szarvas, Monika Fekete, Zsuzsanna Kovats, Gabor Horvath, Veronika Muller	

PA2691	**Understand the role of Breathing Pattern Disorder in adults with and without breathlessness after hospitalisation with COVID-19** Saja Almulhim (Leicester, United Kingdom), Mark Orme, Enya Daynes, Majda Bakali, Sally J Singh, Rachael A Evans
PA2692	**Pulmonary rehabilitation (PR) and movement behaviours: How are we measuring up?** Mark Orme (Leicester, United Kingdom), James Manifield, Yousuf Chaudhry, Sally J Singh, Tom Ward, Maxine E Whelan
PA2693	**Exploring the characteristics of people with long COVID-19 and their associated healthcare use in Latin America** Diana C Sanchez-Ramirez (Winnipeg, Canada), Adriana Angarita-Fonseca, Vicente Andres Benavides Cordoba, Santiago Larrateguy, Santos Chero, Bricia Hernandez Lopez, Rafael Salazar, Mauricio Morales Satan, Rodrigo Torres
PA2694	**The prevalence of exertional desaturation 5 months post-hospital discharge for COVID-19** Molly M Baldwin (Leicester, United Kingdom), Enya Daynes, Urvee Karsanji, Hamish Mcauley, Rachael A Evans, Sally J Singh, P Hosp-Covid Collaborative Group
PA2695	**Smartphone application-based rehabilitation in patients with chronic respiratory and cardiovascular diseases** Chiwook Chung (Seoul, Republic of Korea), Ah-Ram Kim, Il-Young Jang, Min-Woo Jo, Seongho Lee, Dongbum Kim, Hee Kwon, Do-Yoon Kang, Sei Won Lee
PA2696	**Unsupervised physical capacity testing at home: a systematic review** Debbie de Graaf (Nijmegen, Netherlands), Stella Thissen, Alex Van 'T Hul, Nienke De Vries, Bastiaan Bloem
PA2697	**Monitoring of Long COVID symptoms using Digitalised C19-YRS in patients attending LC Rehabilitation Clinic in Manchester, UK** Hsu Myat Noe (Manchester, United Kingdom), Kay Richardson, Harmeet Momi, Christopher Dalton, Clare Gibbons, David Lamb, Sarah Clarke, Sheila Ramjug, Nawar Bakerly
PA2698	**Qualitative evaluation of culturally adapted pulmonary rehabilitation (PR) for people with post-tuberculosis lung disease (pTBLD) in Kyrgyz Republic** Gulzada Mirzalieva (Bishkek, Kyrgyzstan), Maamed Mademilov, Mark Orme, Azamat Akylbekov, Aijan Taalaibekova, Aigul Ozonova, Nurdin Shakiev, Syimyk Azizbekov, Azat Bolotbek U., Amy Barradell, Dominic Malcolm, Talant Sooronbaev, Sally Singh
PA2699	**Home-based pulmonary rehabilitation in ILD patients- all is not gold** Rishabh Kochar (Bikaner (Rajasthan), India), Naveen Dutt, Nishant Chauhan, Ravi Gaur, Mukesh Swami
PA2700	**Physical capacity and fatigue in patients who acquired COVID-19 in the workplace 6 months after rehabilitation: a longitudinal study** Katrin Mueller (Chemnitz, Germany), Marcel Ottiger, Iris Poppele, Alois Wastlhuber, Franziska Ortwein, Michael Stegbauer, Torsten Schlesinger

PS-10 in poster area — Session 283 — 12:30 - 14:00

Poster session: Translational model in chronic airway disease

Disease(s) : Airway diseases

Method(s) : Cell and molecular biology Pulmonary function testing Physiology General respiratory patient care Imaging

Tag(s) : Translational

Chairs : Reinoud Gosens (Groningen, Netherlands), Philip Hansbro (Sydney, Australia)

PA2701	**FUT2 homozygous nonsense mutation is associated with increased future risks and airway microbial network disturbance in COPD** Longyi Du (Chengdu,China, China), Juanjuan Fu, Wei Xiao, Bin Mao, Meilu Liu, Xu-Gui Chen, Yan Yu
PA2702	**Lung stiffness affects the response to methacholine in two strains of mice** Andrés Rojas-Ruiz (Quebec, Canada), Magali Boucher, Percival Graham, Liah Fereydoonzad, Ynuk Bossé
PA2703	**Extracellular matrix degradation products in serum of patients with chronic airway disease** Anna Schnell (Bern, Switzerland), Stefanie Graeter, Moritz Saxenhofer, Samantha Chan, Megan Rees, Jo Douglass, Alastair Stewart, Andrew Mckenzie, Ilka Schulze, Alexander Schaub
PA2704	**Human Upper Respiratory Tract Microbiome and Epithelium Interactions** Pooja Narang (Sydney, Australia), Mehra Haghi, Catherine Burke, Brian Oliver
PA2705	**CYP2R1 gene polymorphisms (rs10741657) in Japanese patients with COPD and bronchial asthma.** Kazuhiro Tada (Koshigaya, Saitama, Japan), Kenya Koyama, Akemi Koyama, Shyuzo Abe, Tomoki Hasegawa, Junya Sato, Atsutaka Ozaki, Kozo Sato, Hajime Arifuku, Hiroyoshi Watanabe, Hideyuki Satoh, Hirokuni Hirata, Yasutsugu Fukushima

PA2706	**CYP2R1 gene polymorphisms (rs12794714) in Japanese patients with COPD and bronchial asthma.** Tomomi Takahashi (Koshigaya, Saitama, Japan), Kenya Koyama, Akemi Koyama, Shyuzo Abe, Hayase Azuma, Yukari Ito, Takayuki Kobayashi, Naotatsu Otsuji, Kei Sugitate, Hiroyoshi Watanabe, Hideyuki Satoh, Takayoshi Owada, Yasutsugu Fukushima
PA2707	**Clinical relevance of mutations in the Serpin 1 gene in patients without severe alpha-1 antitrypsin deficiency.** Eduardo Jose Laviña Soriano (Guadalajara, Spain), Lara Bravo Quiroga, José Luis Izquierdo Alonso, José Miguel Rodríguez González-Moro
PA2708	**Extracellular vesicles from PBDE-47 treated M(LPS) THP-1 macrophages modulate gene expression in ALI culture of airway epithelium.** Mirella Profita (Palermo (PA), Italy), Giusy Daniela Albano, Valeria Longo, Angela Marina Montalbano, Noemi Alongi, Paolo Colombo
PA2709	**The role of the non-coding RNA in COPD** Jinkyeong Park (Seoul, Republic of Korea), Minseok Seo, Woo Jin Kim, Ji Ye Jung, Cheon Woong Choi
PA2710	**Computational fluid dynamics analysis of small airway deformation in COPD** Yousry Khaled Mohamed Elmahdy Mohamady (Leuven, Belgium), Vincent Geudens, Charlotte De Fays, Iwein Gyselinck, Lucia Aversa, Pieter Jan Kerckhof, Gitte Aerts, Astrid Vermaut, Hanne Beeckmans, Karen Maes, Lynn Willems, Marie Vermant, John Mcdonough, Laurent Godinas, Rozenn Quarck, Wim Wuyts, Robin Vos, Laurens Ceulemans, Dirk Van Raemdonck, Ghislaine Ramirez, Wim Janssens, Marcel Filoche, Bart Vanaudenaerde
PA2711	**Assessment of dyspnoea, respiratory symptoms and pulmonary function in patients with rare heterozygous alpha 1 antitrypsin mutations** Sara Spinelli (Napoli, Italy), Roberto Rega, Lidia Atripaldi, Giuseppe Fiorentino, Anna Annunziata
PA2712	**A survey of patient engagement in primary ciliary dyskinesia** Connie Webster (Leeds, United Kingdom), Emma Farrell, Niccola Burke, Giulia Spoletini, Daniel Peckham
PA2713	**Fractional dynamics deep learning approach for diagnosing COPD stages** Stefan Mihaicuta (Timisoara (Timis), Romania), Chenzhong Yin, Mihai Udrescu, Gaurav Gupta, Mingxi Cheng, Lucretia Udrescu, David M. Mannino, Andrei Lihu, Hantang Zhang, Paul Bogdan
PA2714	**Metabolic syndrome and lung function – pilot study LungMetS** Andreea Mihai (craiova, Romania), Cristina Calarasu, Laurentiu Buican, Marius Matei, Costin-Teodor Streba, Victor Ionel Grecu, Mihaela Ionela Vladu
PA2715	**COPD as a trigger for the development of thromboses in patients with defects in the genes predisposing to thrombosis** Elnorahon Abduganieva (Tashkent, Uzbekistan), Irina Liverko
PA2716	**Spirometry network: a program for the future** Mariana Cardoso Tavares (Guarda, Portugal), Filipa Fernandes, Élin Almeida, Filipa Jesus, Fernando Silva, Joana Ribeiro, Sara Braga, Luís Ferreira
PA2717	**The role of DRD2 ubiquitination in macrophage polarization** Tao Fan (Chengdu (Sichuan), China), Yan Lv
PA2718	**Alpha 1 antitrypsin deficiency in severe asthma patients** Martina Zappa (Tradate, Italy), Patrizia Pignatti, Sarah Grossi, Francesco Ardesi, Rosella Centis, Elisabetta Zampogna, Laura Saderi, Giovanni Sotgiu, Antonio Spanevello, Dina Visca
PA2719	**Gene mutations and clinical manifestations of alpha-1 antitrypsin deficiency in Czech patients – a pilot study** Eva Volakova (Olomouc 9, Czech Republic), Jana Petrkova, Lenka Kocourkova, Jaromir Zatloukal, Petr Jakubec, Martin Petrek
PA2720	**Late Breaking Abstract - Changes in surfactant lipid-composition in allergic asthma in- and outside birch-pollen season** Anna-Carin Olin (Göteborg, Sweden), Susanna Lohman Haga, Per Larsson, Spela Kokelj, Linus Schiöler, Per Larson, Spela Kokelj, Linus Schiöler

PS-11 in poster area — Session 284 — 12:30 - 14:00

Poster session: Paediatric viral and bacterial lung infections

Disease(s) : Airway diseases

Method(s) : Cell and molecular biology Epidemiology General respiratory patient care Public health Pulmonary function testing Physiology Imaging

Tag(s) : Clinical

Chairs : Marijke Proesmans (Leuven, Belgium), Livia Elena Brezeanu (Pucioasa, Romania)

PA2721	**An urbanized metabolic and airway immune profile increases the risk of infections in early childhood** Nicklas Brustad (Gentofte, Denmark), Jonathan Thorsen, Mina Ali, Casper-Emil Pedersen, Julie Kyvsgaard, Jenni Lehtimäki, Jakob Stokholm, Klaus Bønnelykke, Bo Chawes
PA2722	**Environmental risk factors for respiratory infection and wheeze in early childhood: a multi-centre cohort study** Tom Ruffles (hove, United Kingdom), Sarah Inglis, Anjum Memon, Paul Seddon, Kaninika Basu, Stephen Bremner, Heike Rabe, Roger Tavendale, Colin Palmer, Somnath Mukhopadhyay, Katy Fidler
PA2723	**A prospective study of community-acquired lower respiratory tract infections during the first year of premature newborns** Asiah Kassim (Kuala Lumpur (Wilayah Persekutuan), Malaysia), 2. Eunice Gui Yu Lee, 3. N Fafwati Faridatul Akmar Mohamad, 4. Shangari Kunaseelan, 5. Yi Cheau Chua, 6. Yee Yen Tan, 7. Sze Chiang Lui, 8. Maria Kamal, 9. Lai Cheng Hooi, 10. Hui Ling Leong, 11. Sin Toun Loh, 12. Ker Yang Chua, 13. Farah Inaz Syed Abdullah, 14. Farizah Mohd Hairi, 15. Hafizah Zainuddin, 16. Siew Hong Neoh
PA2724	**Genotypic diversity and immune dysregulation in children with HRA(rhinovirus) infections __PRESENT __PRESENT** Adnan Zafar (Rawalpindi, Pakistan), Bandar Alosaimi, Asif Naeem
PA2725	**The airway epithelium respiratory illnesses and allergy (AERIAL) birth cohort: viral exposure data within the first year of life** David Hancock (Nedlands, Australia), Stephen Stick, Elizabeth Starcevich
PA2726	**Air pollutants exposure and risk of hospitalization due to RSV in Polish children** Artur Badyda (Warszawa, Poland), August Wrotek, Piotr Dąbrowiecki, Piotr Oskar Czechowski, Tomasz Owczarek, Teresa Jackowska
PA2727	**Passive maternal anti-RSV immunization is influenced by the season of birth** Maria Giulia Conti (Roma, Italy), Leonardo Sorrentino, Lucia Lelli, Giorgio Fravolini, Eleonora Cresta, Laura Petrarca, Enrica Mancino, Elio Iovine, Domenico La Regina, Fabrizio Virgili, Alessandra Pierangeli, Enea Bonci, Raffaella Nenna, Fabio Midulla
PA2728	**Role and Diagnostic Performance of Host Epigenome in Respiratory Morbidity after RSV Infection** Sara Pischedda (Santiago de Compostela, Spain), Irene Rivero-Calle, Alberto Gómez-Carballa, Miriam Cebey-López, Ruth Barral-Arca, Jose Gómez-Rial, Jacobo Pardo-Seco, María José Curras-Tuala, Sandra Viz-Lasheras, Ana Belen Crujeiras, Angel Diaz-Lagares, Federico Martinón-Torres, Antonio Salas
PA2729	**Monocyte-to-lymphocyte ratio and neutrophil-to-lymphocyte ratio as biomarkers for severity in hospitalized children with RSV bronchiolitis** Inbal Golan-Tripto (Beer sheva, Israel), Nitzan Burrack, Assaf Adar, Aviv Goldbart, Sarah Weissmann, Bracha Cohen, Itai Hazan, Amir Horev
PA2730	**Midlands empyema in paediatrics: A UK multicentre retrospective case series review** Nicola Rowbotham (Nottingham (Nottinghamshire), United Kingdom), Anna Harris, Hetal Patel, Caroline Poulter, Heleanne Vankuijk, Kamini Jain, Manisha Ramphul, Francis Gilchrist, Benjamin Davies, Andrew Prayle
PA2731	**Evaluation of pulmonary function tests and predictors in necrotizing pneumonia** begum yoruk (istanbul, Turkey), Sinem Can Oksay, Seyda Karabulut, Ebru Kostereli, Zeynep Reyhan Onay, Huseyin Arslan, Selma Nur Pirim, Gulay Bilgin, Deniz Mavi Tortop, Yasemin Gokdemir, Ela Erdem Eralp, Zeynep Seda Uyan, Ayse Ayzıt Kılınç, Velat Sen, Ali Özdemir, Sedat Oktem, Erkan Cakır, Saniye Girit
PA2732	**Distinction Between Hemoptysis and Pseudohemoptysis; Cross-Sectional Retrospective Study** Yasemin Mocan Çağlar (İstanbul, Turkey), Gülay Bilgin, Zeynep Reyhan Onay, Sinem Can Oksay, Deniz Mavi Tortop, Begüm Yörük, Özge Ülgen, Saniye Girit
PA2733	**How do SARS-CoV-2 pandemic measures influence prevalence of respiratory viruses in healthy infants?** Ruth Steinberg (Bern, Switzerland), Simone Troxler, Anne-Christianne Kentgens, Léa Ho Dac, Marion Curdy, Sophie Yammine, Philipp Agyeman, Pascal Bittel, Philipp Latzin, Insa Korten, Bild Bild Study
PA2734	**Spike specific salivary IgA2 is not induced or boosted by BNT162b2 vaccine in children** Maria Giulia Conti (Roma, Italy), Eva Piano Mortari, Raffaella Nenna, Alessandra Pierangeli, Leonardo Sorrentino, Fedreica Frasca, Laura Petrarca, Enrica Mancino, Greta Di Mattia, Luigi Matera, Matteo Fracella, Carolina Scagnolari, Rita Carsetti, Fabio Midulla
PA2735	**Exercise capacity is preserved in children six months after COVID-19 infection.** Lucia Ronco, Marco Denina, Lorenzo Appendini, Elisabetta Bignamini, Silvia Garazzino

PA2736 **Prospective evaluation of lung function in children with history of neonatal COVID-19 infection: preliminary data.**
Stefano Nobile (Rome, Italy), Paola Catalano, Simonetta Costa, Maria Di Chiara, Benedetta De Santis, Gianluca Terrin, Roberto Chioma, Francesca Gallini, Giovanni Vento

PA2737 **Pulmonary evaluation in children with Long-COVID**
Paola Di Filippo (Chieti (CH), Italy), Francesco Sansone, Laura Sgrazzutti, Sabrina Di Pillo, Francesco Chiarelli, Marina Attanasi

PA2738 **Late Breaking Abstract - A living network meta-analysis comparing modalities in the management of pediatric empyema**
Clara Fernández elviro (Lausanne, Switzerland), Bryn Longcroft-Harris, Emily Allin, Leire Leache, Kellan Woo, Jeffrey N. Bone, Colleen Pawliuk, Jalal Tarabishi, Matthew Carwana, Roshan A. Ananda, Priyadharshini Ramakrishnan, Tala J Alhejazi, Alyssa Chen, Amin Sharifan, Mohamed M. Shawqi, Marie Wright, Nassr Nama

PA2739 **Late Breaking Abstract - Fibrinolytics use in children with pleural empyema**
Carmen Cornelia Maria de Jong (Stettlen, Switzerland), Ilja E Heijting, Peter J F M Merkus, Jolt Roukema, Lara S Van Den Wijngaart, Milanthy S Pourier

PS-12 in poster area — Session 285 — 12:30 - 14:00

Poster session: Diagnostic pathways and paediatric asthma monitoring

Disease(s) : Airway diseases, Sleep and breathing disorders

Method(s) : Cell and molecular biology, Pulmonary function testing, General respiratory patient care, Epidemiology, Public health, Physiology

Tag(s) : Clinical

Chairs : Erol Gaillard (Leicester (Leicestershire), United Kingdom), Ozge Yilmaz (Manisa, Turkey)

PA2740 **Deriving a change score for FEV1 for children with asthma**
Nicole Filipow (London, United Kingdom), Stephen Turner, Anne Chang, Helen Petsky, Thomas Frischer, Stanley Szefler, Sanja Stanojevic

PA2741 **Response to bronchodilation in children by oscillatory impedance and admittance**
Chiara Veneroni (Milano (MI), Italy), Giuliana Ferrante, Laura Venditto, Michele Piazza, Laura Tenero, Marco Zaffanello, Raffaele Dellaca, Pasquale P Pompilio, Giorgio Piacentini

PA2742 **Bronchodilator response cut-off -point of the FEV0.75 s in asthmatic Tunisian children.**
Molk MAALEJ (Sfax, Tunisia), Rim Kammoun, Emna Eleuch, Hana Trabelsi, Leila Triki, Hela Zouari, Kaouthar Masmoudi

PA2743 **Methodological approach of the use of electronic nose in paediatrics: A factibility study**
Ana Díez Izquierdo (Barcelona, Spain), Teresa Garriga-Baraut, Ines De Mir-Messa, Alba Torrent-Vernetta, Sandra Rovira-Amigó, Manuel Gómez-Duque, Ignacio Iglesias-Serrano, Silvia Gartner-Tizzano, Jose M Martínez-Sánchez, Hipólito Pérez, Antonio Moreno-Galdó

PA2744 **Treatable traits in asthmatic children**
Magdalena Vocos (Ciudad Autónoma Buenos Aires, Argentina), Gimena Donth Leger, Carlos Velasco, Tania Flores, Doris Primerose, Marcela Roque, Veronica Giubergia, Veronica Aguerre, Belen Lucero, Gabriela Pelaez, Juan Manuel Figueroa

PA2745 **Bronchodilator response phenotype in children with moderate to severe asthma exhibits elevated T2 and T1 serum cytokines**
Mahmoud Ismael Abdel-Aziz (Amsterdam, Netherlands), Nariman K. A. Metwally, Susanne J. H. Vijverberg, Anne H. Neerincx, Simone Hashimoto, Barbara S Dierdorp, Tamara Dekker, Jan Willem Duitman, Mario Gorenjak, Antoaneta A. Toncheva, Susanne Harner, Susanne Brandstetter, Christine Wolff, Olaia Sardón-Prado, Paula Corcuera-Elosegui, Javier Korta-Murua, Maria Pino-Yanes, Uroš Potočnik, Michael Kabesch, Aletta D. Kraneveld, René Lutter, Anke H. Maitland-Van Der Zee

PA2746 **Children can be safely discharged on as required salbutamol after episodes of acute wheeze.**
Steph Harper (Southampton, United Kingdom), David James, Catherine Crocker, Alison Mcevoy, Amanda Harris, Gary Connett

PA2747 **Prelimnary observations from an asthma intervention package to improve outcomes for children and young people in inner city Birmingham, UK**
Titus Ninan (Solihull (West Midlands), United Kingdom), Teresa Evans, Vipran Vijaya, Susan Frost, Mairead Hitching, Satish Rao

PA2748	**Allergic rhinitis and atopic dermatitis are associated with a decreased risk of asthma-related hospital visits in moderate to severe pediatric asthma; results of the SysPharmPediA study** Amir Hossein Alizadeh Bahmani (Amsterdam, Netherlands), Susanne J.H. Vijverberg, Simone Hashimoto, Christine Wolff, Catarina Almqvist, Lizan D. Bloemsma, Susanne Brandstetter, Paula Corcuera-Elosegui, Mario Gorenjak, Susanne Harner, Anna M. Hedman, Michael Kabesch, Javier Korta-Murua, Aletta D. Kraneveld, Anne H. Neerincx, Maria Pino-Yanes, Uroš Potočnik, Shahriyar Shahbazi Khamas, Olaia Sardón-Prado, Mahmoud I. Abdel-Aziz, Anke H. Maitland-Van Der Zee
PA2749	**Reducing asthma exacerbations after the start of the school year: empowering children and families** Karl Holden (Liverpool, United Kingdom), Lynsey Brown, Vicotria Worrall, Claire Hepworth, Helen Harper, Lucy Gait, Laura Marsh, Andrew Lilley, Ian Sinha, Christopher Grime
PA2750	**Prospective follow-up of asthma and health related quality of life into late adolescence after bronchiolitis in infancy.** Sonja Laitinen (Tampere, Finland), Eero Lauhkonen, Riikka Riikonen, Matti Korppi, Paula Heikkilä
PA2751	**Effect of inhalation formulation on symptoms and impulse oscillometry indices in teen-aged asthmatics** Tiina Tanninen (HELSINKI, Finland), Anna Pelkonen, Pekka Malmberg, Mika Mäkelä
PA2752	**Paediatric rapid-access asthma hubs – a feasibility and effectiveness study** Ali Hakizimana (Leicester, United Kingdom), David K H Lo, Damian Roland, Molla Imaduddin Ahmed, Vinayak K Rai, Lesley Danvers, Rachel Rowlands, Reeta Herzallah, Erol A Gaillard
PA2753	**The outcome of misdiagnosis in childhood asthma:the other side of the coin** Gülay Bas Bilgin (İstanbul, Turkey), Zeynep Reyhan Onay, Fatma Begüm Çopur, Sinem Can Oksay, Deniz Mavi Tortop, Yasemin Mocan Çağlar, Begüm Yörük, Özge Ülgen, Saniye Girit
PA2754	**Under-treated asthma in children – a nationwide secondary care study.** Jon Konradsen (Sollentuna, Sweden), Caroline Stridsman, Øyvind Martinsen, Stina Selberg, Maria Ödling
PA2755	**Correlation between FeNO and asthma control in pediatric patients in a developing country** Daniela Cleves (Bogota, Colombia), Pedro David Vargas Duque, Ranniery Acuña Cordero, Paula Aguilera Otalvaro, Bethy Camargo, Ricardo Aristizabal Duque, Carlos Rodriguez Martinez
PA2756	**Clinical control of asthma and lung inflammation may impair quality of sleep and life in children and adolescents** Etiene Farah Teixeira De Carvalho (São Paulo (SP), Brazil), Evelim Gomes, Dirceu Costa
PA2757	**NHS Wales National Initiative for Good Asthma Control: Patient-facing Apps for Parents, Children and Adults.** Julian Forton (Penarth (South Glamorgan), United Kingdom), Daniel Rigler, Katie Pink, Chris Davies, Grace Moore, Laura Wallis, Simon Barry
PA2758	**Effectiveness of written asthma action plan in improving asthma control in children** senda derouiche (Tunisia, Tunisia), Sabrine Louhaichi, Siwar Rejeb, Aymen Jebali, Farah Garci, Jamel Ammar, Besma Hamdi, Agnès Hamzaoui
PA2759	**How do we identify dysfunctional breathing (DB) in children and young people (CYP)- a UK delphi consensus.** Ruth Stewart (Kirkcaldy, United Kingdom), Kenneth Macleod, Ann Mcmurray, Kirstin Unger

PS-13 in poster area Session 286 12:30 - 14:00

Poster session: Epidemiology of rare paediatric respiratory diseases

Disease(s) : Airway diseases Interstitial lung diseases

Method(s) : General respiratory patient care Epidemiology Pulmonary function testing Imaging

Tag(s) : Clinical

Chairs : Myrofora Goutaki (Bern, Switzerland), Céline Kempeneers (Liège, Belgium)

PA2760	**Variability of lung function in patients with primary ciliary dyskinesia (PCD): longitudinal analysis from the PROVALF-PCD cohort, a BEAT-PCD Collaboration** Bruna Rubbo (Bristol, United Kingdom), Kewei Zhang, Avni Kant, Melissa Borelli, Carolina Constant, Silvia Castillo-Corullón, Ela Eralp, Claire Hogg, Cordula Koerner-Rettberg, Enrico Lombardi, Natalie Lorent, Vendula Martinu, Lucy Morgan, Kim Nielsen, Heymut Omran, Ugur Ozcelik, Phil Robinson, Sandra Rovira-Amigo, Guillaume Thouvenin, Nicola Ullman, Woolf Walker, Panayiotis Yiallouros, Camille Pearse, Bettina Frauchiger, Claudia Kuehni, Nicole Beydon, Philipp Latzin, Jane Lucas
PA2761	**Lung function and airway microbiology in primary ciliary dyskinesia (PCD): cross-sectional analysis from the PROVALF-PCD cohort, a BEAT-PCD Collaboration** Bruna Rubbo (Bristol, United Kingdom), Avni Kant, Kewei Zhang, Annalisa Allegorico, Mieke Boon, Melissa Borelli, Claudia Calogero, Siobhán Carr, Carolina Constant, Silvia Castillo Corullón, Nagehan Emiralioglu, Amanda Harris, Bulent Karadag, June Marthin, Vendula Martinu, Lucy Morgan, Heymut Omran, Phil Robinson, Sandra Rovira-Amigo, Anne Schlegtendal, Guillaume Thouvenin, Panayiotis Yiallouros, Claudia Kuehni, Philipp Latzin, Nicole Beydon, Jane Lucas

PA2762	**Evaluating gene-disease relationships in motile ciliopathies: an international ClinGen and BEAT-PCD ERS CRC collaboration.** Suzanne Crowley (Oslo, Norway), William Hankey, Marwa Elnagheeb, Rahma Mani, Maria-Ines Benito, Rasha Soliman, Mafalda De Almeida Gomes, Alexander Ing, Sabri Abdelwahab, Lindsay Worley, Shannon Mcnulty, Justine Siew, Courtney Lynn Thaxton, Catrina M Loucks, Simon Thomas, Maimoona Zariwala, Margaret Leigh, Deborah Morris-Rosendahl7, Ewa Ziętkiewicz, Sharon Dell, Ben Gaston, Bernd Dworniczak, Robert Hirst, Johanna Raidt, Keith Nykamp, William Hannah, Mahmoud Fassad, Amelia Shoemark, Marie Legendre, Hannah Mitchison
PA2763	**Genotype-phenotype associations in primary ciliary dyskinesia** Eva Sophie Lunde Pedersen (Bern, Switzerland), Myrofora Goutaki, Leonie D Schreck, Jane S Lucas, Claudia E Kuehni
PA2764	**Physical activity in people with primary ciliary dyskinesia** Eva Sophie Lunde Pedersen (Bern, Switzerland), Leonie D Schreck, Myrofora Goutaki, Claudia E Kuehni
PA2765	**Association between upper and lower respiratory disease in primary ciliary dyskinesia** Yin Ting Lam (Bern, Switzerland), Jean-François Papon, Mihaela Alexandru, Andreas Anagiotos, Miguel Armengot, Mieke Boon, Andrea Burgess, Doriane Calmes, Suzanne Crowley, Sinan Ahmed. D. Dheyauldeen, Nagehan Emiralioglu, Ela Erdem Eralp, Christine Van Gogh, Eric G. Haarman, Amanda Harris, Isolde Hayn, Sara-Lynn Hool, Bülent Karadag, Céline Kempeneers, Sookyung Kim, Philipp Latzin, Natalie Lorent, Ugur Ozcelik, Ana Reula, Jobst Roehmel, Panayiotis Yiallouros, Myrofora Goutaki
PA2766	**Fertility counselling in people with primary ciliary dyskinesia** Leonie Daria Schreck (Bern, Switzerland), Eva Sophie Lunde Pedersen, Philippa Jörger, Katie Dexter, Michele Manion, Sophie Christin-Maitre, Nathalie Massin, Bernard Maitre, Myrofora Goutaki, Claudia E Kuehni
PA2767	**Neonatal problems of people with primary ciliary dyskinesia in Switzerland** Myrofora Goutaki (Bern, Switzerland), Mirjam Koller, Yin Ting Lam, Leonie D. Schreck, Eva S.L. Pedersen, Claudia E Kuehni
PA2768	**Piloting the FOLLOW-PCD questionnaire: a clinical and research tool** Myrofora Goutaki (Bern, Switzerland), Yin Ting Lam, Jean-François Papon, Eva S.L. Pedersen, Claudia E. Kuehni
PA2769	**A BEAT-PCD consensus statement: a core outcome set for pulmonary disease interventions in primary ciliary dyskinesia** Eric G. Haarman (Amsterdam, Netherlands), Renate Kos, Myrofora Goutaki, Helene E Kobbernagel, Bruna Rubbo, Amelia Shoemark, Stefano Aliberti, Josje Altenburg, Pinelopi Anagnostopoulou, Rodrigo A. Athanazio, Nicole Beydon, Sharon D. Dell, Nagehan Emiralioglu, Thomas W. Ferkol, Micael R Loebinger, Natalie Lorent, Bernarnd Maître, June K Marthin, Lucy C. Morgan, Kim G. Nielsen, Felix C. Ringhausen, Michal Shteinberg, Harm A.W.M. Tiddens, Anke H. Maitland-Van Der Zee, James D. Chalmers, Jane S.A. Lucas
PA2770	**Impact of steroid and hydroxychloroquine treatment on chILD: A tertiary care experience** Beril Ecem Kiraci (Ankara, Turkey), Halime Nayir Buyuksahin, Nural Kiper, Nagehan Emiralioglu, Ugur Ozcelik, Deniz Dogru Ersoz, Ebru Yalcin
PA2771	**The clinical and genetic spectrum of the interstitial lung diseases in infancy associated with surfactant protein disorders: A retrospective study** Dilber Ademhan Tural (Ankara, Turkey), Beste Ozsezen, Halime Nayir Nuyuksahin, Birce Sunman, Ismail Guzelkas, Nagehan Emiralioglu, Ebru Yalcin, Deniz Dogru, Ugur Ozcelik, Nural Kiper
PA2772	**Clinical characteristics and outcome of drug induced interstitial lund disease in pediatric population.** Mireia Vilella Sabate (Cambrils (Tarragona), Spain), Jordi Costa Colomer, Isabel Gascón Casaredi, Núria Ferrer Bosch, Maria Cols Roig
PA2773	**Pediatric non-CF bronchiectasis in the Vinnytsia region in Ukraine - what can we do better?** Oleksandr Mazulov (Vinnytsia, Ukraine), Kate Khromykh, Oksana Tykholaz
PA2774	**Multiple breath washout and imaging to detect early pulmonary toxicity in paediatric cancer patients and survivors: first results of a systematic review** Jakob Usemann (Basel, Switzerland), Christine Schneider, Christa Koenig, Enno Stranzinger, Maša Žarković, Claudia Kuehni, Christina Schindera
PA2775	**A comparison of management of primary spontaneous pneumothorax in children and adults** Lauren Blake (Cambridge, United Kingdom), Theofilos Polychronakis, Stefan Marciniak
PA2776	**Impact of immunoprophylaxis with palivizumab on respiratory syncytial virus infection in preterm infants less than 35 weeks in Colombian hospitals** Alejandro Colmenares (Bogota, Colombia), Clara Galvis, Lina Cabrales, Linda Ibatá, Juliana Marulanda, Oscar Ovalle, Dionisio Puello, Catherine Rojas, Martha Africano, Adriana Ballesteros, Héctor Posso

PA2777 **Predictors of poor outcomes of respiratory syncytial virus acute lower respiratory infections in children under 5 years of age in a middle-income tropical country based on the National Public Health Surveillance System**
Ranniery Acuña-Cordero (Bogotá, Colombia), Carlos Rodriguez-Martínez

PA2778 **Factors associated with measles-related deaths during the 2017-2019 outbreaks in Vietnam**
Hoang Nguyen Vu (Palaiseau, France), Minh Hung Tran, T. H. Nhung Pham, Huu Phuc Phan, Minh Dien Tran, Hoang-Anh Ngo

PA2779 **Survey on the variability in provision of Paediatric Respiratory Medicine (PRM) services in district general hospitals across the UK**
Renu Khetan (Nottingham (Nottinghamshire), United Kingdom), Christabella Ng, Emily Beswisk, Donna Traves, Jayesh Bhatt

PS-14 in poster area Session 287 12:30 - 14:00

Poster session: Nursing and digital health

Disease(s) : Airway diseases | Interstitial lung diseases | Thoracic oncology | Sleep and breathing disorders | Respiratory critical care

Method(s) : General respiratory patient care | Pulmonary rehabilitation | Endoscopy and interventional pulmonology | Respiratory intensive care

Tag(s) : Clinical

Chairs : Rui Pedro Marques da Silva (Sobreira – Paredes, Portugal), Liliana Silva (Matosinhos, Portugal)

PA2780 **Implementation of a digital programme to promote self-management via cognitive behavioural therapy approaches for breathless people with chronic respiratory disease and symptoms of anxiety: a proof-of-concept study.**
Karen Heslop-Marshall (Newcastle upon Tyne (Tyne and Wear), United Kingdom), Graham Burns, Ioannis Vogiatzis, Matthew Armstrong

PA2781 **Experiences and Perceptions of Telemedicine in Patients Living with Advanced Chronic Obstructive Pulmonary Disease: A Qualitative Evidence Synthesis.**
Una O'Connor (Limerick, Ireland), Geraldine Crilly, Claire Quinn

PA2782 **Successful implementation of Telehealth services in Respiratory nurse clinic -COPD**
Maggie, Pik Kee Lit (Kowloon, Hong Kong), Kuen Han Lee, Fung Ting Mak, Pui Shan Chow, Yuen Hin Wong, Yiu Hei Chan, Wai Man Johnny Chan

PA2783 **Web-based intervention to increase physical activity in COPD patients: a pilot study**
Ricardo Salgado (Lausanne, Switzerland), Philippe Delmas, Patrício Costa, Miguel Padilha

PA2784 **Routine monitoring with pleural manometry during thoracentesis in an Interventional Pulmonology Unit**
Marta Navarro Colom (Barcelona, Spain), Laura Romero, Virginia Pajares, Albert Rafecas, Ana Pardessus, Alfons Torrego

PA2785 **Which digital solutions provide security, quality and safety for patients in Long Term Non Invasive Ventilation (LT-NIV)?**
Bettina Pedersen (Faaborg, Denmark), Anne Dichmann Sorknæs, Hanne Svenningsen, Grete Bøgesvang, Britta Aaes

PA2786 **Analysis of the clinical effects of different nebulized inhalation devices on nurses' inhalation exposure**
Qin Zeyu (Changchun (Jilin), China), Lin Hongjing

PA2787 **Nursing care of a pregnant woman with primary mediastinal large B-cell lymphoma complicated with airway stenosis**
Yu Zhang (Beijing, China), Chunyan Zhang, Shuqin Wang, Bing Sun, Yanrui Jia

PA2788 **Usability of Emento Digital Care Guide: A personalized, selv-guided, app-based intervention for patients with rare lung diseases**
Nanna Vendelboe Gregersen (Aarhus N, Denmark), Vibeke Skivild, Birgit Refsgaard Iversen, Elisabeth Bendstrup

PA2789 **AmbuFlex – a telemedicine tool for improving patient pathways for patients with COPD?**
Lene Brock Jakobsen (Viby J., Denmark), Birgit Refsgaard Iversen

PA2790 **Discharge management of high-risk COPD patients with remote wisdom**
Hui-Wen Po (Douliou, Taiwan), Ying-Chien Chu, Hui-Zhen Cai

PA2791 **Intervention for improving sleep in patients with inflammatory bowel disease (IBD). Study protocol**
Mónica Granados Martín (Madrid, Spain), Dania Rocío Díaz Rodríguez

PA2792 **Late Breaking Abstract - Effect of different form of upper limb muscles training on dyspnea in COPD**
Marc Beaumont (Morlaix, France), Loïc Péran, Anne-Cécile Berriet, Catherine Le Ber, Eloïse Philippe, Emmanuelle Courtois-Communier, Francis Couturaud

PA2793	**Late Breaking Abstract - Longitudinal follow-up in non-hospitalised individuals with post COVID-19 condition** Anna Törnberg (Bromma, Sweden), Annie Svensson, Anna Svensson-Raskh, Elisabeth Rydwik, Mikael Björnson, Michael Runold, Judith Bruchfeld, Malin Nygren-Bonnier
PA2794	**Late Breaking Abstract - Adult Primary Ciliary Dyskinesia (PCD) physiotherapy standards of care in England** Elizabeth Shepherd (Southampton, United Kingdom), Connie Webster, Stevie Peake

PS-15 in poster area Session 288 12:30 - 14:00

Poster session: Epidemiological and public health aspects in tuberculosis

Method(s) : Public health General respiratory patient care Imaging Epidemiology Pulmonary function testing

Tag(s) : Clinical

Chairs : Irina Kontsevaya (Borstel, Germany), Chair to be confirmed

PA2795	**Characteristics of Household Contacts of Rifampin and Multidrug-resistant Tuberculosis Cases at High Risk of Progression to Tuberculosis Disease in Vietnam.** Vicky Chang (Sydney (NSW), Australia), Thu-Anh Nguyen, Binh Nguyen, Nhung Nguyen, Greg Fox
PA2796	**Miliary TB in East London (2014-2022): a retrospective review of microbiology, imaging and outcomes** Joseph Gafton (London, United Kingdom), Daniel Pope, Santino Capocci, Janan Jeyatheesan, Rory Mcdermott
PA2797	**Risk of tuberculosis after endoscopic resection in gastric cancer: nationwide population-based study** Hye Sung Khil (Seoul, Republic of Korea), Sue In Choi, Byung-Keun Kim, Eun Joo Lee, Sang Yeub Lee, Won Jai Jung
PA2798	**Impact of the COVID-19 pandemic on tuberculosis services in a rural area of Senegal** Luigi Ruffo Codecasa (Milano (MI), Italy), Giulia Menotti, Maddalena Giglia, Marina Tadolini, Niccolò Riccardi, Mar Diop Yacine, Mamoudou Ndiaye, Giorgio Besozzi, Giovanni Sotgiu, Laura Saderi
PA2799	**Post-TB lung disease: what can be learned from the past** Maria João Cavaco (Coimbra, Portugal), Sofia Alves, Luís Mateus, André Nunes, Ricardo Cordeiro, Carina Silvestre, Carla Janela, Natália André, Paula Raimundo, Teresa Falcão
PA2800	**Development of a prognostic prediction model of death in new tuberculosis patients** Parichat Niyomthong (Phrae, Thailand), Arpakorn Prawan, Wikanda Udomdech, Thanin Chattrapiban
PA2801	**Impaired lung function in South African children with pulmonary tuberculosis** Ingrid Joy Courtney (Cape Town, South Africa), Vita W. Jongen, Ruan Swanepoel, Carl Lombard, Rory Dunbar, Pierre Goussard, Eric Mccollum, H. Simon Schaaf, Anneke C. Hesseling, Megan Palmer, Marieke M. Van Der Zalm
PA2802	**Assessing patient satisfaction with Video-Observed Therapy (VOT) for drug-susceptible tuberculosis during the COVID-19 pandemic.** Sandra Ragheb (Calgary, Canada), Jinell White, Julie Jarand, Dina Fisher, Rachel Lim
PA2803	**Frequency of serious adverse events on therapy with modified fully oral shorter treatment regimens (mSTR) for MDR/RR-TB** Elmira Gurbanova (Baku, Azerbaijan), Natalia Yatskevich, Askar Yedilbayev, Oleksandr Korotych, Arax Hovhannesyan, Maryna Tyshko, Nastassia Dankova, Alena Skrahina
PA2804	**Does pulmonary tuberculosis differ by gender?** Nemsi Ella (Tunis, Tunisia), Ben Jemia Emna, Chaabi Khouloud, Khedhiri Manel, Ben Attig Yosra, Ben Amar Jihene, Boudaya Sadok, Zaibi Haifa, Aouina Hichem
PA2805	**Tuberculosis and HIV – the Lisbon reality** Helena Pires (Almada, Portugal), Joana Carvalho, Joana Diogo, Susana Carreira, Dalila Ferreira, Teresa Mourato, Luís Coelho
PA2806	**Impact of war to treatment of tuberculosis: experience of Kharkiv, Ukraine** Olha Konstantynovska (Kharkiv, Ukraine), Petro Poteiko, Iryna Kalmykova, Hanna Buravel, Svitlana Tiahlo, Tetiana Synenko
PA2807	**Preventive treatment of latent tuberculosis infection: prevalence of adverse events among 23602 patients treated over the last 30 years at Villa Marelli in Milan.** Sarah Elizabeth O'Donnell (Milan, Italy), Gloria Leonardi, Federica Piedepalumbo, Maurizio Ferrarese, Alice Repossi, Marco Mantero, Pierachille Santus, Francesco Blasi, Luigi Ruffo Codecasa
PA2808	**The burden of multi-drug resistant tuberculosis in the era of coronavirus disease 2019 pandemic in Pakistan: A public health threat of global concern** Muhammad Imran (Peshawar, Pakistan), Zafar Iqbal, Sajjad Khan, Khalid Jamal, Azhar Uddin, Shumaila Javaid, Abdul Ghafoor, Muhammad Salman Khan

PA2809	**COVID pandemic and its drawback effects on tuberculosis in vulnerable groups** Ionela-Alina Grosu-Creangă (Iasi (Iasi), Romania), Maria Panescu, Valentina Esanu, Adriana Ioana Sorete-Arbore
PA2810	**Latent tuberculosis infection in healthcare workers – the reality of a Portuguese hospital** Carina Rôlo Silvestre (S. João das Lampas, Portugal), Rute Afonso, Sofia Alves, Maria Cavaco, Luis Mateus, André Nunes, Ricardo Cordeiro, Natália André, Paula Raimundo, Teresa Falcão, António Domingos
PA2811	**Prevention of tuberculosis among healthcare providers: reality of an endemic country** hanane ikrou (agadir, Morocco), Sofia Farhat, Nada Boutbagha, Houssam Ennaciri, Houda Moubachir, Hind Serhane
PA2812	**Impact of COVID-19 pandemic and country of origin on tuberculosis treatment outcome in Greece** Foteini Gkakou (Thessaloniki, Greece), Maria Sionidou, Panagiota Kyreltsi, Athanasios Avramidis, Serafeim-Chrysovalantis Kotoulas, Marija Hadji-Mitrova, Eleni Papadaki, Giorgos Sakalis, Anna Tsakona, Katerina Manika
PA2813	**21st Century: Directly Observed Video-Therapy of Anti-Tuberculosis Treatment** Joana Catarina Batista Canadas (Rio Maior (District de Santarém), Portugal), Francisca Guimarães, Maria Cunha, Raquel Armindo, Joana Carvalho, Catarina Pissarra, Soledade Estribio, Paula Rosa
PA2814	**The impact of the COVID-19 pandemic on tuberculosis detection in Tashkent, Uzbekistan** Ruzilya Usmanova (Tashkent, Uzbekistan), Nargiza Parpieva, Irina Liverko, Ilhomjon Butabekov, Yuliya Dolgusheva, Revaz Kokhodze, Mahliyo Muhamedova, Sharofiddin Yuldashev, Hasan Safayev

PS-16 in poster area Session 289 12:30 - 14:00

Poster session: Viral infections and antibiotic use

Disease(s) : Airway diseases

Method(s) : Epidemiology General respiratory patient care Public health Cell and molecular biology Endoscopy and interventional pulmonology Respiratory intensive care

Tag(s) : Clinical

Chairs : Chair to be confirmed

PA2815	**RSV as a Cause of Exacerbations of COPD** Dexter Wiseman (London, United Kingdom), Ryan Thwaites, Mairi Macleod, Andrew Ritchie, Lydia Finney, Faisal Kamal, Hasan Shahbakhti, Ashley Sanchez Sevilla Uruchurtu, Braddy-Green Aaron, James Allinson, Gavin Donaldson, Peter Openshaw, Jadwiga Wedzicha, The Resceu Investigators
PA2816	**Disruption in typical patterns of seasonality of respiratory viral infections (RVIs)** Martha Purcell (Southampton, United Kingdom), Tommaso Morelli, Pedro Rodrigues, Sandy Aitken, Charles Roberts, Jacqueline Nuttall, Anna Freeman, Tristan Clark, Tom Wilkinson
PA2817	**A novel rhinovirus mRNA vaccine induces humoral and cellular immunity, providing protection against heterotypic rhinovirus infection** Chloe Julia Pyle (London, United Kingdom), Neeta D Patel, Paul Hamblin, Richard Butt, Michael R Edwards, Stephen Shaw, Sebastian L Johnston
PA2818	**LSC - 2023 - Iron metabolism determines the outcome of influenza A virus infection** Jemma Mayall, Amber Pillar, Katie Daly, Alexandra Brown, Ama-Tawiah Essilfie, Henry Gomez, Richard Kim, Kristy Nichol, Chantal Donovan, Greg Anderson, David Frazer, Elizabeth Milward, Philip Hansbro, David Reid, Alan Hsu, Peter Wark, Jay Horvat
PA2819	**Estimated incidence of hospitalizations and primary care visits attributable to RSV infections in adults in Germany between 2015 – 2019** Lea Bayer (Berlin, Germany), Caroline Beese, Gordon Brestrich, Elizabeth Begier, Aleksandra Polkowska-Kramek, Robin Bruyndonckx, Charles Nuttens, Thao Mai Phuong Tran, Juan Luis Ramirez Agudelo, Caihua Liang, Bradford Gessner, Gernot Rohde
PA2820	**Association between clinical presentation and a host transcriptomic signature in patients with lower respiratory tract infection undergoing bronchoscopy** Andreas Hoheisel (Freiburg, Germany), Desiree Schumann, Leticia Grize, Kathleen Jahn, Nina Khanna, Matthias Herrmann, Andrei Darie, Silvio Ragozzino, Sabine Kuster, Werner Strobel, Hans Hirsch, Michael Tamm, Daiana Stolz
PA2821	**Characterisation of clinical risk factors for severity and outcome in adults hospitalised with respiratory viral infection (RVI): the UNIVERSAL study.** Tommaso Morelli (Southampton, United Kingdom), Martha Purcell, Pedro Rodrigues, Sandra Aitken, Charles Roberts, Jacqueline Nutall, Tristan Clark, Anna Freeman, Tom Wilkinson
PA2822	**Changes in the epidemiology of severe acute respiratory virus infection in the elderly after social distancing was lifted** Jae Jeong Shim (Seoul, Republic of Korea), Hye Sun Lee, Juyeon Yang, Je Hyeong Kim, Sung Won Chang, Kyung Hoon Min, Young Seok Lee

PA2823	**INNA-051 pre-exposure prophylaxis in a human influenza infection model** Ruth Tal-Singer (Media, United States), Scott White, Francesca Mercuri, Nicole Kruger, Grant Mclachlan, Stephan Mynhardt, Hayley Mcquilten, Bruce Miller, Christophe Demaison
PA2824	**Real-world primary care data of antibiotic prescriptions for sore throat in Italy** Graça Coutinho (London, United Kingdom), Aurelio Sessa, Adrian Shepard, Thomas Hallett, Martin Duerden
PA2825	**Medical practices that create risks for the development of antibacterial resistance** Irina Liverko (Tashkent, Uzbekistan), Feruza Niyazova, Farhod Mukhsinov
PA2826	**Savings potential for antibiotics in respiratory infections: Insights from the European market** Peter Kardos (Frankfurt am Main, Germany), Ludger Klimek, Ernest Kuchar, Ingrid Stelzmüller, Andrzej M Fal, André Gessner
PA2827	**Inflammatory and mucociliary dysfunction based endotypes across the spectrum of chronic airways diseases** Erin Cant (Dundee, United Kingdom), Mathieu Bottier, Morven Shuttleworth, Jamie Stobo, Lidia Perea, Alison Dicker, Holly R Keir, Megan L Crichton, Jeffrey Huang, Amelia Shoemark, James D Chalmers
PA2828	**Respiratory infection with multidrug resistant organisms is more often in men than women- a retrospective, multicenter study** Cathrin Kodde (Berlin, Germany), Juliane Köhler, Karin Schwegmann, Marzia Bonsignore, Irit Nachtigall
PA2829	**Predictive factors for a good pulmonary penetration of antibiotics: AntiBiotics dosage in BronchoAlveolar Lavage** Julia Delomez (Neuvillette, France), Alice Henry, Damien Basille, Vincent Jounieaux, Claire Andréjak
PA2830	**Detection of respiratory viruses in patients with aspiration pneumonia: a retrospective study** Daijiro Nabeya (Okinawa, Japan), Takeshi Kinjo, Wakako Arakaki, Wakaki Kami, Hiroe Hashioka, Naoya Nishiyama, Tomoo Kishaba, Kazuko Yamamoto
PA2831	**Aftershocks caused by viruses** Anna Sárközi (Debrecen, Hungary), Erik Békési, Edit Nagy, Mária Papp, Zsuzsanna Orosz, Ildikó Horváth
PA2832	**Findings from a new 12-country survey of respiratory illness, symptoms, and management approaches** Graça Coutinho (London, United Kingdom), Martin Duerden, Sergio Caretta, Thomas Hallett, Adrian Sheppard, Terence Pillay, Anna Ermakova, Aurelio Sessa
PA2833	**Risk factors for influenza-induced exacerbations and mortality in non-cystic fibrosis bronchiectasis** Hung Yu Huang (Taipei, Taiwan), Po-Chuan Ko, Chun-Hua Wang
PA2834	**Late Breaking Abstract - Remdesivir reduces progression to ICU in patients hospitalized with COVID-19** Rikisha Shah Gupta (Foster City, United States), Valentina Shvachko, Mark Berry, Eunyoung Lee, Gina Brown, Mazin Abdelghany, Jason Okulicz, Celine Der-Torossian, Anand Chokkalingam

PS-17 in poster area Session 290 12:30 - 14:00

Poster session: Bronchiectasis treatments

Disease(s) : Airway diseases

Method(s) : Public health General respiratory patient care Pulmonary rehabilitation Respiratory intensive care Pulmonary function testing Epidemiology

Tag(s) : Clinical

Chairs : Pieter Goeminne (Bornem, Belgium), Holly R. Keir (Dundee (Angus), United Kingdom)

PA2835	**Dipeptidyl peptidase-1 inhibition in bronchiectasis with eosinophilic endotype in the WILLOW trial** James D. Chalmers (Dundee (Angus), United Kingdom), Mark L Metersky, Ariel Teper, Carlos Fernandez, Sebastian Fucille, Melanie Lauterio, Roald Van Der Laan, Andreas Maes, Michael R Loebinger
PA2836	**Safety, tolerability, pharmacokinetics(PK) and pharmacodynamics(PD) of HSK31858a novel DPP-1 inhibitor in healthy volunteersa phase I clinical trial** Weijie Guan (Guangzhou (Guangdong), China), Jie Hou, Fang Qiong Li, Wei Fang Zeng, Han Mo Liu
PA2837	**Beclomethasone-formoterol vs placebo for chronic cough in bronchiectasis: the FORZA randomised-controlled trial** Tjeerd van der Veer (Amsterdam, Netherlands), Johanna Margaretha De Koning Gans, Gert Jan Braunstahl, Angelina Pieters, Johanna Van Den Berg, Rogier Hoek, Lieke Kamphuis, Marleen Bakker, Alain Dubois, Joachim Aerts, Menno Van Der Eerden
PA2838	**Impact of hypertonic agents on the solid's concentration in patients with bronchiectasis. A post-hoc analysis** Victoria Serrano (vilafranca del penedes, Spain), Héctor Sanz-Fraile, Antoni Torres, Beatriz Herrero-Cortina

PA2839	**Nebulised Meropenem for prevention of Bronchiectasis Exacerbation** Iftikhar Nadeem (Lode, Cambridge, United Kingdom), Tejas Ingle, Masood Ur Rasool, Noor Mahdi, Syed Ata Ul Munamm, Bobbak Rabiei, Raaga Vijayabarathy, Duncan Grady, Sumita Pai, Dorothy Grogono
PA2840	**Real-world use of the BEST score for IV antibiotic courses in bronchiectasis** Philip Mitchelmore (Kenton, United Kingdom), Hilary Mortimer, Helen Dunning, Kathryn Thomson, Laura Childs, Aye Khin, Hannah Thould
PA2841	**Pseudomonas aeruginosa eradication (PAE) in bronchiectasis (BE) with oral ciprofloxacin treatment (OC)** Letizia Traversi (Cittiglio, Italy), Maria Teresa Gomez-Martin Martín-Gómez, Daniel Romero, Almudena Felipe, Clara Pons, Antonio Alvarez, Ianire Gallego, Eva Polverino
PA2842	**Retrospective review of treatment approaches for Pseudomonas aeruginosa infections in patients with Primary Ciliary Dyskinesia: Insights from a Danish cohort** Mathias G. Holgersen (Copenhagen, Denmark), Frederik T. Søndergaard, June K. Marthin, Helle K. Johansen, Kim G. Nielsen
PA2843	**Pseudomonas aeruginosa eradication in patients with bronchiectasis: data from the EMBARC registry** Mattia Nigro (Opera (MI), Italy), Charles Haworth, Eva Polverino, Megan L. Crichton, Felix C. Ringsahusen, Anthony De Soyza, Montserrat Vendrell, Pierre Regis-Burgel, Michael R. Loebinger, Katerina Dimakou, Rosario Menendez, Antoni Torres, Tobias Welte, Francesco Blasi, Michal Shteinberg, Wim Boersma, J. Stuart Elborn, Pieter C. Goeminne, James D. Chalmers, Stefano Aliberti
PA2844	**The efficacy and safety of inhaled antibiotics for the treatment of bronchiectasis in adults: updated systematic review and meta-analysis** Ricardo José Pereira De Matos Cordeiro (Portela LRS, Portugal), Hayoung Choi, Charles S. Haworth, James D. Chalmers
PA2845	**Healthcare costs and resources utilization in patients with bronchiectasis compared to matched cohorts with asthma and COPD: a population-based cohort study** MARTA NADALIN (Monza, Italy), Raffaella Ronco, Matteo Monzio Compagnoni, Fabrizio Luppi, Giovanni Corrao, Paola Faverio
PA2846	**A citizen phage library for respiratory infection** Philip Mitchelmore (Kenton, United Kingdom), Steve Michell, Julie Fletcher, Robyn Manley, Remy Chait, Jaime Graham, Christian Fitch, Jan Zheng, Jessica Sacher, Alice Mills, Natalie Whitehead, Ben Temperton
PA2847	**Related factors to non-invasive ventilation in patients with acute bronchiectasis exacerbation** Mariem Friha (Ariana, Tunisia), Ines Moussa, Hana Mrassi, Sarra Ben Sassi, Sarra Trimech, Chirine Zaier, Imen Sahnoun, Leila Douik Elgharbi
PA2848	**Changes of QoL-B in bronchiectasis patients undergoing an outpatient intravenous antibiotic therapy; preliminary results from a tertiary European Multicenter Bronchiectasis Audit and Research Collaboration (EMBARC) centre.** Pia Ghosh (Stockholm, Sweden), Malin Sande, James D. Chalmers, Apostolos Bossios
PA2849	**Microbiology in inhaled antibiotic users with bronchiectasis: Data from the European Bronchiectasis Registry (EMBARC)** Charles Haworth (Cambridge, United Kingdom), Eva Polverino, Megan Crichton, Felix Ringshausen, Anthony De Soyza, Montserrat Vendrell, Pierre Regis-Burgel, Michael Loebinger, Katerina Dimakou, Rosario Menendez, Antoni Torres, Tobas Welte, Francesco Blasi, Michal Shteinberg, Wim Boersma, Stuart Elborn, Pieter Goeminne, Stefano Aliberti, James Chalmers
PA2850	**Long-term High flow nasal cannula therapy in bronchiectasis** Francesca Simioli (Napoli (NA), Italy), Anna Annunziata, Pasquale Imitazione, Antonietta Coppola, Rosa Cauteruccio, Francesco De Simone, Giuseppe Fiorentino
PA2851	**Efficacy of inhaled tobramycin in adult patients with bronchiectasis and P. aeruginosa in sputum: a prospective observational study** Chrysavgi Kosti (Gerakas, Greece), Antonia Digalaki, Andreas Matthaiou, Sofia Koukidou, Emmanouela Zervou, Aikaterini-Ioanna Sakellaropoulou, Ioannis Roussis, Serafeim Chrysikos, Georgios Hillas, Katerina Dimakou
PA2852	**Study design of a Phase 2 rollover trial of the novel cathepsin C inhibitor BI 1291583 in patients with bronchiectasis** Michal Shteinberg (Haifa, Israel), Wiebke Sauter, Sanjay H Chotirmall, Pamela J Mcshane, Marcus Mall, Anne E O'Donnell, Peter Eickholz, Henrik Watz, Naoki Hasegawa, Anastasia Eleftheraki, Abhya Gupta, James D Chalmers
PA2853	**A single-centre audit of specialist Bronchiectasis care and outcomes at 12 months** Georgia Tooth (Cambridge, United Kingdom), Shauna Hanrahan, Victoria Monson, Dorothy Grogono
PA2854	**Fibrinogen and fractional exhaled nitric oxide as potential markers of lung functional impairment in clinically stable non-cystic fibrosis bronchiectasis** Nikoleta Bizymi (Heraklion Crete, Greece), Andreas M. Matthaiou, Georgios Pitsidianakis, Katerina M. Antoniou, Nikolaos Tzanakis

PS-18 in poster area Session 291 12:30 - 14:00

Poster session: The global lung cancer epidemic: diversity, social inequalities, and survivorship

Disease(s) : Airway diseases Thoracic oncology

Method(s) : Epidemiology Public health Pulmonary function testing Palliative care

Tag(s) : Clinical

Chairs : Ilona Tietzova (Prague, Czech Republic), Chair to be confirmed

PA2855	**Real-World treatment outcomes for advanced NSCLC in Greece** Andriani Charpidou (Athens, Greece), Eleni Kokkotou, Lamprini Stournara, Maria Mani, Ioannis Gkiozos, Sofia Tsagouli, Nikolaos Syrigos, Thomas Burke, Andreas Desiniotis, Ioannis Dimitriadis
PA2856	**Occupational lung cancer: the medico-legal aspect** Zeineb ATHIMNI (SOUSSE, Tunisia), Marwa Bouhoula, Sana Bhiri, Asma Aloui, Asma Chouchane, Imen Kacem, Maher Maoua, Aicha Brahem, Houda Kalboussi, Olfa El Maalel, Souhail Chatti, Nejib Mrizak
PA2857	**Lung Cancer Awareness in Saudi Arabia: Results of an Interim Analysis** Jaber S. Alqahtani (Dammam, Saudi Arabia), Bader S. Almqati, Turki G. Alharbi, Abdulraheem A. Almuntashiri
PA2858	**Histologic Lung Cancer 5-Year Survival Rates and Trends Vary by Tumor Stage and Residential County: 1990-2013 Surveillance, Epidemiology, and End Results(SEER)** Bingbing Wang (Shanghai, China), Shuanshuan Xie, Changhui Wang
PA2859	**The changing face of lung cancer epidemiology in Greece** Danai Bisirtzoglou (Athens, Greece), Georgia Hardavella, Eleni Karetsi, Kelly Miziou, Gerasimos Metaxas, Christos Raptis, Dina Broupi, Ioannis Gkiozos
PA2860	**REAL-WORLD DATA ON LUNG CANCER PATIENTS CHARCTERISTICS IN NORTHERN SERBIAN PROVINCE OF VOJVODINA** Darijo Bokan (Sremska Kamenica, Republic of Serbia), Bojan Zaric, Tomi Kovacevic, Goran Stojanovic, Jelena Djekic Malbasa, Ana Milenkovic
PA2861	**Epidemiological and histopathological features of lung cancer in Tunisia** Moez Hamdani (Djerba, Tunisia), Marwa Walha, Sana Hidouri, Kamel Bel Haj Ali, Abdelmajid Khabir
PA2862	**Clinical characteristics and out comes of lung cancer patients in a tunisian center** Amani Kacem (Sousse, Tunisia), Jihene Ghariani, Imen Kharrat, Anis Maatallah, Rahma Ben Jazia, Hend Zorgati, Yosri Benali, Dhouha Benbraiek, Sourour Belhajyoussef, Jihene Ayachi, Asma Gaddour
PA2863	**Sociodemographic and clinical characteristics associated with lung cancer in women** Anna Trojnar (Warszawa, Poland), Magdalena Knetki-Wróblewska, Joanna Domagała-Kulawik
PA2864	**Characteristics of lung cancer in elderly patients.** Rim Khemakhem (Sfax, Tunisia), Mounira Kallel, Nessrine Kallel, Rahma Gargouri, Ilhem Yangui, Nedia Moussa, Walid Feki, Najla Bahloul, Samy Kammoun
PA2865	**COPD and lung cancer: Is there a link?** Houda Rouis (Ariana, Tunisia), Chirine Moussa, Mahdi Abdennadher, Soumaya Debiche, Nourchene Khalffallah, Amel Khattab, Ibtihel Khouaja, Ines Zendah, Sonia Maâlej
PA2866	**Does lung cancer in patients with COPD differ between women and men?** Robert Uliński (Warsaw, Poland), Marta Dąbrowska, Joanna Domagała-Kulawik
PA2867	**COPD occurrence among thousand of patients with lung tumor** Robert Uliński (Warsaw, Poland), Marta Dąbrowska, Joanna Domagała-Kulawik
PA2868	**Lung cancer in COPD patients included in a telemonitoring program (TELEPOC)** Jone Solorzano Egurbide (bilbao, Spain), Eva Tabernero Huguet, Mª Pilar Fuentetaja Olmos, Mª Ángeles García Carreira, Imanol González Muñoz, Elena Garay Llorente, Joseba Andia Iturrate, Beatriz González Quero, Larraitz García Echeberria
PA2869	**Employment status at time of lung cancer diagnosis: A nationwide study 1994-2018** Morten Borg (Ry, Denmark), Ditte Fredensborg Søltoft, Ole Hilberg, Anders Løkke
PA2870	**Is death from lung cancer associated with socioeconomic development? Turkey sample** Güntülü Ak (Eskişehir, Turkey), Selma Metintas, Oguz Han Aydilek, Muzaffer Metintas
PA2871	**Long-Term Lung Cancer Survivors – Who are they and what happens throughout their follow up?** Ana Da Cunha Fonseca (Vila Nova de Gaia, Portugal), Mariana Antunes, Margarida Dias, Eloísa Silva, Ana Barroso

PA2872	**Inequality in lung cancer: a nationwide study of income 1980-2018** Morten Borg (Ry, Denmark), Margrethe Høstgaard Bang Henriksen, Sara Witting Christensen Wen, Torben Frøstrup Hansen, Rikke Ibsen, Ole Hilberg, Anders Løkke
PA2873	**Estimated cost of lung cancer in a public reference hospital in Morocco** Ibtissam El Harch (Fès, Morocco), S Guendaoui, M Charkaoui M, Soumaya Benmaamar, Mohammed Omari, Mohammed El Youbi, L Belakhhel, L Abouselham L, H Hachri H, I El Menchay, Samira El Fakir, Mohammed Berraho, Nadia Benchekroun, Nabil Tachfouti

PS-19 in poster area Session 292 12:30 - 14:00

Poster session: Pulmonary fibrosis: clinical and trial experiences

Disease(s) : Interstitial lung diseases

Method(s) : General respiratory patient care Pulmonary function testing Epidemiology Imaging Physiology

Tag(s) : Clinical

Chairs : Claudia Valenzuela (Madrid, Spain), Katarzyna B. Lewandowska (Warszawa, Poland)

PA2874	**Continued nintedanib treatment in patients with progressive pulmonary fibrosis: data from INBUILD-ON** Wim A. Wuyts (Leuven, Belgium), Francesco Bonella, Nazia Chaudhuri, Francesco Varone, Danielle Antin-Ozerkis, Jin Woo Song, Corinna Miede, Mihaela Dumistracel, Carl Coeck, Vincent Cottin
PA2875	**Meta-analysis of effect of nintedanib on mortality in subjects with idiopathic pulmonary fibrosis (IPF) and other forms of progressive pulmonary fibrosis (PPF)** Wim A. Wuyts (Leuven, Belgium), Toby M Maher, Marlies Wijsenbeek, Dirk Koschel, Fernando J Martinez, Wibke Stansen, Susanne Stowasser, Luca Richeldi
PA2876	**Adverse Effects of Nintedanib – A Portent of Gender Inequality?** Dominic Sykes (Hull, United Kingdom), Ellis Day, Kayinaat Ibrar, Amanda Bell, Mark Major, Alyn H Morice, Simon P Hart
PA2877	**Real-World Safety and Effectiveness of Nintedanib in Patients with Idiopathic Pulmonary Fibrosis** Arata Azuma (Kawasaki, Japan), Takashi Ogura, Yoshikazu Inoue, Yasuhiro Kondoh, Sakae Homma, Katsumi Tanaka, Kaori Ochiai, Kenya Muraishi, Yukihiko Sugiyama, Toshihiro Nukiwa
PA2878	**Nocebo effect of nintedanib on gastrointestinal (GI) adverse events (AEs) in patients with interstitial lung diseases (ILDs)** Oliver Distler (Zurich, Switzerland), Kristin B Highland, Arata Azuma, Tejaswini Kulkarni, Wim A Wuyts, Corinna Miede, Margarida Alves, Petros Sfikakis
PA2879	**Effects of nintedanib on circulating biomarkers in patients with progressive pulmonary fibrosis: subgroups by fibrotic pattern on HRCT** Toby M Maher (Los Angeles, United States), Francesco Bonella, Shervin Assassi, Imre Noth, Claudia Diefenbach, Carina Ittrich, Klaus B Rohr, Martin Kolb
PA2880	**Impact of antifibrotic therapy on lung cancer incidence and mortality in patients with idiopathic pulmonary fibrosis** Yong Suk Jo (Seoul, Republic of Korea), Kyung Joo Kim, Chin Kook Rhee, Yong Hyun Kim
PA2881	**Antifibrotic treatment in patients with Idiopathic pulmonary fibrosis (IPF): Real life data from a Swedish registry** Lisa Carlson (Stockholm, Sweden), Dimitrios Kalafatis, Ida Pesonen, Jesper Magnusson, Magnus Skold
PA2882	**Characteristics of patients with progressive fibrosing ILDs in the ILD-PRO Registry** Leonard Lobo (Chapel Hill, United States), Yi Liu, Peide Li, Murali Ramaswamy, Aparna C Swaminathan, Srihari Veeraraghavan, Yanni Fan, Megan L Neely, Scott M Palmer, Amy L Olson
PA2883	**Progressive pulmonary fibrosis in patients with chronic hypersensitivity pneumonitis (cHP): a single center experience.** Julia Wälscher (Essen, Germany), Ulrich Costabel, Dirk Theegarten, Eda Boerner, Lutz Jehn, Christian Taube, Francesco Bonella
PA2884	**Comparison of the diagnostic criteria for progressive pulmonary fibrosis in connective tissue disease related interstitial lung disease** Hyunwoo Kim (Seoul, Republic of Korea), Kyuhwan Kim, Jongmin Lee, Yong Suk Jo
PA2885	**Interobserver variability of the ATS/ERS/JRS/ALAT diagnostic CT criteria for idiopathic pulmonary fibrosis: a systematic review and meta-analysis** Krit Dwivedi (Sheffield, United Kingdom), Liam Delaney, Samer Alabed, Mahan Salehi, Marcus Goodlad, Elliot Checkley, Hassan Shah, Andy Swift

PA2886 **Comparison of antifibrotic availability for patients on the BTS IPF Registry using existing and new prescribing criteria**
Jennifer Naftel (Southampton, United Kingdom), Emma Kinsella, Nicola Wood, Sophie Fletcher

PA2887 **Five-year follow up analysis of Japanese ILD registry**
Kazuya Tsubouchi (Fukuoka, Japan), Naoki Hamada, Shoji Tokunaga, Toru Tsuda, Shohei Takata, Hiroshi Ishii, Yasuhiko Kitasato, Tomoaki Hoshino, Yosuke Sasahara, Kazuhiro Yatera, Masayuki Kawasaki, Masaki Fujita, Makoto Yoshida, Takashige Maeyama, Taishi Harada, Hiroshi Wataya, Chiharu Yoshii, Masashi Komori, Yuichi Mizuta, Kazunori Tobino, Eiji Harada, Yoichi Nakanishi, Isamu Okamoto

PA2888 **Real-world study evaluating anti-fibrotic therapy on survival in idiopathic pulmonary fibrosis**
Lucy Robertson (Cambridge (Cambridgeshire), United Kingdom), Joshua Barnes, Kirstie Rogers, Muhunthan Thillai, Helen Parfrey

PA2889 **Interstitial lung diseases in Israel**
Tzlil Hershko (Tel-Aviv, Israel), Sonia Schneer, Michael J. Segel, Ori Wand, Ophir Freund, Amir Bar-Shai, David Shitrit, Liran Levy, Yochai Adir, Avraham Unterman

PA2890 **Idiopathic pulmonary fibrosis treated by Nintedanib: evaluation of safety even in patients treated with anticoagulants**
Barbara Ruaro (Trieste, Italy), Riccardo Pozzan, Paola Confalonieri, Metka Kodric, Rossella Cifaldi, Mariangela Barbieri, Selene Lerda, Marco Confalonieri, Elisa Baratella, Francesco Salton

PA2891 **High antinuclear antibody titer is associated with increased mortality risk in patients with idiopathic pulmonary fibrosis**
shimon izhakian (Petach Tikva, Israel), May Igawa, Mordechai R Kramer

PA2892 **Clinical and prognostic significance of p-ANCA antibodies positivity in Idiopathic Pulmonary Fibrosis**
Giuseppe Muscato (Catania, Italy), Alessandro Libra, Giuseppe Ielo, Enrico Sciacca, Stefano Palmucci, Gianluca Sambataro, Carlo Vancheri

PA2893 **Autoantibody positivity (AAb+) in idiopathic pulmonary fibrosis (IPF): outcomes from the Pulmonary Fibrosis Foundation Patient Registry (PFF-PR)**
Chad Newton (Dallas, United States), Tejaswini Kulkarni, Mary Beth Scholand, Kevin Flaherty, Zhongze Li, Sachin Gupta, Elana. J Bernstein

PS-2 in poster area — Session 293 — 12:30 - 14:00

Poster session: Digital health innovations in respiratory healthcare

Disease(s) : Airway diseases | Interstitial lung diseases | Pulmonary vascular diseases

Method(s) : Public health | General respiratory patient care | Pulmonary rehabilitation | Physiology | Pulmonary function testing | Respiratory intensive care | Imaging | Epidemiology

Tag(s) : Clinical

Chairs : Konstantinos Kostikas (Ioannina, Greece), Yet Hong Khor (Melbourne (VIC), Australia)

PA2894 **AirPredict - A mobile app for monitoring personal exposure to Particulate Matter and respiratory outcomes in asthma patients**
Michele Atzeni (Padova, Italy), Luca Cossu, Caterina Grisi, Umberto Semenzato, Mariaenrica Tinè, Simonetta Baraldo, Giacomo Cappon, Martina Vettoretti

PA2895 **Causes of failed smoking cessation attempts among active smokers.**
fatiha bounoua (AGADIR, Morocco), Abdelkrim Khannous, Houda Moubachir, Hind Serhane

PA2896 **A machine learning-driven approach to improve patient-centered care in pulmonary fibrosis**
Jiwon Jung (Rotterdam, Netherlands), Rembrandt Oltmans, Ruixuan Zhang, Joke Hendriks, Richard Goossens, Marlies Wijsenbeek

PA2897 **Barriers to digital usage for patients with chronic respiratory diseases**
Mark Burns (Southampton, United Kingdom), Mark Jones, Tom Havelock

PA2898 **Prospective observational study of physical activity measurement using ePRO for evaluating the severity and prognosis in patients with interstitial pneumonia.**
Kentaro Ito (Matsusaka city, Mie, Japan), Maki Esumi, Seiya Esumi, Yuta Suzuki, Tadashi Sakaguchi, Kentaro Fujiwara, Yoichi Nishii, Hiroki Yasui, Osamu Taguchi, Osamu Hataji

PA2899 **Prediction of static lung volumes through spirometric parameters - a machine learning approach**
Marco Pereira (Seixal, Portugal), Mónica Grafino, Ana Lutas, Teresa Pequito, Ricardo Ribeiro, Herminia Dias, Sofia Furtado

PA2900	**Evolution of patient perception and use of home spirometry over time** Karen Parsons (Oxford, United Kingdom), Carmine Ruggiero, Shakila Hussain, Michael Avoseh, Emily Fraser, Ling-Pei Ho, Peter Saunders, Rachel K. Hoyles
PA2901	**Development of an optimal machine learning model to detect features of wheezing in children** Kyunghoon Kim (Seoul, Republic of Korea), Hye Jeong Moon, Baek Seung Kim
PA2902	**Feasibility and Safety of Oxygen Saturation Telemonitoring in Covid-19: an observational study** Jacopo Simonetti (Rome, Italy), Francesco Lombardi, Luca Richeldi
PA2903	**Ballistocardiographic pad for detection of heart rate in respiratory diseases.** Vratislav Sedlák (Hradec Králové 9, Czech Republic), Filip Studnička, Radovan Sedlák
PA2904	**Literature-mining in research of Post-Acute Sequelae of Covid-19** Kristina Piontkovskaya (Stockholm, Sweden), Li Chuan-Xing, Yulian Luo, Michael Runold, Åsa Maria Wheelock
PA2905	**Environmental impact of a CF virtual clinic** David Green (Manchester, United Kingdom), Thomas Fitzmaurice, Miles Eason, Freddy Frost, Dilip Nazareth, Martin Walshaw
PA2906	**Access to health care is a human right: a focus group study in COPD patients regarding eHealth accessibility** Esther I. Metting (Groningen, Netherlands)
PA2907	**Development of the iRECHARGE web application (app) for Pulmonary Rehabilitation (PR) in India using Design Thinking Process (DTP)** Shruti Sahasrabudhe (Pune (Maharashtra), India), Rashmi Padhye, Mark W Orme, Dipali Dhamdhere, Suryakant Borade, Meenakshi Bhakare, Nagesh Dhadge, Mahavir Modi, Zahira Ahmed, Andy Barton, Sundeep Salvi, Sally J Singh
PA2908	**A wearable system for personal air pollution exposure: a walk-about in Milan** Sara Bernasconi (Varese, Italy), Alessandra Angelucci, Andrea Rossi, Andrea Aliverti
PA2909	**The use of digital web-based video training for correct inhalation technique during the COVID-19 pandemic** Maximilian Wollsching-Strobel (Köln, Germany), Uta Butt, Daniel Majorski, Tim Mathes, Friederike Magnet, Doreen Kroppen, Melanie Berger, Sarah Schwarz, Wolfram Windisch
PA2910	**Transforming Irish health care delivery through digital health technology with a global orientation – through the perspective lens of the service user** Tara Byrne (Ballinasloe (County Longford), Ireland), Niall Murray, Mary Mc Donnell-Naughton, Neil Rowan
PA2911	**APPS FOR COPD AND ASTHMA PATIENTS IN UKRAINE: ANALYSIS OF ANDROID MARKETPLACE** Mariia Tsyben (Vinnytsya, Ukraine), Stanislav Shkondin, Vitalii Poberezhets, Anna Demchuk, Yuriy Mostovoy
PA2912	**QUALITY OF ANDROID APPS FOR COPD AND ASTHMA PATIENTS IN UKRAINE** Mariia Tsyben (Vinnytsya, Ukraine), Stanislav Shkondin, Vitalii Poberezhets, Anna Demchuk, Yuriy Mostovoy
PA2913	**HHT Virtual Imaging Case Conferences - A New Way Forward for Rare Disease Management** Dilini Vethanayagam (Edmonton (AB), Canada), Richard Owen, Hugo Bertozzi, Darshan Bakshi, Rohan Parab, Ani Mirakhur, Oliver Halliwell, Charlene Fell

PS-20 in poster area Session 294 12:30 - 14:00

Poster session: Multidisciplinary approach for interstitial lung disease of known cause

Disease(s) : Interstitial lung diseases

Method(s) : Imaging Epidemiology Endoscopy and interventional pulmonology General respiratory patient care Pulmonary function testing Physiology

Tag(s) : Clinical

Chairs : Claudia Ravaglia (Forlì, Italy), Chair to be confirmed

PA2914	**Prediction of mortality in SSc-ILD depends on definition of ILD progression** Anna Maria Hoffmann-Vold (Oslo, Norway), Liubov Petelytskab, Håvard Fretheim, Imon Barua, Mike Becker, Hilde Bjørkekjær, Cathrine Brunborg, Cosimo Bruni, Phuong Phuong Diep, Rucsandra Dobrota, Michael Durheim, Muriel Elhai, Suzana Jordan, Emily Langballe, Øyvind Midtvedt, Carina Mihai, Øyvind Molberg, Oliver Distler
PA2915	**Automatized quantification and progressive evaluation of SSc-ILD: a perspective from the PROFILE.net ERS Clinical Research Collaboration** Julien Guiot (Liège, Belgium), Fanny Gester, Monique Henket, Benoit Ernst, Simon Van Eyndhoven, Jelle Praet, Dirk Smeets, Clio Ribbens, Béatrice André, Renaud Louis

PA2916	**Nutritional parameters in ILD: correlation with functional test and CT** Eva Ailín Vallejos (Ciudad Autónoma Buenos Aires, Argentina), Florencia Santtia, Ana Downey, Veronica Barcos, Gabriela Legarreta, Silvana Acuña, Alberto Case, Juan Enghelmayer, Ana Putruele
PA2917	**LUNG ULTRASONOGRAPHY HELPS RULE OUT INTERSTITIAL LUNG DISEASE IN PATIENTS WITH RHEUMATOID ARTHRITIS.** Maria Otaola (Ciudad Autónoma Buenos Aires, Argentina), Marcos Rosemffet, Jonathan Balcazar, Miguel Perandones, Paola Orausclio, Tomas Cazenave, Santiago Rossi, Sebastian Marciano, Emilce Schneeberger, Gustavo Citera
PA2918	**Forced oscillation technique in progressive pulmonary fibrosis** Anna Denis (Liège, Belgium), Monique Henket, Hadrien Gillet, Laurie Giltay, Fanny Gester, Renaud Louis, Julien Guiot
PA2919	**Transbronchial lung cryobiopsy for the diagnosis of Fibrotic Hypersensitivity Pneumonitis** Pedro Magalhães Ferreira (Vila Nova de Gaia (District de Porto), Portugal), Francisco Machado, Hélder Novais-Bastos, Natália Melo, André Terras Alexandre, Patrícia Caetano Mota, Susana Guimarães, Conceição Souto-Moura, André Carvalho, António Morais
PA2920	**Pulmonary 18F-FDG up-take refines current risk stratification in non-specific interstitial pneumonitis (NSIP) and predicts response to treatment.** Sharenja Ratnakumar (London, United Kingdom), Hannah Torlot, Thida Win, Balaji Ganeshan, Nick Screaton, Toby Maher, Francesco Fraioli, Raymond Endozo, Robert Shortman, Ashley Groves, Joanna Porter
PA2921	**Lung ultrasonographic findings and oxygen desaturation as markers of severity in diffuse parenchymal lung diseases** Ahmed Sadaka (Alexandria, Egypt), Asmaa Gomaa, Hoda Abdelgawad, Hanaa Shafiek, Eman Hatata, Nashwa Abdelwahab
PA2922	**Diagnostic value of transbronchial cryobiopsy in patients with suspicion of pulmonary graft-versus-host disease after allogeneic hematopoietic cell transplantation** Katrin Esther Hostettler (Basel, Switzerland), Kathleen Jahn, Joerg Halter, Andrei Darie, Daiana Stolz, Lukas Bubendorf, Christian Arranto, Jakob Passweg, David Winkel, Maurice Pradella, Spasenija Savic Prince, Michael Tamm
PA2923	**Pulmonary function in Thai patients with systemic sclerosis; a single center 6-year retrospective study** Thitisak Sakulvorakitti (Pathumthani, Thailand), Pattarin Pirompanich
PA2924	**Long term evaluation of pulmonary function in systemic sclerosis associated interstitial lung disease (SSc-ILD)** Daniela Stefana Gologanu (Bucuresti (Sector 1), Romania), Marius Cotet, Simona Caraiola, Alina Dima, Daniela Popescu, Magda Parvu, Razvan Ionescu, Cristian Baicus, Valentin Nedelcu, Ion Ion, Marius Balea
PA2925	**SSc-ILD pulmonary function dynamics – is “normal” dangerous?** Marius-Alexandru Coteț (Bucuresti, Romania), Daniela Gologanu, Valentin Nedelcu, Ion Andrei Ion, Marius Ioan Balea, Daniela Popescu, Alina Dima, Magda Pârvu, Valer Pompilian, Doina Nițescu, Simona Caraiola, Răzvan Ionescu, Camelia Badea, Larisa Pinte, Cristian-Răsvan Băicuș
PA2926	**Overt and covert airflow limitations in DPLD: a spirometric appraisal** Sayanti Karmakar (KOLKATA, India), Sayoni Sengupta, Avishek Kar, Debkanya Dey, Shuvam Ghosh, Dipanjan Saha, Arindam Mukherjee, Parthasarathi Bhattacharyya
PA2927	**Evaluation of lung function referral and testing in the context of Interstitial Lung Disease (ILD).** Calvin Apen (Doncaster (South Yorkshire), United Kingdom), Muhammad Khan
PA2928	**Diagnostic performance of the hypersensitivity pneumonitis guidelines in a real-life multicenter cohort** Avraham Unterman (Tel Aviv, Israel), Ophir Freund, Yitzhac Hadad, Tamar Shalmon, Ori Wand, Sonia Schneer, Tal Moshe Perluk, Eyal Kleinhendler, Tzlil Hershko, Boaz Tiran, Evgeni Gershman, Yochai Adir, David Shitrit, Amir Bar-Shai
PA2929	**Clinical characteristics and changes in pulmonary function tests of rheumatoid arthritis-associated lung diseases: A 10-year retrospective study from a tertiary referral center in Southern Thailand** Punchalee Kaenmuang (Songkhla, Thailand), Asma Navasakulpong, Nunthamon Wonghirundecha, Sarayut Lucien Geater
PA2930	**Radiological features of myositis-related ILD and implications for disease course** Cara M Gill (Dublin, Ireland), Brian Gaffney, Brian Sheehy, Marissa O'Callaghan, Leah Rooney, Eamonn Molloy, Jonathan D Dodd, David J Murphy, Emmet Mc Grath, Michael P Keane, Cormac Mc Carthy
PA2931	**Multidisciplinary collaboration for correct diagnosis and correct treatment in interstitial lung disease associated with connective tissue diseases** Nesrin Öcal (Ankara, Turkey), Emre Tekgöz, Seda Çolak, Ezgi Çimen Güneş, Deniz Doğan, Muhammet Çınar, Yakup Arslan, Cantürk Taşçı
PA2932	**Management of connective tissue disease related interstitial lung diseases in a district general hospital.** Alex Francioni (Luton, United Kingdom), Natasha Ramsundar, Muhammad Nisar, Vijay Joshi, Judeson Gnanapragasam

PS-3 in poster area Session 295 12:30 - 14:00

Poster session: Long-term home ventilatory support: goals and outcomes

Disease(s) : Respiratory critical care | Sleep and breathing disorders | Airway diseases

Method(s) : Pulmonary rehabilitation | General respiratory patient care | Respiratory intensive care | Epidemiology | Physiology | Pulmonary function testing

Tag(s) : Clinical

Chairs : Peter J. Wijkstra (Groningen, Netherlands), Chloé Cantero (Paris, France)

PA2933	**Can health-related quality of life predict mortality in home mechanical ventilated patients?** Carla Ribeiro (Vila Nova de Gaia, Portugal), Cristina Jácome, Luisa Castro, Sara Conde, Wolfram Windisch, Rui Nunes
PA2934	**Long-term health-related quality of life in patients on home mechanical ventilation** Carla Ribeiro (Vila Nova de Gaia, Portugal), Cristina Jácome, Luisa Castro, Sara Conde, Wolfram Windisch, Rui Nunes
PA2935	**- German Version of the S3-NIV Questionnaire - Translation, Cultural adaptation and Validation of a simple tool fo r the assessment of home noninvasive ventilation** Daniel Majorski (Cologne, Germany), Axel Kuck, Doreen Kroppen, Sarah Schwarz, Maximilian Wollsching-Strobel, Friederike Magnet, Tim Mathes, Wolfram Windisch
PA2936	**Perceived health-related benefits and side effects of long-term Home Mechanical Ventilation in an outpatient setting** Diana Amorim (Maia, Portugal), Leonor Roseta, Cristina Jacome, Pedro Oliveira, Daniela Ferreira, Carla Nogueira, Sara Conde, Rui Nunes, Carla Ribeiro
PA2937	**Understanding the outcomes that matter to Patients and what influences these: An International Survey of Patients Treated by Home Mechanical ventilation (HMV)** Cecile Delval (Paris, France), Judith Livingston, Manuella Schaller
PA2938	**Patients' perception of home mechanical ventilation benefits and side effects: does disease play a role?** Leonor Roseta (Calvão – Vagos, Portugal), Diana Amorim, Cristina Jácome, Pedro Oliveira, Daniela Ferreira, Carla Nogueira, Sara Conde, Rui Nunes, Carla Ribeiro
PA2939	**Cardiomyopathy as cause of death in Duchenne muscular dystrophy – a longitudinal observational study** Joël Julien Herzig (Zürich, Switzerland), Annabel Lechner, Jacqueline Gabriela Kientsch, Silvia Ulrich, Esther Irene Schwarz
PA2940	**Survival of multiple sclerosis patients requiring positive airway pressure and/or mechanical insufflation-exsufflation.** Anastasia Krompa (London, United Kingdom), Neeraj Mukesh Shah, Michael Cheng, Rebecca Francesca D'Cruz, Philip Marino, Michelle Ramsay, Shelley Srivastava, Joerg Steier, Eui-Sik Suh, Nicholas Hart, Patrick Brian Murphy, Georgios Kaltsakas
PA2941	**Determining factors affecting survival in a hospital-based motor neurone disease population on domiciliary NIV** Revati Naran (London, United Kingdom), Swapna Mandal
PA2942	**Predictors of survival at initiation of non-invasive ventilation in amyotrophic lateral sclerosis** Neeraj Shah (New Malden (Surrey), United Kingdom), Anne Rossel, Bawan Abdulaziz, Shauna Sheridan, Michael Cheng, Rebecca D'Cruz, Philip Marino, Shelley Srivastava, Joerg Steier, Eui-Sik Suh, Nicholas Hart, Patrick Murphy, Michelle Ramsay, Georgios Kaltsakas
PA2943	**Surgical outcomes in patients on home mechanical ventilation** Jan De Mey (Ghent, Belgium), Lauren Heyman, Luc De Baerdemaeker, Eric Derom
PA2944	**Successful tracheostomy decannulation in patients with neuromuscular disorders: long-term follow-up** Chan Woong Jang (Seoul, Republic of Korea), Han Eol Cho, Miri Suh, Won Ah Choi, Su Hyun Cho, Inyeop Kim, Seong-Woong Kang
PA2945	**Pulmonary rehabilitation (PR) referral of COPD patients established on home NIV** Léa Razakamanantsoa (Paris, France), Typhaine Huchard, Jean-François Muir, Antoine Cuvelier, Tristan Bonnevie, Maxime Patout
PA2946	**Home Non Invasive Ventilation (H-NIV) Patient Characteristics and Outcomes: Observational study in a teaching hospital in the UK** Hannah Bardsley (Norwich, United Kingdom), Kashvin Kumar Ram Kumar, Vicky Ershadi, Georgina Siggins, Prasanna Sankaran
PA2947	**Long-term Noninvasive Ventilation for COPD patients following an exacerbation with acute hypercapnic respiratory failure: a randomized controlled trial** Jon Torgny Rostrup Wilcke (København Ø, Denmark), Caroline Hedsund, Kasper Linde Ankjærgaard, Tine Peick Sonne, Philip Tønnesen, Ejvind Frausing Hansen, Helle Frost Andreassen, Ronan M. G. Berg, Jens-Ulrik Stæhr Jensen

PA2948 **Prognostic indicators of Non-Invasive Ventilation dependence in Duchenne muscular dystrophy**
Kenki Matsumoto (London, United Kingdom), Carrie Hallam, Michael Polkey, Shruthi Konda

PA2949 **Cognitive impairment in patients non-concordant with domiciliary non-invasive ventilation: A service evaluation**
Ashleigh Thorn (London, United Kingdom), Stephanie Mansell, Eleanor Main

PA2950 **Lomg term survival in ALS patients with Home Tracheostomy Mechanical Ventilation**
Mariam García Alfaro (Peralta, Spain), Andrea Ballester Ferriz, Jesús Sancho Chinesta, Santos Ferrer Espinosa, Jaime Signes-Costa Miñana

PA2951 **Intermittent abdominal pressure ventilation in management of neuromuscular diseases: a Delphi panel consensus**
Anna Annunziata (Napoli (NA), Italy), Francesca Simioli, Antonella Marotta, Antonietta Coppola, Rosa Cauteruccio, Francesco De Simone, Paola Pierucci, Paolo Banfi, John R. Bach, Giuseppe Fiorentino

PA2952 **Intermittent abdominal pressure ventilation: efficacy in neuromuscular diseases.**
Francesca Simioli (Napoli (NA), Italy), Anna Annunziata, Maria Rosaria Valentino, Antonietta Coppola, Cauteruccio Rosa, Angela Mirizzi, Roberto Rega, Giuseppe Fiorentino

PS-4 in poster area — Session 296 — 12:30 - 14:00

Poster session: Towards the identification of new biomarkers in pulmonary diseases

Disease(s) : Airway diseases | Interstitial lung diseases | Sleep and breathing disorders | Thoracic oncology | Respiratory critical care

Method(s) : Cell and molecular biology | Epidemiology | Pulmonary function testing | Respiratory intensive care | Public health

Tag(s) : Translational

Chairs : Nikolaos I. Kanellakis (Oxford, United Kingdom), Chair to be confirmed

PA2953 **Oxidized low density lipoprotein mediates NLRP3 activation in patients with sleep apnea and early subclinical atherosclerosis.**
Elena Díaz García (Madrid, Spain), David Sanz Rubio, Sara García-Tovar, Enrique Alfaro, Pablo Cubero, Ana V Gil, José M. Marín, Carolina Cubillos Zapata, Francisco García-Río

PA2954 **Influence of the therapeutic approach in the metabolomic profile evolution of Lung Adenocarcinoma patients**
Daniela Sofia Madama Santos Silva (Coimbra, Portugal), David Carrageta, Pedro Oliveira, Marco Alves, Ana Margarida Abrantes

PA2955 **Human bronchial and alveolar epithelial cells respond differently to hypoxia and profibrotic stimuli**
Martin Garcia-Ryde (Lund, Sweden), Rebecca Berggren-Nylund, Anna Löfdahl, Arturo Ibáñez-Fonseca, Monica Kåredal, Gunilla Westergren-Thorsson, Ellen Tufvesson, Anna-Karin Larsson-Callerfelt

PA2956 **Real-time breath volatilomics analysis by soft Ionisation Mass Spectrometry**
Shahd Abuhelal (London, United Kingdom), Kenneth Robinson, Zoltan Takats, Salman Siddiqui

PA2957 **Optimisation of DNA extraction from nasal lining fluid to assess the nasal microbiome**
Samuel Montgomery (Leederville (WA), Australia), Jose Caparrós-Martín

PA2958 **Predicting the efficiency of the treatment of comorbidity diabetes mellitus and multidrug-resistant tuberculosis depending on the polymorphism variation of glutathione-S-transferase genes**
Ihor Semianiv (Chernivtsi, Ukraine), Liliia Todoriko, Marianna Semianiv, Mykola Garas

PA2959 **Hypoxia-induced metabolic response in obstructive sleep apnoea patients is influenced by sphingomyelin levels**
Ott Kiens (Tartu, Estonia), Viktoria Ivanova, Egon Taalberg, Ketlin Veeväli, Ragne Tamm, Triin Laurits, Birgit Ahas, Martin Juss, Tuuliki Hion, Roman Pihlakas, Kalle Kilk, Ursel Soomets, Alan Altraja

PA2960 **Investigation into the Plasma Proteome Signature in Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS)**
Johanna Squires (Worcester, United States), Sarra Al-Zayer, Peng Li, Wenzhong Xiao, David Systrom

PA2961 **Minimally invasive autopsy as a tool for lung molecular study**
Sabrina Setesmbre Batah (Ribeirão Preto, Brazil), Alexandre Fabro

PA2962 **Metabolomics of blood plasma from critically ill patients with suspected ventilator-associated pneumonia**
Waqar Ahmed (Manchester, United Kingdom), Adam Burke, Nigel Gotts, Pouline Van Oort, Jonathan Bannard-Smith, Ben Morton, Ingeborg Welters, Ronan Mcmullan, Roy Goodacre, Paul Dark, Tim Felton, Stephen Fowler

PA2963 **Metabolomic analysis of exhaled breath can rule out ventilator-associated pneumonia (VAP) in critically ill patients**
Waqar Ahmed (Manchester, United Kingdom), Iain White, Pouline Van Oort, Nicholas Rattray, Callum Docherty, Jonathan Bannard-Smith, Ben Morton, Ingeborg Welters, Ronan Mcmullan, Stephen Roberts, Roy Goodacre, Paul Dark, Tim Felton, Stephen Fowler

PA2964 **CFTR modulator therapy partially resolves inflammation in CF lung disease**
Rosemary Maher (Liverpool, United Kingdom), Peter Barry, Edward Emmott, Andrew Jones, Lijing Lin, Paul Mcnamara, Jaclyn Smith, Robert Lord

PA2965 **Comparative analysis of macrolide antibiotics effects on bronchial epithelial cell differentiation in vitro**
Arni Asbjarnarson (Reykjavik, Iceland), Fridrik Runar Gardarsson, Jon Petur Joelsson, Bryndis Valdimarsdottir, Ari Jon Arason, Snaevar Sigurdsson, Jennifer Kricker, Thorarinn Gudjonsson

PA2966 **BBS1 and BBS7 gene expression profile in mesothelial cells during hyperosmotic stress.**
Rajesh Jagirdar (Larissa, Greece), Erasmia Rouka, Eleanna Pitaraki, Sotiris Sinis, Eleftherios Papazoglou, Rania Kotsious, Chrissy Hatzoglou, Konstantinos Gourgouliannis, Sotirios Zarogiannis

PA2967 **miRNA identification in Particles in Exhaled Air (PExA) to study lung diseases**
Martina Bonatti (Solna, Sweden), Monika Ezerskyte, Pia Lindberg, Åsa Maria Wheelock

PA2968 **Development and validation of in vitro human inhalation toxicity tests for volatile liquids, mists, and sprays**
Jan Markus (Bratislava, Slovakia), Yulia Kaluzhny, George R. Jackson, Paul Kearney, Silvia Letasiova, Mitchell Klausner, Alex Armento

PA2969 **Late Breaking Abstract - Circulating ITGB6 levels are elevated in patients with IPF and reduced following lung transplant**
Martin Decaris (South San Francisco, United States), Martin Decaris, Erine Budi, Prerna Kotak, Susan Jacobs, Tushar Desai, Scott Turner

PA2970 **Inhaled cannabis product methods for in vitro toxicological assessment**
Emily Wilson (Montreal, Canada), Maddison Arlen, Rui Lui, Ryan Pusiak, Percival Graham, David Eidelman, Cory Harris, Carolyn Baglole

PA2971 **Consensus clustering with missing labels (ccml): a consensus clustering tool for multi-omics integrative prediction in cohorts with unequal sample coverage**
Åsa Wheelock (Stockholm, Sweden), Chuan-Xing Li, Hongyan Chen, C. Magnus Sköld, Meng Zhou

PA2972 **Impact of host DNA depletion in human upper respiratory microbiome investigations**
Ekanayake Mudiyanselage Udani Anuradha Ekanayake (Hull, United Kingdom), Angela Oates, Simon Hart, Laura Sadofsky

PS-5 in poster area Session 297 12:30 - 14:00

Poster session: Mechanisms of allergic airway disease

Disease(s) : Airway diseases

Method(s) : Cell and molecular biology Physiology Pulmonary function testing Imaging

Tag(s) : Translational

Chairs : Amanda Oliver (Cambridge, United Kingdom)

PA2973 **Multiplex protein quantification per cell type in bronchoalveolar lavage cytospin cells using NanoStrings GeoMx**
Nicole van der Burg (Lund, Sweden), Martin Ryde, Jaro Ankerst, Leif Bjermer, Ellen Tufvesson

PA2974 **Metabolomic Profiling in a Mouse Model of Menopause-Associated Asthma.**
Julie Ledford (Tucson, United States), William Pederson, Laurie Ellerman, Yan Jin, Haiwei Gu

PA2975 **Rac GTPase dependent cell signaling drives eosinophilic function in severe asthma.**
Dorian Hassoun (Nantes, France), Hugo Bergereau, Morgane Rousselle, Marie-Aude Cheminant, Carole Brosseau, Nicolas Jouand, Christine Sagan, Grégory Bouchaud, Sophie Brouard, François-Xavier Blanc, Gervaise Loirand, Vincent Sauzeau

PA2976 **Different subtypes of eosinophils between asthma and COPD in bronchial tissue.**
Alejandra Sánchez-Santos (Las Palmas de Gran Canaria, Spain), Carlos Cabrera-López, Angelina Lemes-Castellano, Sara Cazorla-Rivero, Enrique González-Dávila, Bartolomé Bartolomé, Ciro Casanova-Macario

PA2977 **LSC - 2023 - Eosinophil subtypes affect airway smooth muscle cells migration and ECM-related proliferation i n asthma**
Airidas Rimkunas (Kaunas, Lithuania), Andrius Januskevicius, Egle Vasyle, Jolita Palacionyte, Ieva Janulaityte, Greta Seskaite, Kestutis Malakauskas

PA2978 **WISP-1 stimulates the accumulation of nuclear factor erythroid-2 related factor 2 (NRF2) into the nucleus of airway smooth muscle cells from patients with asthma and COPD**
MARIA ELPIDA Christopoulou (Freiburg im Breisgau, Germany), Eleni Papakonstantinou, Daiana Stolz

PA2979	**Collagen turnover in airway smooth muscle cells is mediated by WISP-1 differently in asthma and in COPD** MARIA ELPIDA Christopoulou (Freiburg im Breisgau, Germany), Panagiota Moraiti, Charikleia Ntenti, Eleni Papakonstantinou, Daiana Stolz
PA2980	**WISP-1 promotes proliferation and migration of airway smooth muscle cells from patients with asthma and COPD** MARIA ELPIDA Christopoulou (Freiburg im Breisgau, Germany), Panagiota Moraiti, Eleni Papakonstantinou, Daiana Stolz
PA2981	**Role of nesprin-1 in STAT3 nuclear import of human airway smooth muscle cells** Dale Tang (Albany, United States), Ruping Wang, Guoning Liao
PA2982	**Relating Type 2 status to steroid exposure, cytokine expression and symptoms** Vincent Brennan (Dublin, Ireland), Christopher Mulvey, Lorna Lombard, Elaine Mac Hale, Patrick Kerr, Garrett Greene, Richard Costello
PA2983	**Il-33 drives airway remodeling by promoting mixed inflammation and pro-fibrotic pathways** Seblewongel Asrat (Tarrytown, United States), Subhashini Srivatsan, Brianna Buonagurio, Kirsten Nagashima, George Scott, Kaitlyn Gayvert, Wei Keat Lim, Dylan Birchard, Li-Hong Ben, Audrey Floc'H, Andrew Murphy, Matthew Sleeman, Jamie Orengo
PA2984	**Neuroimmune interactions and neuroplasticity in fatal asthma** Guilherme Dragunas (Munich, Germany), Natalia De Souza Xavier Costa, Reinoud Gosens, Carolina Demarchi Munhoz, Thais Mauad
PA2985	**Overexpression of miR-29b-3p in bronchial biopsies from individuals with asthma coincides with lower levels of soluble ST2 in bronchial lavage fluid** Jenny Calvén (Gothenburg, Sweden), Carina Malmhäll, Christopher Mccrae, Kristina Johansson, Henric Olsson, Madeleine Rådinger
PA2986	**Sputum protein measures in severe asthma as a theragnostic tool** Clair Barber (Southampton (Hampshire), United Kingdom), Adnan Azim, Laurie Lau, Jon Ward, Scott P Elliott, Thomas Brown, Thomas Jones, Karl J Staples, Tom M A Wilkinson, Anoop Chauhan, Peter H Howarth
PA2987	**Fibrocytes induced airway epithelial dysfunction in severe T2-high asthma by producing T2 cytokines** Chih-Ming Weng (Taipei, Taiwan), Meng-Jung Lee, Yuh-Rong Lin, Mei-Chuan Chen, Wei-Ciao Wu, Han-Pin Kuo
PA2988	**Anisakis extract induces inflammation process: in vitro and ex-vivo study** Serena Di Vincenzo (Palermo (PA), Italy), Maria Ferraro, Valentina Lazzara, Paola Pinto, Ignazio Brusca, Vincenzo Ferrantelli, Gaetano Cammilleri, Elisabetta Pace
PA2989	**Intravital imaging of mucus transport after mucolytic treatment in IL-13-treated mice** Mario Pieper (Lübeck, Germany), Inken Schmudde, Hinnerk Schulz-Hildebrandt, Martin Ahrens, Gereon Hüttmann, Peter König
PA2990	**Quercetin modulate expression of paraoxonase 2 in human airways epithelial cells by inducing expression of nuclear factor like 2 (Nfr2)** Daniel Winnica (Aurora, United States), Shuyu Ye, Fernando Holguin
PA2991	**Effects of dexamethasone on human stem cell-derived peripheral cholinergic neurons** Guilherme Dragunas (Munich, Germany), Pien Goldsteen, Carli Koster, Marina Trombetta Lima, Sophie T Bos, Carolina Demarchi Munhoz, Reinoud Gosens
PA2992	**The IL23-Th17 axis in neutrophilic airway inflammation** Barsha Baisakhi Nayak (Graz, Austria), Iris Red, Juliana Schwanzer, Julia Teppan, Ilse Lanz, Melanie Kienzl, Akos Heinemann, Philipp Douschan, Eva Sturm

PS-6 in poster area — Session 298 — 12:30 - 14:00

Poster session: Cardiovascular-related aspects and non-positive airway pressure treatment of sleep-disordered breathing

Disease(s) : Sleep and breathing disorders

Method(s) : General respiratory patient care Physiology Pulmonary rehabilitation Epidemiology Public health Respiratory intensive care

Tag(s) : Clinical

Chairs : Marijke Dieltjens (Edegem (Antwerp), Belgium), Richard Staats (Lisbon, Portugal)

PA2993	**Prevalence and characteristics of sleep apnea syndrome in heart failure patients** syrine Abdellatif (Marsa, Tunisia), Ferdaous Yangui, Sawssen Antit, Hela Cherif, Amine Boufares, Salma Mkaddem, Mariem Triki, Lillia Zakhama, Mohamed Ridha Charfi
PA2994	**Sleep apnea screening questionnaires in heart failure patients** syrine Abdellatif (Marsa, Tunisia), Ferdaous Yangui, Sawssen Antit, Hela Cherif, Amine Boufares, Salma Mkaddem, Mariem Triki, Lilia Zakhama, Mohamed Ridha Charfi
PA2995	**Predictive factors of moderate to severe sleep apnea syndrome in heart failure** syrine Abdellatif (Marsa, Tunisia), Ferdaous Yangui, Sawssen Antit, Hela Cherif, Amine Boufares, Salma Mkaddem, Mariem Triki, Lilia Zakhama, Mohamed Ridha Charfi
PA2996	**Temporal association of ventricular arrhythmias and respiratory events in heart failure patients with CSA** Valentin Guenzler (Regensburg, Germany), Michael Arzt, Marjorie Grimm, Amélie Ebert, Florian Zeman, Dominik Linz, Holger Woehrle, Renaud Tamisier, Martin R Cowie, Christoph Fisser
PA2997	**Resolution of ST deviation in patients with and without sleep disordered breathing early after acute myocardial infarction** Aya Kassim (Regensburg, Germany), Michael Arzt, Henrik Fox, Clemens Wiest, Stefan Buchner, Stefan Stadler
PA2998	**Obstructive sleep apnea and ischemic ECG changes in Mauritius** Ulf Nilsson (Umeå, Sweden), Anders Blomberg, Paul Zimmet, Jaakko Tuomilehto, Dianna Magliano, George Alberti, Sudhir Kowlessur, Jonathan Shaw, Abdonas Tamosiunas, Stefan Söderberg
PA2999	**Trajectories of daytime sleepiness post-ischemic stroke and TIA: a propensity score matching study** Sébastien Baillieul (Grenoble CEDEX 9, France), Renaud Tamisier, Bastien Gevaudan, Sarah Alexandre, Olivier Detante, Yves Dauvilliers, Claudio Bassetti, Jean-Louis Pépin, Sébastien Bailly
PA3000	**Hypoxic Burden in patients with Obstructive Sleep Apnoea: Correlation with sleepiness, polygraphic parameters and cardiovascular risk factors** Thais Beauperthuy Levy (Valencia, Spain), Grace Jacqueline Oscullo Yepez, Marina Inglés Azorin, Jose Gomez Olivas, Amina Bekki, Sergio Mompean Rodríguez, Alberto García Ortega, Miguel Ángel Martínez García
PA3001	**Predictors of nocturnal hypoxemic burden in patients with severe coronary artery disease** Michael Arzt (Regensburg, Germany), Verka Blagoeva, Maximilian Trum, Philipp Hegner, Bernhard Floerchinger, Daniele Camboni, Marcus Creutzenberg, Florian Zeman, Christof Schmid, Lars S Maier, Maria Tafelmaier
PA3002	**Time spent with saturation below 80% versus 90% as predictive values for cardiovascular risk in patients with obstructive sleep apnoea** Stefan Mihaicuta (Timisoara (Timis), Romania), Mariela Romina Birza, Stefan Frent, Alina Mirela Popa, Loredana Gligor, Martina Meszaros, Andras Bikov
PA3003	**Pharmacotherapeutic profile of sleep apnea patients** Stefan Mihaicuta (Timisoara (Timis), Romania), Mihai Udrescu, Adrian Militaru, Alexandru Topirceanu, Lucretia Udrescu
PA3004	**Sleep-wake cycle and the burden of comorbidities in patients with and without obstructive sleep apnoea** Salman Qayum (Manchester, United Kingdom), Laura Melissari, Balazs Csoma, Maria Mascareno Ponte, John Blaikley, Mahmoud Barakat, Andras Bikov
PA3005	**Impact of a sleep intervention program on anxiety and depression in patients with Chronic Musculoskeletal Pain** Sofia Romero Peralta (Madrid, Spain), Pilar Resano Barrio, Gloria Hernando Benito, Esther Solano Pérez, Carlota Coso, Laura Silgado Martínez, Juan Fernando Masa, Sonia López Monzoni, Leticia Álvarez Balado, María Esther Viejo Ayuso, Rosa Mediano San Andrés, María Castillo García, Olga Mediano
PA3006	**Effectiveness of pulmonary rehabilitation and oropharyngeal exercises in patients with moderate obstructive sleep apnea syndrome (OSAS)** Iana Andreieva (Zaporizhia, Ukraine), Oleksander Tokarenko, Dmitro Myrnyi
PA3007	**Efficacy of positional therapy in patients with positional obstructive sleep apnea: a retrospective study to investigate predictive factors in successful adaptation** Federica Bonavoglia (Voghera, Italy), Giulia Pennacchini, Angela Bellofiore, Carlo Magnoni, Marco Mantero
PA3008	**Short-term effectiveness of positional obstructive sleep apnoea therapy (SOMNIBEL®): An observational study** Ana Reyes Pardessus Otero (Barcelona, Spain), Paula Pujal Montaña, Inés Podzamczer Valls, Judit Gutiérrez Anguita, Marta Blanco Bejar, Marta Gutiérrez Rouco, Ana Mª Fortuna Gutiérrez, Mercedes Mayos Pérez
PA3009	**An audit to increase the efficiency of mandibular advancement splint (MAS) referrals to a hospital orthodontic department.** Matthew Holder (london, United Kingdom), Emma Weston, Guanhong Li, Lucy Davenport-Jones, Safoora Keshtgar

PA3010 **Use of the ExVent accessory with the O2Vent Optima oral appliance for the treatment of obstructive sleep apnea – A clinical trial**
Sat Sharma (Toronto (ON), Canada), Antonella Conflitti

PA3011 **Long-term cephalometric analyses during treatment with mandibular advancement device (MAD) in patients treated for OSA**
Jean-Baptiste Kerbrat (, France), Yamina Ibn Mejd, Marie Mercier, Elodie Aversenq, Florent Lavergne

PA3012 **Mandibular advancement device efficacy as a therapeutic alternative treatment in patients with OSA and CPAP intolerance after 3 years of follow up**
Sara Gonzalez Castro (Tres Cantos (Madrid), Spain), Laura Pozuelo Sánchez, Ignacio Jara Alonso, Andrea Pérez Figuera, Alfonso Muriel García, Alberto Carreño Alejandre, María Parra Jarque, Lorena Delgado Vera-Pinto, Aldara García Sánchez, Irene Cano Pumarega, Eva Mañas Baena

PS-7 in poster area Session 299 12:30 - 14:00

Poster session: Addressing exacerbations and pneumonia in airway diseases

Disease(s) : Airway diseases Respiratory critical care

Method(s) : General respiratory patient care Cell and molecular biology Epidemiology Respiratory intensive care Imaging

Tag(s) : Clinical

Chairs : Sachin Ananth (London, United Kingdom), Charlotte Suppli Ulrik (Virum, Denmark)

PA3013 **Increased risk of severe cardiovascular events following exacerbations of COPD: a multi-database cohort study**
Claus Vogelmeier (Marburg, Germany), Sami Simons, Edeltraut Garbe, Don Sin, Nathaniel Hawkins, Nicolas Manito, Salud Santos, Karin Polinder, Muriel Lobier, Paul Ekwaru, Nils Kossack, Ignacio Hernandez, Hana Mullerova, Arsh Randhawa, Lindy Van Burk, Joaquin Sanchez-Covisa, Kirsty Rhodes, Clementine Nordon, On Behalf Of The Exacos-Cv Study Group

PA3014 **Respiratory specialist visit before admission with a COPD exacerbation may affect management and outcomes.**
Ophir Freund (Tel Aviv, Israel), Boaz Tiran, Eyal Kleinhendler, Evgeni Gershman, Avishay Elis, Amir Bar-Shai

PA3015 **In-hospital antibiotic use for severe chronic obstructive pulmonary disease exacerbations: a retrospective observational study**
Lies Lahousse (Ghent, Belgium), Anna Vanoverschelde, Chloë Van Hoey, Franky Buyle, Nadia Den Blauwen, Pieter Depuydt, Eva Van Braeckel

PA3016 **FREQUENCY OF OCCURRENCE AND GENE-SEROTYPE CHARACTERISTIC OF STREPTOCOCCUS PNEUMONIAE IN COHORT OF PATIENTS WITH COPD.**
Rano Nalibaeva (Tashkent, Uzbekistan), Irina Liverko

PA3017 **Predictive factors for the occurrence of COPD exacerbations**
Meriam Nemleghi (Ariana, Tunisia), Hela Kamoun, Bochra Karaborni, Hadhemi Rejeb, Dorra Greb, Hajer Abdelghaffar, Ines Akrout, Hela Hassene, Leila Fekih, Hanene Smadhi, Mohamed Lamine Meghdiche

PA3018 **One-year mortality and readmission rate following hospitalization for acute exacerbation of chronic obstructive pulmonary disease based on the types of acute respiratory failure**
Hong-Joon Shin (Gwangju, Republic of Korea), Bo Gun Kho, Young-Ok Na, Jae-Kyeong Lee, Tae-Ok Kim, Yong-Soo Kwon, Yu-Il Kim, Sung-Chul Lim

PA3019 **Tapering courses of oral corticosteroids after hospital admission due to asthma exacerbation**
Richard Russell (Leicester, United Kingdom), Meghna Ray, Hamza Yaqub, Anna Murphy

PA3020 **Inhaled corticosteroid might not affect clinical outcomes of pneumonia in patients with chronic obstructive pulmonary disease**
Inso Cho (Wonju, Republic of Korea), Min-Seok Chang, Ji-Ho Lee

PA3021 **Inhaled versus systemic corticosteroids in COPD exacerbations: a meta-analysis.**
Efthymia Papadopoulou (Thessaloniki, Greece), Sulaiman Bin Safar, Ali Khalil, Ran Wang, Konstantinos Kostikas, Stavros Tryfon, Jørgen Vestbo, Alexander G. Mathioudakis

PA3022 **Better Response to Tanreqing Injection in Frequent Acute Exacerbation of Chronic Obstructive Pulmonary Disease (AECOPD) Patients—— Real-World Evidence from a Nationwide Registry (ACURE) Study**
Guohui Fan (Beijing, China), Dingyi Wang, Sinan Wu, Ting Yang

PA3023 **Systemic inflammation and exacerbations are associated with serum vitamin D levels in a cohort of patients with COPD, group E**
Apostolos Sioutas (Athens, Greece), Petra Kristina Jacobson, Hans Lennart Persson

PA3024 **Validation of an EMR derived algorithm to identify moderate asthma exacerbations in the UK**
Kieran J. Rothnie (London, United Kingdom), Robert Wood, Theo Tritton, Beade Numbere, Mark Small, Claire Trennery, Rosie Wild, David Slade, Shiyuan Zhang, Chris Compton, Gema Requena, Stephen Noorduyn, Afisi Ismaila, Emma Goodall

PA3025 **A prospective study of inhaled therapy prescribing, pMDI technique assessment, and inhaler concordance amongst hospitalised patients with airways disease**
Luanne Lai (Middlesbrough, United Kingdom), Bethany Cockerill, Emma Lunn, Reem Abdelgadir, George Antunes

PA3026 **COPD Patients Admitted to Hospital: A Missed Opportunity to Optimise Care?**
Maeve Savage (London, United Kingdom), Maeve Savage, Alicia Piwko, Alyson Tee, Karina Gukhool, Gráinne D'Ancona, Amy Dewar

PA3027 **Interpreting the significance of collagen-IV level changes in bronchoalveolar fluid in acute COPD exacerbation before and after tiotropium bromide treatment**
Mariana Kulynych-Miskiv (Galych, Ukraine), Mykola Ostrovskyy, Vasyl Miskiv, Iryna Savelikhina, Oleksandr Varunkiv, Kostiantyn Shvets, Alla Zuban, Nadiia Korzh, Olga Molodovets, Galyna Korzh

PA3028 **A Comparative Study to Evaluate the Efficacy/Outcome of Non-invasive Positive Pressure Ventilation through Mechanical Ventilator and conventional BiPAP in Patients of Hypercapnic Respiratory Failure**
Aman Ahuja (Vellore, India), Manoharlal Gupta, Sanjay Sogani

PA3029 **A Simple Clinical Risk Score (A2CDPS) for Predicting Mortality in Patients with AECOPD and Cardiovascular Diseases**
Jiarui Zhang (chengdu, China), Haixia Zhou, Qun Yi, Chen Zhou, Yuanming Luo, Hailong Wei, Huiqing Ge, Huiguo Liu, Jianchu Zhang, Xianhua Li, Pinhua Pan, Mengqiu Yi, Lina Cheng, Liang Liu

PA3030 **Medical errors in the use of antibacterial drugs of the cephalosporin group at the outpatient stage of the treatment of respiratory pathology**
Irina Liverko (Tashkent, Uzbekistan), Feruza Niyazova

PA3031 **Bronchodilators delivered via high-flow nasal cannula (HFNC) in adults with moderate-severe asthma exacerbation admitted to the emergency department (ED)**
Nico Colaianni Alfonso (Buenos Aires, Argentina), Guillermo Cesar Montiel, Ada Toledo, Mauro Castro-Sayat, Mariano Techera

PA3032 **Characteristics of exacerbations in patients with severe, uncontrolled asthma who received tezepelumab versus placebo**
Arnaud Bourdin (Montpellier Cedex 5, France), Michael E Wechsler, Christopher E Brightling, Stephanie Korn, Guy Brusselle, Liam G Heaney, Sandhia Ponnarambil, Gillian Hunter, Andrew W Lindsley, Christopher S Ambrose

PS-8 in poster area — Session 300 — 12:30 - 14:00

Poster session: New frontiers in chronic cough, a1-antitrypsin deficiency, and airway diseases endoscopy

Disease(s) : Airway diseases Interstitial lung diseases

Method(s) : Epidemiology General respiratory patient care Cell and molecular biology Endoscopy and interventional pulmonology Surgery Imaging Physiology Pulmonary function testing

Tag(s) : Clinical

Chairs : Gaetano Caramori (Messina (ME), Italy), Chair to be confirmed

PA3033 **Efficacy and safety of gefapixant for treatment of refractory or unexplained chronic cough: a systematic review and dose-response meta-analysis**
Elena Kum (Hamilton, Canada), Matthew Patel, Nermin Diab, Mustafaa Wahab, Dena Zeraatkar, Derek Chu, Gordon Guyatt, Paul O'Byrne, Imran Satia

PA3034 **Relevance of cough in patients with severe asthma: Analysis from the Korean Severe Asthma Registry (KoSAR) study**
Hwa Young Lee (Seoul, Republic of Korea), Youngsoo Lee, Seung-Eun Lee, Da Woon Sim, Noeul Kang, Byung-Jae Lee, Joo-Hee Kim, Sung-Yoon Kang, Ga-Young Ban, Young Hee Nam, Sujeong Kim, Chan Sun Park, So Ri Kim, Jin An, Byung Keun Kim, Heung-Woo Park, Taehoon Lee, Ji-Ho Lee, So-Young Park, Sook Young Lee, Hae-Sim Park, You Sook Cho, Sang-Heon Kim, Woo-Jung Song

PA3035 **Early cough severity changes over the first 4 weeks of treatment with gefapixant in two phase 3 studies**
Surinder S. Birring (London, United Kingdom), Peter Dicpinigaitis, Alyn Morice, Qing Li, Eduardo Urdaneta, George Philip, Carmen La Rosa

PA3036	**Demographics and subjective cough outcomes of guideline-based treatment in the McMaster Cough Clinic.** Mustafaa Wahab (Hamilton, Canada), Elena Kum, Nermin Diab, Danica Brister, Caitlin Obminski, Jennifer Wattie, Lesley Wiltshire, Karen Howie, Sue Beaudin, Kieran Killian, Jaclyn Smith, Gordon Guyatt, Roma Sehmi, Gail Gauvreau, Paul O'Byrne, Imran Satia
PA3037	**Cough responses to inhaled hypotonic solutions correlate with other measures of refractory chronic cough** James Wingfield Digby (Manchester (Greater Manchester), United Kingdom), Jenny King, Rachel Dockry, Maria Belvisi, Michael Wortley, Sara Bonvini, Eric Dubois, Shannon Galgani, Kimberley Holt, Shilpi Sen, Phil Turner, Paul Czyzyk, Paul Marsden, Jacky Smith
PA3038	**Does the type of Inhaler matter in cough variant or cough predominant asthma?** Marta Dąbrowska (Warszawa, Poland), Elzbieta M. Grabczak, Katarzyna Białek-Gosk, Dominika Siwik, Wojciech Apanasiewicz, Rafał Krenke
PA3039	**Patient-reported cough severity in women with chronic cough and stress urinary incontinence treated with gefapixant** Peter Dicpinigaitis (New York, United States), Surinder S. Birring, Linda Cardozo, Roger Dmochowski, Amna S. Afzal, Susan Lu, Allison Martin Nguyen, Ruji Yao, Carmen La Rosa, Paul Reyfman
PA3040	**Association of changes in self-reported cough severity and cough-induced stress urinary incontinence (phase 3b gefapixant trial)** Peter Dicpinigaitis (New York, United States), Surinder S. Birring, Linda Cardozo, Roger Dmochowski, Amna S. Afzal, Susan Lu, Allison Martin Nguyen, Ruji Yao, Carmen La Rosa, Paul Reyfman
PA3041	**Burden of disease in a phase 3b trial of gefapixant in women with chronic cough and stress urinary incontinence** Surinder S. Birring (London, United Kingdom), Linda Cardozo, Peter Dicpinigaitis, Roger Dmochowski, Amna S. Afzal, Susan Lu, Allison Martin Nguyen, Ruji Yao, Carmen La Rosa, Paul Reyfman
PA3042	**Surfactant found in cleaning products, 4-tert-octylphenol, causes airway sensory nerves firing and airway smooth muscle contraction** Billy Peter Baxter (London, United Kingdom), Sara J. Bonvini, Michael A. Wortley, Eric D. Dubuis, John J. Adcock, Fisnik Shala, James Bolaji, Mark A. Birrell, Teresa D. Tetley, Maria G. Belvisi
PA3043	**Adherence to inhaled corticosteroids in patients with asthma prior to and during the first 12 months of COVID-19 pandemic** Miguel Santibañez Margüello (Santander (Cantabria), Spain), Isabel Rodríguez, Juan Carlos.Com López-Caro, Silvia Gonzalez-Carranza, Maria Elena Cerrato, Maria Mar De Prado, Francisca Gomez-Molleda, Margarita Pinel, Maria Teresa Saiz, Carmen Fuentes, Juan Luis García-Rivero
PA3044	**Comparing neuronal phenotypes in two preclinical models of chronic lung disease** Jonathan H. A. Miles (Hatfield, United Kingdom), Sara J. Bonvini, Michael A. Wortley, James W. Pinkterton, Sabina Issop, Charlotte E. Healey, Mark A. Birrell, Maria G. Belvisi
PA3045	**Investigating the efficacy of a NaV1.7 channel blocker on airway sensory nerve activation and cough** Sara Jane Bonvini (London, United Kingdom), Fisnik Shala, John Adcock, Michael Wortley, Ranganath Gopalakrishnan, Stuart Francis, Ramon Hendrickx, Marianna Stamou, Linda Fröderberg Roth, Edward Humphries, Cristina Gardelli, Mark Birrell, Maria Belvisi
PA3046	**Assessment of clinical outcome after endoscopic lung volume reduction with one-way valves in emphysema patients and a very-low 6 minute walk test at baseline** Jacopo Saccomanno (Berlin, Germany), Lara Kilic, Thomas Sgarbossa, Martin Witzenrath, Franz Stanzel, Angelique Holland, Christian Grah, Wolfgang Gesierich, Andreas Gebhardt, Joachim H. Ficker, Stephan Eggeling, Stefan Andreas, Bernd Schmidt, Stephan Eisenmann, Björn Björn Schwick, Karl-Josef Franke, Andreas Fertl, Ralf-Harto Hübner
PA3047	**Manifestations and management of laryngoceles: A report of 10 cases** Rim Hammami (Sfax, Tunisia), Souha Kallel, Sirine Ayedi, Omar Walha, Najla Bahloul, Mohamed Amin Chaabouni, Sami Kammoun, Ilhem Charfeddine
PA3048	**Acquired tracheal stenosis: what to do?** Najla Bahloul (Sfax, Tunisia), Kallel Souha, kharrat rania, Ben Ayed Mariem, Salem Noura, Ayadi Syrine, Kammoun Sami, Charfeddine Ilhem
PA3049	**Smoking cessation improves lung function in heterozygote alpha-1 antitrypsin patients.** Dimitrios Toumpanakis (Athens, Greece), Nicholas S Hopkinson, Sally Meah, James P Allinson, Omar S Usmani
PA3050	**Treatment of emphysema in patients with very severe alpha-1-antitrypsin deficiency** Emily F. A. van 't Wout (Leiden, Netherlands), Ilaria Ferrarotti, Robert A. Stockley, Jan Stolk
PA3051	**Late Breaking Abstract - Neutrophilic inflammation associates with dysregulated iron metabolism in COPD.** James Baker (MANCHESTER, United Kingdom), Christopher Mccrae, Andrew Higham, Simon Lea, Dave Singh

PA3052	**Late Breaking Abstract - Validation of assays measuring functional alpha-1 antitrypsin (AAT) in patients with AAT deficiency (AATD)** Carson Veldstra (La Jolla, United States), Jason Zour, Varun Ramani, Carolina Bellizzi, Buket Onel, Liz Nolff, Brendan Eckelman

PS-9 in poster area Session 301 12:30 - 14:00

Poster session: Asthma and chronic obstructive pulmonary disease

Disease(s) : Airway diseases Interstitial lung diseases Sleep and breathing disorders

Method(s) : General respiratory patient care Epidemiology Physiology Public health Pulmonary rehabilitation Pulmonary function testing Imaging Cell and molecular biology

Tag(s) : Clinical

Chairs : Ian Douglas Pavord (Oxford (Oxfordshire), United Kingdom)

PA3053	**Severe Asthma and sleep disorders: a Severe Asthma Network Italy (SANI) analysis** Sebastian Ferri (Milan (MI), Italy), Enrico Heffler, Francesca Puggioni, Pierluigi Paggiaro, Francesco Blasi, Giorgio Walter Canonica
PA3054	**Risk factors for asthma exacerbations in adult-onset asthma: an analysis of GINA report** Lauri Nordman (Tampere, Finland), Iida Vähätalo, Leena Tuomisto, Onni Niemelä, Lauri Lehtimäki, Pinja Ilmarinen, Hannu Kankaanranta
PA3055	**Preserved ratio impaired spirometry (PRISm) as a spirometric pattern among Bulgarian asthma patients** Stoilka Koleva Mandadzhieva (Plovdiv, Bulgaria), Plamena Stoimenova
PA3056	**Isolated respiratory microbials and clinical characteristics in exacerbation of obese asthmatics: a multicenter study** Jung Hyun Chang (Seoul, Republic of Korea), Sojung Park, Yon Ju Ryu, Jin Hwa Lee, Yong-Il Hwang
PA3057	**Is impulse oscillometry useful in the diagnosis tracheobronchomalacia in patients with severe asthma?** Juan Fco. Nieves Salceda (Oviedo, Spain), Tamara Hermida Valverde, Marta Iscar Urrutia, Francisco Julian López González, Ana Isabel Enriquez Rodríguez, María Rodríguez Pericacho, Marta Sánchez Zeballos, Ángela Lanza Martínez, Laura Martínez Vega, Laura Abad Chamorro, Eduardo Sánchez Vázquez, Patricia Álvarez Álvarez, María Rodil Riera, Isabel Martínez González-Posada, Ramón Fernández Álvarez, Marta María García Clemente
PA3058	**Documentation of comorbidities, lifestyle factors and other asthma management details during scheduled asthma contacts in primary health care** Jaana Takala (Seinäjoki, Finland), Iida Vähätalo, Leena Tuomisto, Onni Niemelä, Pinja Ilmarinen, Hannu Kankaanranta
PA3059	**Nasal polyposis and asthma : clinical severity and recurrence** Rim Hammami (Sfax, Tunisia), Souha Kallel, Sirine Ayedi, Youssef Hbaieb, Najla Bahloul, Mohamed Amin Chaabouni, Sami Kammoun, Ilhem Charfeddine
PA3060	**Core function in adults with severe asthma and the relationship with dyspnoea and dysfunctional breathing** Joice Mara Oliveira (Londrina, Brazil), Vanessa L Clark, Karina Couto Furlanetto, Peter G Gibson, Vanessa L Mcdonald
PA3061	**Young asthmatics with exercise-induced bronchospasm have repercussions on cardiac autonomic modulation** Debora Carneiro de Mendonca (Vitória de Santo Antão, Brazil), Glívia Maria Barros Delmondes, Bruno Rafael Vieira Souza Silva, Polyanna Guerra Chaves Quirino, José Ângelo Rizzo, Edil Albuquerque Rodrigues Filho, Emanuel Sarinho, Camila Matias De Almeida Santos, Decio Medeiros, Emilia Chagas Costa, Alexandre Sérgio Silva, Breno Quintella Farah, Marco Aurélio De Valois Correia Júnior, Steve Hunter
PA3062	**Worsening of asthma control after recovery from mild to moderate COVID-19** Wang Chun Kwok (Hong Kong, Hong Kong), Terence Chi Chun Tam, David Chi Leung Lam, Jackson Ka Chun Leung, King Pui Florence Chan, Shung Kay Samuel Chan, Ka Yan Chiang, Mary Sau Man Ip, James Chung Man Ho
PA3063	**Overweight improves long-term survival in Japanese patients with asthma** Jun Sasaki (Kurume, Japan), Tomotaka Kawayama, Takashi Kinoshita, Chiyo Matama, Shingo Tsuneyoshi, Ryo Yano, Masanobu Matsuoka, Tomoaki Hoshino
PA3064	**Physical activity, sedentary behaviour and sleep quality of Sri Lankan adults with and without COPD: cross-sectional study** Akila Randika Jayamaha (Colombo, Sri Lanka), Chamilya H Perera, R. S. Karunatillake, A. Fernando, S. W. Wimalasekera, S. J. Singh, M. W. Orme
PA3065	**Hypercapnia increases airway resistance in patients with stable chronic obstructive pulmonary disease** Vitalii Kryvenko (Giessen, Germany), Masahiko Shigemura, Werner Seeger, Jacob. I. Sznajder, István Vadász

PA3066	**Differences in the consumption of health resources in patients with COPD exacerbations according to convivence with family members.** Stephany Ivonne Briones Alvarado (Madrid, Spain), Katiuska Herminia Liendo Martinez, Zichen Ji, Cristina Sánchez Fernández, Javier De Miguel-Diez, Luis Puente-Maestu
PA3067	**Microbial contamination of home nebulisers and its impact on Chronic Obstructive Pulmonary Disease(COPD) patients** Darshan Kumar Bajaj (Lucknow (Uttar Pradesh), India), Richa Tyagi, Jyoti Bajpai, R A S Kushwaha, Sapna Dixit, Ankit Kumar, Surya Kant, Neha Kumari, Ajay Kumar Verma
PA3068	**Co-morbidities and frailty in a single practice primary care COPD cohort in UK** Mukesh Singh (Sutton Coldfield (West Midlands), United Kingdom), Ketan Singh
PA3069	**Echocardiographic findings of Left Ventricular Function of stable Chronic Obstructive Pulmonary Disease (COPD) patients in a tertiary training hospital in Tacloban City** Bobby Jay Ochea (Tacloban City, Philippines), Paula Teresa Sta. Maria, Leila Diaz
PA3070	**The serial reversibility with salbutamol and glycopyrronium in obstructive airway disease (OAD)-an appraisal** Parthasarathi Bhattacharyya (Kolkata (West Bengal), India), Srijita Sen, Shuvam Ghosh, Debkanya Dey, Avishek Kar
PA3071	**Comparing Cardiovascular disease pattern among COPD patients with and without bronchiectasis.** Saadia Ashraf (Peshawar, Pakistan), Amber Ashraf, Yasir Imtiaz, Rukhsana Anwar, Hamza Asif, Hussain Ahmed
PA3072	**Late Breaking Abstract - Oral bacteria and rate of lung function decline in a general population** Christine Drengenes (Bergen, Norway), Hesham Amin, Ane Johannessen, Kristina Mathiesen, Cecilie Svanes, Randi Bertelsen

12:45-13:45
INDUSTRY LUNCHTIME SYMPOSIUM SEE PAGE 1

Studio (White) Session 307 13:15 - 14:50

Year in review: Clinical year in review
Management of respiratory diseases

Aims : to provide an overview of the most relevant advances in diagnosis and treatment of chronic obstructive pulmonary disease (COPD), obstructive sleep apnoea, interstitial lung disease (ILD), idiopathic pulmonary fibrosis, cystic fibrosis (CF) and COVID-19; to discuss recent findings indicating potential novel pathways that support COPD subphenotypes and evidence for potential new drugs and therapeutic approaches to treat COPD; to describe evidence about the prognosis of different sleep indices alongside different patient cluster responses to continuous positive airway pressure therapy in terms of major cardiovascular events in patients with obstructive sleep apnoea; to examine major developments in diagnostic imaging methods and techniques (including computed tomography, magnetic resonance imaging and ultrasound) for lung function assessment in patients with COPD, ILD, CF and COVID-19; to discuss recent evidence of the effectiveness of alternative pulmonary rehabilitation models for patients with chronic respiratory diseases.

Disease(s) : Airway diseases | Interstitial lung diseases | Sleep and breathing disorders

Method(s) : Cell and molecular biology | Imaging | Physiology

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Respiratory critical care physician, Pathologist, Patient, Physician in Pulmonary Training, Physiologist, Radiologist, Respiratory physiotherapist, Scientist (basic, translational), Thoracic oncologist, Thoracic surgeon, Respiratory therapist

Chairs : Ioannis Vogiatzis (Blyth, United Kingdom), Jellien Makonga-Braaksma (Woudenberg, Netherlands)

13:15	**Advances in sleep breathing disorders** Sophia E. Schiza (Heraklion, Greece)	**3095**
13:30	**Developments in diagnostic imaging** Andrea Aliverti (Milan, Italy)	**3096**
13:45	**Discussion and Q&A** All Speakers	**3097**
14:00	**Break** All Speakers	**3098**
14:05	**Novel therapeutic approaches for COPD** Florence Schleich (Liège, Belgium)	**3099**

14:20	**Alternative models of pulmonary rehabilitation** Thierry Troosters (Leuven, Belgium)	**3100**
14:35	**Discussion and Q&A** All Speakers	**3101**

Gold — Session 309 — 13:45 - 15:15

State of the art session: Respiratory infections

Management of respiratory infections: the future and the present

Aims : to provide an overview of the most interesting advances in the field of respiratory infections from a translational perspective; to cover different topics from the role of mucosal immunity in determining the clinical outcomes to the more advance research in term of prevention and treatment of respiratory infections.

Disease(s) : Respiratory infections

Tag(s) : Clinical

Target audience : Clinical researcher, Adult pulmonologist/Clinician, General practitioner, Physician in Pulmonary Training

Chairs : Eva Polverino (Barcelona, Spain), Onno Akkerman (Groningen, Netherlands), Graham H. Bothamley (London, United Kingdom)

13:45	**The role of mucosal immunity of the lung in respiratory infections** Paul G. Thomas (Memphis, United States)	**3103**
14:00	**The role of microbiome in chronic respiratory diseases: contribution to stability and to exacerbations** Sanjay Haresh Chotirmall (Singapore, Singapore)	**3104**
14:15	**Non-antibiotic strategies to fight respiratory infections** Christophe CARNOY (LILLE, France)	**3105**
14:30	**Update on vaccination to preventable respiratory infections** Tobias Welte (Hannover, Germany)	**3106**
14:45	**Discussion and Q&A** All Speakers	**3107**

Silver — Session 310 — 13:45 - 15:15

Journal session: From the Editor's Desk

NEJM/ERS joint session

Aims : The Editors of the ERJ and NEJM will introduce seminal papers that were published in the respective journal in 2023 which will then be presented by one of the authors.

Disease(s) : Airway diseases Respiratory infections

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Physician in Pulmonary Training

Chairs : Darren Taichman (Boston, United States), James D. Chalmers (Dundee (Angus), United Kingdom), Chair to be confirmed

13:45	**Dupilumab for COPD with Type 2 Inflammation Indicated by Eosinophil Counts** Surya Bhatt (Birmingham, United States)	**3108**
14:00	**Airway smooth muscle area to predict steroid responsiveness in COPD patients receiving triple therapy (HISTORIC): a randomized, placebo-controlled, double-blind, investigator-initiated trial** Daiana Stolz (Freiburg, Germany)	**3109**
14:15	**Hydrocortisone in Severe Community-Acquired Pneumonia** Speaker to be confirmed	**3110**
14:30	**Effects of Sotatercept on Haemodynamics and Right Heart Function: Analysis of STELLAR Trial** Marius M. Hoeper (Hannover, Germany)	**3111**
14:45	**Discussion and Q&A** All Speakers	**3112**

Coral 4+5 — Session 311 — 13:45 - 15:15

Hot topics: Current challenges in airways disease management

Aims : to provide an update on our knowledge of airway disease pathophysiology and its clinical implications; to present new paradigms and latest challenges that appear in the airway diseases management.

Disease(s) : Airway diseases

Method(s) : Epidemiology General respiratory patient care Physiology

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist, Scientist (basic, translational)

Chairs : Emer Kelly (Dublin 4, Ireland), Apostolos Bossios (Stockholm, Sweden), Omar S. Usmani (London, United Kingdom)

13:45	**Aiming for remission in asthma: is this a useful treatment goal?** Johann Christian Virchow (Rostock, Germany)	**3113**
14:00	**Evolution in GOLD: we cannot 'see' 'C' anymore and LABA/ICS are gone. Helpful or a hindrance?** Antonio Anzueto (SAN ANTONIO, United States)	**3114**
14:15	**Chronic rhinosinusitis: how do we diagnose and do we treat with biologics or surgery?** Mona Al-Ahmad (Kuwait, Kuwait)	**3115**
14:30	**Cough drugs and trials: truly novel medicines or is it all a placebo effect?** Marta Dąbrowska (Warszawa, Poland)	**3116**
14:45	**Discussion and Q&A** All Speakers	**3117**

Coral 3 — Session 312 — 13:45 - 15:15

State of the art session: Thoracic oncology

Aims : to present four selected hot topics that are currently in the scientific spotlight of thoracic oncology care; –to explain how pulmonologists can within their expertise treat and guide patients throughout the entire continuum of thoracic malignancies in close collaboration with other relevant disciplines and professions.

Disease(s) : Thoracic oncology

Method(s) : Cell and molecular biology Endoscopy and interventional pulmonology Imaging

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Respiratory critical care physician, Pathologist, Patient, Physician in Pulmonary Training, Radiologist, Respiratory physiotherapist, Thoracic oncologist, Thoracic surgeon, Respiratory therapist

Chairs : Marcello Migliore (Riyadh, Saudi Arabia), Andriani Charpidou (Athens, Greece), Joanna Chorostowska-Wynimko (Warsaw, Poland)

13:45	**New insights into tumour biology: digital pathology in lung cancer diagnostics** Speaker to be confirmed	**3118**
14:00	**It is not always malignant: a revisited systematic approach to diagnose the solitary pulmonary nodule** Torsten Gerriet Blum (Berlin, Germany)	**3119**
14:15	**Determining suspicious pleural findings: update on differential diagnostic strategies for pleural thickening and plaques** Najib M. Rahman (ABINGDON, United Kingdom)	**3120**
14:30	**Modern physiotherapy as an essential component of lung cancer and pleural mesothelioma care** Maria Koulopoulou (London, United Kingdom)	**3121**
14:45	**Discussion and Q&A** All Speakers	**3122**

Coral 1 — Session 313 — 13:45 - 15:15

Hot topics: Determinants of lung function trajectories and respiratory health from infancy to adulthood

Aims : to provide a life-course approach to respiratory health and lung function from birth to adulthood; to explain the prenatal and perinatal mechanisms involved in increased susceptibility priming of the lung for disease later in life; to summarise the current evidence on early-life risk factors that are associated with respiratory symptoms and lower lung function trajectories later in childhood; to present data from large respiratory cohort studies on tracking of lung function trajectories from school age to adulthood and the factors that define these trajectories; to discuss how this knowledge is translated into clinical practice, examining the role that paediatric clinical history is playing in managing respiratory health in adults.

Disease(s) : Airway diseases Paediatric respiratory diseases

Method(s) : Epidemiology Physiology Pulmonary function testing

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Paediatrician, Patient, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist, Scientist (basic, translational), Respiratory therapist

Chairs : Nicole Beydon (Paris, France), Marielle W.H. Pijnenburg (Rotterdam, Netherlands), Dirk Schramm (Düsseldorf, Germany)

13:45	**Lung function trajectories across the life-course: the looking forward/backward concept** Shyamali Dharmage (Carlton Victoria, Australia)	**3123**
14:00	**A mechanistic view into the early-life microenvironment and lung health** Niki Ubags (Epalinges, Switzerland)	**3124**
14:15	**Looking forward: is the lung growth trajectory fixed or can we intervene?** Erik Melén (Stockholm, Sweden)	**3125**
14:30	**Novel biomarkers of impaired lung function in clinical practice** Rosa Faner Canet (Barcelona, Spain)	**3126**
14:45	**Discussion and Q&A** All Speakers	**3127**

Coral 2 Session 314 13:45 - 15:15

Hot topics: The role of novel imaging modalities in sarcoidosis diagnosis and management

Aims : to discuss pivotal role of imaging in diagnosis and follow-up of patients with sarcoidosis; to point out the most appropriate imaging studies, stressing their advantages in various forms of sarcoidosis; to emphasise the important role of high-resolution computed tomography (HRCT) for detection and assessment of subtle parenchymal lesions and abnormalities of lung structures; to present role of HRCT and newly emerging photon counting CT (PCCT) in differentiating active inflammation from irreversible lung disease and fibrosis; to discuss use of magnetic resonance imaging (MRI) for evaluating the involvement of the myocardium in sarcoidosis, as well as increased interest in the role of diffusion-weighted MRI for the characterisation of mediastinal lymphadenopathy.

Disease(s) : Airway diseases Interstitial lung diseases Thoracic oncology

Method(s) : Epidemiology General respiratory patient care Imaging

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Respiratory critical care physician, Paediatrician, Pathologist, Physician in Pulmonary Training, Radiologist, Scientist (basic, translational), Thoracic oncologist, Thoracic surgeon

Chairs : Karen Moor (Rotterdam, Netherlands), Carlos Robalo Cordeiro (Coimbra, Portugal)

14:30	**Sarcoidosis: gaps in diagnosis and treatment** Paolo Spagnolo (Padova (PD), Italy)	**3131**
13:45	**Sarcoidosis: when is HRCT not enough and when should PCCT be performed?** Ádám Domonkos Tárnoki (Budapest, Hungary)	**3128**
14:00	**MR in sarcoidosis: is it reserved for cardiac sarcoidosis/assessment of cardiac involvement?** Speaker to be confirmed	**3129**
14:15	**Is there a role for PET CT in sarcoidosis?** Zsuzsanna Besenyi (Szeged, Hungary)	**3130**
14:45	**Discussion and Q&A** All Speakers	**3132**

Purple Session 315 13:45 - 15:15

Symposium: Kidney-lung crosstalk in pulmonary disease

Aims : to describe the pulmonary-renal link in physiology and pathological conditions. Ito discuss the interorgan crosstalk, which is emerging as a key underlying pathophysiologic mechanism in both systemic (sepsis and critical illness) and organ-specific (chronic obstructive pulmonary disease (COPD) and interstitial lung disease) illnesses; to emphasize the interaction between the kidneys and lungs in pathological conditions that has been recently identified; to explain the clinical and therapeutic consequences of the crosstalk between the kidneys and lungs.

Disease(s) : Airway diseases | Interstitial lung diseases | Respiratory critical care

Method(s) : Cell and molecular biology | Physiology

Tag(s) : Translational

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Medical Student, Respiratory critical care physician, Pathologist, Scientist (basic, translational)

Chairs : Silke Meiners (Sülfeld, Germany), Salman Siddiqui (London, United Kingdom), Julie Bastarache (Nashville, United States)

13:45	**The importance of lung-kidney crosstalk in homeostasis and disease** Wolfgang M. Kübler (Berlin, Germany)	**3133**
14:00	**Cellular and molecular mechanisms of kidney-lung crosstalk in acute lung injury** John Laffey (Galway, Ireland)	**3134**
14:15	**The endothelial cell in lung-kidney interactions in COPD** Francesca Polverino (Houston, United States)	**3135**
14:30	**The kidney and interstitial lung disease** Gabriela Riemekasten (Lübeck, Germany)	**3136**
14:45	**Discussion and Q&A** All Speakers	**3137**

14:00-14:45
INDUSTRY SKILLS LAB WORKSHOP SEE PAGE 1

Red 1+2 Session 318 14:15 - 15:30

Oral presentation: Genetic and biological mechanisms in chronic airway disease

Disease(s) : Airway diseases

Method(s) : General respiratory patient care | Cell and molecular biology | Endoscopy and interventional pulmonology | Physiology | Pulmonary function testing | Epidemiology

Tag(s) : Basic science, Translational

Chairs : Ian M. Adcock (London, United Kingdom)

OA3143	**Late Breaking Abstract - Dysanapsis Genetic Risk and Chronic Obstructive Pulmonary Disease Mortality** Leina Kingdom (Montreal, Canada), Catherine Debban, Yohan Bossé, Michael Cho, Qingling Duan, Jamie Engert, Ani Manichaikul, Benjamin M Smith
OA3144	**Genetic screening for cerebellar ataxia with neuropathy and bilateral vestibular areflexia syndrome (CANVAS) in patients with chronic cough. Preliminary analysis** Esther Palones (Barcelona, Spain), Elena Curto Sánchez, Lidia Gonzalez Quereda, Pia Gallano Petit, Luis Querol Gutiérrez, Federico Bertoletti, Maria Jose Rodriguez Fernandez, Alba Segarra Casas, Astrid Crespo Lessmann
OA3145	**Breath metabolomics to monitor the response to CFTR modulators in adults with cystic fibrosis** Emmanuelle Bardin (Paris, France), Helene Salvator, Camille Roquencourt, Isabelle Sermet-Gaudelus, Dominique Grenet, Philippe Devillier, Stanislas Grassin Delyle
OA3146	**Augmentation therapy for severe alpha-1 antitrypsin deficiency improves survival but is decoupled from FEV1 decline** Daniel Fraughen (County Dublin, Ireland), Auyon J Ghosh, Brian D Hobbs, Tobias Meischl, Noriane A Sievi, Karin Schmid-Scherzer, Louise Clarke, Geraldine Kelly, Malcolm Herron, Suzanne Roche, Ronan C Heeney, Lameese Alhaddah, Emma Julia Leacy, Lasya Kanchi, Oliver J Mcelvaney, Cedric Gunaratnam, Georg-Christian Funk, Christian F Clarenbach, Tomás P Carroll, Noel Gerard Mcelvaney
OA3147	**Patients with chronic airway disease: Insights from a sputum proteome analysis** Stefanie Graeter (Bern, Switzerland), Luigi Capriotti, Anna Schnell, Moritz Saxenhofer, Samantha Chan, Megan Rees, Jo Douglass, Alastair Steward, Carlos Roca, Ilka Schulze, Alexander Schaub
OA3148	**Serum YKL-40 as a biomarker for predicting loss of lung function and neutrophilic airway inflammation in asthma, COPD and asthma-COPD overlap** Yasuhito Suzuki (Fukushima-City, Japan), Junpei Saito, Mami Rikimaru, Atsuro Fukuhara, Tomoyoshi Lee, Ryuki Yamada, Riko Sato, Takumi Onuma, Hikaru Tomita, Mikako Saito, Natsumi Watanabe, Takaya Kawamata, Ryuichi Togawa, Julia Morimoto, Yuki Sato, Hiroyuki Minemura, Takefumi Nikaido, Naoko Fukuhara, Kenya Kanazawa, Yoshinori Tanino, Yoko Shibata

OA3149	**Airway extracellular copper concentrations increase with age and are associated with oxidative stress independent of disease state.** Andreas Frølich (Umeå, Sweden), Rosamund E. Dove, Annelie F. Behndig, Ian S. Mudway, Anders Blomberg
OA3150	**A novel mice model investigating the effect of low-dose PM2.5 exposure on lung health** min feng (Sidney, Australia), Brian Oliver, Hui Chen
OA3151	**Ciliary dyskinesia is not affected by chronic mucus hypersecretion in severe asthma** Céline Kempeneers (Liège, Belgium), Romane Bonhiver, Noëmie Bricmont, Maud Pirotte, Sara Engelskirchen, Catherine Moermans, Doriane Calmes, Françoise Guissard, Lionel Benchimol, Marie-Christine Seghaye, Renaud Louis, Florence Schleich
OA3152	**Effect of Mepolizumab on airways remodeling in patients with late-onset severe eosinophilic asthma and fixed obstruction (preliminary data of the MESILICO study)** Kalliopi Domvri (Thessaloniki, Greece), Ioanna Tsiouprou, Petros Bakakos, Nikoleta Rovina, Paschalis Stiropoulos, Athanasios Voulgaris, Konstantinos Katsoulis, Maria Kipourou, Paraskevi Katsaounou, Sofia Karachrysafi, Pinelopi Anastasiadou, Theodora Papamitsou, Antonia Sioga, Nikoleta Pasteli, Styliani Papaemmanouil, Angeliki Cheva, Stavros Tryfon, Evangelia Fouka, Despoina Papakosta, Konstantinos Porpodis
OA3153	**Discussion and Q&A** All Speakers

Brown 3 Session 319 14:15 - 15:30

Oral presentation: Basic mechanisms in pulmonary hypertension

Disease(s) : Pulmonary vascular diseases Interstitial lung diseases

Method(s) : Epidemiology Cell and molecular biology Imaging

Tag(s) : Basic science, Translational

Chairs : Christina Eichstaedt (Heidelberg, Germany), Christophe Guignabert (Paris, France)

OA3154	**Late Breaking Abstract - Use of multi-omics to uncover novel druggable targets of SOX17 in PAH** Eleni Vasilaki (London, United Kingdom), Rachel Walters, Yukyee Wu, Martin Wilkins, Ines Cebola, Christopher Rhodes
OA3155	**Unpicking the Effects of General Control Non-depressible 2 (GCN2) Deficiency in Pulmonary Veno-Occlusive Disease** Max Schwiening (CAMBRIDGE, United Kingdom), Stephen Moore, Reshma Nibhani, Alexi Crosby, Mark Southwood, Ben Dunmore, Nick Morrell, Stefan Marciniak, Elaine Soon
OA3156	**Empagliflozin attenuates hypoxia-induced pulmonary arterial remodeling via inhibiting NOTCH3 signaling pathway** Celina De Almeida (Taoyuan, Taiwan), Ying-Ju Lai
OA3157	**Proteomic analysis of biomarkers associated with long-term survival in systemic sclerosis-related group 3 pulmonary hypertension in the HYPID study** Valentine Mismetti (Saint Etienne, France), Xavier Delavenne, David Montani, Souad Bezzeghoud, Olivier Delezay, Sophie Hodin, David Launay, Sylvain Marchand-Adam, Hilario Nunes, Edouard Ollier, Jean Pastré, Sébastien Quetant, Martine Reynaud-Gaubert, Julie Traclet, Sabrina Zeghmar, Laurent Bertoletti, Vincent Cottin
OA3158	**An endothelial cell subtype is linked with altered Rho-kinase (ROCK)-associated pathways in PAH** Rui Benfeitas (Stockholm, Sweden), Fabrizio Facchinetti, Mirco Govoni
OA3159	**Quantitative evaluation of pulmonary arteriolar structural changes in pulmonary arterial hypertension** Gitte Aerts (Leuven, Belgium), Lynn Willems*, Astrid Vermaut, Vincent Geudens, Hanne Beeckmans, Joline Michiels, Ruben Celen, Charlotte Hooft, Pieterjan Kerckhof, Janne Kaes, Janne Verhaegen, Yousry Mohamady, Laura Hardy, Jan Van Slambrouck, Birger Tielemans, Birgit Weynand, Aernaut Luttun, Catharina Belge, Tom Verbelen, Geert M. Verleden, Greetje Vande Velde, Laurens J. Ceulemans, Robin Vos, Ghislaine Gayan-Ramirez, Marion Delcroix, Rozenn Quarck, Bart M. Vanaudenaerde, Laurent Godinas
OA3160	**Characteristics and outcomes of patients developing pulmonary hypertension associated with proteasome inhibitors** Julien GRYNBLAT (Paris, France), Charles Khouri, Marie-Camille Chaumais, Laurent Savale, Alex Hlavaty, Xavier Jais, Mithum Kularatne, Gérald Simonneau, Olivier Sitbon, Frederic Perros, Marc Humbert, David Montani
OA3161	**Identification of AURKB as a new actor in vascular remodeling in PAH** Sarah-Eve Lemay (Quebec, Canada), Mélanie Sauvaget, Manon Mougin, Reem El Kabbout, Sandra Martineau, Sandra Breuils-Bonnet, Alice Bourgeois, Mabrouka Salem, Charlie Théberge, François Potus, Steeve Provencher, Olivier Boucherat, Sébastien Bonnet
OA3162	**Low Systemic Exposure With Targeted Administration of AER-901 (Inhaled Imatinib): Results of a Phase 1 Clinical Trial** Gary Burgess (Canterbury (Kent), United Kingdom), Dawn Edgerton, Nolan Wood, Michelle Widmann, Joshua Ziel

OA3163	**Neuroinflammation mediates cognitive dysfunction in pulmonary hypertension** Ping Yuan (Shanghai, China), Xiaoyi Hu, Lan Wang, Jinming Liu, Yi Wang, Xiaohuan Xia, Jialin Zheng
OA3164	**Discussion and Q&A** All Speakers

Brown 1+2 Session 320 14:15 - 15:30

Oral presentation: Nursing role in global respiratory health

Disease(s) : Airway diseases Interstitial lung diseases

Method(s) : General respiratory patient care Epidemiology Pulmonary rehabilitation Palliative care Public health

Tag(s) : Clinical

Chairs : José Miguel dos Santos Castro Padilha (Porto, Portugal), Rui Pedro Marques da Silva (Sobreira – Paredes, Portugal)

OA3165	**Late Breaking Abstract - Preferences for asthma decision-making: Focus groups with low-income and racial and ethnic minority adults in safety-net primary care settings** Maureen George (New York, United States), Samrawit Solomon, Amy Mcmenamin, Gordon Zhang, Carolina Lopez, Marija Zeremski, Andrea Cassells, Jonathan N. Tobin, Jean-Marie Bruzzese, Emily Dimango, Alanna E. Kavanaugh, Rachel Shelton
OA3166	**Use of non-invasive ventilation in the palliative care of patients with chronic obstructive pulmonary disease: a scoping review** Simen Alexander Steindal (Oslo, Norway), Mari O Ohnstad, Kristin Heggdal, Marte-Marie Wallander Karlsen, Hanne Aagaard, Kari Sørensen, Vivi L Christensen, Kristin Hofsø, Monica E Kvande, Nina M Kynø, Anne Kathrine Langerud, Brith Andresen, Marie H Larsen
OA3167	**The extent and characterization of underdiagnosis and misclassification of COPD in Sweden** Malin Axelsson (Malmö, Sweden), Helena Backman, Bright I. Nwaru, Caroline Stridsman, Lowie Vanfleteren, Linnea Hedman, Päivi Piirilä, Juuso Jalasto, Arnulf Langhammer, Hannu Kankaanranta, Madeleine Rådinger, Linda Ekerljung, Eva Rönmark, Anne Lindberg
OA3168	**Assessing the impact of a dedicated advanced nurse practitioner on a complex ILD service** Lindsay Brown (Blessington (Co. Wicklow), Ireland), Fiona Hickey, Omaima Omar, Emmet Mcgrath, Michael P Keane, Cormac Mccarthy
OA3169	**Modifiable factors of uncontrolled asthma – the crucial role of the asthma nurse** Maja Zrnić (Golnik, Slovenia), Mariana Rezelj, Tea Mocnik
OA3170	**Do symptoms of anxiety correlate with lung function (FEV1) or age in patients with COPD? Results from a randomised controlled trial (RCT) of cognitive behavioural therapy (CBT) undertaken by respiratory nurses.** Karen Heslop-Marshall (Newcastle upon Tyne (Tyne and Wear), United Kingdom), Christine Baker, Julia Newton, Carlos Echevarria, Michelle Jambon, Joanne Gray, Kim Pearce, Graham Burns, Anthony De Souza
OA3171	**Effectiveness of a maintenance PR programme: Preliminary results os the Rehab2Life study** Liliana Silva (Matosinhos, Portugal), Tiago Maricoto, Angela Mota, Lara Lemos, Mariana Santos, Inês Azevedo, Patrício Costa, José Miguel Padilha
OA3172	**A standardized language for respiratory nursing care: mixed method research in Spain. Project awarded by SEPAR** Silvia Arranz Alonso (Madrid, Spain), Sonia Parra Cordero
OA3173	**Existing respiratory nursing curriculum, frameworks, and other documentation relevant to respiratory nursing education: A Scoping Review** Bridget Murray (DUBLIN, Ireland), Sheree Smith, Nicola Roberts, Miguel José Padilha, Andreja Šajnić, Georgia Narsavage, Helle Marie Christensen, Malin Axelsson, Hernández Carme, Betty Poot, Carol Kelly
OA3174	**International Coalition of Respiratory Nurses supports global initiative in raising awareness of Asthma and COPD in low- and middle-income countries** Andreja Sajnic (Zagreb, Croatia), Georgia Narsavage, Phyllis Murphie, Carme Hernández, Malin Axelsson, José Miguel Padilha, Mariana Paula Rezelj, Carol Stonham, Karen Heslop-Marshall
OA3175	**Discussion and Q&A** All Speakers

Blue 1+2 Session 321 14:15 - 15:30

Oral presentation: Remote monitoring of respiratory patients

Disease(s) : Airway diseases Interstitial lung diseases

Method(s) : General respiratory patient care Epidemiology Pulmonary function testing

Tag(s) : Clinical

Chairs : David Drummond (Paris, France), Hilary Pinnock (Edinburgh (Edinburgh), United Kingdom)

OA3176	**Late Breaking Abstract - Exploring technology preferences and reliever inhaler use in adults with asthma – survey results with behavioural segmentation analysis** Naomi Bennett-Steele (Birmingham, United Kingdom), Andrew Cumella, Anna Francis, Samantha Walker
OA3177	**Late Breaking Abstract - Making therapy behaviour transparent by using an app and a Bluetooth® enabled electronic nebulizer, was found to increase therapy adherence.** David Fiebig (Starnberg, Germany), Philippine Reimpell, Serena Mautone, Andreas Schmitt, Carola Fuchs
OA3178	**Usefulness of NIV telemonitoring versus usual follow-up to reduce hypoventilation (eVENT – eHealth and VENTilation - randomized trial)** Arnaud Prigent (Rennes, France), Joëlle Texereau, Claude Schmitz, Cécile Ropars, Jean-Marc Degreef, Marion Teulier, Christian Darne, Franck Lavergne, Capucine Morelot-Panzini
OA3179	**Remote MONITORing of patients with chronic obstructive pulmonary disease using a tablet system. A randomized crossover study on quality of life measurements** Malte Frerichs (Mölndal, Sweden), Kristina Andelid, Anders Andersson, Monika Crona, Huiqi Li, Lowie E.G.W. Vanfleteren
OA3180	**Virtual ward (VW) in respiratory medicine - a fleeting premise or a sustainable enterprise?** Sivakamasundari Narayani Ampikaipakan (Norwich, United Kingdom), Claire Beard, Katherine Cooper, Rose Cary, Michael Waters, Mark Pasteur
OA3181	**Electronic monitoring with a digital smart spacer to support personalized inhaler use education in patients with asthma: the randomized controlled OUTERSPACE feasibility trial** Boudewijn Dierick (Groningen, Netherlands), Maria Achterbosch, Amber Eikholt, Sandra Been-Buck, Titia Klemmeier, Susanne Van De Hei, Paul Hagedoorn, Huib Kerstjens, Janwillem Kocks, Job Van Boven
OA3182	**Variability in home spirometry is associated with dyspnoea in interstitial lung disease** Iain Stewart (London, United Kingdom), Ankesh Gandhi, Jia Wen, Colin Edwards, Rebecca Borton, Steve Jones, Fasihul Khan, Gisli Jenkins
OA3183	**Clinical validation of real-world walking cadence in patients with COPD** Laura Delgado Ortiz (Barcelona, Spain), Saverio Ranciati, Ane Arbillaga-Etxarri, Eva Balcells, Joren Buekers, Heleen Demeyer, Anja Frei, Elena Gimeno-Santos, Nicholas S. Hopkinson, Corina De Jong, Niklas Karlsson, Luca Palmerini, Michael I. Polkey, Milo A. Puhan, Roberto Rabinovich, Diego Rodríguez Chiaradia, Robert Rodriguez-Roisin, Pere Toran, Ioannis Vogiatzis, Henrik Watz, Thierry Troosters, Judith Garcia-Aymerich
OA3184	**Anticipated barriers and facilitators for implementing smart inhalers in asthma medication adherence management: a qualitative study** Susanne J. van de Hei (Groningen, Netherlands), Nilouq Stoker, Bertine M.J. Flokstra-De Blok, Charlotte C. Poot, Eline Meijer, Maarten J. Postma, Niels H. Chavannes, Janwillem W.H. Kocks, Job F.M. van Boven
OA3185	**Laboratory and free-living gait performance in adults with COPD and healthy controls** Joren Buekers (Barcelona, Spain), Dimitrios Megaritis, Sarah Koch, Lisa Alcock, Clemens Becker, Stefano Bertuletti, Tecla Bonci, Philip Brown, Ellen Buckley, Sara C. Buttery, Brian Caulfield, Andrea Cereatti, Nikolaos Chynkiamis, Heleen Demeyer, Carlos Echevarria, Anja Frei, Clint Hansen, Jeffrey Hausdorff, Nicholas S. Hopkinson, Emily Hume, Walter Maetzler, Encarna M. Micó-Amigo, Luca Palmerini, Francesca Salis, Kirsty Scott, Thierry Troosters, Henrik Watz, Lynn Rochester, Silvia Del Din, Ioannis Vogiatzis, Judith Garcia-Aymerich
OA3186	**Discussion and Q&A** All Speakers

Yellow 1+2+3 Session 322 14:15 - 15:30

Oral presentation: The future of non-invasive ventilation: new applications, selection of patients and the value of advanced monitoring

Disease(s) : Sleep and breathing disorders Airway diseases Respiratory critical care Thoracic oncology

Method(s) : Physiology General respiratory patient care Respiratory intensive care

Tag(s) : Clinical

Chairs : Marieke L. Duiverman (Groningen, Netherlands), Claudia Crimi (Catania (CT), Italy)

OA3187	**Late Breaking Abstract - Efficacy of non-invasive ventilation with expiratory washout in stable COPD patients: A randomised cross-over pilot.** Ruth Semprini (Harbour View (Lower Hutt), New Zealand), Stacey Kung, Alex Semprini, Jessica Fogarin, Sascha Zoellner, Richard Beasley, Louis Kirton, Karen Oldfield, Marjan Doppen, Allie Eathorne, Georgia Hoggarth, Zamir Joya, Sajida Ismatullah
OA3188	**Comparison of Extubation Success between Prophylactic Helmet NIV and Facemask NIV in High-Risk Postextubation Patients; A Randomized Controlled Trial** Napat Jirawat (Bangkok, Thailand), Napplika Kongpolprom
OA3189	**The effect of prone position and helmet CPAP on ventilatory pattern** Antonella LoMauro (Milano (MI), Italy), Annalaura Deluca, Paolo Scarpazza, Andrea Aliverti
OA3190	**Telemonitoring of home non-invasive ventilation (NIV) patients: Friend or foe** Clara Bianquis (Saint-Prix, France), Kinan El Husseini, Adrien Kerfourn, Emeline Fresnel, Jean-Christian Borel, Antoine Cuvelier, Johan Dupuis, Frédéric Gagnadoux, Jésus Gonzales, Jean-François Muir, Patrick Brian Murphy, Arnaud Prigent, Claudio Anibal Rabec, Wojciech Trzepizur, João Carlos Winck, Maxime Patout
OA3191	**Pixellating ventilation: which signals are required?** Anna Ridgers (Heidelberg, Australia), Warren Ruehland, Liam M Hannan, David J Berlowitz, Mark E Howard
OA3192	**Continuous and bilevel positive airway pressure to reduce breathing amplitudes in patients undergoing radiotherapy** Judith Elshof (Groningen, Netherlands), Corry M. Steenstra, Peter W. Dijkstra, Anne G.H. Niezink, Robin Wijsman, Marieke L. Duiverman
OA3193	**Hypoxic challenge test during treatment with non-invasive ventilation: a surmountable challenge** Alison Armstrong (Newcastle upon Tyne (Tyne and Wear), United Kingdom), Ben Messer
OA3194	**Health related quality of life of two phenotypes of COPD patients under home NIV** Tim Raveling (Groningen, Netherlands), Peter Wijkstra, Marieke Duiverman
OA3195	**Benefits of inspiratory muscle training in Myotonic Dystrophy: a pilot study** Charlotte Seijger (Heerenveen, Netherlands), Marieke Duiverman, Peter Wijkstra
OA3196	**Discussion and Q&A** All Speakers

Amber 1+2 Session 323 14:30 - 16:50

Skills workshop: SW6 Interpretation of cardiopulmonary exercise tests

Tips and pitfalls in cardiopulmonary exercise testing assessment

Aims : to identify typical patterns of responses to cardiopulmonary exercise testing and to demonstrate how to discriminate these from anomalous response profiles, which can cause misinterpretation of test results.

Disease(s) : Airway diseases | Interstitial lung diseases | Pulmonary vascular diseases

Method(s) : Physiology | Pulmonary function testing | Pulmonary rehabilitation

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Paediatrician, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist, Respiratory therapist

Chairs : Pierantonio Laveneziana (Paris, France)

14:30	**Introduction** All Speakers	**3197**
14:30	**Relationship between oxygen uptake and work rate** Paolo Palange (Rome, Italy)	**3198**
14:30	**Anaerobic/lactate threshold** William Stringer (Long Beach, United States)	**3199**
14:30	**Ventilatory efficiency** J. Alberto Neder (Kingston (ON), Canada)	**3200**
14:30	**Breathing pattern and dynamic hyperinflation** Michele Schaeffer (Leuven, Belgium)	**3201**

Amber 3+4 Session 324 14:30 - 16:50

Skills workshop: SW9 Practicalities of spirometry and whole-body plethysmography

Aims : to help attendees gain the technical expertise needed to perform spirometry and whole-body plethysmography according to both best practice and the latest recommendations that are supported by experts in the field; to explain the measurements of spirometry, static lung volumes, airway resistance and resistance-volume loops via whole-body plethysmography; to discuss the technical aspects of the body box, standardisation of test performance, reporting and case study interpretation.

Disease(s) : Airway diseases Paediatric respiratory diseases

Method(s) : Physiology Pulmonary function testing

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Medical Student, Nurse, Paediatrician, Physician in Pulmonary Training, Physiologist

Chairs : Karl Sylvester (Cambridge (Cambridgeshire), United Kingdom)

14:30	**Introduction** All Speakers	**3202**
14:30	**Performing spirometry** Matthew Rutter (Cambridge (Cambridgeshire), United Kingdom)	**3203**
14:30	**Standardised static lung volume measurement using whole-body plethysmography** Frans H.C. De Jongh (Enschede, Netherlands)	**3204**
14:30	**Measurement of airway resistance and resistance-volume loops using whole-body plethysmography** Rachel Ong-Salvador (Amsterdam, Netherlands)	**3205**
14:30	**Reporting and interpretation of case studies** Gregory King (Sydney (NSW), Australia)	**3206**

Gold Session 325 15:30 - 17:00

Clinical cases: Lungs on fire: respiratory infections?

Aims : to present real-life clinical cases as part of an interactive session. Cases vary in difficulty and may require differential diagnosis. This session is led by two discussants who will present cases submitted by respiratory health professionals to a panel of experts and will drive the discussion in a step-by-step approach, encouraging dialogue and reflection among the panel, who have no prior knowledge of these cases. As the cases are discussed, the discussants will invite the audience to participate in determining which diagnostic and therapeutic options would be best for these patients.

Disease(s) : Respiratory infections

Chairs : Eva Polverino (Barcelona, Spain), Onno Akkerman (Groningen, Netherlands), Graham H. Bothamley (London, United Kingdom)

Discussants : Daiana Stolz (Freiburg, Germany), James D. Chalmers (Dundee (Angus), United Kingdom)

15:30	**Case 1 incl. panel discussion and Q&A - Author: T. Ejaz (Pakistan)** Daiana Stolz (Freiburg, Germany)	**3207**
15:52	**Case 2 incl. panel discussion and Q&A - Author: H. Liyanage (Sri Lanka)** James D. Chalmers (Dundee (Angus), United Kingdom)	**3208**
16:14	**Case 3 incl. panel discussion and Q&A - Author: K. Vijayasaratha (United Kingdom)** Daiana Stolz (Freiburg, Germany)	**3209**
16:36	**Case 4 incl. panel discussion and Q&A - Author: R. Saleh (Saudi Arabia)** James D. Chalmers (Dundee (Angus), United Kingdom)	**3210**

Silver Session 326 15:30 - 17:00

Clinical trials session: ALERT 2: organisation of care

Digital care, practical strategies, and care pathways

Chairs : Darren Taichman (Boston, United States), Chair to be confirmed

Discussants : Frits M.E. Franssen (Horn, Netherlands), Discussant to be confirmed

15:30	**RCT3211**
15:37	**RCT3212**

15:44		**RCT3213**
15:51	**Wrap-up by discussant and discussion** Speaker to be confirmed	**RCT3214**
16:13		**RCT3215**
16:20		**RCT3216**
16:27		**RCT3217**
16:34	**Wrap-up by discussant and discussion** Frits M.E. Franssen (Horn, Netherlands)	**RCT3218**
16:56	**Closing remarks** All Speakers	**RCT3219**

Coral 4+5 Session 327 15:30 - 17:00

Hot topics: Precision medicine in airways disease: where is the science going and what we can offer in the clinic?

Aims : to update European Respiratory Society members on the role of precision medicine in airway diseases.

Disease(s) : Airway diseases

Method(s) : Epidemiology Physiology

Tag(s) : Translational , Basic science

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Respiratory critical care physician, Patient, Physician in Pulmonary Training

Chairs : Emer Kelly (Dublin 4, Ireland), Apostolos Bossios (Stockholm, Sweden), Omar S. Usmani (London, United Kingdom)

15:30	**Early diagnostics in airway disease: will omics and cellular signatures really help our patients?** Sanjay Haresh Chotirmall (Singapore, Singapore)	**3220**
15:45	**Multiple novel classifications of COPD (subtypes, aetiotypes, pre-COPD, early-COPD): are these helpful in offering better care for patients?** Shyamali Dharmage (Carlton Victoria, Australia)	**3221**
16:00	**Non-T2 asthma, the unmet need: molecular phenotyping to identify pathways for patient benefit. Are we getting any closer?** Richard Costello (Dublin 9, Ireland)	**3222**
16:15	**Treatable traits in bronchiectasis: will they help in bedside treatments for our patients?** Clémence Martin (Paris, France)	**3223**
16:30	**Discussion and Q&A** All Speakers	**3224**

Coral 3 Session 328 15:30 - 17:00

Clinical cases: Lungs on fire: lung cancer?

Aims : to present real-life clinical cases as part of an interactive session. Cases vary in difficulty and may require differential diagnosis. This session is led by two discussants who will present cases submitted by respiratory health professionals to a panel of experts and will drive the discussion in a step-by-step approach, encouraging dialogue and reflection among the panel, who have no prior knowledge of these cases. As the cases are discussed, the discussants will invite the audience to participate in determining which diagnostic and therapeutic options would be best for these patients.

Disease(s) : Thoracic oncology Airway diseases Interstitial lung diseases

Chairs : Marcello Migliore (Riyadh, Saudi Arabia), Andriani Charpidou (Athens, Greece), Joanna Chorostowska-Wynimko (Warsaw, Poland)

Discussants : Georgia Hardavella (Athens, Greece), Torsten Gerriet Blum (Berlin, Germany)

15:30	**Case 1 incl. panel discussion and Q&A - Author: A. P. Cunha Craveiro (Portugal)** Georgia Hardavella (Athens, Greece)	**3225**
15:52	**Case 2 incl. panel discussion and Q&A - Author: N. A. Villamagua Arias (Spain)** Torsten Gerriet Blum (Berlin, Germany)	**3226**

16:14	**Case 3 incl. panel discussion and Q&A - Author: A. Sturm (Switzerland)** Georgia Hardavella (Athens, Greece)	**3227**
16:36	**Case 4 incl. panel discussion and Q&A - Author: M. Bordicchia (Italy)** Torsten Gerriet Blum (Berlin, Germany)	**3228**

Coral 1 Session 329 15:30 - 17:00

Symposium: Addressing disparities and deprivation in the care of children with lung diseases: a world view

Aims : to address disparities and strategies to achieve equity in asthma care globally; to discuss global differences in asthma prevalence, asthma management, access to healthcare and affordability of asthma medications; to define solutions to gaps in asthma care in low-resource settings; to discuss potential social injustice and disparities and strategies to achieve equity in middle- and high-income countries.; to address issues of diagnostics and asthma care in these lower-resourced settings as well as key research priorities that may improve outcomes globally.

Disease(s) : Airway diseases Paediatric respiratory diseases

Method(s) : Epidemiology General respiratory patient care Public health

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Paediatrician, Physician in Pulmonary Training, Journalist

Chairs : Nicole Beydon (Paris, France), Marielle W.H. Pijnenburg (Rotterdam, Netherlands), Dirk Schramm (Düsseldorf, Germany)

15:30	**Access to asthma medication across the life-course: what we have learnt from global data** Luis Garcia-Marcos Alvarez (El Palmar (Murcia), Spain)	**3229**
15:45	**Sub-Saharan Africa: impact of deprivation on respiratory infections and lung health outcomes in chronic respiratory diseases** Refiloe Masekela (Durban, South Africa)	**3230**
16:00	**Disparities in communities: how do we make the equation more equitable?** Wanda Phipatanakul (Hopkintkn, United States)	**3231**
16:15	**Eastern Europe: deprivation in the face of war and access to healthcare** Oleksandr Mazulov (Vinnytsia, Ukraine)	**3232**
16:30	**Discussion and Q&A** All Speakers	**3233**

Coral 2 Session 330 15:30 - 17:00

Hot topics: Digital solutions for respiratory medicine: a new way of working

Aims : to review how adoption of an electronic health records system has created opportunities for respiratory patients to receive better care; to evaluate digital health services for respiratory patients; to discuss the role of big data analytics in respiratory care; to assess artificial intelligence (AI) solutions for imaging, pathology, spirometry, real-time assistance, etc; to discuss the potential drawbacks and advances of using digital technologies during the war in Ukraine.

Disease(s) : Airway diseases Interstitial lung diseases Respiratory infections

Method(s) : Imaging Public health Pulmonary rehabilitation

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Respiratory critical care physician, Paediatrician, Physician in Pulmonary Training, Radiologist, Respiratory physiotherapist, Thoracic oncologist, Thoracic surgeon, Respiratory therapist, Journalist

Chairs : Karen Moor (Rotterdam, Netherlands), Carlos Robalo Cordeiro (Coimbra, Portugal)

15:30	**Electronic health records system: an opportunity for respiratory patients to receive better care** Speaker to be confirmed	**3234**
15:45	**Big data and AI: it is not just about imaging** Özçelik Neslihan (Rize, Turkey)	**3235**
16:00	**Digital health services for respiratory patients in Norway** Paolo Zanaboni (Tromsø, Norway)	**3236**
16:15	**Use of digital medicine during wartime: Ukrainian experience** Vitalii Poberezhets (Vinnytsia, Ukraine)	**3237**

16:30	**Discussion and Q&A** All Speakers	**3238**

Purple — Session 331 — 15:30 - 17:00

Symposium: Post-viral lung diseases: from basic immunology to clinical phenotypes and therapy

Lung Science Conference session

Aims : to present the very best of international lung science research; to highlight new discoveries that will likely impact the future of respiratory medicine; to encourage debate and interaction between basic scientists and clinical researchers on the topic of how respiratory infections cause long-term consequences that give rise to chronic lung diseases such as asthma and pulmonary fibrosis.

Disease(s) : Airway diseases | Interstitial lung diseases | Respiratory infections

Method(s) : Cell and molecular biology | Respiratory intensive care

Tag(s) : Translational

Target audience : Clinical researcher, Medical Student, Physician in Pulmonary Training, Scientist (basic, translational), Journalist

Chairs : Silke Meiners (Sülfeld, Germany), Salman Siddiqui (London, United Kingdom)

15:30	**What can we learn from acute virus infections for chronic disease?** Peter Openshaw (London, United Kingdom)	**3239**
15:45	**Long-lasting alterations in lung anti-tumour immunity by viral infections** Lucia Rodriguez Rodriguez (Liege, Belgium)	**3240**
16:00	**Lung regeneration for inherited interstitial pulmonary fibrosis using a novel combinatorial adeno-associated virus gene therapy** Pauline BARDIN (Paris, France)	**3241**
16:15	**Recapitulating morphological and functional characteristics of distal airways in tubular organoids to model post-viral obstructive diseases** Isabelle Dupin (Bordeaux, France)	**3242**
16:30	**Discussion and Q&A** All Speakers	**3243**

15:30-16:15
INDUSTRY SKILLS LAB WORKSHOP SEE PAGE 1

Red 1+2 — Session 334 — 15:45 - 17:00

Symposium: Early career member session

Aims : to bring together all types of respiratory professionals in order to discuss key aspects for career development in respiratory medicine

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Respiratory critical care physician, Paediatrician, Pathologist, Physician in Pulmonary Training, Physiologist, Radiologist, Respiratory physiotherapist, Scientist (basic, translational), Thoracic oncologist, Thoracic surgeon, Respiratory therapist

Chairs : Sara Cuevas Ocaña (Nottingham, United Kingdom), Thomas Gille (Bobigny, France)

15:45	**Environmental awareness in respiratory medicine: a clinical and scientific view** Lucilla Piccari (Barcelona, Spain)	**3247**
16:00	**Communicate your research: reaching the media, the public and how to use social media** Leticia Kawano-Dourado (Sao Paulo, Brazil)	**3248**
16:15	**How ERS activities can help to shape your career** Niki Ubags (Epalinges, Switzerland)	**3249**
16:30	**Mina Gaga Lecture** Mareike Lehmann (Marburg, Germany)	**3250**
16:45	**Discussion and Q&A** All Speakers	**3251**

Brown 3 — Session 335 — 15:45 - 17:00

Oral presentation: Best abstracts in pulmonary rehabilitation and chronic care

Disease(s) : Interstitial lung diseases Airway diseases

Method(s) : Palliative care Physiology Pulmonary function testing Pulmonary rehabilitation Endoscopy and interventional pulmonology

Tag(s) : Clinical

Chairs : Guido Vagheggini (Volterra (PI), Italy), Rachael A. Evans (Leicester (Leicestershire), United Kingdom)

OA3252	**Late Breaking Abstract - The impact and timing of pulmonary rehabilitation in patients undergoing bronchoscopic lung volume reduction with endobronchial valves: a randomized controlled trial in patients with severe emphysema** Rein Posthuma (Maastricht, Netherlands), Marieke C. Van Der Molen, Jorine E. Hartman, Hester Van Der Vaart, Eline Bij De Vaate, Anouk W. Vaes, Bram Van Der Borst, Dirk Van Ranst, Martijn A. Spruit, Lowie E.G.W. Vanfleteren, Dirk-Jan Slebos
OA3253	**Blood-flow restricted cycling maximizes leg muscle effort with less ventilatory work compared to work-matched free-flow exercise: A randomized crossover study** Manuel Kuhn (Zurich, Switzerland), Christian F. Clarenbach, Adrian Kläy, Thomas Radtke, Sarah R. Haile, Noriane A. Sievi, Dario Kohlbrenner
OA3254	**Survival following pulmonary rehabilitation (PR): the effect of achieving the minimal important difference (MID) in walking distance.** Thomas Ward (Leicester, United Kingdom), Neil J Greening, Charlotte E Bolton, Sally J Singh, William D Man, Michael C Steiner, Rachael A Evans
OA3255	**Low-load blood-flow restriction strength training in patients with COPD: a randomised controlled pilot study** Dario Kohlbrenner (Copenhagen, Denmark), Manuel Kuhn, Anastasios Manettas, Céline Aregger, Matthias Peterer, Nicola Greco, Noriane A. Sievi, Christian F. Clarenbach
OA3256	**Muscle mRNA and protein responses to aerobic exercise training (AET) in COPD and health** Lorna Latimer (Rugby (Warwickshire), United Kingdom), Despina Constantin, Linzy Houchen-Wolloff, Bhavesh Popat, Dumitru Constantin-Teodosiu, Charlotte Bolton, Michael Steiner, Paul Greenhaff
OA3257	**Effects of spray cryotherapy on cough receptors and airway microenvironment in a canine model of chronic bronchitis** long liang (Shanghai, China)
OA3258	**Nasal stimulation with L-menthol alleviates multidimensional breathlessness in patients with interstitial lung disease: a randomized controlled trial** Masashi Kanezaki (Kawagoe, Japan), Kunihiko Terada, Satoru Ebihara
OA3259	**Mortality in COPD: Physical capacity of physical activity?** Anouk W. Vaes (Horn, Netherlands), Noriane A. Sievi, Christian F. Clarenbach, Alex J. Van 'T Hul, Martijn A. Spruit
OA3260	**Pulmonary rehabilitation and physical activity: a step in the right direction? A network meta-analysis** James Manifield (Nottingham, United Kingdom), Yousuf A Chaudry, Sally J Singh, Tom Ward, Maxine E Whelan, Mark W Orme
OA3261	**Interventions to increase fat-free mass in COPD: a systematic review and meta-analysis** Alex Jenkins (Nottingham (Nottinghamshire), United Kingdom), Kaveh Gaynor-Sodeifi, Hayley Lewthwaite, Jaycie Triandafilou, Leticia Belo, Mayron Faria De Oliveira, Dennis Jensen
OA3262	**Discussion and Q&A** All Speakers

Brown 1+2 Session 336 15:45 - 17:00

Oral presentation: From lung cancer screening to early diagnosis

Disease(s) : Thoracic oncology

Method(s) : General respiratory patient care Imaging Public health Epidemiology Surgery Pulmonary function testing Cell and molecular biology Endoscopy and interventional pulmonology

Tag(s) : Clinical

Chairs : Neal Navani (London, United Kingdom)

OA3263	**Late Breaking Abstract - Endobronchial ultrasound in diagnosing and staging of lung cancer by 22G TBNB versus regular 22G TBNA needles: a randomized clinical trial** Antonio Moretti (Amsterdam, Netherlands), Tess Kramer, Jolanda C Kuijvenhoven, Jan Von Der Thüsen, Daniëlle Cohen, Artur Szlubowski, Maciej Gnass, Maarten K Ninaber, Bart Hoppe, Rocco Trisolini, Zuzana Sestakova, Jiri Votruba, Daniël A Korevaar, Peter I Bonta, Jouke T Annema

OA3264	**Lung cancer screening by Low-Dose CT scan in France: final results of the DEP'K80 study after three rounds** Olivier Leleu (Abbeville Cedex, France), Nicolas Storme, Damien Basille, Marianne Auquier, Vincent Jounieaux, Sebastien Couraud
OA3265	**Exhaled breath analysis optimizes nodule management in a lung cancer screening program.** Kathleen Zwijsen (Wilrijk, Belgium), Reinier Wener, Eline Janssens, Eline Schillebeeckx, Elly Marcq, Jo Raskin, Jan P. Van Meerbeeck, Annemiek Snoeckx, Annelies Janssens, Kevin Lamote
OA3266	**Growth patterns of screen-detected malignant pulmonary nodules: Accuracy of doubling-time models** Andrew Creamer (Bristol (Avon), United Kingdom), Carolyn Horst, Jennifer Dickson, Sophie Tisi, Helen Hall, Priyam Verghese, Ruth Prendecki, Amyn Bhamani, John Mccabe, Jonathan Teague, Anne-Marie Hacker, Laura Farrelly, Kylie Gyertson, Anand Devaraj, Arjun Nair, Allan Hackshaw, Sam Janes
OA3267	**Fluid-specific miRNA-based signatures for lung cancer screening** Giovanna Casagrande (Barretos, Brazil), Rodrigo Chiarantano, Alexia Polo, Ana Carolina Laus, Isabella Tegami, Eduardo Cabral, Angela Filatieri, Rachid Oliveira, Luciane Sussuchi Da Silva, Rui Reis, Leticia Leal
OA3268	**Validation of the Danish Lung Cancer Registry** Anja Gouliaev (Viby J, Denmark), Torben Riis Rasmussen, Niels Lyhne Christensen
OA3269	**Identification of potential biomarkers for diagnosis of lung adenocarcinoma** Giovanna Casagrande (Barretos, Brazil), Isabella Tegami, Luciane Sussuchi Da Silva, Rodrigo Oliveira Cavagna, Maria Fernanda Gonçalves, Flávio Augusto Ferreira Da Silva, Eduardo Caetano Albino Da Silva, Vinicius Duval Da Silva, Pedro De Marchi, Rui Manuel Reis, Letícia Ferro Leal
OA3270	**Determinants of Therapeutic Sensitivity in EGFR-Driven Lung Cancer** Giorgia Foggetti (Milan, Italy), Mariana Do Carmo, Francisco Expósito, Camila Robles-Oteiza, Hongchen Cai, Virginia Guzzeloni, Federica Pedica, Gianluigi Arrigoni, Claudio Doglioni, Alessandra Bulotta, Stefano Cascinu, Giulia Veronesi, Giampiero Negri, Monte M. Winslow, Katerina Politi
OA3271	**Integrating artificial intelligence tool in multidisciplinary tumor board for predicting complications after lung cancer surgery** Luca Bertolaccini (Milan, Italy), Elena Prisciandaro, Gabriele Maffeis, Andrea Cara, Giulia Sedda, Lorenzo Spaggiari
OA3272	**The role of crural diaphragm density in respiratory complications after VATS lobectomy: a retrospective analysis** Alice Bellini (Forlì, Italy), Antonio Vizzuso, Sara Sterrantino, Eleonora Antognoni, Angelica Amatulli, Beatrice Siroli, Roland Barbante, Edoardo Raffaeli, Angelo Paolo Ciarrocchi, Sara Piciucchi, Emanuela Giampalma, Franco Stella
OA3273	**Discussion and Q&A** All Speakers

Blue 1+2 Session 337 15:45 - 17:00

Oral presentation: Challenges and novelties in rare interstitial lung diseases

Disease(s) : Interstitial lung diseases

Method(s) : Imaging Pulmonary function testing General respiratory patient care Physiology Cell and molecular biology

Tag(s) : Clinical

Chairs : Maria Molina Molina (Barcelona, Spain), Cormac McCarthy (Dublin 4, Ireland)

OA3274	**Late Breaking Abstract - Nintedanib for Lymphangioleiomyomatosis: an open-label phase II study** Sergio Alfonso Harari (Milano (MI), Italy), Davide Elia, Antonella Caminati, Jens Geginat, Francesca Luisi, Giuseppe Pelosi, Claudia Specchia, Olga Torre, Chiara Vasco, Maurizio Zompatori, Roberto Cassandro
OA3275	**Autoimmune Pulmonary Alveolar Proteinosis (aPAP) in Greece: 20 years in progress** Effrosyni D. Manali (Athens, Greece), Spyros A Papiris, Maria Kallieri, Lykourgos Kolilekas, Georgia Papadaki, Emmanouil Verykakis, Georgia Kontonasiou, Andriana I Papaioannou, Demosthenes Bouros, Vasiliki Apollonatou, Elvira-Markela Antonogiannaki, Panagiotis Lyberopoulos, Nikolaos Roussakis, Konstantinos Douros, Andrea Schams, Matthias Griese
OA3276	**Preclinical studies supporting a first-in-human trial of pulmonary macrophage transplantation therapy of CSF2RA-associaited PAP** Bruce Trapnell (Cincinnati, United States), Paritha Arumugam, Brenna Carey, Lisa Trump-Durbin, Matthew Wessendarp, Takuji Suzuki, Fnu Spoorthi, Yan Ma, Kenjiro Shima, Jennifer Stock, Claudia Chalk, Kathryn Wikenheiser-Brokamp, Carolyn Lutzko
OA3277	**Exploring the prognosis and pathogenesis of secondary pulmonary alveolar proteinosis** Haruyuki Ishii (Tokyo, Japan), Ryushi Tazawa, Tomohiro Handa, Yoshinori Tanino, Nobutaka Kitamura, Yoshikazu Inoue, Koh Nakata

OA3278	**New diagnostic approaches for lymphangioleiomyomatosis (LAM)** Christoph Lederer (Heidelberg, Germany), Krisztina Guth, Anikó Bohács, Verena Müller, Michael Kreuter
OA3279	**Alveolar fibroblast activation and epithelial injury/repair in pulmonary lymphangioleiomyomatosis (LAM)** Vera Krymskaya (Philadelphia, United States), Kseniya Obraztsova, Alexander Mukhitov, Ryan Rue, Akansha Goel, Apoorva Babu, Michael Morley, Edward Morrisey, Susan Lin, Jillian Evans
OA3280	**Phenotypic characterization of interstitial lung disease associated with mutations in SFTPC and ABCA3 in adults** Rémi Diesler (Lyon, France), Marie Legendre, Salim Si-Mohamed, Pierre-Yves Brillet, Lidwine Wemeau, Effrosyni D Manali, Frédéric Gagnadoux, Anne Gondouin, Sandrine Hirschi, Gwenael Lorillon, Martine Reynaud-Gaubert, Vanessa Bironneau, Elodie Blanchard, Arnaud Bourdin, Stéphane Dominique, Aurélien Justet, Julie Macey, Sylvain Marchand-Adam, Hélène Morisse-Pradier, Hilario Nunes, Spyros Papiris, Julie Traclet, Bruno Crestani, Serge Amsellem, Nadia Nathan, Raphaël Borie, Vincent Cottin
OA3281	**Reversal of interstitial lung disease after olipudase alfa enzyme replacement therapy in adults with acid sphingomyelinase deficiency** Francesco Bonella (Düsseldorf, Germany), Melissa Wasserstein, Roberto Giugliani, Robin Lachmann, Imre Noth, Maurizio Scarpa, Wim A Wuyts, Mario Aguiar, Nicole M Armstrong, Andreas Jessel, Monica Kumar, Sara Waters, Kenneth I Berger
OA3282	**Pirfenidone in post-covid19 pulmonary fibrosis (FIBRO-COVID): Phase-II randomized clinical trial (NCT04607928)** Guadalupe Bermudo Peloche (Barcelona, Spain), Belen Del Río, Vanesa Vicens-Zygmunt, Claudia Valenzuela, Rosalia Laporta, Juan Rigual, Karina Portillo, Paloma Millan, Eva Balcells, Diana Badenes, Santiago Bolívar, Jose Antonio Rodriguez-Portal, Laura Tomás, Koral Fernández De Roitegi, Jacobo Sellarés, Diego Castillo, Jaume Bordas, Yasmina Gutierrez-Rodriguez, Paloma Caballero, Javier Alarcon, Christian Tebé, Sebastian Videla, Salud Santos-Perez, Anna Ferrer, Ana Montes-Worboys, Patricio Luburich, María Molina-Molina
OA3283	**Home spirometry in regular care for patients with pulmonary fibrosis** Gizal Nakshbandi (Barendrecht, Netherlands), C.C. Moor, M. Veltkamp, S.F.M. Nijman, M.J. Overbeek, P. Bresser, J.J.M. Geelhoed, R.E. Jonkers, A.D.M. Vorselaars, R. Mostard, M.S. Wijsenbeek
OA3284	**Discussion and Q&A** All Speakers

Yellow 1+2+3 Session 338 15:45 - 17:00

Oral presentation: Positive airway pressure for sleep-disordered breathing: adherence and outcomes

Disease(s) : Sleep and breathing disorders

Method(s) : General respiratory patient care Physiology Epidemiology Public health Imaging Cell and molecular biology

Tag(s) : Clinical

Chairs : Dries Testelmans (Leuven, Belgium), Carolina Lombardi (Milano (MI), Italy)

OA3285	**Late Breaking Abstract - Cardiovascular morbidity and mortality after positive airway pressure (PAP) discontinuation in obstructive sleep apnea (OSA) patients** AbdelKebir Sabil (Paris, France), Claire Launois, Wojciech Trzepizur, François Goupil, Thierry Pigeanne, Sandrine Launois, Laurene Leclair-Visonneau, Philippe Masson, Acya Bizieux-Thaminy, Dany Jaffuel, Sebastien Bailly, Frédéric Gagnadoux
OA3286	**CPAP Reduces Circulating Vascular Endothelial Growth Factor Levels in Patients with Coronary Artery Disease and Obstructive Sleep Apnoea: The RICCADSA Trial** Yeliz Celik (İstanbul, Turkey), Sanja Jelic, Afrouz Behboudi, Daniel J. Gottlieb, Susan Redline, Yuksel Peker
OA3287	**The effect of CPAP therapy on coronary artery plaque volume in obstructive sleep apnoea: data from a proof-of-concept study** Cliona O'Donnell (Dublin 4, Ireland), Shane Crilly, Anne O'Mahony, Brian O'Riordan, Racheal Gitau, Donal O'Shea, David Murphy, Jonny Dodd, Silke Ryan
OA3288	**Reduction in sympathetic tone in patients with obstructive sleep apnoea: Fiixed is more effective than adapted pressure. A randomised, parallel clinical trial.** Renaud Tamisier (Grenoble, France), Erika Treptow, Sebastien Bailly, Marie Destors, Sebastien Baillieul, Rita Clin, Maelle Guellerin, Audrey Guerrache, Patrick Levy, Jean Louis Pépin
OA3289	**Effects of peak-airflow triggered adaptive servo-ventilation on nocturnal cardiac arrhythmias in patients with heart failure and sleep apnoea** Michael Arzt (Regensburg, Germany), Christian M. Horvath, Christoph Fisser, John S. Floras, Samuel Sossalla, Stella Wang, George Tomlinson, Fiona Rankin, Clodagh Ryan, T. Douglas Bradley

OA3290	**Impact of CPAP treatment on cardiovascular outcomes: a Catalan nationwide database analysis.** Jordi de Batlle (Lleida, Spain), Esther Gracia-Lavedan, Anna Garcia-Altés, Elisenda Martínez Carbonell, Manuel Sánchez-De-La-Torre, Ferran Barbé
OA3291	**REM Sleep Less Than 30 Minutes Predicts Less CPAP Use in Adults with Coronary Artery Disease and Obstructive Sleep Apnoea** Baran Balcan (Istanbul, Turkey), Patrick J Strollo Jr, Yüksel Peker
OA3292	**Adherence to CPAP treatment is associated with a decrease in the incidence of cardiovascular events: an individual participant data meta-analysis** Manuel Sanchez De La Torre (Lleida, Spain), Esther Gracia-Lavedan, Ivan D. Benitez, Alicia Sánchez-De-La-Torre, Anna Moncusí-Moix, Gerard Torres, Kelly Loffler, Richard Woodman, Robert Adams, Gonzalo Labarca, Jorge Dreyse, Christine Eulenburg, Erik Thunström, Helena Glantz, Yüksel Peker, Craig Anderson, Doug Mcevoy, Ferran Barbé
OA3293	**Clinical and Economic Assessment of a Comprehensive Program to Improve Adherence of Continuous Positive Airway Pressure Treatment in Obstructive Sleep Apnea Patients in Spain: a randomized controlled trial with a Health Economic Model** Sarah Alami (Bagneux, France), David Rudilla, Hélène Pasche, Danielle C Zammit, Pablo Lázaro Y De Mercado, Pedro Landete Rodríguez
OA3294	**Normalized hypercapnia is a strong predictor of survival in patients with home mechanical ventilation (HMV) - the population-based DISCOVERY study** Andreas Palm (Uppsala, Sweden), Ludger Grote, Össur Emilsson, Karin Ersson, Mirjam Ljunggren, Josefin Sundh, Magnus Ekstrom
OA3295	**Discussion and Q&A** All Speakers

PS-1 in poster area — Session 340 — 16:00 - 17:30

Poster session: Clinical problems in respiratory medicine (2)

Disease(s) : Airway diseases | Interstitial lung diseases | Pulmonary vascular diseases | Thoracic oncology | Respiratory critical care

Method(s) : Imaging | Cell and molecular biology | Endoscopy and interventional pulmonology | General respiratory patient care | Epidemiology | Palliative care | Surgery | Pulmonary function testing | Public health | Physiology | Respiratory intensive care

Tag(s) : Clinical

Chairs : Shailesh Balasaheb Kolekar (Herlev, Denmark), Anne Orholm Nielsen (Gentofte, Denmark)

PA3297	**What clinical factors are predictive of outcome in Primary Spontaneous Pneumothorax management?** Rob Hallifax (Oxford (Oxfordshire), United Kingdom), Mohammed Raza, Najib Rahman
PA3298	**The diagnostic implications of the pleural fluid cell differentiation** Wei Wei Ee (Bristol, United Kingdom), David T Arnold, Sonia Patole, Andrew Medford, John E Harvey, Steven Walker, Nick A Maskell
PA3299	**Clinical, laboratory, and radiologic markers to differentiate benign pleural effusions** Güntülü Ak (Eskişehir, Turkey), Fatmanur Korul, Selma Metintas, Huseyin Yildirim, Muzaffer Metintas
PA3300	**Differential diagnosis of pleural effusion using machine learning** Na Young Kim (Hwaseong-si, Gyeonggi-do, Republic of Korea), Boa Jang, Young-Gon Kim, Jaeyoung Cho
PA3301	**Long term association between frailty and survival in patients with pleural disease** Eleanor Barton (Bristol, United Kingdom), Ben Carter, Alessia Verduri, Jessica Hughes, Jonathan Hewitt, Nick Maskell
PA3302	**Impact of fluid overload on pulmonary function in Heart Failure: a cross-sectional study.** Alvaro Montañez (Mexico City, Mexico), Guiedani Haydé Galván Bautista, Dulce González-Islas, Arturo Orea-Tejeda, Pedro Carranza-Muñoz, Nadia Hernández-López, Rocío Sánchez-Sánchez-Santillán, Robinson Robles-Hernández, Ilse Pérez-García, Angelia Jiménez-Valentín, Mildred De La Concha-Duarte, Luz Jiménez-Gallardo, Arturo Rodríguez-Medina, Dalia Domínguez-Moya, Mauricio Reyes-Franco, Wendy Rodríguez-García
PA3303	**Successful use of anti IL5 targeted therapy (Mepolizumab) in two cases of hypereosinophilic syndrome from India** Manu Chopra (Delhi, India), Suman Pramanik, Subhro Mukherjee, Meenakshi Chopra
PA3304	**Ultrasound quantification versus the actual pleural fluid volume drained in patients undergoing medical thoracoscopy.** Vijayaravindh Ramachandran (Coimbatore, India), Isaac Barney, Gupta Richa, D.J. Christopher, Robinson Vimala Leena, Yadav Bijesh

PA3305	**Metabolic alterations in post-COVID-19 patients with sarcopenia or sarcopenic-obesity:A cross-sectional study.** Alvaro Montañez (Mexico City, Mexico), Nadia Hernández López, Dulce González-Islas, Arturo Orea-Tejeda, Rocío Sánchez-Santillán, Ilse Pérez-García, Angelia Jiménez-Valentín, Rafael Hernández-Zenteno, Mariana Valdés-Moreno, Mildred De La Concha-Duarte, Luz Jimenez-Gallardo, Arturo Rodríguez-Medina, Dalia Domínguez-Moya, Guiedani Galván-Bautista, Pedro Carranza-Muñoz, Diana Torres-Gómez
PA3306	**Efecto del B-hidroxi-B-metilbutirato sobre la masa muscular en pacientes post-COVID-19: Ensayo clínico.** Angelia Jiménez Valentín (Mexico City, Mexico), Arturo Orea Tejeda, Dulce González Islas, Mildred De La Concha-Duarte, Luz Jimenez Gallardo, Arturo Rodríguez Medina, Alvaro Montañez Orozco, Benigno Valderrábano Salas, Dalia Domínguez Moya, Guiedani Galván Bautista, Pedro Carranza Muñoz, Nadia Hernández López, Rocío Sánchez Santillán, Ilse Pérez García, Fernando Casarín López
PA3307	**Muscle depletion on lung function in post-COVID-19 patients: a cross-sectional study.** Arturo Rodríguez Medina (Edo. Mex., Mexico), Dulce González Islas, Arturo Orea Tejeda, Dalia Moya Domínguez, Guiedani Galván Bautista, Pedro Muñoz Carranza, Susana Galicia Amor, Nadia Hernández Lopez, Rocío Sánchez Santillán, Ilse Pérez Gracía, Angelia Jiménez Valentín, Mildred De La Concha Duarte, Luz Jimenez Gallardo, Lizeth Castañeda Ordoñez, Alvaro Montañez Orozco, Alejandro García Gutiérrez
PA3308	**Pulmonary artery pseudoaneurysms (PAPs) in Hughes-Stovin syndrome (HSS) a new emerging concept with potential fatal disease course.** Catherine Joy Tubig (Quezon city, Philippines), Sherwina Juljani, Ma. Encarnita Limpin, Ma. Paz Mateo, Fernando Ayuyao
PA3309	**Alpha-1 antitrypsin Pi*SS genotype and risk of pulmonary disease. An EARCO Research project** Teresa Martín Rioja (Lisboa, Portugal), Catarina Guimarães, Cristina Esquinas, Maria Torres, Maria Sucena, Marc Miravitlles
PA3310	**Long-term follow-up of Pi*ZZ alpha-1 antitrypsin deficient patients receiving intravenous alpha-1 antitrypsin augmentation therapy** Suzanne Roche (Dublin, Ireland), Daniel D Fraughen, Malcom Herron, Ronan Heeney, Lameese Alhaddah, Emma Leacy, Lasya Kanchi, Oliver J Mcelvaney, Mark P. Murphy, Tomás P Carroll, Cedric Gunaratnam, Noel G Mcelvaney
PA3311	**Hemoptysis: a retrospective analysis in a tertiary hospital of Greece** Dimitrios Potonos (Ioannina, Greece), Antonia Assioura, Konstantinos Exarchos, Antigoni Simou, Christina Aggelopoulou, Christos Kyriakopoulos, Evgenia Salla, Christos Chronis, Konstantinos Tatsis, Athanasios Konstantinidis, Athena Gogali, Konstantinos Kostikas
PA3312	**Impact of thrombomodulin on mortality in hospitalized patients with COVID-19: A cohort-study** Alvaro Montañez (Mexico City, Mexico), Luz Magdaly Jimenez Gallardo, Rocío Sánchez-Santillán, Arturo Orea-Tejeda, Dulce Gonzalez-Islas, Arturo Rodríguez, Dalia Domínguez-Moya, Guiedani Bautista-Galván, Benigno Valderrábano-Salas, Pedro Carranza-Muñoz, Nadia Hernández-López, Ilse Pérez-García, Angelia Jimenez-Valentín, Mildred De La Concha-Duarte, Adrián Rosas-Trujillo, Dennis Soler-Montalvo, Laura Flores-Cisneros, Rufina Gallardo-Reyes
PA3313	**What is the accuracy of pre-operative staging in identifying patients with single station N2 disease?** janet johnston (Manchester, United Kingdom), Christopher Craig, Patrick Goodley, Matthew Evison, Paul Bishop, Sarah Upperton, Matthew Callister, David Meek, Laura Succony, Wadood Parvez, Muhammad Tufail, John Maclay, Jayasekera Geeshath, Ian Woolhouse, Alana Livesey
PA3314	**Prevalence of Metabolic Syndrome in Covid-19 patients after 60 days-hospital discharge** Robson Prudente (Botucatu (SP), Brazil), Mariana Dorna, Marcelo Lorena, Flavia Silva, Larissa Pacielo, Raissa Toledo, Luiz Machado, Estefania Franco, Luis Brizola, Maercio Santos, Edris Savadkouhi, Camila Colombo, Suzana Tanni
PA3315	**The impact of comorbidities contributing to QT prolongation in respiratory patients admitted to hospital** Aditya Adhikarla (Manchester, United Kingdom), Fortune Kwushue, Benjamin Allison, Andras Bikov
PA3316	**Management of hemoptysis in a pneumology department** Nemsi Ella (Tunis, Tunisia), Ben Jemai Emna, Chaabi Khouloud, Ben Attig Yosra, Khedhri Manel, Ben Amar Jihene, Boudaya Saddok, Zaibi Haifa, Aouina Hichem

PS-10 in poster area — Session 341 — 16:00 - 17:30

Poster session: Health effects of tobacco use

Disease(s) : Airway diseases Thoracic oncology

Method(s) : Epidemiology Pulmonary function testing General respiratory patient care Public health Cell and molecular biology Imaging Physiology Pulmonary rehabilitation

Tag(s) : Clinical

Chairs : Aslı Görek Dilektaşlı (Bursa, Turkey), Chair to be confirmed

PA3317	**Is nicotine dependence associated with lung function, physical capacity and sleep quality ?** Nadia BEN LAZREG (sousse, Tunisia), Khouloud Kchaou, Fatma Guezguez, Balsam Barkous, Saloua Ben Khamsa

PA3318	**Effects of yoga on pulmonary parameters, posture and body awareness among smokers** Caner Özbek (Istanbul, Turkey), Elif Develi
PA3319	**Associations of Pipe and Cigar Use with Cardiopulmonary Outcomes: The NHLBI Pooled Cohort Study** Pallavi P. Balte (New York, United States), Jack E. Morris, Surya P. Bhatt, Pat Cassano, David Couper, David Jacobs Jr., Ravi Kalhan, Laura Loehr, Stephanie London, Anne Newman, George O'Connor, Joseph E Schwartz, Sachin Yende, Neal D. Freedman, Tiffany R Sanchez, Elizabeth Oelsner
PA3320	**Herb vaporizers are not safe for health. Particles emissions from dry chamomile vaporization** Efthimios Zervas (Patra, Greece), Chara Tsipa, Niki Matsouki, Manos Konstantinidis, Zoe Gareiou
PA3321	**A breathing human lung-on-chip to study cigarette smoke induced COPD** Arunima Sengupta (Bern, Switzerland), Aurélien Dorn, Nuria Roldan, Janick Stucki, Tobias Krebs, Oliver Wisser, Nina Hobi, Olivier T. Guenat
PA3322	**Effect of Second-Hand Tobacco Smoke Exposure on Lung Functions of Children with Chronic Lung Disease** Beste Özsezen (Ankara, Turkey), Nagehan Emiralioglu, Dilber Ademhan Tural, Suna Sabuncuoglu, Gözde Girgin, Birce Sunman, Halime Nayir Buyuksahin, Ismail Guzelkas, Didem Alboga, Ebru Yalcin, Deniz Dogru, Ugur Ozcelik, Nural Kiper
PA3323	**"Chance" pilot study: hospitalization's impact on patients´ smoking habit** Rafael Ricardo Salcedo Valenciano (Castellon, Spain), Salvador De La Torre Carazo, Esperanza Guzmán Ansado, Héctor Castro Villamor, Norman Andrés Villamagua, Irene Macarena Garcia Salazar, Erika Maria Dias Pires, Sergio Campos Téllez
PA3324	**The Fagerström Test in current smokers with and without COPD: a cross-sectional study** Efthymia Papadopoulou (Thessaloniki, Greece), Anna-Bettina Haidich, Alexander G. Mathioudakis, Vasilios Karapetsas, Drosos Tsavlis, Stavros Tryfon
PA3325	**E-Cigarette : New form of smoking in Tunisia** Soumaya Ben Saad (Ariana, Tunisia), Jallouli Nour Lahbib, Amani Ben Mansour, Azza Slim, Hafaoua Daghfous, Fatma Tritar
PA3326	**Interrelation between smoking, obesity and surfactant protein-D in patients with acute exacerbation COPD** Olha Shtepa (Dnipro, Ukraine)
PA3327	**Water pipe smoking and Lung cancer, A case control study in Iran** Zahra Hessami (Tehran, Islamic Republic of Iran), Sogol Sobhani, Gholamreaza Heydari
PA3328	**Despite substantial decrease of smoking, exposure to passive smoking remains a risk factor for asthma and wheeze in children** Linnea Hedman (Luleå, Sweden), Helena Backman, Pablo Sundvall, Martin Andersson, Eva Rönmark
PA3329	**Pneumothorax in tobacco and cannabis smokers in the Agadir region** Oussama HALLOUMI (AGADIR, Morocco), Khadija Aitnasser, Fatiha Bounoua, Aboubakr Imzil, Abdelkrim Khannous, Younes Essaid, Abdelmajid Oulahbib, Nada Boutbagha, Hanane Ikrou, Sofia Farhat, Houssam Ennaceri, Houda Moubachir, Hind Serhane
PA3330	**Tobacco use among ICU patients with Candida auris infection in COVID 19 referral hospital.** Stamatoula Tsikrika (Athens, Greece), Asimina Raftopoulou, Vasiliki Nanou, Marina Asmanidou, Theoni Agapitou, Anastasia Kosmidou, Aristea Christou, Eirini Mikrovasili, Evangelos Stefanidis, Gerasimos Mexatas, Ioannis Nikolopoulos
PA3331	**Relationship between smoking status and inflammation markers in adolescents.** Khurshidbek Tashmetov (Ташкент, Uzbekistan), Naima Ubaydullaeva
PA3332	**Study of smoking behaviour in asthmatic workers** Nidhal Balloumi (Ariana, Tunisia), latifa BEN AFIA, Dorra Brahim, Amen Moussa, Hanene Ben Said, Najla Mechergui, Meriem Mersni, Ghada Bahri, Imen Youssef, Nizar Ladhari, Soraya Fenniche
PA3333	**Changes in violations at tobacco point of sales between 2015 – 2022 in Istanbul** Elif Dagli (Istanbul, Turkey), Ummuhan Pece Sonmez, Murat Guner, Tanzer Gezer, Osman Elbek, Pınar Ay, Fusun Yildiz, Banu Salepci, Pinar Bostan
PA3334	**Profile of child labourers in a rural area of West Bengal: A Cross sectional study** Himanish Roy (Kolkata, India)
PA3335	**Early use of oral moist tobacco as related to respiratory symptoms: a cross-sectional analysis from the RHINESSA study** Juan Pablo López-Cervantes (Bergen, Norway), Christer Janson, Simone Accordini, Vivi Schlünssen, Randi J. Bertelsen, Cecilie Svanes

PA3336	**Effect of tobacco in the non-control of asthma among workers** Nidhal Balloumi (Ariana, Tunisia), latifa BEN AFIA, Dorra Brahim, Amira Bel Kahla, Hanene Ben Said, Meriem Mersni, Najla Mechergui, Ghada Bahri, Imen Youssef, Nizar Ladhari, Soraya Fenniche

PS-11 in poster area Session 342 16:00 - 17:30

Poster session: Occupational upper and lower airway diseases

Disease(s) : Airway diseases Interstitial lung diseases

Method(s) : Epidemiology Public health Pulmonary function testing Cell and molecular biology General respiratory patient care Imaging

Tag(s) : Clinical

Chairs : Sara De Matteis (Cagliari, Italy), Orianne Dumas (Villejuif, France)

PA3337	**Disease-specific mortality related to occupational exposure in Helsinki, Finland** Juuso Jalasto (Helsinki, Finland), Ritva Luukkonen, Ari Lindqvist, Arnulf Langhammer, Hannu Kankaanranta, Helena Backman, Eva Rönmark, Anssi Sovijärvi, Päivi Piirilä, Paula Kauppi
PA3338	**Global burden and trends of mortality and disability-adjusted life years for malignant and chronic respiratory disease attributable to occupational exposures, from 1990 to 2019: results from the Global Burden of Disease study 2019** Wigdan Farah (Rochester, United States), Oluwateniayo Ogunsan, Zhen Wang, Yewande Odeyemi
PA3339	**Mortality associated with occupational exposures among people with small airways obstruction** Valentina Quintero Santofimio (London, United Kingdom), Cosetta Minelli, James Potts, Roel Vermeulen, Hans Kromhout, Ben Knox-Brown, Johanna Feary, Andre F.S Amaral
PA3340	**Household use of cleaning products and asthma control** Emilie PACHECO DA SILVA (Villejuif, France), Raphaëlle Varraso, Anne-Marine Lenzotti, Léopold Fezeu, Guillaume Sit, Pilar Galan, Serge Hercberg, Mathilde Touvier, Christophe Paris, Orianne Dumas, Nicole Le Moual
PA3341	**Household use of irritants and sprayed cleaning products and asthma endotypes** Emilie PACHECO DA SILVA (Villejuif, France), Rachel Nadif, Eddy Dohoukpe, Laurent Orsi, Joane Quentin, Raphaëlle Varraso, Valérie Siroux, Orianne Dumas, Nicole Le Moual
PA3342	**The association of current asthma and exacerbation of asthma with using cleaning, disinfecting, and medical products in healthcare** Paul K. Henneberger (Morgantown, United States), Steven M. Rollins, Michael J. Humann, Xiaoming Liang, Feng-Chiao Su, Mohammed A. Virji
PA3343	**Assessment of small airways by impulse oscillometry in hospital cleaning staff** Bilun Gemicioglu (Istanbul, Turkey), Betül Gültekin, Nejdiye Güngördü, Ilgım Vardaloglu, Kevser Sak
PA3344	**Long-term clinical outcome of irritant-induced asthma** Hille Suojalehto (Helsinki, Finland), Jussi Lantto, Irmeli Lindström
PA3345	**Occupational exposures to irritants and asthma in the CONSTANCES Cohort** Orianne Dumas (Villejuif, France), Guillaume Sit, Laurent Orsi, Yuriko Iwatsubo, Brigitte Dananché, Florence Orsi, Marcel Goldberg, Bénédicte Leynaert, Rachel Nadif, Céline Ribet, Nicolas Roche, Yves Roquelaure, Raphaëlle Varraso, Marie Zins, Corinne Pilorget, Nicole Le Moual
PA3346	**Zintec coated steel, a cause of occupational asthma in welders** Vicky moore (Coventry, United Kingdom), Gareth Walters, Alastair Robertson, Sherwood Burge
PA3347	**Thymic stromal lymphopoietin contributes to ozone-induced pulmonary responses in mice** Hiroki Tashiro (Saga, Japan), Yuki Kurihara, Koichiro Takahashi, Yoshie Konomi, Shinya Kimura, Sueoka-Aragane Naoko
PA3348	**Asthma control in severe asthma and occupational exposures to inhaled asthmagens** Gareth Walters (Birmingham (West Midlands), United Kingdom), Christopher Reilly, Nicole Le Moual, Christopher Huntley, Hanan Hussein, Thirumala Krishna, Adel Mansur
PA3349	**Occupational exposures and asthma control among adults from Northern Finland** Maritta S. Jaakkola (Oulu, Finland), Penpatra Sribaiboonkij, Henna Hyrkäs-Palmu, Jouni J.K. Jaakkola
PA3350	**Respiratory health among operators working in polymer additive manufacturing** Anna-Carin Olin (Göteborg, Sweden), Ann-Charlotte Almstrand, Anna Bredberg, Gunilla Runström, Helen Karlsson, Maria Assenhöj, Hatice Koca Akdeve, Håkan Tinnerberg

PA3351	**Long-term indoor shooting exposure of special police forces induces bronchitic reactions – the Berlin Shooting Range Study** Christian Witt (Berlin, Germany), Rudolf Tauber, Dennis Nowak, Andrew Coats, Uta Liebers
PA3352	**A cluster randomised controlled trial to reduce respiratory effects of cotton dust exposure among textile workers – the MultiTex RCT study** Asaad Ahmed Nafees (Karachi, Pakistan), Muhammad Masood Kadir, James Potts, Cosetta Minelli, Sean Semple, Sara De Matteis, Peter Burney, Paul Cullinan
PA3353	**COPD in a sample of working population** Jordan Minov (Skopje, North Macedonia), Sasho Stoleski, Dragan Mijakoski, Aneta Atanasovska, Dragana Bislimovska
PA3354	**Occupational COPD; ten years' experience from a UK occupational lung disease reporting scheme** Ruth Wiggans (Manchester (Greater Manchester), United Kingdom), David Fishwick, Loren Zelic, Rheanna Pereira, Laura Byrne, Melanie Carder, Martie Van Tongeren
PA3355	**Correlation between reduced lung attenuation in quantitative CT imaging and lung function trajectory in World Trade Center (WTC) disaster responders** Jonathan Weber (Roslyn, United States), Raúl San José Estépar, John Doucette, Juan Celedón, Rafael E. de la Hoz
PA3356	**Evaluation of Voice Quality in Pulmonary Function Tests Laboratory Technicians** Gökçen Ömeroğlu Şimşek (Izmir, Turkey), Melike Yüksel Yavuz, Nejdiye Güngördü

PS-12 in poster area Session 343 16:00 - 17:30

Poster session: The bugs in lung transplantation

Disease(s) : Respiratory critical care | Interstitial lung diseases | Airway diseases

Method(s) : Pulmonary function testing | Transplantation | Cell and molecular biology | Endoscopy and interventional pulmonology | Imaging | Respiratory intensive care

Tag(s) : Clinical

Chairs : Vicky Gerovasili (Rickmansworth, United Kingdom), Chair to be confirmed

PA3357	**Microbiological surveillance after lung transplant: focus on fungi** Irene Tomarelli (milano, Italy), Filippo Maraz, Valeria Rossetti, Letizia Corinna Morlacchi, Ilaria Righi, Davide Tosi, Marco Mantero, Mario Nosotti, Francesco Blasi
PA3358	**The pleural microbiome in lung transplant recipients and non-transplant patients** Carlo Mümmler (München, Germany), Michael Gerckens, Silvia Gschwendtner, Diego Kauffmann-Guerrero, Katrin Milger, Jürgen Behr, Nikolaus Kneidinger
PA3359	**Treatment of fungal infections in lung transplant recipients: is standard dose adjustment of tacrolimus sufficient?** Tanja Zijp (Groningen, Netherlands), Fadia Hadi, Stephan Bakker, Job Van Boven, Tji Gan, Daan Touw
PA3360	**Transmission and persistent SARS-CoV-2 infection in a lung transplant recipient with Molnupiravir-induced hypermutation** Bjoern Frye (Freiburg, Germany), Ina Hettich, Vivien Karl, Lena Jaki, Daiana Stolz, Maike Hofmann, Jonas Fuchs
PA3361	**Lung Transplantation for COVID-19-Related Respiratory Failure: 1-year outcome of 29 patients** Zsófia Kovacs (Wien, Austria), Peter Jaksch, Konrad Hötzenecker, Gabriella Muraközy
PA3362	**Use of Favipiravir as a Broad-Spectrum Virostatic Drug in Lung Transplant Recipients** Andrea Zajacova (Prague, Czech Republic), Eliska Dvorackova, Luis Fernando Casas-Mendez, Ales Brixi, Tereza Kotowski, Jan Havlin, Robert Lischke, Libor Fila, Petr Hubacek
PA3363	**Program cell death 1 (PD1) and program cell death ligand 1 (PDL1) expression in pulmonary aspergillosis with and without SARS-CoV-2 virus infection.** Shiang-Fen Huang (Taipei, Taiwan), Kun-Ta Chou, Yu-Chi Huang, Hao-Chia Lin, Ping-Feng Wu
PA3364	**Plasma virome dynamics after lung transplantation** Victoria Ruiz (Barcelona, Spain), Vicente Pérez-Brocal, Meritxell Boada-Pérez, Berta Saez, Ibai Los-Arcos, Maria Deu, Marta Zapata-Ortega, Judit Sacanell, Alba Santiago, Andrés Moya, Victor Monforte, Cristina Berastegui, Susana Gomez-Olles
PA3365	**The impact of COVID-19 on long term lung function in lung transplant recipients: a single-center retrospective study** Brice Touilloux (Fribourg, Switzerland), Matthaios Papadimitriou-Olivgeris, Cédric Bongard, Nahal Mansouri, Foteini Ioakeim, John-David Aubert, Oriol Manuel, Angela Koutsokera, Alessio Casutt

PA3366 **Late Breaking Abstract - Bedside non-invasive radiation-free lung ventilation/perfusion mapping by electrical impedance tomography in lung transplant recipients**
Vittorio Scaravilli (MILAN, Italy), Jacopo Fumagalli, Valentina Cattaneo, Francesco Damarco, Letizia Morlacchi, Giacomo Grasselli

PA3367 **Late Breaking Abstract - Speckle-tracking right ventricle free wall longitudinal strain: a new non-invasive highly sensitive tool for screening right ventricle function of lung transplant candidates**
Paolo Meani (Milan, Italy), Vittorio Scaravilli, Silvia Scansani, Letizia Morlacchi, Valeria Rossetti, Marco Vicenzi, Gloria Turconi, Valeria Musso, Amedeo Guzzardella, Mario Nosotti, Francesco Blasi, Giacomo Grasselli

PA3368 **Late Breaking Abstract - High burden of early complications in outcome of lung transplantation for non-cystic fibrosis bronchiectasis**
Sixtine Decaux (Paris, France), Antoine Roux, Hervé Mal, Matthieu Glorion, Sandra De Miranda, Edouard Sage, Vincent Bunel, Yves Castier, Arnaud Roussel, Philippe Montravers, Pierre Mordant, Jonathan Messika

PA3369 **Late Breaking Abstract - Diversity of endothelial cells in restrictive allograft syndrome**
Lena Maureen Leiber (Hannover, Germany), Hande Yilmaz, Leonard Christian, Jan-Christopher Kamp, Lavinia Neubert, Tobias Welte, Christine Falk, Danny Jonigk, Jens Gottlieb, Jonas Christian Schupp

PS-13 in poster area Session 344 16:00 - 17:30

Poster session: Effects of CFTR modulator therapy in cystic fibrosis

Disease(s) : Airway diseases

Method(s) : General respiratory patient care Imaging Pulmonary function testing Surgery Physiology Epidemiology Cell and molecular biology Transplantation

Tag(s) : Clinical

Chairs : Stojka Fustik (Skopje, North Macedonia), Chair to be confirmed

PA3370 **Cystic fibrosis transmembrane conductance regulator (CFTR) modulator therapy (ETI) for one-year and changes in chronic rhinosinusitis in people with cystic fibrosis (pwCF)**
Shahid Sheikh (Columbus, United States), Mai-Lan Ho, Mariah Eisner, Courtney Gushue, Grace Paul, Karen Mccoy, Meredith Lind

PA3371 **Impact of Kaftrio on exercise capacity in children with Cystic Fibrosis**
Molla Imaduddin Ahmed (Leicester (Leicestershire), United Kingdom), Natalie Blyth, Joe Madge, Erol Gaillard

PA3372 **Cystic fibrosis fransmembrane regulator modulator therapies effect on liver function in Bulgarian patients**
Dilyana Petkova (Sofia, Bulgaria), Mila Baycheva, V Petkova, Vera Papochieva, Kristin Genkova, Yana Andonova, Ivaylo Nikolov, Polina Shahid, Dimitrinka Miteva, Guergana Petrova

PA3373 **Evaluation of the impact of cystic fibrosis modifier therapies on liver function in children and young adults**
Sophie Hodgson (Glasgow, United Kingdom), Lyndsay Kennedy, Anne Devenny, Susan Kafka, Louise Thomson, Jane Davis

PA3374 **Modulatory therapy experience in patients with cystic fibrosis in Turkey: A multi-center study**
Pinar Ergenekon (Istanbul, Turkey), Ela Erdem Eralp, Ayse Ayzit Kilinc Sakalli, Muruvvet Yanaz, Azer Kilic Baskan, Aynur Gulieva, Sevgi Pekcan, Salih Uytun, Erkan Cakir, Bulent Karadag, Pelin Asfuroglu, Erdem Basaran, Velat Sen, Fazilet Karakoc, Esen Demir, Veysel Karakulak, Sedat Oktem, Zeynep Seda Uyan, Yasemin Gokdemir

PA3375 **Correlations between in-vitro and clinical drug response to CFTR modulators**
Felix Ratjen (Toronto (ON), Canada), Sanja Stanojevic, Tarini Gunawardena, Theo Moraes, Tanja Gonska, Paul Eckford, Christine Bear

PA3376 **Exercise tolerance in cystic fibrosis patients treated with elexacaftor/tezacaftor/ivacaftor**
Lovro Hrvoić (Zagreb, Croatia), Ivan Bambir, Lana Omerza, Ivana Todorić, Ivona Markelić, Andrea Vukić Dugac, Duška Tješić-Drinković

PA3377 **CFTR modulators modify exhaled breath of children with cystic fibrosis within a week.**
Emmanuelle Bardin (Paris, France), Nicolas Hunzinger, Elodie Lamy, Bingqing Zhou, Natasha Remus, Laurence Le Clainche Viala, Philippe Devillier, Frederique Chedevergne, Stanislas Grassin Delyle, Isabelle Sermet-Gaudelus

PA3378 **Fraction of exhaled nitric oxide increases in children treated with elexacaftor-tezacaftor-ivacaftor**
Isaac Martin (Toronto, Canada), Felix Ratjen, Hartmut Grasemann

PA3379 **Nutritional status of cystic fibrosis patients under CFTR modulators therapy - a 6 months experience**
Mihaela Dediu (Timisoara, Romania), Diana Popin, Liviu Laurentiu Pop, Ioana Mihaiela Ciuca

PA3380 **Impact of elexacaftor/tezacaftor/ivacaftor on chronic rhinosinusitis in children with cystic fibrosis.**
Beatrice Della Gatta (Torino, Italy), Lucia Ronco, Federica Peradotto, Elisabetta Bignamini

PA3381 **Description of the variations in airway colonization in patients with cystic fibrosis in treatment with the combination of Ivacaftor, Tezacaftor and Elexacaftor (ITE)**
Jonathan Benito Patón (TORRENT, Spain), Sergio Iniesta González, Claudia López Pavía, Teresa Pérez Sanz, Lucía González Álvarez, Jose Vicente Arcos Machancoses, Elena Crehuá Gaudiza, Silvia Castillo Corullón

PA3382 **Improved bone mineral density following highly effective CFTR modulator treatment in children and young adults with cystic fibrosis**
Jasna Rodman Berlot (Ljubljana, Slovenia), Darja Šmigoc Schweiger, Malena Aldeco, Dušanka Lepej, Marina Praprotnik, Gaja Setnikar Kimovec, Saša Šetina Šmid, Aleksandra Zver, Uroš Krivec

PA3383 **The long-term respiratory effect of Elexacaftor/Tezacaftor/Ivacaftor in people with cystic fibrosis**
Mohamad Hadhud (jerusalem, Israel), Joel Reiter, Alex Gileles-Hillel, Ido Sadras, Eitan Kerem, Malena Cohen-Cymberknoh, Oded Breuer

PA3384 **CFTR-modulator therapy effect assessed by CT and MBW in infants and toddlers with CF**
Rikke Sandvik (Copenhagen, Denmark), Yuxin Chen, Marianne Skov, Frederik Buchvald, Lotte Borgwardt, Tacjana Pressler, Harm Tiddens, Kim Nielsen

PA3385 **Possible founder effect and prevalence of the p.Cys1400Ter pathogenic CFTR mutation in Cyprus**
Pinelopi Anagnostopoulou (Nicosia, Cyprus), Pavlos Fanis, Panayiotis Kouis, Phivos Ioannou, Constantina Costi, Andreas Matthaiou, Tonia Adamidi, Leonidas Phylaktou, Vassos Neocleous, Panayiotis Yiallouros

PA3386 **Late Breaking Abstract - Infertility among adults with primary ciliary dyskinesia**
Leonie Daria Schreck (Bern, Switzerland), Eva Sophie Lunde Pedersen, Yin Ting Lam, Katie Dexter, Michele Manion, Sophie Christin-Maitre, Nathalie Massin, Bernard Maitre, Myrofora Goutaki, Claudia E Kuehni

PA3387 **Late Breaking Abstract - Epidemiology, clinical features and disease severity in pediatric patients with COVID-19 in maternal and children's central hospital in Batumi, Georgia**
Tamar Bakhtadze (Batumi, Georgia), Vakhtang Beridze, Veriko Takidze

PS-14 in poster area Session 345 16:00 - 17:30

Poster session: Update on respiratory physiotherapy in different perspectives of the field

Disease(s) : Sleep and breathing disorders | Thoracic oncology | Airway diseases | Interstitial lung diseases | Respiratory critical care | Pulmonary vascular diseases

Method(s) : Pulmonary rehabilitation | Epidemiology | Public health | Pulmonary function testing | General respiratory patient care | Surgery | Respiratory intensive care | Imaging

Tag(s) : Clinical

Chairs : Agnieszka Lewko (Coventry, United Kingdom), Christian Osadnik (Melbourne, Australia)

PA3388 **Difference in diagnostic accuracy of several respiratory muscle assessments to predict weaning outcomes: sensitivity analyses (SA) of a systematic review and meta-analysis**
Diego Poddighe (Leuven, Belgium), Marine Van Hollebeke, Jan Verbakel, Yasir Qaiser Choudhari, Débora Ribeiro Campos, Greet Hermans, Rik Gosselink, Daniel Langer

PA3389 **Inspiratory effort and activation of extradiaphragmatic inspiratory muscles in a difficult to wean (DTW) patient during different breathing conditions.**
Diego Poddighe (Leuven, Belgium), Marine Van Hollebeke, Beatrix Clerckx, Jan Muller, Greet Hermans, Rik Gosselink, Daniel Langer

PA3390 **Investigation of psychometric properties of De-Morton Mobility Index in the intensive care survivors**
Büsra Turgut (Izmir, Turkey), Ilknur Naz, Ozlem Edipoglu, Cenk Kıraklı

PA3391 **Tissue oxygen saturation of quadriceps muscle for critically ill patients receiving mechanical ventilation**
Shinichi Arizono (Hamamatsu (Shizuoka), Japan), Ryuji Sugiya, Yusuke Nagae, Yuichi Tawara, Masashi Shiraishi, Yuji Higashimoto, Hironori Shigeoka

PA3392 **Investigation of the relationship between respiratory muscle strength and endurance capacity in liver cirrhosis: a pilot study**
Bilge Taşkın (Ankara, Turkey), Naciye Vardar-Yağlı, Melda Saglam, Onur Keskin, Ahmet Bülent Doğrul

PA3393 **Relationship between respiratory muscle strength and functional capacity in patients undergoing oncological abdominal surgery**
Fatma Rümeysa Kasap (Ankara, Turkey), Naciye Vardar Yagli, Melda Saglam, Deniz Inal Ince, Ebru Calik Kutukcu, Derya Karakoc, Erhan Hamaloglu

PA3394 **National observational study of first mobilization after cardiac surgery**
Elisabeth Westerdahl (Örebro, Sweden), Johanna Lilliecrona, Monika Fagevik Olsén

PA3395 **Impact of cancer treatment on physical performance in early-stage non-small cell lung cancer**
Kirsten Quadflieg (Hasselt, Belgium), Eva Arents, Sarah Haesevoets, Fien Hermans, Maarten Criel, Marc Daenen, David Ruttens, Michiel Thomeer, Martijn A. Spruit, Dieter Stevens, Veerle Surmont, Eric Derom, Heleen Demeyer, Chris Burtin

PA3396 **Symptoms experienced by people with lung, head and neck cancer during an exercise training program delivered as a complementary treatment to usual care**
Karina Marcela Morro Pozo (Presidente Prudente, Brazil), Matheus Pedroso, Vinicius Cavalheri, Paloma Borges, Thamirys Serafim, Diogo Gonçalves Ribeiro, Enio Rodrigues Maia, Dionei Ramos, Nara Ielo, Isis Grigoletto, Ercy Mara Cipulo Ramos

PA3397 **Objectively measured physical activity and clinical correlates after pulmonary embolism**
Stacey Haukeland-Parker (Moss, Norway), Øyvind Jervan, Waleed Ghanima, Martijn A. Spruit, Mazdak Tavoly, Jostein Gleditsch, Knut Stavem, Hege Hølmo Johannessen

PA3398 **Heart Rate Recovery and Chronotropic Response on Exercise in Colorectal Cancer Survivors**
Mehmet Fatih Sanver (Kütahya, Turkey), Naciye Vardar Yagli, Melda Saglam, Ebru Calik Kutukcu, Deniz Inal Ince, Saadettin Kilickap

PA3399 **6MWT and ISWT: Levels of agreement between different in-person and remote testing procedures in lung transplant candidates**
Lisa Wickerson (Toronto (ON), Canada), Manoela De Paula Ferreira, Dmitry Rozenberg, Sunita Mathur, Lianne Singer

PA3400 **Patient experience with fully remote inspiratory muscle training device**
Martin Dvořáček (Bouzov, Czech Republic), Pavla Horová

PA3401 **Investigation of respiratory muscle strength and pulmonary functions in patients with neuropsychiatric disorder**
Furkan Özdemir (Ankara, Turkey), Naciye Vardar Yağlı, Betül Tufanoğlu, Belda Çağlayan

PA3402 **Dyspnea impacts right emotional cerebral blood flow**
Kazuhiro Kimpara (hamamatsu, Japan), Shinichi Arizono, Yuichi Tawara, Natsumi Tanaka, Maki Takayama, Daiki Takahashi

PA3403 **Remotely delivered pulmonary rehabilitation assessments - a quality improvement project to tackle long pulmonary rehabilitation waiting list at King's College Hospital**
Maria Koulopoulou (London, United Kingdom), Victoria Meyrick, Michelle Johnson, Charles Reilly, Arun Shuresh Kumar, Peter Cho, Caroline Jolley, Savannah Ramos-Smith

PA3404 **Development of theoretically informed audit and feedback to improve asthma self-management in UK primary care**
Hilary Pinnock (Edinburgh (Edinburgh), United Kingdom), Kirstie McClatchey, Aimee Sheldon, Liz Steed, Jessica Sheringham, David Price, Stephanie Jc Taylor

PA3405 **Asthma in Brazil: an epidemiological analysis from 2008 to 2021**
David Halen Araújo Pinheiro (São Paulo, Brazil), João Victor Hermógenes De Souza, Fabiano Francisco De Lima, Alberto Fernando Oliveira Justo, Vitoria Zacarias Cervera, Regina Maria Carvalho-Pinto, Celso R F Carvalho

PA3406 **Respiratory Functions, Respiratory Muscle Strength, and Postural Abnormalities in Patients with Temporomandibular Joint Dysfunction**
Seda Saka (Istanbul, Turkey), Musab Deniz, Deniz Tuncer

PS-15 in poster area Session 346 16:00 - 17:30

Poster session: COVID-19 diagnostics and pathogenesis

Disease(s) : Airway diseases | Interstitial lung diseases | Respiratory critical care

Method(s) : Epidemiology | Public health | General respiratory patient care | Imaging | Pulmonary function testing | Cell and molecular biology | Respiratory intensive care

Tag(s) : Clinical

Chairs : Mattia Nigro (Opera (MI), Italy), Dumitru Chesov (Chisinau, Republic of Moldova)

PA3407 **Breath of Health: Spectroscopy Breath Test for the Detection of SARS-CoV-2**
Dan Padawer (Jerusalem, Israel), Mutaz Karameh, Abed Qadan, Aria Laor, Zvi G Fridlender

PA3408 **Role of Artificial-Intelligence Powered Digital-Health in Reducing Strain on Health-Care-System: First of Its Kind experience in COVID19-Pandemic.**
Aman Ahuja (Vellore, India), Pawan Singh, Dhruva Chaudhry

PA3409 **PCR PERFORMANCE FOR SARS-CoV-2 PRIOR TO RESPIRATORY FUNCTIONAL TESTS AND THE RELATIONSHIP WITH CONTAGION RATES.**
Maria Zuil Moreno (Lleida, Spain), Faty B.A. Seck-Mboup, Sally Santisteve, Maria Aguilà, Mar Malla-Bañeres, Iván D. Benítez, Rosa Sarrat, Adriana Sabaté, Adriana Fulga, Clara Gort-Paniello, Ferrán Barbé, Jessica González

PA3410	**Effect of a Functional Phospholipid Metabolome-Protein Association Pathway on the Mechanism of COVID-19 Disease Progression** Baoqing Sun (Guangzhou (Guangdong), China), Mingshan Xue, Teng Zhang, Zhangkai J Cheng, Baojun Guo, Yifeng Zeng, Runpei Lin, Peiyan Zheng, Mingtao Liu, Qi Zhao, Xiaoping Tang
PA3411	**Single-cell RNA sequencing of bronchoalveolar lavage fluid reveals potential increase in antigen presentation pathways and cellular immunity in airways of pulmonary long COVID** Elizabeth Guinto (Vancouver, Canada), Firoozeh V. Gerayeli, Stephen Milne, Rachel L. Eddy, Tara Stach, Chen Xi Yang, Xuan Li, Chung Yan Cheung, Julia Shun-Wei Yang, Janice M. Leung, Don D. Sin
PA3412	**NEBULIZATION AND COVID-19: THE RISK OF SPREAD DURING A NEBULIZATION SESSION IS ACTUAL** Christophe Thibon (Bruxelles, Belgium), Laurent Vecellio, Leila Belkhir, Jean-Christophe Dubus, Annie Robert, Benoit Kabamba, Grégory Reychler
PA3413	**Omicron BA.5 - 5 days of isolation during hospital admission, is it enough?** Ana Rita Ribeiro (Ansião, Portugal), Catia Saraiva, Marta Domingos, Daniela Louro, Domítilia Faria
PA3414	**Risk factors for COVID-19: A test-negative case-control study** Marjut Sarjomaa (Skien, Norway), Randi Eikeland, Chi Zhang, Yngvar Tveten, Harald Reiso, Carina Thilesen, Svein Arne Nordbø, Kristine Karlsrud Berg, Ingeborg Aase S. Aaberge, Johny Kongerud, Neil Pearce, Hege Kersten, Jan P. Vandenbroucke, Anne Kristin Møller Fell
PA3415	**Symptomatic prolonged viral shedding in long COVID - Our experience with remdesivir** Leng Cheng Sia (Kuala Lumpur, Malaysia), Yong-Kek Pang, Chee Kuan Wong, Chun Ian Soo, Nur Husna Ibrahim, Vijayan Munusamy, Thian Chee Loh, Ka Kiat Chin, Mau Ern Poh, Jiunn Liang Tan, Chong-Kin Liam
PA3416	**Incidence of viral respiratory infections,excluding SARS-CoV-2,during COVID-19** Souid Fatima zahra (Alger, Algeria), Zerouki Ali, Benarfa Noumaira, Tareb Djouher, Chaabani Madjid, Bensersa Doria, Aggoune Nadjet, Nemra Abdelkader, Nebih Mounir, Sebahi Hamza
PA3417	**Bacterial co-infection, secondary bacterial infection and patterns of antibiotic use in adult patients with COVID-19 pneumonia admitted at the Manila Doctors Hospital, Philippines** Jan Michael Lo (Dasmariñas City, Philippines), Jener De Castro, Jennifer Sison-San Luis
PA3418	**Post COVID-19 HRCT features related to inpatient ward therapy history: A preliminary study** Laharsa Madison (Jakarta, Indonesia), Dianiati Kusumo Sutoyo, Fanny Fachrucha, Aziza Ghanie Icksan
PA3419	**Clinical epidemiological study of hospitalized patients with severe COVID-19 – current data** Elena Borissova (Pleven, Bulgaria), Snejanka Ivankovska, Plamen Pavlov, Pavlina Glogovska
PA3420	**Healthcare associated infections on a respiratory ward in Athens during the Covid-19 pandemic** Iris-Theodora Vlachantoni (Athens, Greece), Romina Chatzipetrou, Anastasia Levounets, Eirini Skontzou, Andrea Kyriacou, Lamprini Vlassi, Chrysa Kontogianni, Konstantinos Samitas, Zafeiris Sardelis, Evangelos Markozannes, Theoplasti Grigoratou, Eleftherios Zervas, Lykourgos Kolilekas
PA3421	**Validity and reliability evidence of Fear of COVID-19 Scale in Greek people with Chronic Obstructive Pulmonary Disease.** Andreas Daskalakis (N. Smyrni - Athens, Greece), Stavroula Giannoulaki, Irini Patsaki, Maria Moutzouri, George Koumantakis, Aikaterini Haniotou, Afroditi Evangelodimou, Irini Grammatopoulou
PA3422	**Lung ultrasonography in post-COVID-19 follow-up in correlation with chest computed tomography.** Katarzyna Zimna (Warszawa, Poland), Małgorzata Sobiecka, Dorota Wyrostkiewicz, Monika Szturmowicz, Witold Tomkowski
PA3423	**Late Breaking Abstract - Change in post-COVID-19 long term symptoms after use of intranasal chlorpheniramine during the acute phase: Inquiry after two randomized controlled trials** Franck Rahaghi (Weston, United States), Estela Pineda, Mari Tesch, Farbod Rahaghi, Fernando Valerio-Pascua
PA3424	**Late Breaking Abstract - Association with changes in pulmonary artery diameters and outcomes before, during and after COVID-19 hospitalization:Retrospective Study** Aybuke Selcuk (Berlin, Germany), Derya Kocakaya, Şehnaz Olgun Yildizeli, Sait Karakurt
PA3425	**Late Breaking Abstract - Increased SARS-CoV-2 infection in asthmatic primary bronchial epithelial cells defined with single cell RNA-sequencing** Matt Johansen (Camperdown, Australia), Sobia Idrees, Fia Boedijono, Stefan Miemczyk, Duc Nguyen, Kristy Nichol, Peter Wark, Alen Faiz, Philip Hansbro

PA3426	**Late Breaking Abstract - Host response changes and phenotypes in lymphopenic COVID-19 patients and their association with mortality** Erik Michels (Amsterdam, Netherlands), Brent Appelman, Justin De Brabander, Rombout Van Amstel, Christine Van Linge, Osoul Chouchane, Tom Reijnders, Alex Schuurman, Titia Sulzer, Augustijn Klarenbeek, Renée Douma, Lieuwe Bos, W. Joost Wiersinga, Hessel Peters-Sengers, Tom Van Der Poll

PS-16 in poster area Session 347 16:00 - 17:30

Poster session: Pleural malignancy at the cutting edge: clinical studies, translation, and mechanisms

Disease(s) : Thoracic oncology Airway diseases

Method(s) : General respiratory patient care Epidemiology Endoscopy and interventional pulmonology Surgery Cell and molecular biology Physiology Palliative care Imaging

Tag(s) : Translational

Chairs : Selina Tsim (Glasgow (Glasgow), United Kingdom), Nick Maskell (Bristol (Avon), United Kingdom)

PA3427	**Comparing the Success Rate of Pleurodesis with Thoracoscopic Talc Poudrage Combined with Indwelling Pleural Catheter versus Thoracoscopic Talc Poudrage in Patient with Malignant Pleural Effusion, A Randomized, Non-inferiority Clinical Trial** Jitanong Sootlek (Bangkok, Thailand), Vorawut Thanthitaweewat
PA3428	**Symptom-guided drainage and autopleurodesis rates in patients with Indwelling Pleural Catheters (IPCs) for malignant pleural effusions** Isaac Fong (Singapore, Singapore), Wui Mei Chew, Kah Yee Tham, Marnie Tamayo Gutierrez, Aza Taha, Sandra Hui, Imran Bin Mohamed Noor
PA3429	**Getting the basics right. Optimal catheter size for the pleurodesis of recurrent malignant pleural effusions** Dimitris Lioumpas (Athens, Greece), Evdokia Tzatzadaki, Konstantinos Stefanidis, Evangelos Fergadis, Stylianos Michelis, Ioannis Provatas, Georgios Gkantinas, Theodoros Fachouridis, Ioannis Stamatatos, Theoni Kiknadze, Antonios Katsantonis, Georgios Anagnostopoulos, Georgios Benakis, Antonios Antoniadis, Nikolaos Tzatzadakis, Efstathios Metaxas
PA3430	**Ultrasonic Elastography-guided Pleural Biopsy for the Diagnosis of Pleural Effusion, An Observational Prospective Multicentric Study** Gang Hou (Beijing, China), Mingming Deng
PA3431	**Cell block in malignant pleural fluids- a safe tool in the evaluation of histopathological predictive factors.** Daniela Xhemalaj (Tirana, Albania), Fatmir Caushi, Ilir Skenduli, Jonida Tula, Elona Hysenbelli, Jolanda Nikolla, Elvisa Kozma, Elona Hila, Silva Bala
PA3432	**Determining the clinical utility of a breath test to screen an asbestos-exposed population for pleural mesothelioma.** Kathleen Zwijsen (Wilrijk, Belgium), Joris Van Cleemput, Caroline Jonckheere, Tom Richart, Kristiaan Nackaerts, Veerle Surmont, Jan P. Van Meerbeeck, Kevin Lamote
PA3433	**Cutting-edge tools for lung cancer-related pleural effusion detection** Tan Shu Feng (Serdang , Malaysia), Ummi Nadira Daut, Jamalul Azizi Bin Abdul Rahaman, Mohammad Zulkarnain Bidin, Siti Hajar Binti Umar
PA3434	**An update regarding the Meso-ORIGINS study: part of the PREDICT-Meso International Accelerator** Mark Neilly (Glasgow, United Kingdom), Selina Tsim, John Maclay, Rocco Bilancia, Anna Bibby, Timothy Gatheral, Alina Ionescu, Andrew Griffiths, Avinash Aujayeb, Najib Rahman, Janet Fallon, Christopher Craig, Michelle Macdougall, John Corcoran, Rakesh Panchal, Mahendran Chetty, Kevin Lamote, Gordon Cowell, Crispin Miller, Robert Rintoul, Jan Van Meerbeeck, Joshua Roche, Alexandrea Macpherson, Laura Alexander, Julie Roberts, Jacqui Gourlay, Joanne Mcgarry, Nicola Walker, Kevin Blyth
PA3435	**Dactinomycin could prime immune cell therapy via activation of tumour cell STING** Yu Zhao (Headington, Oxford, United Kingdom), Nikolaos I Kanellakis, Yanchun Peng, Beibei Wang, Adan Pinto Fernandez, Megat Bin Abd Hamid, Xuan Yao, Elie Antoun, Simeon Draganov, Tao Dong, Najib M Rahman
PA3436	**Patient-derived organoids of malignant pleural mesothelioma** Francesca Gonnelli (Ancona, Italy), Luca Volpini, Federica Monaco, Marco Tomasetti, Francesca Barbisan, Gaia Goteri, Lory Santarelli, Lina Zuccatosta, Federico Mei
PA3437	**Primary cilium associated BBSome gene expression during inflammatory stress in mesothelial cells and primary mesothelioma cells.** Erasmia Rouka (Larissa, Greece), Rajesh Jagirdar, Eleanna Pitaraki, Sotiris Sinis, Eleftherios Papazoglou, Rania Kotsiou, Chrissy Hatzoglou, Konstantinos Gourgouliannis, Sotirios Zarogiannis

PA3438 **Phenotype and characterisation of the immunosuppressive mechanisms of malignant pleural effusion fluid**
Nikolaos I. Kanellakis (Oxford, United Kingdom), Yu Zhao, Zheqing Zhang, Megat Abd Hamid, Yanchun Peng, Tao Dong, Najib M. Rahman

PA3439 **Multicenter analysis of procedural burden and diagnostic delay in patients with malignant pleural effusions**
Louis Yeung (Sydney, Australia), Simon Graffen, Jonathon Parker, Andrew Oaten, Vineeth George

PA3440 **Seven year retrospective analysis of the pleural procedure service at Singleton hospital**
Jennifer Park (Swansea, United Kingdom), Matthew Renwick, Mohammad Sanim Yasar, Narendrababu Rampura Chinnappa

PA3441 **Understanding trends of malignant pleural effusion and ascites in metastatic intra-abdominal cancers**
Beenish Iqbal (Oxford, United Kingdom), Anand Sundaralingam, Dinesh Addala, Poppy Denniston, Suzy Guo, Rob Hallifax, Najib M Rahman

PA3442 **Prevalence and clinical significance of non-expandable lung in malignant pleural effusion in Asians**
Charles Wong (Hong Kong, Hong Kong), Hei-Shun Cheng, Chun-Wai Tong, Pui-Hing Chiu, Flora Pui-Ling Miu, Loretta Yin-Chun Yam

PA3443 **Clinical characteristics of pleural effusion with exudative and transudative borderline properties**
Akiko Sano (Osaka, Japan), Hiroyuki Sano, Osamu Nishiyama, Yuji Tohda, Hisako Matsumoto

PA3444 **The continued burden of pleural mesothelioma; a review of 10 years experience at this hospital Trust**
Qasim Gohir (Telford, United Kingdom), Julia Mcadam, Emma Crawford, Olivia Bosher, Muhammad Saleem, Koottalai Srinivasan, Harmesh Moudgil

PA3445 **Malignant pleural mesothelioma. Description of 70 cases in the last decade.**
Fernando Garcia Prieto (Getafe, Spain), Sara Calero Pardo, María Teresa Rio Ramirez, Cristina Matesanz López, Jose Maria Diaz García, Beatriz Raboso Moreno, Araceli Abad Fernandez

PS-17 in poster area Session 348 16:00 - 17:30

Poster session: Comprehensive management in pulmonary fibrosis

Disease(s) : Interstitial lung diseases | Sleep and breathing disorders | Airway diseases

Method(s) : General respiratory patient care | Cell and molecular biology | Pulmonary function testing | Physiology | Public health | Epidemiology | Imaging | Transplantation

Tag(s) : Clinical

Chairs : Martina Koziar Vasakova (Praha 10, Czech Republic), Thomas Skovhus Prior (Egå, Denmark)

PA3446 **Trends in lung transplantation (LTx)in Spain among patients suffering or not from IPF (2016 -2020)**
Ana Isabel Higes Diaz (Madrid, Spain), Belen Lopez-Muñiz Ballesteros, Christian Alonso Correa Gonzalez, Cristina Sánchez Fernández, Rodrigo Jiménez García, Ana Lopez De Andres, Javier De Miguel Díez

PA3447 **Dyspnea scale and 1-min sit-to-stand test can predict frailty status in interstitial lung disease patients**
Keiji Oishi (Ube, Japan), Maki Asami-Noyama, Tasuku Yamamoto, Kazuki Hamada, Ryo Suetake, Syuichiro Ohata, Kenji Sakamoto, Yoriyuki Murata, Yoshikazu Yamaji, Nobutaka Edakuni, Tsunahiko Hirano, Kazuto Matsunaga

PA3448 **Combined scores from cardiopulmonary exercise tests can predict mortality in patients with interstitial lung disease**
Pin-Kuei Fu (Taichung, Taiwan), Yuan-Yang Cheng

PA3449 **Lung dysbiosis index as a biomarker for interstitial lung disease**
Kristel Svalland Knudsen (Bergen, Norway), Rune Nielsen, Xenia Roda, Gunnar Reksten Husebø, Andreu Paytuvi, Walter Sanseverino, Sverre Lehmann, Tomas Mikal Eagan

PA3450 **Antacid and patient survival in idiopathic pulmonary fibrosis**
Jin-Young Huh (, Republic of Korea), Jin Woo Song

PA3451 **Investigation of pepsin levels in bronchial lavage in patients with interstitial lung disease and chronic cough**
Selen Ala (Samsun, Turkey), Nurhan Köksal, Bahattin Avcı, Tibel Tuna, Yusuf Taha Güllü

PA3452 **The eating and drinking experience in patients with IPF: a qualitative study**
(,), Chris Ward, Ian Forrest, Michael Drinnan, Joanne M Patterson

PA3453 **NUTRITIONAL STATUS IN IDIOPATHIC PULMONARY FIBROSIS**
Esther Sánchez Alvarez (Málaga, Spain), Eva B. Cabrera Cesar, Rocio Fernández Jiménez, Francisco Espildora Hernandez, José Manuel García Almeida, Jose Luis Velasco Garrido

PA3454	**Co-designing a Core Outcome Set for and with patients with Pulmonary Fibrosis (COCOS-IPF project): a joint patient-professional effort** Vivien Somogyi (Heidelberg, Germany), anouk delameillieure, Silja Schenk, Zehra Nur Toreyin, Nazli Uckuyu, Omer Selim Unat, Eda Sen, Nikola Stenzel, Michael Kreuter, Nesrine Mogulkoc, Wim Wuyts, Liam Galvin, Steve Jones, Pippa Powell, Polina Starchenko, Jeanette Boyd, Natalia Liagka, Sabrina Bajwah, Allison Tong, Thomy Tonia, Valerie Vaccaro, Fabienne Dobbels
PA3455	**Trajectories of health-related quality of life (HRQL) in patients with idiopathic pulmonary fibrosis (IPF)** Amy Olson (Ridgefield, United States), Jamie L Todd, Laurie D Snyder, Peide Li, Megan L Neely
PA3456	**Utility of EXACT®, a patient-reported outcome instrument, for idiopathic pulmonary fibrosis-related cough** Marlies S. Wijsenbeek (Rotterdam, Netherlands), Thomas Sciascia, Toby Maher, Philip L. Molyneaux
PA3457	**Cough monitoring and quality of life in patients with interstitial lung diseases measured by a smartphone application-based technique** Byoung Soo Kwon (Seoul, Republic of Korea), Dayeon Han, Catherine Song, Jiyoung Jung, Jong Sun Park
PA3458	**Characteristics of idiopathic pulmonary fibrosis -associated cough. A case-control study** Eeva Saari (Kuopio, Finland), Minna Mononen, Hannele Hasala, Anne Lätti, Johanna Kaulamo, Hanna Nurmi, Riitta Kaarteenaho, Minna Purokivi, Heikki 0 Koskela
PA3459	**Telemedicine in pulmonary fibrosis – home spirometry as a new approach in disease control** Miroslav Ilić (Sremska Kamenica (Vojvodina), Republic of Serbia), Jovan Javorac, Ana Milenković, Dejan Živanović, Dejan Miljkovic, Dragica Kovačević, Emilija Vujičić
PA3460	**Effect of BI 1015550, a preferential PDE4B inhibitor, on FEV1/FVC ratio in IPF** Vincent Cottin (Lyon, France), Arata Azuma, Toby M Maher, Claudia Valenzuela, Marlies S Wijsenbeek, Yi Liu, Susanne Stowasser, Donald F Zoz, Luca Richeldi
PA3461	**The extent of emphysema plays a role in morbidity-mortality in patients with CPFE and IPF** Filippo Gozzi (Modena, Italy), Jaume Bordas-Martínez, Naiara Santos-Erice, Guadalupe Bermudo-Peloche, Cristian Tebé-Cordomí, Marta Lopez-Sanchez, Stefania Cerri, Enrico Clini, Salud Santos-Pérez, Maria Molina-Molina, Vanesa Vicens-Zygmunt
PA3462	**Comparison of emphysematous COPD patients with or without Combined Pulmonary Fibrosis and Emphysema (CPFE)** Muzaffer Onur Turan (Izmir, Turkey), Sebnem Karasu, Ceyda Anar, Bunyamin Sertogullarindan
PA3463	**Win ratio approach to assessing the effect of nintedanib on a hierarchical composite endpoint in patients with progressive pulmonary fibrosis** Claudia Valenzuela (Madrid, Spain), Kevin R Flaherty, Yoshikazu Inoue, Dirk Koschel, Jin Woo Song, Corinna Miede, Michiel Oldenburg, Martin Kolb
PA3464	**Relevance of the systematic sleep study on idiopathic pulmonary fibrosis (IPF)** Jaume Bordas Martinez (barcelona, Spain), Neus Salord Oleo, Vanesa Vicens Zygmunt, Rosana Blavia Aloy, Sandra Pérez Ramos, Eliseo Prado Gala, María D. Calvo Sánchez, Ana Montes-Worboys, Guadalupe Bermudo Peloche, Salud Santos Pérez, Carmen Monasterio Ponsa*, María María Molina Molina* (* Equal Contribution)
PA3465	**Impact of air pollution on survival in idiopathic pulmonary fibrosis according to the MUC5B polymorphism** Lucile Sese (Paris, France), Raphaël Borie, Caroline Kannengiesser, Vincent Cottin, Dominique Israel-Biet, Bruno Crestani, Jacques Cadranel, Cécile Chenivesse, Stéphanie Guillot-Dudoret, Dominique Valeyre, Isabella Annesi Maesano, Hilario Nunes

PS-18 in poster area — Session 349 — 16:00 - 17:30

Poster session: New tools for risk assessment in the interstitial lung disease setting

Disease(s) : Interstitial lung diseases

Method(s) : General respiratory patient care Imaging Pulmonary function testing Pulmonary rehabilitation Epidemiology Physiology

Tag(s) : Clinical

Chairs : Diego Castillo Villegas (Barcelona, Spain), Fabio Arimura (São Paulo (SP), Brazil)

PA3466	**PF-ILD and PPF criteria as predictors for mortality in RA-ILD** Phuong Phuong Diep (Oslo, Norway), Emily Langballe, Asad Chaudhary, Torhild Garen, Are Martin Holm, Henrik Mangseth, Øyvind Molberg, Anna-Maria Hoffmann-Vold, Michael T Durheim

PA3467	**RA-ILD – new insights into disease burden from an international patient survey** Michael Kreuter (Heidelberg, Germany), Katerina Antoniou, Jeroume Avouac, Elisabeth Bendstrup, Graham Brown(+), Ivan Castellvi, Santos Castañeda, Vincent Cottin, Bruno Crestani, Philippe Dieude, Liam Galvin, Klaus Geissler, Clive Green, Joseph Jacob, Steve Jones, Andreas Krause, Preston Long, Britta Maurer, Erika Mosor, Toby M Maher, Polina Pchelnikova, Jef Van Rompay, Nelleke Tak, Jeska De Vries-Bouwstra, Claudia Valenzuela, Marlies Wijsenbeek, Anna Maria Hoffmann-Vold
PA3468	**Screening for ILD in RA: a survey of 1132 patients with RA** Anna Maria Hoffmann-Vold (Oslo, Norway), Katerina Antoniou, Jerome Avouac, Elisabeth Bendstrup, Graham Brown, Ivan Castellvi, Santos Castañeda, Vincent Cottin, Bruno Crestani, Philippe Dieude, Liam Galvin, Joseph Jacobs, Steve Jones, Andreas Krause, Preston Long, Britta Krause, Erika Mosor, Toby M Maher, Polina Pchelnikova, Nelleke Tak, Jeska De Vries-Bouwstra, Claudia Valenzuela, Marlies Wijsenbeek, Michael Kreuter
PA3469	**Interstitial lung disease in connective tissue disease: data from an Italian Multidisciplinary Unit** Alberto Bracciali (Prato, Italy), Sara Torracchi, Elisabetta Rosi, Matteo Drigo, Rubina Giulia Girolamo, Francesco Bonomi, Federico Lavorini, Serena Guiducci, Sara Tomassetti
PA3470	**Clinical score composite of DLCO, mMRC, and 6-mnute walking distance provides prognostic value in patients with fibrotic lung disease: A Prospective observationl Study** Pin-Kuei Fu (Taichung, Taiwan), Yu-Wan Liao
PA3471	**Risk factors for SSc-ILD progression using the new PPF guideline and INBUILD PF-ILD criteria** Oliver Distler (Zurich, Switzerland), Anna-Maria Hoffmann-Vold, Liubov Petelyska, Håvard Fretheim, Imon Barua, Mike Becker, Hilde Bjørkekjær, Cathrine Brunborg, Cosmino Bruni, Phuong Phuong Diep, Rucsandra Dobrota, Michael Durheim, Muriel Elhai, Suzana Jordan, Emily Langballe, Øyvind Midtvedt, Carima Mihai, Øyvind Molberg
PA3472	**ILD associated with systemic sclerosis: predisposing factors for progressive fibrosing ILD** Sheila Ramjug (Altrincham, United Kingdom), Christopher Markus, Jennifer Helm, Hayley Fox, Muditha Samaranayaka, Michael Hughes
PA3473	**Real world incidence & prevalence of PF-ILD in a systemic sclerosis cohort** Mahin Ahmad (Heswall, United Kingdom), Rosalind Benson, Theresa Barnes, Madhusudan Paravasthu, Freddy Frost, Veronica Yioe, Lisa Spencer
PA3474	**Factors prognostic of rapid progression of systemic sclerosis-associated interstitial lung disease (SSc-ILD)** Oliver Distler (Zurich, Switzerland), Jérôme Avouac, Anna-Maria Hoffmann-Vold, Vanessa Smith, Gerrit Toenges, Margarida Alves, Masataka Kuwana
PA3475	**The Feasibility of Home Spirometry and Oximetry Monitoring In Patients With Interstitial Lung Disease** Wan Lin Ng (Dublin, Ireland), Anja Schweikert, Rebecca Borton, Donough Howard, Laura Durcan, Killian Hurley
PA3476	**ILD progression varies in subtypes of connective tissue diseases** Phuong Phuong Diep (Oslo, Norway), Emily Langballe, Cosimo Bruni, Håvard Fretheim, Helena Andersson, Silje Reiseter, Ragnar Gunnarsson, Øyvind Palm, Torhild Garen, Øyvind Midtvedt, Øyvind Molberg, Trond Mogens Aaløkken, Michael Thomas Durheim, Oliver Distler, Anna-Maria Hoffmann-Vold
PA3477	**Decline in BMI is a predictor of functional progression in pulmonary fibrosis associated with connective tissue disease** Alexandra Nagy (Budapest, Hungary), Bernadett Mák, Veronika Müller
PA3478	**Living with chronic cough: experiences, burden and management in ILD – a qualitative Study** Shirley Quach (Concord, Canada), Renata Mancopes, Dina Brooks, Ana Oliveira
PA3479	**Argentine registry of autoimmune interstitial lung disease: EPIMAR 2 baseline data** Juan Ignacio Enghelmayer (Ciudad Autónoma Buenos Aires, Argentina), Silvia Quadrelli, Norma Naval, Patricia Aruj, Viviana Moyano, Adrian Gaser, Maria Laura Alberti, Santiago Auteri, Soledad Altube, Javier Abdala, Brenda Varela, Maria Otaola, Lilian Caponi, Gabriela Tabaj, Luciana Molinari, Federico Zenon, Eugenia Perticone, Joaquin Maritano, Marcela Usandivaras, Fabian Caro, Matias Castro, Beatriz Gil, Fernando Piumatti, Javier Sebastiani, Diana Lancellotti, Federico Campins, Diego Goffredo, Antonella Gamarra, Gabriela Manonelles, Jorge Garcia Gonzalez, German Arce, Raul Lisanti, Silvia Del Valle Escotorin, Paula Gonzalo, Francisco Paulin, Florencia Vivero
PA3480	**Functional improvement at one year in fibrotic interstitial lung diseases (ILD) – impact of baseline biomarkers and anti-inflammatory therapies** Guangyu Shao (Linz, Austria), Paul Thöne, Bernd Lamprecht, Bernhard Kaiser, David Lang
PA3481	**Malaysian real-world data to describe progressive pulmonary fibrosis (PPF) in a clinical setting** Syazatul Syakirin Sirol Aflah (Kuala Lumpur, Malaysia), Noraishah Sulaiman, Mohd Syahin Shahira Lilah, Ming Yi Khoo, Wooi Leong Leow

PA3482 **The natural history of interstitial pneumonia with autoimmune features compared to connective tissue disease-associated interstitial lung disease – prospective single-centre study preliminary results**
Ewa Miadlikowska (Łódź, Poland), Joanna Miłkowska-Dymanowska, Adam Jerzy Białas, Wojciech Jerzy Piotrowski

PA3483 **Late Breaking Abstract - AI-powered decision support helps pulmonologists to diagnose ILD more accurately.**
Julie Maes (Leuven, Belgium), Paul Desbordes, Karolien Van Orshoven, Maarten De Vos, Markus Steinwender, Erich Helfenstein, Corina Marginean, Nicolas Henzi, Peter Cerkl, Patrick Heeb, Stephan Keusch, Gianluca Calderari, Paul Boetticher, Bernhard Baumgartner, Daiana Stolz, Marioara Simon, Daniela Gompelmann, Wim Janssens, Marko Topalovic

PA3484 **Late Breaking Abstract - Characterization of high responders in the phase 2a IPF AIR trial of C21 using baseline quantitative CT image analysis**
Elliott Bussell (Cambridge, United Kingdom), Rohit Batta, Elin Rosendahl, Muhunthan Thillai, Alessandro Ruggiero, Thomas Bengtsson, Cecilia Ganslandt, Philip Molyneaux, Toby Maher

PA3485 **Late Breaking Abstract - Inhaled pirfenidone (AP01) forced vital capacity (FVC) data from the ATLAS study vs placebo from 3 historical idiopathic pulmonary fibrosis (IPF) randomised controlled trials (RCTs)**
Nazia Chaudhuri (Limavady, United Kingdom), Lisa Lancaster, Scott Palmer, Peter George, Felix Woodhead, Lyn Baranowski, Deepthi Nair, Andrey Pavlov, Colin Reisner

PS-19 in poster area Session 350 16:00 - 17:30

Poster session: Pulmonary hypertension in lung disease and hypoxia

Disease(s) : Interstitial lung diseases | Pulmonary vascular diseases | Airway diseases

Method(s) : Epidemiology | General respiratory patient care | Imaging | Cell and molecular biology | Transplantation | Respiratory intensive care | Public health

Tag(s) : Clinical

Chairs : Deimante Hoppenot (Kaunas, Lithuania), Da-Hee Park (Hannover, Germany)

PA3486 **PH-ILD management and unmet need in Europe: a clinician survey**
Luke Howard (London, United Kingdom), Stefano Ghio, Federica Meloni, John Cannon, Hilario Nunes, Jose Cifrian-Martinez, Raquel Rojo, Andreas Günther, David Montani, Karl Pehk, Miriam Delgado

PA3487 **The Effect of Subcutaneous Treprostinil on Pulmonary Hypertension Associated with Interstitial Lung Disease**
Roela Sadushi-Kolici (Wien, Austria), Inbal Shafran, Helmut Prosch, Nika Skoro-Sajer, Christin Gerges, Irene Lang

PA3488 **Improved survival after treatment with pulmonary vasodilator therapies in patients with sarcoidosis-associated pulmonary hypertension: results from an international registry**
Laura Price (London, United Kingdom), Vasilis Kouranos, Robert Baughman, Chloe Bloom, Oksan Shlobin, Steven Nathan, Rohit Gupta, Colm Mccabe, Chinthaka Samaranayake, Thomas Mason, Elisabetta Renzoni, Athol Wells, John Wort

PA3489 **Safety and tolerability of inhaled treprostinil with phosphodiesterase-5 inhibitors in patients with pulmonary hypertension due to interstitial lung disease**
David Zisman (Weston, United States), Hilary Dubrock, Christopher King, Sheila Weaver, Steven Nathan, Franck Rahaghi, Hyoshin Kim, Youlan Rao, Eric Shen, Aaron Waxman

PA3490 **Artificial Intelligence and Computed Tomography to improve quantification and prognostication of lung disease in precapillary pulmonary hypertension**
Krit Dwivedi (Sheffield, United Kingdom), Michael Sharkey, Liam Delany, Samer Alabed, Smitha Rajaram, Catherine Hill, Christopher Johns, Alex Rothman, Roger Thompson, Jim Wild, Robin Condliffe, David Kiely, Andrew Swift

PA3491 **Reduced pulmonary vascular density in severe pulmonary hypertension associated with chronic lung disease**
Agustin Roberto Garcia (BARCELONA, Spain), Iván Vollmer Torrubiano, Isabel Blanco, Ruben San José Estepar, Diego Andrés Rodriguez Chiaradia, Clara Martin Ontiyuelo, Manuel Lopez Meseguer, Pietro Nardelli, Fernanda Hernandez Gonzales, Jesus Ribas, Adelaida Bosacoma Armora, Xavier Pomares Amigo, Salud Santos Perez, Maria Molina Molina, Jacobo Sellares Torres, Farbod N Rahaghi, Raul San Jose Estepar, Joan Albert Barberà

PA3492 **Predicting Pulmonary Pharmacokinetics of Inhaled Liposomal Treprostinil (L606) and Treprostinil Solution in Healthy Adult**
Pei Kan (Taipei, Taiwan), Ko-Jie Chen

PA3493 **PH-ILD patient characteristics and burden of disease in Europe: a clinician survey**
David Montani (Le Kremlin-Bicêtre, France), Stefano Ghio, Federica Meloni, John Cannon, Hilario Nunes, Jose Cifrian-Martinez, Raquel Rojo, Andreas Günther, Luke Howard, Karl Pehk, Gabriela Jeanneret

PA3494 **Artificial intelligence to detect pulmonary hypertension in idiopathic pulmonary fibrosis: Study design**
Alexandra Arvanitaki (London, United Kingdom), Gerhard Paul Diller, Bhashkar Mukherjee, Alexandra Lawrence, Vasilis Kouranos, Thomas Semple, Wei Li, Natali Chung, Phillip Marino, Surinder Birring, Colm Mccabe, Michael Gatzoulis, Laura Price, John Wort

PA3495 **Use of pulmonary vasodilator therapy in anti-synthetase syndrome-associated pulmonary hypertension**
Thomas Mason (London, United Kingdom), Chinthaka Samaranayake, Colm Mccabe, Kostas Dimopoulos, Vasilis Kouranos, John Wort, Laura Price

PA3496 **Multi-institutional Development and External Validation of Nomograms for the Prediction of Diagnosis and Survival in COPD with Severe Pulmonary Hypertension**
Yuqin Chen (Guangzhou, China), Dansha Zhou, Chi Hou, Jian Wang

PA3497 **CircPMS1 promotes proliferation of pulmonary artery smooth muscle cells, pulmonary microvascular endothelial cells, and pericytes under hypoxia**
Xiaoyi Hu (Shanghai, China), Shang Wang, Hui Zhao, Yaqin Wei, Yuxia Huang, Rong Jiang, Jinming Liu, Ping Yuan

PA3498 **Pulmonary hypertension in patients with Progressive Fibrosing Interstitial Lung disease(PF-ILD)referred for Lung transplantation:Retrospective study from India.**
Manjunath M N (Hyderabad, India), Vijil Rahulan, Moiz Lalani, Owais Tisekar, Samuel Priyaranjan, Prabhath Dutta, Sonali Arora, Sandeep Attavar

PA3499 **Prediction of survival in patients with pulmonary hypertension associated with interstitial lung disease treated with pulmonary vasodilators**
Jun Fukihara (Seto, Japan), Reoto Takei, Hajime Sasano, Yasuhiko Yamano, Toshiaki Matsuda, Kensuke Kataoka, Tomoki Kimura, Yasuhiro Kondoh

PA3500 **Effect of Targeted Pulmonary Arterial Hypertension Therapy on Arterial Oxygenation in Patients With Pulmonary Hypertension Associated With Lung Disease: A Systematic Review and Meta-analysis**
Rodrigo Torres Castro (Barcelona, Spain), Isabel Blanco, Lucilla Piccari, Agustin Roberto García, Clara Martin Ontiyuelo, Elena Gimeno Santos, Ana Ramírez, Anna Sardine, Joan Albert Barberà

PA3501 **An open-label, pharmacodynamic trial investigating vascular effects of the angiotensin II type 2 receptor (AT2R) agonist (ATRAG) C21**
Rohit Batta (Maidenhead, United Kingdom), Cecilia Ganslandt, Erik Rein-Hedin, Folke Sjöberg, Göran Tornling, Thomas Bengtsson, Kamilla Overbeck, Elin Rosendahl, Barbara Bjerring, Johan Raud, Carl-Johan Dalsgaard

PA3502 **Severity of pulmonary hypertension in lung disease: impact of the 2022 guidelines on the REHAR registry population**
Diego Agustin Rodriguez Chiaradia (Barcelona, Spain), Lucilla Piccari, Marta Arjona, Virginia Pérez-González, Isabel Blanco, Gregorio Pérez-Peñate, Juan Antonio Domingo, Roberto Del Pozo, Ernest Sala, Raquel López, Xavier Pomares, Amaya Martínez, Cristina Sabater, Alberto García, Agueda Aurtenetxe, Leyre Chasco, Salud Santos, Andrés Tenes, Maria Asunción Nieto, Luis Jara-Palomares, Diego Rodríguez

PA3503 **Pulmonary Hypertension International Survey of Health Impacts (PHISH): a global patient questionnaire**
Joseph Newman (Cambridge, United Kingdom), Isla Sanderman, Millicent Stone, Gergely Meszaros, Gerald Fischer, Joanna Pepke-Zaba, . Pulmonary Vascular Research Institute: Patient Engagement And Empowerment Working Group

PA3504 **What role does the NLRP3 Inflammasome play in Systemic Sclerosis-Associated Pulmonary Arterial Hypertension (SScPAH)?**
Jennifer Rossdale (Bristol, United Kingdom), Sergey Smirnov, Victoria Flower, Raveen Kandan, Kevin Carson, Oliver Watkinson, Daniel Augustine, John Graby, Sarah Skeoch, Gerry Coghlan, Rob Mackenzie Ross, John Pauling, Amanda Mackenzie, Jay Suntharalingam

PA3505 **Correlations between lung injury and peripheral vascular manifestations in patients with systemic sclerosis: a preliminary study**
Barbara Ruaro (Trieste, Italy), Paola Confalonieri, Riccardo Pozzan, Stefano Tavano, Chiara Bozzi, Selene Lerda, Marco Confalonieri, Francesco Salton

PS-2 in poster area Session 351 16:00 - 17:30

Poster session: COVID-19, infectious and interstitial pulmonary diseases from a primary care perspective

Disease(s) : Interstitial lung diseases | Airway diseases | Respiratory critical care | Pulmonary vascular diseases | Thoracic oncology | Sleep and breathing disorders

Method(s) : Epidemiology | General respiratory patient care | Imaging | Physiology | Pulmonary function testing | Public health | Respiratory intensive care | Pulmonary rehabilitation

Tag(s) : Clinical

PA3506 **RELATIONSHIP BETWEEN EARLY MENARCHE AND RESPIRATORY MUSCLE PRESSURES IN MIDDLE AGE AND OLDER WOMEN**
Ingrid Guerra Azevedo (São paulo, Brazil), Maria Do Socorro Luna Cruz, Saionara Maria Aires Da Câmara, Álvaro Campos Cavalcanti Maciel, Elizabel De S. Ramalho Viana

PA3507	**RELATIONSHIP BETWEEN MATERNAL AGE OF FIRST BIRTH AND RESPIRATORY MUSCLE PRESSURES IN MIDDLE AGE AND OLDER WOMEN** Ingrid Guerra Azevedo (São paulo, Brazil), Saionara Maria Aires Aires Da Câmara, Maria Do Socorro Luna Cruz, Mayra Quintana Villarroel, Álvaro Campos Cavalcanti Maciel, Elizabel De S. Ramalho Viana
PA3508	**AI models for respiratory diseases from spirometry alone: validation based on UK Biobank** Julie Maes (Leuven, Belgium), Ahmed Elmahy, Paul Desbordes, Maarten De Vos, Marko Topalovic
PA3509	**Prevalence of interstitial lung disease (ILD) in symptomatic individuals with normal spirometry in primary care** Suhani Patel (London, United Kingdom), Anthony Sunjaya, Ethaar El-Emir, Jennifer Harvey, Elizabeth Fleming, Ingram Karen, George Edwards, Timothy Jenkins, Gillian Doe, Samantha Kon, Karl Sylvester, Toby Maher, Philip Molyneaux, William Man
PA3510	**Service evaluation of a pilot healthcare scientist led OSA clinic in primary care** Rhodri Curtis (Cardiff, United Kingdom), Joleta Hooper-Lee, Alex Perkins
PA3511	**Novel screening protocol for early detection of lung involvement in sero- and ACPA-positive rheumatoid arthritis** Frank Reichenberger (Munich, Germany), Martin Welcker, Martin Hoffmann, Werner Von Wulffen, Florian Popp
PA3512	**BETA-LACTAMASE ACTIVITY IS A BIOMARKER FOR THE PREDICTION OF THE EFFICACY OF ANTIMICROBIAL THERAPY.** Farkhod Mukhsinov (Tashkent, Uzbekistan), Irina Liverko
PA3513	**Pulmonary embolism during tuberculosis: clinical features and outcomes** Tarak Cherif (Ariana, Tunisia), Amani Ben Mansour, Azza Slim, Hafaoua Daghfous, Soumaya Ben Saad, Fatma Tritar
PA3514	**COVID-19 pandemic: challenges, facts and risks of antibiotic resistance** Irina Liverko (Tashkent, Uzbekistan), Feruza Niyazova
PA3515	**Post-COVID consultation at Winterthur Cantonal Hospital - follow-up over six months** Markus Hofer (Zürich, Switzerland), Swantje Beyer, Sarah Egli, Anne-Kathrin Rauh, Juergen Hetzel, Irina Nast, Markus Wirz
PA3516	**Impact of post-covid-19 condition on health and activities of daily living: a population-based cohort study** Maarten Van Herck (Horn, Netherlands), Demi M E Pagen, Céline J A Van Bilsen, Stephanie Brinkhues, Kevin Konings, Casper D J Den Heijer, Suhreta Mujakovic, Henriëtte L G Ter Waarbeek, Chris Burtin, Daisy J A Jansen, Christian J P A Hoebe, Martijn A Spruit, Nicole H T M Dukers-Muijrers
PA3517	**Prediction of the development of traction bronchiectasis and parenchymal bands in patients discharged after treatment for COVID-19** Rebecca Saray Marchesini Stival (Rio Grande (RS), Brazil), Ariele Haagsma, Rafaella Bernardelli, Bruno Pedrazzani, Karin Storrer, Nayanne Oliveira, Luisa Abbott, Maria Letícia Tebet, Maria Fernanda Vieira, Cristina Baena
PA3518	**Long Covid (LC) is still unrecognized in Greece. A barrier to adequate treatment.** Paraskevi Katsaounou (Athens, Greece), Martha-Spyridoula Katsarou, Archontoula Antonoglou, Antonis Kontaxakis, Ioanna Kotsamidi, Vassiliki Vakouftsi, Maria Saroglou, Helen Iasonidou
PA3519	**Patient care in the last days of life – Prescription patterns in a Pneumology Ward** Pedro Viegas (Vila Nova de Gaia, Portugal), Leonor Roseta, Eloisa Silva, Ana Cristina Ferreira, Teresa Shiang, Manuela Vanzeller, Carla Ribeiro
PA3520	**Symptom management in the last days of life in a Respiratory Ward** Pedro Viegas (Vila Nova de Gaia, Portugal), Leonor Roseta, Eloisa Silva, Ana Cristina Ferreira, Teresa Shiang, Manuela Vanzeller, Carla Ribeiro
PA3521	**Possible changes in diagnoses before and during Covid-19 with focus on the respiratory tract** Pia Lindberg (Tyresö, Sweden), Seika Lee, Gunnar Ljunggren, Åsa Wheelock, Axel Carlsson
PA3522	**Development of patient resources for chronic breathlessness: Needs analysis** Anthony Paulo Sunjaya (Sydney, Australia), Allison Martin, Clare Arnott, Guy Marks, Christine Jenkins
PA3523	**Predictors of successful separation from high flow nasal cannula oxygen therapy in severe COVID-19 patients admitted in a tertiary hospital in Bacolod City, Philippines** Rencel Beljera (Bacolod City, Philippines), Rock Jr. Camiña, Paolo Hilado
PA3524	**The association of SpO2/FiO2 (SF) ratio with the chest CT severity score (CTSS) in adult COVID-19 patients admitted in a tertiary hospital in Manila, Philippines.** PAOLO HILADO, Jennylyn Go

PS-20 in poster area Session 352 16:00 - 17:30

Poster session: Imaging studies in COVID pneumonia and other lung diseases

Disease(s) : Interstitial lung diseases | Airway diseases | Respiratory critical care | Thoracic oncology | Pulmonary vascular diseases

Method(s) : Imaging | Physiology | Pulmonary function testing | Respiratory intensive care | Endoscopy and interventional pulmonology | Epidemiology | Public health | Surgery

Tag(s) : Clinical

Chairs : Ádám Domonkos Tárnoki (Budapest, Hungary), Chair to be confirmed

PA3525	**Comparison of Conventional Clinical and Laboratory Findings with 18F-FDG PET/CT and 68Ga Citrate PET/CT in terms of Diagnostic Utility and Disease Activity Among Sarcoidosis Patients** bahar kubat (ISTANBUL, Turkey), Mehmet Cüneyt Tetikkurt, Haluk Burçak Sayman
PA3526	**CT imaging differences between different Covid-19 strains** Aleksandar Ivkovic (Niš, Republic of Serbia), Tamara Milosavljevic, Ivana Svilarov, Stevan Ivkovic, Dusan Ivkovic
PA3527	**CT findings as prediction of long covid** Aleksandar Ivkovic (Niš, Republic of Serbia), Tamara Milosavljevic, Ivana Svilarov, Stevan Ivkovic, Dusan Ivkovic
PA3528	**Quantitative CT lung alterations and lung function in COVID-19 associated ARDS: 1-year follow-up** Riccardo Ripamonti (Vimercate, Italy), Bianca Corrò, Silvia Pagani, Stefania Raschi, Pierfranco Usai, Cristiano Bonacina, Roberta Cattaneo, Monica Bernareggi, Chiara Melacini, Serena Bencini, Martina Piluso, Francesca D'Arcangelo, Luca Parachini, Chiara Milano, Roberta Ciceri, Angela Brancaforte, Marcello Intotero, Paolo Scarpazza
PA3529	**Persisting radiological abnormalities following covid-19 are common and correlate with impaired Quality of Life** Hannah Bayes (Glasgow, United Kingdom), Robert Sykes, Andrew J Morrow, Kenneth Mangion, Alex Mcconnachie, Alasdair Mcintosh, Giles Roditi, Claire Rooney, Katherine Scott, David Stobo, Colin Berry, Colin Church
PA3530	**Differences in CT presentation of covid 19 between vaccinated and unvaccinated patients** Aleksandar Ivkovic (Niš, Republic of Serbia), Tamara Milosavljevic, Ivana Svilarov, Stevan Ivkovic, Dusan Ivkovic
PA3531	**Computed tomography (CT) characteristics of vanishing lung syndrome in patients after severe COVID-19 pneumonia** Svitlana Opimakh (Kyiv, Ukraine), Yurii Feshchenko, Viktoria Ignatieva, Mykola Lynnyk, Galyna Gumeniuk, Mykola Gumeniuk, Maryna Polianska, Nataliia Musienko
PA3532	**Multislice CT in the visualisation of thromboembolism of small branches of pulmonary arteries in COVID-19** Elmira Chuvakova (Astana, Kazakhstan), Lina Zaripova, Timur Sarsengaliyev, Manana Peradze, Abay Baigenzhin
PA3533	**Incidentaloma in covid 19** Stevan Ivković (Niš, Republic of Serbia), Dušan Ivković, Aleksandar Ivković
PA3534	**Medical managment strategies in epidemic** Dušan Ivković (Niš, Republic of Serbia), Stevan Ivković, Aleksandar Ivković
PA3535	**CT findings in asymptomatic patients with covid 19** Stevan Ivković (Niš, Republic of Serbia), Dušan Ivković, Aleksandar Ivković
PA3536	**Post COVID-19 HRCT Thorax sequalae, a one year follow up study** Rajesh Agrawal (Bareilly, India), Rajat Agarwal, Javied Ahmad Malik
PA3537	**Thromboembolic complications during SARS-CoV-2 infection in the elderly** Hamida Kwas (Gabes, Tunisia), Sabrine Majdoub Fehri
PA3538	**Pneumonectomy in the surgery of pulmonary Hydatid cysts: A therapeutic option that is sometimes unavoidable** wifek SAIDANI (Ariana, Tunisia), Kaouther Ben Amara, Imen Bouassida, Hazem Zribi, Mehdi Abdennadher, Sarra Zairi, Imen Sahnoun, Adel Marghli
PA3539	**Radiation exposure in primary spontaneous pneumothorax patients.** Bart P.C. Hoppe (Leiden, Netherlands), Tijmen J.T. Van Der Wel, Gijs C.M. Van De Ven, Pieter E. Postmus
PA3540	**Changes in lung volumes during bronchoalveolar lavage according to bedside position. Case Series** Ignacio Fernández Ceballos (Buenos Aires, Argentina), Julieta Gonzalez Anaya, Juan Martín Nuñez Silveira, Emilio Steinberg, Leiniker Navarro Rey, Gabriel Elias Vega, Ivan Huespe, Indalecio Carboni Bisso, Marcos Las Heras, Rodriogo Cornejo
PA3541	**Severity and radiological score in nasal polyposis associated with asthma : comparison between asthmatic and non-asthmatic patients** Rim Hammami (Sfax, Tunisia), Souha Kallel, Mohamed Amin Chaabouni, Omar Walha, Najla Bahloul, Sirine Ayedi, Sami Kammoun, Ilhem Charfeddine

PA3542	**Computerized tomography evaluation of pleural effusion before medical thoracoscopy** Filip Popović (Zagreb, Croatia), Marta Koršić, Fran Seiwerth, Sonja Badovinac, Lela Bitar, Marko Jakopović, Miroslav Samaržija
PA3543	**Late Breaking Abstract - CT-based diaphragm analysis to evaluate the diaphragm configuration with increasing COPD severity** Jens Thomas Bakker (GRONINGEN, Netherlands), Jorine E. Hartman, Karin Klooster, David A. Lynch, Marieke C. Van Der Molen, Jean-Paul Charbonnier, Michail Tsiaousis, Rozemarijn Vliegenthart, Dirk-Jan Slebos
PA3544	**Late Breaking Abstract - Deep learning-based outcome prediction in pulmonary fibrosos using synthetic HRCT** Simon Walsh (London, United Kingdom), Xiaodan Xing, John Mackintosh, Lucio Calandriello, Yingying Fang, Shiyi Wang, Sheng Zhang, Yang Nan, Mario Silva, Athol Wells, Guang Yang, Tamera Corte

PS-3 in poster area — Session 353 — 16:00 - 17:30

Poster session: Respiratory mechanics, structure-function, and modelling studies

Disease(s) : Respiratory critical care | Airway diseases | Interstitial lung diseases | Pulmonary vascular diseases

Method(s) : Physiology | Pulmonary function testing | Pulmonary rehabilitation | Respiratory intensive care | Public health | Imaging | General respiratory patient care

Tag(s) : Translational

Chairs : Raffaele Dellaca (Milano (MI), Italy), Katarzyna Górska (Warszawa, Poland)

PA3545	**Improved gas exchange during high-frequency percussive ventilation: comparison of intratracheal and extrathoracic oscillations** Ferenc Peták (Szeged, Hungary), Walid Habre, John Diaper, Roberta Südy, Davide Bizzotto, Raffaele Dellacà, Álmos Schranc
PA3546	**Effects of positive and negative end-expiratory pressures on gas exchange and haemodynamics during flow-controlled ventilation: an experimental study** Álmos Schranc (Geneva, Switzerland), John Diaper, Roberta Südy, Walid Habre, Gergely Albu, Philippe Bijlenga, Hervé Quintard
PA3547	**Ventilation-perfusion matching assessed by volumetric capnography: differences between positive- and negative -pressure mechanical ventilation in rats** Bence Ballók (Szeged, Hungary), Gergely H. Fodor, Fruzsina Kun-Szabó, Ibolya Tóth, Petra Somogyi, József Tolnai, Barna Babik, Ferenc Peták
PA3548	**Viscoelastic behavior of sheep respiratory system during mechanical ventilation** Camilla Zilianti (Milano (Mi), Italy), Fabio Acocella, Giuliano Ravasio, Roberto Galli, Anna Kyriakoudi, Matteo Pecchiari
PA3549	**Establishing reference values for the end-expiratory lung volume (EELV) in a common model of respiratory research** Gergely H. Fodor (Szeged, Hungary), Ferenc Rárosi, Bence Ballók, Fruzsina Kun-Szabó, Ibolya Tóth, Petra Somogyi, Ferenc Peták
PA3551	**Evaluation of the spatial spirometry indicators using electrical impedance tomography** Wang Chun Kwok (Hong Kong, Hong Kong), Fedi Zouari, Pak To Cheung, Adrien Touboul, Venice Sin, Eddie C. Wong, Iris Y. Zhou, Terence Chi Chun Tam, Russell W. Chan
PA3552	**Distribution of regional lung ventilation in upright healthy subjects determined by electrical impedance tomography** Inez Frerichs (Kiel, Germany), Barbara Vogt, Kathinka Deuss, Victoria Hennig, Claas Strodthoff
PA3553	**Comparing a semi-empirical model of inhaled compound deposition with computational fluid dynamics (CFD)** Hosein Sadafi (Kontich, Belgium), Benjamin Lavon, Wilfried De Backer, Maarten Lanclus, Jan De Backer
PA3554	**Computational fluid dynamic analysis of the effect of airflow vibration in nasal cavity** MASATO MIWA (TOKYO, Japan), Soichiro Fujimura, Nagisa Yanagi, Masahiro Nakamura, Fumihiko Matsumoto, Makoto Yamamoto
PA3555	**Effects of breathing frequency on the capnogram shape factors in healthy subjects** József Tolnai (Szeged, Hungary), Gergely Fodor H., Ibolya Tóth, Petra Somogyi, Bence Ballók, Barna Babik, Ferenc Peták
PA3556	**Understanding the determinants of CO gas-transfer test through a computational lung model** Christos Nikolaou (London, United Kingdom), Wenjia Bai, Brody H Foy, Salman Siddiqui
PA3557	**Examining the relationship between pulmonary vascular structure and function in chronic obstructive pulmonary disease: a cross-sectional analysis.** Sophie Collins (EDMONTON, Canada), Miranda Kirby, Joshua Perka, Andrew Weinkauf, Gaurav Veer Singh, Stephanie Thompson, Benjamin M. Smith, Sean Van Diepen, Michael Stickland

PA3558	**Association of Forced Oscillation Technique measurements with respiratory system compliance and resistance in a 2-compartment physical model of the respiratory system** Laurent Plantier (Tours Cedex 9, France), Valentin Cerfeuillet, Laurine Allimonnier, Sandrine Le Guellec
PA3559	**Use of oscillometry in clinical practice** Elisabeth Edvardsen (Oslo, Norway), Ingvild Bjellmo Johnsen
PA3560	**The Utility of Forced Oscillation Technique in the Assessment of Obstructive Lung Disease among Adult Patients** Nikko John Dalisay (Angeles City, Philippines), Bernice Ong-Dela Cruz, Ma. Encarnita Limpin
PA3561	**Airspace diameter map - a quantitative measurement of all pulmonary airspace to characterize structural lung diseases** Sanja Blaskovic (Bern, Switzerland), Pinelopi Anagnostopoulou, Elena Borisova, Dominik Schittny, Yves Donati, David Haberthür, Zhe Zhou-Suckow, Marcus A. Mall, Christian M. Schlepütz, Marco Stampanoni, Constance Barazzone, Johannes C. Schittny
PA3562	**Diabetes Enhances Impairments in Pulmonary Function and Exercise Capacity in Patients with Non-Alcoholic Steatohepatitis (NASH)** Chul-Ho Kim (Rochester, United States), Kade Fritz, Jack Lavey, Bruce Johnson, Kymberly Watt, Alexander Niven, Jinkyung Cho
PA3563	**Does the level of obesity impact on the respiratory function in adults?** Antonella LoMauro (Milano (MI), Italy), Gabriella Tringali, Franco Codecasa, Alessandro Sartorio, Andrea Aliverti

PS-4 in poster area — Session 354 — 16:00 - 17:30

Poster session: Intensive care unit settings and acute respiratory failure

Disease(s) : Respiratory critical care | Thoracic oncology | Airway diseases

Method(s) : General respiratory patient care | Respiratory intensive care | Epidemiology | Public health | Cell and molecular biology | Palliative care | Pulmonary rehabilitation | Surgery

Tag(s) : Clinical

Chairs : Christoph Fisser (Regensburg, Germany), Chair to be confirmed

PA3564	**Characteristics and clinical outcomes of adults hospitalized with viral lung infection** Mina Khezrian (Cambridge, United Kingdom), Steven Kiddle, Shubh Agrawal, Malin Fagerås, Benjamin Emmanuel, Trung Tran, Ioannis Psallidas
PA3565	**Post-intubation cardiac arrest events in patients of acute respiratory failure: compare neuromuscular blockers (NMBs) for rapid sequence intubation (RSI)** Yi-Ting Chen
PA3566	**The clinical score composite of six factors can guide DNR decisions in elderly patients with severe community acquired pneumonia: a retrospective multicenter cohort study.** Yu-Cheng Wu (Taichung City, Taiwan), Pin-Kuei Fu
PA3567	**Decrease tissue oxygen saturation influenced acute skeletal muscle weakness in patients with critically ill patients** Ryuji Sugiya (Osakasayama, Japan), Shinichi Arizono, Yuta Kimoto, Masashi Shiraishi, Kazuyuki Tabira, Yuichi Tawara, Tamotsu Kimura, Yuji Higashimoto, Hironori Shigeoka
PA3568	**Risk factors associated with Hantavirus Cardiopulmonary Syndrome in Chile.** Ricardo Fritz (Santiago, Chile), Francisco Arancibia, Ruvistay Gutiérrez-Arias, Claudia Sepulveda, Carlos Guerra, Cesar Paulsen
PA3569	**Risk factors for asthma related intensive care unit (ICU) admissions: Analysis of 1.4 million patients in England** Nikita Simms-Williams (Birmingham, United Kingdom), Prasad Nagakumar, Rasiah Thayakaran, Nicola Adderley, Krishnarajah Nirantarakumar, Adel Mansur, Shamil Haroon
PA3570	**Development and validation of deep-learning-based sepsis and septic shock early prediction system in real-world ICU data** woo hyun cho (Yangsan, Republic of Korea), Taehwa Kim, Hye Ju Yeo, Yunwon Tae, Kyungjae Cho, Dongjoon Yoo, Yeha Lee
PA3571	**Expansion of anaerobic bacteria in the lung microbiome of critically ill patients is associated with altered immune landscape and worsened outcomes.** Jared Schlechte, Amanda Zucoloto, Ian-Ling Yu, Christopher Doig, Mary Dunbar, Christina Thornton, Braedon Mcdonald
PA3572	**Outcomes of lung cancer patients admitted to a medical intensive care unit (ICU)** Glenn Yong (Singapore, Singapore), John Abisheganaden, Sennen Lew

PA3573	**A prospective study of circulating omentin-1 in critically ill patients with sepsis** Irene Karampela (Athens, Greece), Natalia Vallianou, Gerasimos-Socrates Christodoulatos, Dimitrios Tsilingiris, Georgios Antonakos, Ioanna Marinou, Evaggelos Vogiatzakis, Apostolos Armaganidis, Maria Dalamaga
PA3574	**Thirty-one-month outcomes of utilizing business intelligence tool for data-driven decision support to enhance compliance with lung protective strategy** Yu-Chu Kuo (, Taiwan), How-Yang Tseng, Chieh-Lung Chen, Wei-Cheng Chen
PA3575	**Modeling using risk factors for delirium in elderly patients admitted to an intensive care unit.** SUNG WON CHANG (Seoul, Republic of Korea), Kyung Soo Chung, Chi Rayng Chung, Jong Min Lee, Je Hyeong Kim, Jae Jeong Shim, Young Seok Lee
PA3576	**Impact of socioeconomic factors on pneumological emergency response** Klaas F. Franzen (Luebeck, Germany), Holger Maurer, Charlotte Söling, Daniel Drömann
PA3577	**Prognostic value of serum omentin-1 in critically ill patients with sepsis** Irene Karampela (Athens, Greece), Gerasimos-Socrates Christodoulatos, Natalia Vallianou, Dimitrios Tsilingiris, Georgios Antonakos, Ioanna Marinou, Evaggelos Vogiatzakis, Apostolos Armaganidis, Maria Dalamaga
PA3578	**Association of breathing reserve with post-operative pulmonary complications in an elective surgical cohort** Matthew Knight (manchester, United Kingdom), Inbar Aberman, Manisha Shah, Rahuldeb Sarkar
PA3579	**Association between early blood urea nitrogen-to-albumin ratio and one-year post-hospital mortality in critically ill surgical patients: a propensity score-matched study** Pei-Ya Liao (Taichung, Taiwan), Chao Wen-Cheng
PA3580	**Prediction of healthcare-associated infection using Quantiferon monitoring in pneumonia patients** Yun Seong Kim (Yangsan city (Kyeongsang Nam-do), Republic of Korea), Taehwa Kim
PA3581	**Risk factors for long-term invasive mechanical ventilation: a retrospective longitudinal study using German health claims data** Franziska Trudzinski (Heiderberg, Germany), Julia D Michels, Benjamin Neetz, Jan Meis, Michael Müller, Axel Kempa, Claus Neurohr, Armin Schneider, Felix Herth, Joachim Szecsenyi, Elena Biehler, Thomas Fleischhauer, Michael Wensing, Simone Britsch, Janina Schubert-Haack, Thomas Grobe, Timm Frerk
PA3582	**COPD Care Bundle in Emergency Department Observation Unit Reduces Emergency Department Revisits** Pierpaolo Maietta (mercogliano (AV), Italy)
PA3583	**ICU experience of the Respiratory Syncytial Virus Season after 2 years into the COVID-19 pandemic in a single instituition** Lurisha Coopoosamy (Pretoria, South Africa), Ameena Goga, Alicia Lazarus

PS-5 in poster area — Session 355 — 16:00 - 17:30

Poster session: From basic to translational sleep breathing disorders

Disease(s) : Sleep and breathing disorders, Airway diseases

Method(s) : General respiratory patient care, Imaging, Public health, Cell and molecular biology, Physiology, Epidemiology, Pulmonary function testing

Tag(s) : Translational

Chairs : Chair to be confirmed

PA3584	**Intermittent hypoxia mediates cancer development and progression through HIF-1 and miRNA regulation** GIORGIA MORIONDO (Barletta, Italy), Piera Soccio, Mélanie Minoves, Giulia Scioscia, Maria Pia Foschino Barbaro, Jean-Louis Pépin, Anne Briançon-Marjollet, Donato Lacedonia
PA3585	**Sleep apnoea indices associated with markers of inflammation and cardiovascular disease -A proteomic study in the MUSTACHE-cohort** Mirjam Elisa Ljunggren (Uppsala, Sweden), Xingwu Zhou, Jenny Theorell-Haglöw, Christer Jansson, Karl Franklin, Össur Emilsson, Eva Lindberg
PA3586	**Association of obstructive sleep apnea hypopnea syndrome with brain iron deposition** Sotirios Zarogiannis (Larisa, Greece), Dimitrios Raptis, Ioannis Lampropoulos, Olga Sinani, Dimitra Siachpazidou, Lamprini Pouliou, Georgia Rapti, Chrysoula Marogianni, Eftychia Kapsalaki, Chaido Pastaka, Foteini Malli, Konstantinos Gourgoulianis, Georgia Xiromerisiou
PA3587	**Intermittent hypoxia can induce apoptosis of macrophage** Yina Wang (Changsha (Hunan), China), Xiao Xiao, Silei Deng, Jingjie Kuang, Yuanguo Chen, Yayong Li

PA3588	**Intermittent hypoxia up regulates mTOR expression in hepatic macrophages through CX3CL1/CX3CR1** Yina Wang (Changsha (Hunan), China), Silei Deng, Xiao Xiao, Yuanguo Chen, Yayong Li
PA3589	**Tracking of respiratory effort during hypopneas in sleep apnea patients by analysis of energy ratio of breathing sounds using PneaVoX sensor** Martin Glos (Berlin, Germany), Songül Karaca, Jade Vanbuis, Margaux Blanchard, Paria Pourriahi, Meghna Jha, Ingo Fietze, Thomas Penzel
PA3590	**Experience with the mandibular advancement device (MAD) in the sleep-disordered breathing clinic.** Pablo Giménez Ruiz (Valencia, Spain), Alberto Martínez Aracil, Amparo Lluch Bisbal, Judith Murillo Cortés, Rafael Navarro Iváñez, Estrella Fernández Fabrellas
PA3591	**Two birds, one stone: a RCT investigating the efficacy of dexamfetamine for treating obesity and obstructive sleep apnoea** Natalie Gauci (Kingswood, Australia), Hazer Khalifa, Donald Lee, David Coulshed, Emily Hibbert, Kaye Foster-Powell, Alison Poulton
PA3592	**The effect of low dose CO2 on sleep quality in healthy subjects** Shanfeng Liang (Guangzhou, China), Dongxiao Lu, Qishan Wei, Baiting He, Luguang Wu, Yingxin Wu, Joerg Steier, Andrew Wellman, Yuanming Luo
PA3593	**Gender transition from female to male as a risk factor for sleep-disordered breathing** Samuel Genzor (Olomouc, Czech Republic), Jan Mizera, Jakub Vanek, Jan Prasko, Petr Jakubec, Monika Zurkova, Jiri Kufa
PA3594	**Obesity and self-reported symptoms as determinants of responses to atomoxetine and aroxybutynin for sleep apnea** Ludovico Messineo (Boston, United States), Scott Sands, Andrew Wellman, Ali Azarbarzin
PA3595	**TRANSCUTANEOUS NOCTURNAL CAPNOGRAPHY - AN UNDERUSED TOOL?** Laura Abad Chamorro (Oviedo, Spain), Gemma Rubinos Cuadrado, Maria José Vázquez López, Irene Fernández Suárez, Patrícia Rodríguez Menédez, Ina Iordanova Guerassimova, Pablo Lozano Cuesta, Ines Ruíz Alvarez, Juan Francisco Nieves Salceda, Laura Martinez Vega, María Rodil Riera, Eduardo Sánchez Vázquez, Isabel Martínez Gozález-Posada, Patricia Álvarez Álvarez, Ángela Lanza Martínez, Ramon Fernández Álvarez
PA3596	**Neck structures, risk factor for obstructive sleep apnea** Norbert Wellmann (TIMISOARA, Romania), Alexandru Cătălin Motofelea, Monica Steluța Marc
PA3597	**Estimating obstructive sleep apnea endotypes from the oxyhemoglobin saturation signal** Ludovico Messineo (Boston, United States), Ali Azarbarzin, Neda Esmaeili, Atqiya Aishah, Daniel Vena, Gonzalo Labarca, Laura Gell, Hu Wen-Sin, Hyung-Chae Yang, Scott Sands, Andrew Wellman
PA3598	**Gender difference in residual sleepiness at 1-year of CPAP treatment** Pasquale Tondo (Foggia, Italy), Simone Sorangelo, Anela Hoxhallari, Giulia Scioscia, Matteo Siciliano, Rosa Leccisotti, Matteo Bradicich, Giorgia Moriondo, Piera Soccio, Giuseppe Mansueto, Roberto Sabato, Maria Pia Foschino Barbaro, Donato Lacedonia
PA3599	**Systematic Review and Pathway Analysis of differentially expressed microRNAs in Obstructive Sleep Apnea** Barbara Santos (Coimbra, Portugal), Laetitia Gaspar, Ana Capitão, Alexandrina Ferreira Mendes, Claudia Cavadas, Irina S. Moreira, Ana Rita Álvaro
PA3600	**Late Breaking Abstract - Dysanapsis in adult obstructive sleep apnoea patients and its association with asthma.** Masood Ur Rasool (HUNTINGDON, United Kingdom), Hina Qaim, Sadiyah Hand, Parsanna Sankaran
PA3601	**Late Breaking Abstract - Association between obstructive sleep apnea syndrome (OSAS) and QRS duration in women** Derlen Ozgec (Nicosia, Cyprus), Cenk Conkbayır, Mustafa Akansoy

PS-6 in poster area — Session 356 — 16:00 - 17:30

Poster session: Precision medicine considerations and inhalation efficacy in airway diseases

Disease(s) : Airway diseases Respiratory critical care

Method(s) : General respiratory patient care Cell and molecular biology Respiratory intensive care Epidemiology Pulmonary function testing Public health

Tag(s) : Clinical

Chairs : Ellen Tufvesson (Lund, Sweden), Morten Hvidtfeldt (Lejre, Denmark)

PA3602	**Absolute blood eosinophil counts among 3,763 healthy, asthmatic, and COPD subjects across India.** Priyanka Dhumal (Pune, India), Virendra Singh, Malay Sarkar, Arjun Padmanabhan, Rajesh Swarnakar, Devasahayam Christopher, Mohankumar Thekkinkattil, Raja Dhar, Jitendra Ingole, Arpan Shah, Gayathri Joshy, Sonali Trivedi, Nagesh Dhadge, Shrikant Krishmurthy, Saurabh Karmakar, Sameer Arbat, Vijay Tyagi, Saibal Moitra, Sahebrao Toke, Archana B, Suresh Anantraj, Surya Kant Tripathi, Zuber Ahmed, Sanjay Kochar, Swapnil Gadhave, Sundeep Salvi
PA3604	**Treatable trait guided asthma management: biomarker changes and responder analysis** James Fingleton (Wellington, New Zealand), Rob Mclachlan, Jenny Sparks, Richard Beasley, Alvar Agusti, Peter G Gibson, Ian Pavord, Jo Hardy, Mark Weatherall, Allie Eathorne, Vanessa M Mcdonald
PA3605	**The impact of smoking history on baseline characteristic in patients with severe asthma in the German Asthma Net (GAN)** Leonie Biener (Bonn, Germany), Slagjana Stoshikj, Jonas Brugger, Roland Buhl, Eckard Hamelmann, Stephanie Korn, Christian Taube, Katrin Milger-Kneidinger, Christian Schulz, Hendrik Suhling, Margret Jandl, Rainer Ehmann, Olaf Schmidt, Marco Idzko, Dirk Skowasch
PA3606	**The impact of pretreatment blood eosinophils count (BEC) in the efficacy of Allergen Immunotherapy (AIT)** Antonios Christopoulos (Patras, Greece), Maria-Elpida Christopoulou, Ioannis Christopoulos, Georgios Tsirikos, Panagiota Tsiri, Eva Theohari, Electra Koulousousa, Vasiliki Sotiropoulou, Demitris Komninos, Argyrios Tzouvelekis
PA3607	**Fractional exhaled nitric oxide as a biomarker in patients with uncontrolled asthma** William Busse (Madison, United States), Ian D. Pavord, Michael E. Wechsler, Ignacio J. Davila, Arman Altincatal, Megan Hardin, Xavier Soler, Harry Sacks, Juby A. Jacob-Nara, Yamo Deniz, Paul J. Rowe
PA3608	**The effect of lung emptying on the airway deposition of aerosol drugs** Janos Tamas Varga (Budapest, Hungary), Árpad Farkas, Gábor Tomisa, Georgina Szénási, Péter Czaun, Alpár Horváth
PA3609	**Aerosol delivery during high flow nasal oxygenation: breath enhanced nebulization.** Gerald Smaldone (Stony Brook, United States)
PA3610	**BDP/FF FDC protects against bronchospasm induced by PEG, a BNT162b2 COVID-19 vaccine excipient** Luigino Calzetta (Roma (RM), Italy), Alfredo Chetta, Marina Aiello, Annalisa Frizzelli, Josuel Ora, Enrico Melis, Francesco Facciolo, Lorenzo Ippoliti, Andrea Magrini, Paola Rogliani
PA3611	**The effect of lung emptying on the breathing parameters characterizing the inhalation of aerosol drugs** Botond Havadtoi (Budapest, Hungary), Izolda Réti, Norbert Ilyés, Árpad Farkas, Alpár Horváth, Balázs Sánta, Tamás Kovács, Péter Czaun, Gabriella Gálffy
PA3612	**Anti-IL-5/5Ra biologics improve work productivity and activity in severe asthma.** PP Hekking (Rotterdam, Netherlands), Hanna Kuiper - Van Der Valk
PA3613	**Improving access to biologic treatments for patients with severe asthma** Angela Cooper (Stoke on Trent, United Kingdom), Holly Minshall, Elfatih Idris
PA3614	**Consistency of Medication Delivery with Breath Actuated Technology when Simulated with Differing Inhalation/Exhalation Ratios** Mark Nagel (London (ON), Canada), Rubina Ali, Cathy Doyle, Jason Suggett
PA3615	**ORBE II study: clinical characteristics and outcomes after treatment with benralizumab according to baseline blood eosinophil count** Alvaro Martinez Mesa (Malaga, Spain), Jose Luis Velasco Garrido, Ismael García Moguel, Carlos Martinez, Ruben Andujar, Carmen Cañete, Rocío Díaz Campos, Loles Arnao, Gabriel Niza, Javier Nuevo, Elisa Luzon Alonso, Alicia Padilla
PA3616	**ORBE II study: clinical characteristics and outcomes after treatment with benralizumab according to smoking status** Carlos Martínez Rivera (Barcelona, Spain), Francisco Casas, Marta Palop, Luis Cassini, Laia Secall, Maria Jose Escarpenter, Javier Nuevo, Elisa Luzón Alonso, Alicia Padilla Galo
PA3617	**Can patients with FEV1 ≥80% achieve improvements with benralizumab treatment? An ORBE II study subanalysis according to lung function** Marina Blanco Aparicio (A Coruña, Spain), Eva Martínez Moragón, Andrea Trisán Alonso, Borja Valencia Azcona, Pilar Ausín Herrero, Eugenia Navarrete Rouco, Marta González Sierra, Javier Nuevo Rivero, Elisa Luzón Alonso, Alberto Levy Naón
PA3618	**Long-term efficacy and tolerability of dupilumab in patients with moderate-to-severe type 2 asthma stratified by baseline characteristics** Michael E. Wechsler (Denver, United States), Linda Rogers, Giorgio Walter Canonica, Arman Altincatal, Megan Hardin, Xavier Soler, Paul J. Rowe, Yamo Deniz, Harry Sacks, Juby A. Jacob-Nara

PA3619	**Unprimed electrostatic plastic bottle spacer delivered more salbutamol aerosol to airways than antistatic valved holding chambers** Hyouk-Soo Kwon (Seoul, Republic of Korea), Ji-Yoon Oh, Ji-Hyang Lee, Yu Ri Kang, Young-Soon Yoon, Woo-Jung Song, Tae-Bum Kim, You Sook Cho
PA3620	**Late Breaking Abstract - Evaluation of the bronchoconstriction potential and safety profile of the novel environmentally-friendly HFA-152a propellant compared to the marketed HFA-134a propellant in a randomized clinical trial of adults with mild asthma** Michela Salvadori (Parma, Italy), Dave Singh, Brian Laker, James W Dodd, Luca Girardello, Kusum S Mathews, Gianluigi Poli
PA3621	**Late Breaking Abstract - Baseline characteristics impact on asthma exacerbation risk: individual patient trial data analysis** Pierluigi L. Paggiaro (Pisa (PI), Italy), David Price, Nicolas Roche, Sebastian Moreira, Manish Verma, Shalini Girotra, Maximilian Plank, Sean Oosterholt, Oscar Della Pasqua

PS-7 in poster area — Session 357 — 16:00 - 17:30

Poster session: Chronic obstructive pulmonary disease exacerbations

Disease(s) : Airway diseases Respiratory critical care

Method(s) : General respiratory patient care Cell and molecular biology Epidemiology Public health Pulmonary function testing Respiratory intensive care Imaging

Tag(s) : Clinical

Chairs : Fabiano Di Marco (Milan, Italy)

PA3622	**Evaluation of ACCEPT to predict COPD exacerbations in NOVELTY** Samuel Lewis (Cambridge, United Kingdom), Adam Taylor, Eleni Rapsomaniki, Hana Müllerová, Cecilia Kristensson, Andrew Harper, Pierre-Régis Burgel, Mohsen Sadatsafavi, Caroline Owen, Rod Hughes, . For The Novelty Scientific Community And The Novelty Study Investigators
PA3623	**Impact of Intrinsic and Extrinsic Environmental Factors on Acute Exacerbations of Chronic Airway Disease** Ying-Yin Chen (Douliou, Taiwan), Hung-Chueh Peng, Chen-Wen Lin, Yenh-Chen Hsein, Chung-Yu Chen
PA3624	**Chronic rhinosinusitis in COPD is associated with increased exacerbation risk** Anders Andersson (Göteborg, Sweden), Joel Bergqvist, Anne Lindberg, Caddie Zhou, Fredrik Nyberg, Johan Hellgren, Caroline Stridsman, Lowie E.G.W. Vanfleteren
PA3625	**Recognising exacerbations in Early COPD** Jordina Mah (London, United Kingdom), Andrew Ritchie, Gavin Donaldson, James Allinson, Aaron Braddy-Green, Chloe Bloom, Hassan Shahbakhti, Mairi Macleod, Dexter Wiseman, Luana Alves-Moreira, Malin Fageras, Kristoffer Ostridge, Olaf Jöns, Enrica Bucchioni, Chris Compton, Paul Jones, Karen Mezzi, Jørgen Vestbo, Peter Calverley, Jadwiga Wedzicha
PA3626	**Validation of the Rome proposal for severity of acute exacerbation of chronic obstructive pulmonary disease** Hyo Jin Lee (Seoul, Republic of Korea), Jung-Kyu Lee, Tae Yun Park, Eun Young Heo, Deog Kyeom Kim, Hyun Woo Lee
PA3627	**Comparison of eosinophilic and noneosinophilic exacerbations of COPD: phenotyping of the next relapse** Balazs Antus (Budapest, Hungary), Csilla Paska, Imre Barta
PA3628	**Association between changes in thoracic muscle mass assessed by high resolution computed tomography and exacerbations in patients with COPD- 1-year follow-up** Mia Solholt Godthaab Brath (Vadum, Denmark), Sisse Dyrman Alsted, Esben Bolvig Mark, Pernille Veiss-Pedersen, Rasmus Brath Christensen, Henrik Højgaard Rasmussen, Jens Brøndum Frøkjær, Lasse Riis Østergaard, Ulla Møller Weinreich
PA3629	**Frailty: a multifaceted challenge in Chronic Obstructive Pulmonary Disease** Warda Jelassi (Tunis, Tunisia), Chaima Habouria, Nidhal Belloumi, Imen Bechouch, Fatma Chermiti, Soraya Fenniche
PA3630	**Patient-reported symptoms as drivers of COPD exacerbation risk in routine care** Hana Müllerová (Cambridge, United Kingdom), Clementine Nordon, Stefan Franzén, Laura Belton, Clement Erhard, Nifasha Rusibamayila, Rod Hughes, Pierre-Régis Burgel, Mohsen Sadatsafavi, Christer Janson, For The Novelty Scientific Community And The Novelty Study Investigators
PA3631	**Comparison of hospitalised AECOPDs secondary to SARS-CoV-2 versus other respiratory viruses** Martin MacDonald (Ferny Creek, Australia), Louis Chhor, Stefan Saggese, Garun Hamilton
PA3632	**Association between weather and emergency department visits for acute exacerbation of chronic obstructive pulmonary disease patients with acute respiratory failure** Man-Ju Ting (New Taipei City, Taiwan), Yating Chen, Yeong-Long Hsu, Shih-Lung Cheng

PA3633 **Malnutrition : An independent risk factor of an early readmission for acute exacerbation in COPD**
Warda Jelassi (Tunis, Tunisia), Chaima Habouria, Nidhal Belloumi, Imen Bechouch, Fatma Chermiti, Soraya Fenniche

PA3634 **Platelet count and platelet-to-lymphocyte ratio as biomarkers on the onset of a severe COPD exacerbation**
Andreas Schønberg-Moe (EIKSMARKA, Norway), Balázs Csoma, András Bikov, Veronika Müller, Zsófia Lázár

PA3635 **Identifying opportunities for earlier diagnosis of high-risk COPD patients in Australia: an observational study**
Andrew Dickens (Cambridge, United Kingdom), Christine Jenkins, Alexander Evans, Kerry Hancock, Anita Sharma, Belinda Cochrane, Paul Leong, Brian Ko, Florian Heraud, Porsche Le Cheng, Alexander Roussos, Sinthia Bosnic-Anticevich, Fabio Botini, Victoria Carter, Angelina Catanzariti, Clare Ghisla, Thao Le, Chantal Le Lievre, Ruth Murray, Kanchanamla Ranasinghe, Deb Stewart, Marije Van Melle, Rebecca Vella, Russell Wiseman, David Price

PA3636 **Analysis of sputum microbial metagenome in COPD based on exacerbation frequency and lung function: a case control study**
Bingbing Wang (Shanghai, China), Shuanshuan Xie, Changhui Wang

PA3637 **Burden of chronic obstructive pulmonary disease (COPD) and risk factors for acute exacerbation: results of phase IV SWORD study**
Sheetu Singh (Jaipur (Rajasthan), India), Bharat Bhushan Sharma, Arvind Sharma, Krishna Kumar Sharma, Kp Suraj, Tariq Mehmood, Kumar Utsav Samaria, Surya Kant, Nishtha Singh, Tejraj Singh, Aradhana Singh, Rajeev Gupta, Parvaiz Koul, Sundeep Salvi, Virendra Singh

PA3638 **Biochemical markers as predictors of outcomes in COPD exacerbations**
Ana Sofia Maciel Campos Da Silva (Sesimbra, Portugal), Rita Enriquez, Joana Duarte, Andreia Daniel, Inês Claro, Margarida Barata, Maria Alvarenga Santos, Teresa Martín, Nídia Caires, Filipa Todo Bom

PA3639 **Pulmonary exacerbations in alpha-1 antitrypsin deficiency and usual COPD**
Paul Ellis (Solihull, United Kingdom), Joshua De Soyza, Ketan Patel, John Ripollone, Alice Turner, Michael Newnham

PA3640 **Predictive factors of intensive care unit admission in COPD exacerbations**
Asma Knaz (Sousse, Tunisia), Aissa Sana, Benzarti Wafa, Benbdira Baraa, Imen Gargouri, Ahmed Abdelghani

PA3641 **Predictors of acute exacerbations in COPD: a systematic review**
Marjolein Brusse-Keizer (Enschede, Netherlands), Charlotte Cecile Bucsán, Anke Lenferink, S H B Van Dijk, W J C Van Beurden, P D L P M Van Der Valk, C J M Doggen, J Van Der Palen

PS-8 in poster area Session 358 16:00 - 17:30

Poster session: Clinical aspects in asthma

Disease(s) : Airway diseases

Method(s) : Epidemiology General respiratory patient care Public health Pulmonary function testing Physiology Pulmonary rehabilitation

Tag(s) : Clinical

Chairs : Pavol Pobeha (Košice, Slovakia), Antonio Spanevello (Milano, Italy)

PA3642 **Sensitivity and Specificity of the 2022 European Respiratory Society (ERS) Guidelines for the Diagnosis of Asthma in Adults**
Andrew Simpson (Hull, United Kingdom), Sarah Drake, Ran Wang, Laura Healy, Hannah Wardman, Miriam Bennett, Clare S Murray, Stephen J Fowler, Angela Simpson

PA3643 **Medical care access and asthma-related hospitalization**
Yossr Aloulou (Manouba, Tunisia), Hana Blibech, Houda Snene, Marwa Bougacha, Rym Cheour, Amal Zemzemi, Nadia Mehiri, Sameh Belhadj, Nozha Ben Salah, Bechir Louzir

PA3644 **Impact of protocolised care on difficult-to-treat asthma outcomes**
Nicole Yu-Fang Sieow (Singapore, Singapore), Kundan Saripalli, Yiong Huak Chan, Wilson Chan, Anthony Yii, Xue Ning Choo, Tunn Ren Tay

PA3645 **Asthma frequent fliers: phenotypes, endotypes and current hospital healthcare utilisation – can we do better?**
Charlotte Buchalter (Hertfordshire, United Kingdom), Rama Vancheeswaran

PA3646 **Longitudinal lung function trajectories in adults with severe asthma.**
Samuel Wallbanks (BIRMINGHAM, United Kingdom), Maximillian Thomas, Julie Marsh, Brendan Cooper, Ali Bahron, Adel Mansur

PA3647 **Does a normal symptom score for asthma exclude abnormal airway resistance in mildly symptomatic asthma Patients?**
Ilgim Vardaloglu (Istanbul, Turkey), Mert Karatas, Bilun Gemicioglu

PA3648 **Relation of changes in PEF and FEV1 in exercise challenge in children**
Leon Csonka (Tampere, Finland), Antti Tikkakoski, Jussi Karjalainen, Lauri Lehtimäki

PA3649 **Internal consistency reliability of the VCDQ for Inducible Laryngeal Obstruction**
Siobhan Ludlow (Cheshire, United Kingdom), Bethany Tidmarsh, Charles Pantin, Stephen Fowler

PA3650 **Respiratory muscle strength investigation in asthma patients with post-COVID-19 syndrome and significant dyspnea**
Svitlana Opimakh (Kyiv, Ukraine), Yurii Feshchenko, Galyna Gumeniuk, Mykola Gumeniuk, Maryna Polianska, Viktoria Ignatieva, Inna Zvol, Svitlana Moskalenko, Nataliia Vlasova, Iryna Chumak, Liudmyla Halai

PA3651 **Identifying undiagnosed asthma in symptomatic adults with normal pre- and post-bronchodilator spirometry**
Sheojung Shin (Ottawa, Canada), George Whitmore, Louis-Philippe Boulet, Marie-Ève Boulay, Andréanne Côté, Céline Bergeron, Catherine Lemière, M. Diane Lougheed, Katherine L Vandemheen, Gonazlo Alvarez, Sunita Mulpuru, Shawn Aaron

PA3652 **The impact of time-of-day on the diagnostic performance of tests for asthma**
Ran Wang (Manchester (Greater Manchester), United Kingdom), Stephen Fowler, Robert Maidstone, Laura Healy, Sarah Drake, Lesley Lowe, Angela Simpson, Clare Murray, Hannah Durrington

PA3653 **Impact on clinical practice of the ERS/ATS 2022 recommendation on defining bronchodilator response.**
Monique Hardy (Roermond, Netherlands), Martijn Cuijpers, Herman-Jan Pennings

PA3654 **The control of asthma in association with body mass index and the age of asthma onset**
Vladyslava Kachkovska (Sumy, Ukraine)

PA3655 **Difference between spirometry and oscillometry in detecting bronchodilator response in asthma.**
Lotte Bult (Rotterdam, Netherlands), A Roos, G J Braunstahl, J C C M In 'T Veen

PA3656 **Characterization of the patients attended in the Emergency Room due to asthmatic exacerbation**
Daniel Enrique Vega Lizarazo (Malaga, Spain), Javier López, Alvaro Martinez, Eva Cabrera, María Carmen Fernández, José Luis Velasco

PA3657 **Effectiveness of a comprehensive pulmonary rehabilitation program in difficult to treat bronchial asthma**
Nicoletta R. Morelli (Den Haag, Netherlands), Eline Bij De Vaate, Peter Klijn

PA3658 **Financial incentives to improve asthma management: a systematic review**
Jasmine Hine (London, United Kingdom), Bohee Lee, Andy Bush, Anna Desimoni, Chris Griffiths, Gaby Judah, Louise Fleming

PA3659 **Impact of socio-economic status on asthma control and therapeutic compliance in the Tunisian population**
Hana Dhifallah (Ariana, Tunisia), Houda Rouis, Chirine Moussa, Donia Jridi, Chaima Turki, Oumayma Aggouni, Ibtihel Khouaja, Ines Zendah, Sonia Maalej

PA3660 **Work-related asthma and occupational asthma: what are the differences?**
Siwar Chemingui (Nabeul, Tunisia), Meriem Mersni, Imen Youssef, Nidhal Balloumi, Najla Mechergui, Hanene Ben Said, Ghada Bahri, Souraya Fenniche, Nizar Ladhari

PA3661 **CONNECT3: design and rationale for a study of the BF Digihaler System in adult patients with asthma**
Nawar Diar Bakerly (Salford (Lancashire), United Kingdom), Richard Costello, Job F.M. Van Boven, Jennifer K. Quint, Janwillem Kocks, Randall Brown, Guilherme Safioti

PS-9 in poster area Session 359 16:00 - 17:30

Poster session: Pulmonary function monitoring

Disease(s) : Airway diseases

Method(s) : Physiology Pulmonary function testing Epidemiology Imaging General respiratory patient care

Tag(s) : Clinical

Chairs : Marco Contoli (Ferrara (FE), Italy), Kristian Brat (Brno, Czech Republic)

PA3662 **Comparison of bronchodilator reversibility to spirometry and oscillometry in the ATLANTIS study**
Franz Aaron Clemeno (London, United Kingdom), Janwillem Kocks, Leonardo Fabbri, Monica Kraft, Alberto Papi, Klaus Rabe, Maarten Van Den Berge, Dave Singh, Maxim Kots, Christopher Brightling, Salman Siddiqui

PA3663 **Use of the CAPTURE case-finding tool to identify COPD patients who may need treatment**
Jinping Zheng (Guangzhou (Guangdong), China), Yun Li, Fuqiang Wen, Qianli Ma, Rongchang Chen, Yongchang Sun, Tiantian Liu, Chenjuan Gu, Shuling Hu, Jie Song, Chris Compton, Nanshan Zhong, Paul Jones

PA3664	**Spinal Muscular Atrophy patients are capable of meeting the ATS/ERS 2019 criteria for spirometry, evaluated by ArtiQ.QC** Benoit Cuyvers (Leuven, Belgium), Paul Desbordes, Ahmed Elmahy, Maarten De Vos, Marko Topalovic
PA3665	**Relationships Between High-Resolution Computed Tomographic Features and Lung Function Trajectory in Patients with Asthma** JONG SOOK PARK (Bucheon, Republic of Korea), Jai Soung Park, Kyung Eun Shin, Choon-Sik Park, Joo-Hee Kim
PA3666	**Preserved ratio impaired spirometry: fewer small airway dysfunction than COPD** Yumi Fujita (Shizuoka, Japan), Toshihiro Shirai, Shuichi Sugiyama, Taisuke Akamatsu, Keita Hirai, Yasuhiro Gon
PA3667	**Lung volumes by CT and plethysmography: are we measuring the same? Data from the CanCOLD study** Tobias Lorenz Mraz (Wien, Austria), Miranda Kirby, Robab Breyer-Kohansal, Emiel F M Wouters, Wan Tan
PA3668	**Phenotyping asthma with airflow obstruction in middle-aged and older adults: a CADSET Clinical Research Collaboration** Xander Bertels (Gent, Belgium), Ahmed Edris, Judith Garcia-Aymerich, Rosa Faner, Howraman Meteran, Torben Sigsgaard, Peter Alter, Claus Vogelmeier, Núria Olvera, Nazanin Zounemat-Kermani, Alvar Agusti, Gavin Donaldson, Jadwiga Wedzicha, Guy Brusselle, Helena Backman, Eva Rönmark, Anne Lindberg, Judith Vonk, Kian Fan Chung, Ian Adcock, Maarten Van Den Berge, Lies Lahousse
PA3669	**Small Airway Dysfunction (SAD) in older patients: analysing lung function data from the SAFFRON study** Max Thomas (Birmingham, United Kingdom), Alison Mansfield, Michael Armitage, Ketan Patel, Aditya Krishnan, Emily Ho, Marie Kershaw, Priya Chukowry, Alice Turner
PA3670	**Revisiting Hutchinson's paradigm: PRISm or vital capacity?** Caspar Schiffers (Vienna, Austria), Emiel Wouters, Tobias Mraz, Marie-Kathrin Breyer, Otto Burghuber, Sylvia Hartl, Robab Breyer-Kohansal
PA3671	**The comparison of new and old European Respiratory Society/American Thoracic Society criteria for airway responsiveness in patients with asthma** Nina Trepić (Novi Sad, Republic of Serbia), Marko Nemet, Ivan Kopitović, Marija Vukoja
PA3672	**Bayesian modelling of combined FEV1 and FVC vital lung function trajectories: relationship with airflow obstruction and PRISm** Núria Olvera Ocaña (Barcelona, Spain), Àlvar Agustí, James Ross, Rosa Faner
PA3673	**Detection of Small Airway Disease with Oscillometry in Asthmatics** Christoph Valach (Vienna, Austria), Chiara Veneroni, Emiel Wouters, Pasquale Pio Pompilio, Alessandro Gobbi, Raffaele Dellaca, Owat Sunanta, Sylvia Hartl, Marie-Kathrin Breyer, Caspar Schiffers, Charles G. Irvin, Robab Breyer-Kohansal
PA3674	**Association of a polygenic risk score for chronic obstructive pulmonary disease with lung function across the lifespan** Natalia Hernandez-Pacheco (Stockholm, Sweden), Anna Kilanowski, Ashish Kumar, John A Curtin, Núria Olvera, Sara Kress, Xanders Bertels, Lies Lahousse, Laxmi Bhatta, Raquel Granell, Sergi Marí, Jose R Bilbao, Yidan Sun, Tarik Karramass, Simon Kebede Merid, Gang Wang, Jenny Hallberg, Maribel Casas, Judith Garcia-Aymerich, Mariona Bustamante, Göran Pershagen, Antonios Georgelis, Lesley Lowe, Angela Simpson, Ulrike Gehring, Roel Ch Vermeulen, Torben Sigsgaard, Vivi Schlünssen, Graham Roberts, Anna Bergström, Judith M Vonk, Janine Felix, Liesbeth Duijts, Nic Timpson, Guy Brusselle, Ben Brumpton, Arnulf Langhammer, Stephen Turner, John W Holloway, Syed Hasan Arshad, Adnan Custovic, Paul Cullinan, Clare S Murray, Maarten Van Den Berge, Inger Kull, Tamara Schikowski, Jadwiga A Wedzicha, Gerard Koppelman, Rosa Faner, Àlvar Agustí, Marie Standl, Erik Melén, O N Behalf Of The Ers Cadset Clinical Research Collaboration
PA3675	**Patient attitudes towards digital peak flow monitoring in asthma** Sachin Ananth (London, United Kingdom), Serena Alpi, Thomas Antalffy
PA3676	**Relationship between impulse oscillometry and spirometry parameters in adults with pulmonary obstructive diseases** Marta Martin Lana (Zaragoza, Spain), Beatriz Herrero Cortina, Guillermo Samuel Loscertales Vacas, Ana Garcia Esteban, Xunxiao Lin, Lucia Elosua Prats, Patricia Iñiguez De Heredia Monforte, Jorge Luis Hurtado Ortega, Elena Borobia Irache, Ana Cristina Aguelo Velilla
PA3677	**How many lung function interpretations can an expert make in one hour based on the 2021 ERS/ATS standards?** Julie Maes (Leuven, Belgium), Paul Desbordes, Nadia Stachowicz, Janine Kaspers, Rami Arfoosh, Matthew Hegewald, Maarten De Vos, Marko Topalovic
PA3678	**Comparison of spirometry and both spectral and intra-breath oscillometry for the prediction COPD symptoms** Paolo Medina-Iglesias (Montreal, Canada), Hugo Morin, Carol Artico, Zoltan Hantos, Ronald Dandurand

PA3679 **Correlation and concordance of arterial oxygen saturation measured by arterial blood gases and pulse oximetry according to anatomical location**
Cristhian Correa (Madrid, Spain), Virginia Gallo González, Rosa María Rojas Moreno-Tomé, María Del Carmen Suárez Rubio, Rafael Pesquera Criado, Daniel López Padilla, Paola Antonella Benedetti, José Javier García López, Luis Puente Maestu

PA3680 **Sharing recruitment sites with a precision-medicine based study**
Anel Mahmutovic (Mölndal, Sweden), Andrew Harper, Guillaume Desachy, John Tillinghast, Jason Cooper

17:30-19:00
INDUSTRY EVENING SYMPOSIUM SEE PAGE 1

17:30-19:00
INDUSTRY EVENING MINI SYMPOSIUM SEE PAGE 1

No Room — Session 369 — 07:00 - 08:00

Public: Take the Active Option @ Congress

Aims : Build awareness of the Healthy Lungs for Life campaign and help people to get active at congress

07:15-08:15
INDUSTRY EARLY MORNING SYMPOSIUM

SEE PAGE 1

08:00-08:45
INDUSTRY SKILLS LAB WORKSHOP

SEE PAGE 1

Amber 1+2 — Session 374 — 08:00 - 10:20

Skills workshop: SW10 Clinical-radiological-pathological correlation in pulmonary hypertension

Aims : to develop a systematic approach to interpretation of radiological investigations (with a focus on computed tomography) in patients with suspected pulmonary hypertension (PH); to provide practical experience in performing and interpreting echocardiography in patients with PH; to improve knowledge and understanding of pathological changes associated with PH; to improve skills in integrating clinical, radiological and right heart catheter data to enable the correct diagnosis of patients with suspected PH.

Disease(s) : Pulmonary vascular diseases

Method(s) : Imaging

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Pathologist, Physician in Pulmonary Training, Radiologist

Chairs : Robin Condliffe (Sheffield (South Yorkshire), United Kingdom)

08:00	**Introduction** All Speakers	**3745**
08:00	**Radiological assessment of pulmonary hypertension** Deepa Gopalan (LONDON, United Kingdom)	**3746**
08:00	**Pathological assessment of pulmonary hypertension** Peter Dorfmuller (Le Plessis-Robinson, France)	**3747**
08:00	**Echocardiography in pulmonary hypertension** Marielle van de Veerdonk (Amsterdam, Netherlands), Abdul Hameed (Sheffield (South Yorkshire), United Kingdom)	**3748**
08:00	**Clinical assessment of pulmonary hypertension** Robin Condliffe (Sheffield (South Yorkshire), United Kingdom)	**3749**

Amber 3+4 — Session 375 — 08:00 - 10:40

Skills workshop: SW13 Thoracic ultrasound basic principles

Aims : To describe the current use of thoracic ultrasound and to provide participants with the opportunity to perform this technique using training models, simulators, volunteers and patients.

Disease(s) : Thoracic oncology Interstitial lung diseases

Method(s) : Imaging General respiratory patient care

Tag(s) : Clinical

Target audience : Radiologist, Thoracic surgeon, Adult pulmonologist/Clinician, Clinical researcher, Respiratory critical care physician, Physician in Pulmonary Training

Chairs : Christian B. Laursen (Odense, Denmark)

08:00	**Introduction** Christian B. Laursen (Odense, Denmark)	**3750**
08:20	**Normal Thoracic Cavity** Helen Mcdill (Bristol (Avon), United Kingdom), Casper Falster (Odense, Denmark)	**3751**
08:20	**Pleural effusion and/or pleural thickening** Gilles Mangiapan (Creteil, France), Pia Iben Pietersen (Odense C, Denmark)	**3752**

08:20	**Case studies** Najib M. Rahman (ABINGDON, United Kingdom)	**3753**
08:20	**Guided interventions** Søren Helbo Skaarup (Aarhus C, Denmark), Rahul Bhatnagar (Bristol, United Kingdom)	**3754**

PS-1 in poster area — Session 376 — 08:00 - 09:30

Poster session: Critical care and management of chronic respiratory failure

Disease(s) : Airway diseases | Interstitial lung diseases | Respiratory critical care | Sleep and breathing disorders | Thoracic oncology

Method(s) : Pulmonary rehabilitation Epidemiology General respiratory patient care Palliative care Physiology Respiratory intensive care Pulmonary function testing Surgery Public health

Tag(s) : Clinical

Chairs : Natasha Smallwood (Melbourne (VIC), Australia), Chair to be confirmed

PA3755	**The effect of early pulmonary rehabilitation on the treatment of ICU chronic obstructive pulmonary disease with severe respiratory failure** Fangbo Zhao (Changchun (Jilin), China), Hongjing Lin
PA3756	**A contemporaneous comparison of functional recovery in ECMO and non-ECMO survivors of acute respiratory failure** Andrea Levine (Baltimore, United States), Noel Britton, Mackenzie Snyder, Binta Njie, Sara Viola, Hatoon Abbas, Waqas Bhati, Ryan Lee, Siu Yan Yeung
PA3757	**Delivering home mechanical ventilation: Evaluating a regional outreach service.** Laura Tregidgo (London, United Kingdom), Christopher Steward, Roy Enriquez, Nicholas Skipper, Sasha Fudio, Nicholas Hart, Georgios Kaltsakas, Philip Marino, Michelle Ramsay, Shelley Srivastava, Joerg Steier, Eui-Sik Suh, Patrick B Murphy, Rebecca F D'Cruz
PA3758	**Ventilatory support and telemonitoring in patients with neuromuscular disease: a prospective study.** Claudia Simeire Albertini (São Paulo (SP), Brazil), Diogo Fernandes Dos Santos, Ana Elizabeth Cunha Guimarães De Almeida, Laerte Honorato Borges Junior, Vinicius Oliveira, Maria Fernanda Prado Rosa, William Nicoleti Turazza Da Silva, Daniela Name Chaul Vidigal, Isabella Cristina Guimarães De Almeida
PA3759	**Long term outcome of patients treated with home NIV according to pulmonary rehabilitation (PR) attendance** Léa Razakamanantsoa (Paris, France), Typhaine Huchard, Jean-François Muir, Antoine Cuvelier, Tristan Bonnevie, Maxime Patout
PA3760	**PaCO2 vs etCO2 correlations in Amyotrophic Lateral Sclerosis patients during routine out-patient follow-up** Dario D'Amato (Grumo Appula, Italy), Paola Pierucci, Gualtiero Ermando Romano, Marialuisa De Candia, Simone Rizzelli, Pierluigi Intiglietta, Alessandro Palumbo, Luciana Labate, Nicola Valerio, Alessandro Pilon, Chiara Massaro, Giovanna Elisiana Carpagnano
PA3761	**Pilot clinical study on the safety, tolerance and comfort of thoracic vibratory therapy by electrostimulation. Phase 1. The ELECTROVEST study.** Maria Del Pilar Cejudo Ramos (Sevilla, Spain), Antonio Y. Méndez Alonso, Inmaculada Ortiz Molina, Rosa Vazquez Sanchez, Lola Nuñez Ollero, Fernando Diaz Guerrero, Mar Elena, Sergio Tejero Garcia, Miguel Angel Giráldez Sánchez, Esther Quintana Gallego
PA3762	**Breathlessness and exercise performance to predict mortality in long-term oxygen therapy** Filip Björklund (Karlskrona, Sweden), Andreas Palm, Jwan Abdulrazak Gorani, Zainab Ahmadi, Josefin Sundh, Jenny Theorell Haglöw, Mirjam Ljunggren, Ludger Grote, Karin Wadell, Magnus Ekström
PA3763	**Evaluation of a novel domiciliary long term oxygen therapy assessment service** Kathleen McGee (Glasgow, United Kingdom), Michael Mcgettrick, Katherine Rooney, Christopher Wills, Hannah Bayes
PA3764	**Enhancing advance care planning and palliative care for respiratory patients: A 4-year review of integrated respiratory palliative MDT** Muhammad Salman Rashid (Leeds, United Kingdom), Suzie Gillon, Mike Stockton, Ellie Kane, Ash Birtles, Alison Boland
PA3765	**Advances in Telemonitoring of Home Mechanical Ventilation (Brazil): Outcomes and update** Claudia Simeire Albertini (São Paulo (SP), Brazil), João Paulo Silveira, Maria Clariane Berto Hayashi, Vinicius Oliveira, Gerardo Ferrero, Debora Nunes Da Silva, Miguel Victor Deganutti Krause
PA3766	**Title: Effects of exercises on lung function of NCFB and healthy subjects evaluated by impulse oscillometry system** Ada Clarice Gastaldi (Ribeirao Preto (SP), Brazil), Daniele Oliveira Dos Santos, Ana Lara De Castro Rodrigues, Larisse Souza Reis, Jéssica Perossi, Sulamita Pereira Rosa, Larissa Perossi, Hugo Celso Dutra De Souza, José Antônio Baddini-Martinez

PA3767	**Determination of parameters associated with physical activity levels in spinal cord injury** Kubra Kardes (BAGCILAR, Turkey), Yasemin Buran Cirak, Emine Atici, Burcu Isikci, Yunus Emre Tutuneken, Nurgül Durustkan Elbasi
PA3768	**Oropharyngeal dysphagia in COPD patients** Anne Sophie Malishchuk (Rouen, France), Armand Bonne, Rimeh Ayari, Eric Verin
PA3769	**Pulmonary rehabilitation following hospitalised exacerbations in people with bronchiectasis** Jennifer Kilduff (London, Ireland), Claire Nolan, Suhani Patel, Anand Shah, Janet Stowell, William Man
PA3770	**Infant tracheostomy-consider the need for long term ventilation (LTV) in infants needing tracheostomy for airway issues** Siddhant Lalwani (Birmingham, United Kingdom), Swathi Sanapala, Channa Panagamuwa, Prasad Nagakumar, Isobel Brookes
PA3771	**Patients' clinical and psychological status in different COVID-19 waves: a quanti-qualitative study** Marina Maffoni (Montescano , Italy), Martina Vigorè, Valeria Torlaschi, Alessandra Gorini, Maria Teresa La Rovere, Roberto Maestri, Maurizio Bussotti, Sergio Enea Masnaghetti, Francesco Fanfulla, Antonia Pierobon
PA3772	**Building healthcare professionals consensus on non-pharmacological patient care priorities during hospitalisation and post-discharge phases following acute exacerbation of chronic obstructive pulmonary disease (AECOPD)** Bedor Alkhathlan (Leicester, United Kingdom), Neil Greening, Theresa Harvey-Dunstan, Sanjay Ramakrishnan, Sally Singh
PA3773	**Prehabilitation in lung cancer surgery: A review and meta-analysis of RCT studies** Kalliopi Athanassiadi (Athens, Greece), Dimitrios Magouliotis, Evangelia Chatzimichali, Evangelia Liverakou, Aikaterini Katsandri, Ioannis Kalomenidis, Paraskevi Katsaounou
PA3774	**The Successful Procedures Of weaning from Tracheostomy (SPOT) study: preliminary analysis of predictive factors for failure and validation of the QsQ score** Dejan Radovanovic (Milano (MI), Italy), Marina Gatti, Debora Spitaleri, Stefano Pini, Marina Saad, Andrea Gramegna, Michele Mondoni, Stefano Aliberti, Fabiano Di Marco, Stefano Centanni, Francesco Blasi, Pierachille Santus

PS-10 in poster area — Session 377 — 08:00 - 09:30

Poster session: Monitoring in chronic airway disease (1)

Disease(s) : Airway diseases

Method(s) : General respiratory patient care Public health Pulmonary function testing Epidemiology Imaging

Tag(s) : Clinical

Chairs : Marieann Högman (Uppsala, Sweden), Giuseppe Guida (ORBASSANO (TO), Italy)

PA3775	**Assessment of Small Airway Flow Parameters: A Comparative Study between Realistic and Idealistic Computational Models** Yousry Khaled Mohamed Elmahdy Mohamady (Leuven, Belgium), Vincent Geudens, Charlotte De Fays, Iwein Gyselinck, Lucia Aversa, Pieter-Jan Kerckhof, Gitte Aerts, Astrid Vermaut, Hanne Beeckmans, Karen Maes, Lynn Willems, Marie Vermant, Emanuela Elsa Cortesi, Tinne Goos, John Mcdonough, Laurent Godinas, Rozenn Quarck, Wim Wuyts, Robin Vos, Laurens Ceulemans, Dirk Van Raemdonck, Ghislaine Ramirez, Wim Janssens, Marcel Filoche, Bart Vanaudenaerde
PA3776	**Clinical usefulness of exhaled breath temperature in asthma management** Mami Rikimaru (Fukushima, Japan), Junpei Saito, Yasuhito Suzuki, Atsuro Fukuhara, Tomoyoshi Lee, Ryuki Yamada, Riko Sato, Takumi Onuma, Hikaru Tomita, Natsumi Watanabe, Takaya Kawamata, Julia Morimoto, Ryuichi Togawa, Yuki Sato, Hiroyuki Minemura, Takefumi Nikaido, Naoko Fukuhara, Kenya Kanazawa, Yoshinori Tanino, Yoko Shibata
PA3777	**Association of blood eosinophils and exhaled nitric oxide with exacerbations in patients with asthma, COPD, and asthma+COPD: the NOVELTY study** Susan Muiser (Groningen, Netherlands), Hana Müllerova, Laura Belton, Clement Erhard, Nifasha Rusibamayila, Alvar Agustí, Rosa Faner, Ian Pavord, Hiromasa Inoue, David Price, José Olaguibel, Huib Kerstjens, Maarten Van Den Berge
PA3778	**Establishment of the alpha-1 research registry analyzing demographic and participant specific characteristics** Jeanine D'Armiento (New York, United States), Alison Keaveny, Laura Fonseca, Charlie Strange, James Michael Wells, Nadine Nuchovich, Randel Plant, Monica Goldklang
PA3779	**Recognizing asthma risk scenarios: individualized inhaler usage and inhalation parameter profiles from an electronic inhaler with integrated sensors** Guilherme Safioti (Stigtomta, Sweden), Mark L. Levy, Flavia Hoyte, Giselle Mosnaim, Michael Wechsler, Nathalie Magnus, Katja Sagalovich, Sinthia Bosnic-Anticevich, Janwillem Kocks

PA3780 **Preventing hospital readmissions of COPD patients : alerting rules on vital signs for remote patient monitoring**
Yann Le Guillou (Cesson-Sévigné, France), Florian Tilquin, Sylvain Le Liepvre, Graziella Brinchault, Tiphaine Guy, Fanny Thépault

PA3781 **COPD Screening and Ventilatory Function Assessment based on smartwatch sensor signals**
Yibing Chen, Lu Cao, Dahui Zhao, Song Meng, Dan Li, Wenjuan Chen, Jing Li, Kailun Xia, Lixin Xie

PA3782 **RS and PRISm: symmetric reductions in FEV1 and FVC?**
Tobias Lorenz Mraz (Wien, Austria), Caspar Schiffers, Emiel Wouters, Marie-Kathrin Breyer, Otto Burghuber, Sylvia Hartl, Robab Breyer-Kohansal

PA3783 **Validation of the Obstructive Lung Disease Questionnaire in a primary care cohort, with additional focus on ACO in primary and tertiary care**
Liz Cuperus (Rotterdam, Netherlands), Cathelijne Van Zelst, Huib Kerstjens, Rudi Hendriks, Maureen Rutten-Van Molken, Jacqueline Muilwijk-Kroes, Gert-Jan Braunstahl, Hans In 'T Veen

PA3784 **Exploratory study of a risk prediction artificial intelligence model to diagnose asthma and COPD in Mexico**
Ramses Hernandez (Mexico, Mexico), Roxana Rodriguez, Oscar Villalva, Joaquin Pimentel, Jose Luis Miguel, Miguel Angel Villasis

PA3785 **Utility of the Oscillometer in the detection of small airways dysfunction (SAD) in patients with respiratory symptoms and normal lung function**
Raja Dhar (Kolkata (West Bengal), India), Sushmeeta Chhowala

PA3786 **Impulse oscillometry findings in subjects with preserved ratio impaired spirometry (PRISm)**
Andrei Malinovschi (Uppsala, Sweden), Gunnar Engström, Suneela Zaigham, Johan Sundström, Christer Janson, Per Wollmer

PA3787 **Double Pulmonary diffusing capacity for NO and CO (DLNO/CO) in patients with COPD: implications beyond traditional lung function assessments**
Emilie Maufroy (Bruxelles, Belgium), Silvia Perez Bogerd, Kevin Forton, Corentin Scoubeau, Thomas Schaefer, Alain Michils, Alain Van Muylem, Vitalie Faoro

PA3788 **Nutrition Risk Index: A predictive metric of severity and subsequent lung impairment in COPD**
Warda Jelassi (Tunis, Tunisia), Chaima Habouria, Nidhal Belloumi, Imen Bechouch, Fatma Chermiti, Soraya Fenniche

PA3789 **The effect of mobile health application on symptom control, self-efficacy and chronic disease management in COPD**
Bilun Gemicioglu (Istanbul, Turkey), Neşe özdemir, Nuray Enç

PA3790 **Comparing testing parameters for forced oscillation technique among healthy Indians with published reference norms**
Madhuri Batyala (Tirupati, India), Shantanu Tilak, Lancelot Pinto

PA3791 **Predictors of Pulmonary hypertension in chronic obstructive pulmonary disease**
Lamia Shaaban (Assiut, Egypt), Ashraf Zin El-Abdeen Mohamed, Amira Emad El-Din, Ali Mohamed Tohami, Waleed Gamal

PA3792 **FeNO@Home: a proof of concept protocol for home monitoring fractional exhaled nitric oxide in patients with ashtma**
Enrico Marco Heffler (Milano, Italy), Giovanni Paoletti, Tim Harrison, Matthew J Martin, Kai-Michael Beeh

PA3793 **How up-to-date is the Electronic Health Record?**
Maarit Albers (Enschede, Netherlands), C.C. Bucsán, J. Van Der Palen

PA3794 **Prevalence of subjects enrolled in CPASS who have peak flow rate: height ratio of < 2.2 liters/sec/meter2**
Shane Villamonte (Manila, Philippines), Guinevere Agra, Celeste Mae Campomanes, Teresita De Guia, Helen Isaac, Lenora Fernandez, Rodolfo Pagcatipunan, Roland Panaligan, Tim Trinidad

PS-11 in poster area Session 378 08:00 - 09:30

Poster session: Environment, occupation, and lung diseases

Disease(s) : Interstitial lung diseases | Airway diseases | Pulmonary vascular diseases

Method(s) : Cell and molecular biology | Public health | Epidemiology | General respiratory patient care | Imaging | Pulmonary function testing | Physiology

Tag(s) : Translational

Chairs : Christopher C. Huntley (Bromsgrove, United Kingdom), Benoit Nemery (Leuven, Belgium)

PA3795 **Outcome of artificial stone silicosis in an Italian cluster of patients**
Paola Mason (Padova (PD), Italy), Marco Biasioli, Filippo Liviero, Piero Maestrelli, Stefania Vio

PA3796	**Silicosis in rutilated quartz miners in Brazil** Lavinia Clara Del Roio (São Paulo (SP), Brazil), Jefferson Benedito Pires De Freitas, Rafael Futoshi Mizutani, Gustavo Corrêa De Almeida, Mario Terra-Filho, Ubiratan De Paula Santos
PA3797	**Occupational trends in asbestos-related pleural disease (ARPD): data from the SWORD scheme** Ruth Wiggans (Manchester (Greater Manchester), United Kingdom), Rheanna Pereira, Laura Byrne, Ireny Y. K. Iskandar, Melanie Carder, Christopher Barber, Martie Van Tongeren
PA3798	**Asbestos exposure, a cause of pleuroparenchymal fibroelastosis (PPFE)?** Christopher C. Huntley (Bromsgrove, United Kingdom), Sherwood Burge, Alastair Robertson, Madava Djeraman, John Reynolds, Gareth Walters
PA3799	**Decrease of DLCO and VC is associated with asbestos-related changes on TCT** Alexandra Marita Preisser (Hamburg, Germany), Lennart Ströker, Kersten Peldschus, Robert Herold, Volker Harth
PA3800	**The Nintedanib in Progressive Pneumoconiosis Study (NiPPs): early data from Australia.** Aruvi Thiruvarudchelvan (Lidcombe, Australia), Louise Hart-Brown, Mark Bloch, Deborah Yates
PA3801	**RELATIONSHIP BETWEEN AIR POLLUTION IN COMUNIDAD DE MADRID AND THE DEVELOPMENT OF CHRONIC RESPIRATORY FAILURE IN PATIENTS WITH IDIOPATHIC PULMONARY FIBROSIS** Pablo Mariscal Aguilar (Madrid, Spain), Luis Gómez Carrera, Cristina Mariscal Aguilar, Carlos Carpio, Ester Zamarrón, Daniela Alloca, Isabel Esteban, María Fernández-Velilla, Gema Bonilla, Isabel Esteban, Rita Regojo, Concepción Prados, Rodolfo Álvarez-Sala
PA3802	**Potential biomarkers for the diagnosis of patients with fibrotic hypersensitivity pneumonitis** Silvia Sánchez-Díez (Barcelona, Spain), Xavier Muñoz, David Espejo, Susana Gómez-Ollés, Iñigo Ojanguren, Christian Romero-Mesones, María-Jesús Cruz
PA3803	**Exposure to mould in dwellings and respiratory/allergic/systemic symptoms in Italian children** Sara Maio (Pisa (PI), Italy), Giuseppe Sarno, Sandra Baldacci, Anna Angino, Ilaria Stanisci, Sofia Tagliaferro, Patrizia Silvi, Giovanni Viegi
PA3804	**Lung function, mercury exposure and chronic mountain sickness in gold miners at 5100m** Ahmet Sevik (Zuerich, Switzerland), Dominic Gilliand, Renaud Persoons, Benoit Champigneulle, Julien Brugniaux, Samuel Verges, Michael Furian
PA3805	**Effects of hypobaric hypoxia on workers in a ski resort** Pedro José Romero Palacios (Peligros, Spain), Bernardino Alcázar Navarrete, Antonio Luis Arrebola Moreno, Juan Antonio Holgado Terriza, María Wenceslaa Puya Pérez
PA3806	**Lung deposition patterns of anthracosis is related to air pollution environment by geolocalization in a temporal manner** Maria Julia Faci do Marco (Ribeirão Preto (SP), Brazil), Sabrina Setembre Batah, Heloisa Acurcio Zimermam, Mateus Magalhães Lage Moraes, Alexandre Todorovic Fabro
PA3807	**Soot particles induce cytotoxicity, oxidative stress and inflammatory responses in structural lung cells linked to adverse health effects from exposure to polluted air.** Anna-Karin Larsson-Callerfelt (Lund, Sweden), Nilofar Faruqui, Sofie Orell, Camilla Dondi, Jenny Rissler, Konstantina Vasilatou, Ian Mudway, Monica Karedal, Michael Shaw
PA3808	**Association between Covid-19 pandemic and shift work: the COVISTRESS online survey** Elvia Giovanna Battaglia (Milano (MI), Italy), Monica Puligheddu, Rosamaria Lecca, Matteo Figorilli, Maria Livia Fantini, Maëlys Clinchamps, Frederic Dutheil, Pierluigi Cocco
PA3809	**Comparison of the immune response of respiratory healthcare workers to booster vaccination against SARS-CoV-2 and to a subsequent viral infection** Imre Barta (Budapest, Hungary), Viktória Szél, Imola Mán, Lilla Lőrinczi, Balázs Antus
PA3810	**Long-term risk of COVID-19 after extreme smoke exposure** Michael J. Abramson (Melbourne (VIC), Australia), Tyler Lane, Matthew Carroll, Brigitte Borg, Tracy Mccaffrey, Caroline Gao, Catherine Smith, David Brown, David Poland, Shantelle Allgood, Jillian Ikin
PA3811	**Exposure to air pollution and respiratory diseases in adults: an innovative multipollutant approach** Sara Maio (Pisa (PI), Italy), Salvatore Fasola, Alessandro Marcon, Anna Angino, Sandra Baldacci, Maria Beatrice Bilò, Roberto Bono, Claudio Gariazzo, Stefania La Grutta, Pierpaolo Marchetti, Pietro Pirina, Giuseppe Sarno, Patrizia Silvi, Camillo Silibello, Giulia Squillacioti, Massimo Stafoggia, Ilaria Stanisci, Sofia Tagliaferro, Giuseppe Verlato, Giovanni Viegi

PA3812 **Clinical and inflammatory profile before and after specific inhalation challenge in individuals with suspected occupational asthma to persulfate salts**
MARIA SAEZ LOPEZ, Silvia Sánchez-Diez, Christian Romero Mesones, David Espejo, Iñigo Ojanguren, María Jesús Cruz, Xavier Muñoz

PA3813 **Lung function impairment and COPD in workers from production of chemical materials for construction and engineering**
Dragan Mijakoski (Skopje, North Macedonia), Sasho Stoleski, Jordan Minov, Aneta Atanasovska, Dragana Bislimovska, David Zdraveski, Jovanka Karadzinska-Bislimovska

PA3814 **Influence of PM and NO2 exposure on long-term risk of hospital admissions due to COPD exacerbations in 3 Polish agglomerations**
Artur Badyda (Warszawa, Poland), Piotr Dąbrowiecki, Agata Dąbrowiecka, Anna Piórkowska, Andrzej Chciałowski

PS-12 in poster area Session 379 08:00 - 09:30

Poster session: Recent advances in behavioural science in chronic respiratory disease

Disease(s) : Respiratory critical care | Airway diseases | Thoracic oncology | Sleep and breathing disorders | Interstitial lung diseases | Pulmonary vascular diseases

Method(s) : Public health | General respiratory patient care | Pulmonary rehabilitation | Epidemiology | Respiratory intensive care | Physiology

Tag(s) : Clinical

Chairs : Marieke Verkleij (Amsterdam, Netherlands), Jeannette Jacobs-Peters (Nijmegen, Netherlands)

PA3815 **The influencing factors of depressive symptom trajectories among COPD patients**
Cui Wang (Beijing, China), Hongbo Chen, Peiyuan Liu, Ziqiu Zou, Shaomei Shang

PA3816 **Impact of Shared Decision Making on medication adherence in patients with COPD and/or asthma: The ANANAS study.**
Maria Achterboschm (Groningen, Netherlands), Priya Vart, Liset Dijk, Van, Job Boven, Van

PA3817 **Improving depression symptoms in COPD patients through home-based pulmonary rehabilitation with health coaching**
Maria Benzo (Rochester, United States), Madison Roy, Roberto Benzo

PA3818 **COPD-related anxiety: A systematic review of patient perspectives.**
Camilla Fischer Christiansen (Børkop, Denmark), Anders Løkke, Vibeke Bregnballe, Thomas Prior, Ingeborg Farver-Vestergaard

PA3819 **COVID-19 vaccination hesitancy in the European population aged 50+**
Anna Boros (Warszawa, Poland)

PA3820 **The use of a questionnaire underpinning Capability, Opportunity, and Motivation to determine the psychological and behavioural barriers to adherence in patients with asthma (The COM-Behaviour asthma study).**
Alice Munns (Kent, United Kingdom), Laura Wiffin, Daphne Kaklamanou, Ina Kostakis, Alessandra Fasulo, Thomas Brown, Anoop Chauhan

PA3821 **Neurocognitive and Neuropsychiatric Sequelae of Long COVID (LC) patients (pts)**
Paraskevi Katsaounou (Athens, Greece), Evniki Ntinopoulou, Maria Karytinou, Sofia Margariti, Sofia Sideri, Katerina Poprelka, Theodoros Fasilis, Panayiotis Patrikelis, Maria Stefanatou, Archodoula Adonoglou, Sofia Pappa, Stylianos Gatzonis

PA3822 **Emotions associated with bouts of cough. A study in patients with refractory/unexplained chronic cough**
Ebymar Arismendi Nunez (Vilassar de Dalt, Barcelona, Spain), Luis Puente-Maestu, Ignacio Dávila, Santiago Quirce, Francisco Javier González-Barcala, Luis Cea-Calvo, Marta Sanchez Jareño, Cristina Rivas-Pardinas, Christian Domingo-Ribas

PA3823 **Measuring the stigma of long COVID: principles and practices transferrable to other stigmatizing respiratory conditions**
Ronald Damant (Edmonton (AB), Canada), Liam Rourke, Ying Cui, Grace Lam, Maeve Smith, Desi Fuhr, Jacqueline Tay, Rhea Varughese, Cheryl Laratta, Angela Lau, Eric Wong, Mike Stickland, Giovanni Ferrara

PA3824 **A qualitative study explaining family-management of children's and young people's asthma in the changing COVID-19 context**
Grace Lewis (Leeds, United Kingdom), Linda Milnes, Alexandra Adams, Jürgen Schwarze, Alistair Duff

PA3825	**Non-Invasive Ventilation (NIV) in people affected by COVID-19 pneumonia: evaluation between acute and rehabilitation settings** Eleonora Volpato (Milano (MI), Italy), Paola Pierucci, Valentina Poletti, Lavinia Di Palma, Alessandro Pilon, Giovanna Elisiana Carpagnano, Laura Fagetti, Paolo Banfi
PA3826	**Sleep disorders between COVID-19 survivors with different levels of fear of COVID** Alvaro Montañez (Mexico City, Mexico), Liseth Sarai Castañeda Ordóñez, Viridiana Peláez Hernández, Diana Everanda Torres Gómez, Mauricio Reyes Franco, Adrián Rosas Trujillo, Fernando Casarin López, Ana Patricia Pedro Portillo, Nadia Hernández López, Mildred Corina De La Concha Duarte, Guiedani Galván Bautista, Arturo Rodríguez Medina, Luz Jiménez Gallardo, Rocío Sánchez Santillán, Arturo Orea Tejeda
PA3827	**The usefulness of relationships assessing between personality dimensions as an element differentiating patients with obstructive sleep apnea.** Paweł Kwiecień (Warsaw, Poland), Joanna Domagała-Kulawik
PA3828	**Effectiveness of brief referral methods for smoking cessation – a literature review** Mads Hansen (Odense C, Denmark), Ingeborg Farver-Vestergaard, Anders Løkke
PA3829	**Anxiety, depression and PTSD in COVID-19 survivors with and without invasive mechanical ventilation** Alvaro Montañez (Mexico City, Mexico), Fernando Casarin López, Viridiana Pelaez Hernandez, Adrian Rosas Trujillo, Celia Deyanira Ledesma Ruiz, Ana Patricia Pedro Portillo, Diana Everanda Torres Gómez, Mauricio Reyes Franco, Liseth Sarai Castañeda Ordóñez, Arturo Orea Tejeda, Rocio Sanchez, Guiedani Galván, Nadia Hernández López, Arturo Rodriguez, Mildred Corina De La Concha Duarte
PA3830	**Reassessing the mental health of Respiratory High Care Unit (RHCU) staff in the aftermath of the COVID-19 pandemic** Hannah Badawy (solihull, United Kingdom), Catherine Salisbury, See Ling Tan, Abhimanyu Lal
PA3831	**Psychological affectation in caregivers of respiratory failure patients by age groups** Alvaro Montañez (Mexico City, Mexico), Diana Everanda Torres Gómez, Viridiana Peláez Hernández, Liseth Saraí Castañeda Ordónez, Mauricio Reyes Franco, Fernando Casarín López, Adrián Rosas Trujillo, Ana Patricia Pedro Portillo, Nadia Hernández López, Mildred Corina De La Concha Duarte, Guiedani Galván Bautista, Arturo Rodríguez Medina, Luz Jiménez Gallardo, Rocío Sánchez Santillán, Arturo Orea Tejeda
PA3832	**Autonomic alterations measured by temperature in COVID-19 survivors with and without IMV** Adrian Rosas Trujillo (CDMX, Mexico), Viridiana Peláez Hernández, Mauricio Reyes Franco, Diana Everanda Torres Gómez, Fernando Csarín López, Liseth Sarai Castañeda Ordóñez, Celia Deyanira Ledesma Ruíz, Ana Patricia Pedro Portillo, Mildred Corina De La Concha Duarte, Arturo Rodríguez Medina, Nadia Hernández López, Guiedani Galván Bautista, Luz Magdaly Jiménez Gallardo
PA3833	**Smoking behavior of the Tunisian physicians** Hana Mrassi (Tunis, Tunisia), Hanen Smadhi, Ines Akrout, Hela Hassene, Imen Nouira, Lamine Megdiche
PA3834	**A survey exploring the characteristics of current and former smokers with suspected lung cancer** Ingeborg Farver-Vestergaard (Vejle, Denmark), Mojtaba Saei, Morten Borg, Ole Hilberg, Anders Løkke

PS-13 in poster area Session 380 08:00 - 09:30

Poster session: COVID-19 biomarkers

Disease(s) : Respiratory critical care Airway diseases

Method(s) : Cell and molecular biology Physiology Respiratory intensive care Imaging Pulmonary function testing Public health General respiratory patient care

Tag(s) : Translational

Chairs : Ignacio Martin-Loeches (Dublin, Ireland), Jessica Rademacher (Hannover, Germany)

PA3835	**LSC - 2023 - Elevated CD27-IgD- B cells in Post-Acute COVID-19 Sequalae Patients with Rheumatological Symptoms** Manali Mukherjee (Hamilton (ON), Canada), Nadia Suray Tan, Kayla Zhang, Joshua F.E. Koenig, Snehal Somalwar, Nardien Sedhom, Mei Nee Chiu, Rameen Jamil, Zil Patel, Margaret Larché, Terence Ho, Sarah Svenningsen, Dawn M.E. Bowdish, Manel Jordana, Konstantinos Tselios, Manali Mukherjee
PA3836	**Krebs Von den Lungen-6 as a predictive indicator for the risk of secondary pulmonary fibrosis and its reversibility in COVID-19 patients** Runpei Lin (GuangZhou, China), Mingshan Xue, Teng Zhang, Hao Chen, Yifeng Zeng, Ning Li, Zhifeng Huang, Luqian Zhou, Xiaohua Douglas Zhang, Baoqing Sun
PA3837	**Oxidative stress parameters and leukocyte telomere dynamic change in patients with COVID-19 infection – three weeks of follow up** Marina Roksandić Milenković (Beograd, Republic of Serbia), Dejan Dimic, Nemanja Dimic, Jelena Kotur Stevuljevic, Azra Guzonjic, Danica Cuic, Dejan Zujovic

PA3838	**Balance between neutrophil extracellular trap formation and DNase activity in COVID-19 patients: a prospective cohort study** Renaud Prével (Bordeaux, France), Geoffrey Garcia, Sylvie Colomer-Labrouche, Alexandre Duvignaud, Etienne Clequin, Charles Dussiau, David-Alexandre Tregouët, Denis Malvy, Julien Goret, Maria Mamani-Matsuda, Antoine Dewitte, Chloe James
PA3839	**Levels of inflammatory and cardiac biomarkers as a predictor factor for complications and outcomes in hospitalized COVID-19 patients** Nona Rovira Ribalta (Solsona, Spain), Catia Cilloniz, Ruben López-Aladid, Ana Motos, Josep Lluis Bedini, Alba Soler-Comas, Roberto Cabrera, Kasra Kiarostami, Blanca Llonch, Laia Fernández-Barat, Antoni Torres
PA3840	**Altered red blood cell metabolism in COVID-19: A source of biomarkers to predict evolution** Francisco Sanz Herrero (Quart de Poblet (Valencia), Spain), Francesc Puchades, Martina Palomino-Schätzlein, Rita Ortega-Vallbona, Noelia Carrión Collado, José Raúl Herance, Miguel García Del Toro, Estrella Fernández-Fabrellas, Juan José Tamarit
PA3841	**Altered peripheral blood neutrophil profiles are associated with persistent symptoms post-COVID19** Chloe Hughes (Dundee, United Kingdom), Merete Long, Holly Keir, Yan Hui Giam, Thomas Pembridge, Amy Gilmour, Amelia Shoemark, David Connell, Faisel Khan, James Chalmers
PA3842	**Evaluating the utility of a serum calprotectin lateral flow test in acute lung infection** Amy Gilmour (Dundee, United Kingdom), Chloe Hughes, Merete B Long, Holly R Keir, Yan Hui Giam, Hani Abo-Leyah, Thomas Pembridge, Lilia Delgado, Rebecca C Hull, Benjamin Jm New, Rebecca Dowey, Helena Turton, Alison M Condliffe, James D Chalmers, A A Rodger Thompson
PA3843	**TSLP gene polymorphisms and alarmin protein levels in COVID-19** Maral Ranjbar (Hamilton, Canada), Ruth Cusack, Christiane Whetstone, Shiraz Nawaz, Christopher Khoury, Jennifer Wattie, Lesley Wiltshire, Jennifer Le Roux, Eric Cheng, Thivya Srinathan, Terence Ho, Roma Sehmi, Mylinh Duong, Gail Gauvreau
PA3844	**Phenotypic Characteristics of Hospitalized Patients with COVID-19 Pneumonia Using Machine Learning Consensus Clustering Approach** Nuttinan Nalinthasnai (Bangkok, Thailand), Dararat Eksombatchai, Viboon Boonsarngsuk, Pongdhep Theerawit, Yuda Sutherasan, Detajin Junhasavasdikul, Somnuek Sangkanuparph, Tanapat Tassaneyasin, Ratchainant Thammasudjarit, Tananchai Petnak
PA3845	**Cytokine and chemokine signature of COVID-19 and predictive markers** Maral Ranjbar (Hamilton, Canada), Ruth Cusack, Christiane Whetstone, Shiraz Nawaz, Christopher Khoury, Jennifer Wattie, Lesley Wiltshire, Jennifer Le Roux, Eric Cheng, Thivya Srinathan, Terence Ho, Roma Sehmi, Mylinh Duong, Gail Gauvreau
PA3846	**Soluble Bradykinin as a clinical prognostic marker for SARS-CoV2?** Pajanivel Ranganadin (PONDICHERRY (Tamil Nadu), India), Agiesh Kumar Balakrishnan, Vignesh Mariappan
PA3847	**COVID-19 pneumonia: when do eosinophils matter?** Nicol Bernardinello (Trecenta (RO), Italy), Dylan Pasin, Giulia Grisostomi, Chiara Giraudo, Gioele Castelli, Elisabetta Cocconcelli, Anna Maria Cattelan, Paolo Spagnolo, Elisabetta Balestro
PA3848	**miR-21-5p high expression levels in younger hospitalized COVID-19 patients are associated with mortality and critical disease** Ramcés Falfán-Valencia (Ciudad de México (CDMX), Mexico), Brandon Bautista-Becerril, Karol J Nava-Quiroz, Ingrid Fricke-Galindo, Ivette Buendía-Roldán, Gloria Pérez-Rubio, Leslie Chávez-Galán, Angel Camarena, Rafael Dj Hernández-Zenteno
PA3849	**Vitamin D values in post-COVID syndrome patients are lower than in control groups** Jens Bräunlich (Leipzig, Germany)
PA3850	**Procalcitonin to rule out early bacterial coinfection in COVID-19 critically ill patients** Francesco Bindo (Cusano Milanino, Italy), Flavia Galli, Anna Motos, Laia Fernandez-Barat, Enric Barbeta, Sofia Misuraca, Andrea Palomeque, Ferran Barbé, Antoni Torres
PA3851	**Who gets persistent symptoms and why - analysing the plasma proteome in long COVID** Emma Denneny (London, United Kingdom), Spyros I Vernardis, Robert Chapman, Rebecca Evans, Brintha Selvarajah, Toby Hillman, Melissa Heightman, Jeremy S Brown, Markus Ralser, Joanna C Porter
PA3852	**Predictors of mortality among COVID-19 patients in Shebin El Kom Chest Hospital** Rana Helmy El-Helbawy (Shebin El-Kom, Egypt), Sarah El-Sayed Zaki Zaki, Ahmed Abd El-Rahman Ali, Asmaa Metwally Abd El-Tawab

PA3853 **Ferritin to Procalcitonin (F/P) ratio in patients with COVID19 pneumonia versus bacterial pneumonia. Do we have a reliable and challenging biomarker?**
Radmila Dmitrovic (Belgrade, Republic of Serbia)

PA3854 **Late Breaking Abstract - Erdosteine and its metabolite MET-1 modulate innate immunity and stress oxidative state in SARS-CoV-2 infection**
Sergio Strizzi (Milan, Italy), Fiammetta Danzo, Claudia Vanetti, Mara Biasin, Dejan Radovanovic, Daria Trabattoni, Pierachille Santus

PS-14 in poster area Session 381 08:00 - 09:30

Poster session: Pleural and miscellaneous infections

Disease(s) : Airway diseases Respiratory critical care

Method(s) : Endoscopy and interventional pulmonology Epidemiology General respiratory patient care Respiratory intensive care Public health Imaging Pulmonary rehabilitation Surgery

Tag(s) : Clinical

Chairs : Eric Mortensen (Simsbury, United States), Chair to be confirmed

PA3855 **A scoping review of outcome measures in randomised controlled trials of pleural infection**
Jessica Hughes (BRISTOL, United Kingdom), Sarah Rudd, Alice Milne, Nick Maskell, David Arnold

PA3856 **RAPID Score: Mortality and hospitalization risk stratification in pleural empyema**
Maria João Lúcio (linda a velha, Portugal), Eva Brysch, Margarida Guerreiro, Fernando Nogueira

PA3857 **Incidence and clinical outcomes of pneumonia patients with pleural effusions in 28 urgent care clinics**
Nathan Dean (Murray, United States), Jackie Eve, Allison Butler, James Hart, Thea Sakata, Eddie Stenejhem, Y. C. G. Lee

PA3858 **Intrapleural use of tissue plasminogen activator and DNase in management of pleural infection.**
Prashanth Shetty (Aston Clinton, United Kingdom), Alex Francioni, Adeel Jafri

PA3859 **Clinical features of pneumothorax associated with COVID-19: a single-centre retrospective analysis**
Kohei Fujita (Kyoto, Japan), Toshiyuki Iwata, Osamu Kanai, Hiroaki Hata, Masayuki Hashimoto, Hiroyuki Tanaka, Takao Odagaki, Tadashi Mio

PA3860 **Association between time-to-treatment and prognosis of pneumocystis pneumonia in non-human immunodeficiency virus-infected immunocompromised patients; A multi-centre, retrospective observational cohort study (RE-VISION-PCP)**
Haruka Fujioka (Kamogawa, Japan), Yuya Homma, Tatsuya Nagai, Ayumu Otsuki, Hiroyuki Ito, Kei Nakashima

PA3861 **Chronic non-infectious lung conditions in HIV-infected children at Chris Hani Baragwanath Academic Hospital. Kegode E1, Verwey C1, Sipambo N1. 1 University of Witwatersrand,South Africa**
everlyne kegode (johannesburg, South Africa)

PA3862 **Prognostic factors of pneumocystis pneumonia in non-human immunodeficiency virus-infected immunocompromised patients: A multicentre, retrospective, observational cohort study (RE-VISION-PCP)**
YUYA HOMMA (Chiba, Japan), Haruka Fujioka, Tatsuya Nagai, Ayumu Otsuki, Hiroyuki Ito, Kei Nakashima

PA3863 **Efficacy and safety of low-dose versus conventional-dose trimethoprim-sulfamethoxazole treatment for pneumocystis pneumonia in non-human immunodeficiency virus-infected patients:A multi-centre, retrospective observational cohort study (RE-VISION-PCP)**
Tatsuya Nagai (Kamogawa, Japan), Haruka Fujioka, Yuya Homma, Ayumu Otsuki, Hiroyuki Ito, Kei Nakashima

PA3864 **Impact of bronchoalveolar lavage on the management of immunocompromised hosts**
Kathleen Jahn (Basel, Switzerland), Meropi Karakioulaki, Desiree Schumann, Hans Hirsch, Karoline Leuzinger, Letizia Grise, Stefano Aliberti, Giovanni Sotgiu, Michael Tamm, Daiana Stolz

PA3865 **Clinical outcomes of haematological patients undergoing bronchoscopy in a registry of immunocompromised patients evaluated for pulmonary infections.**
Eugene Gan (Singapore, Singapore), Brian Chua, You Xin Puan, Timothy Toh, Saripalli Kundan Reddy, Isaac Fong, Deshawn Tan, Yi Hern Tan

PA3866 **Burden of hospitalized adult pertussis in France, 2008-2020**
Denis Macina (LYON, France), Mickael Arnaud, Johanna Despres, Ana Antunes, Regis Verdier, Juan C Vargas Zambrano

PA3867 **Antibiotic treatment strategies in a Danish cohort of patients with lung abscesses.**
Søren Sperling (Aarhus N, Denmark), Victor Næstholt Dahl, Jakob Kirkegaard Vaarst, Christian Borbjerg Laursen, Tina Nørregaard Gissel, Pia Holland Gjørup, Andreas Fløe, Elisabeth Bendstrup

PA3868 **Pulmonary nocardiosis as an emerging infection in non-cystic fibrosis bronchiectasis**
Mariapia Niceforo (Pisa, Italy), Miriam De Francesco, Roberta Gaeta, Federica Di Giorgi, Davide Chimera, Federico L. Dente, Roberta Pancani, Massimiliano Desideri, Francesco Pistelli, Laura Carrozzi

PA3869 **Biochemical parameters predicting diagnosis of melioidosis pneumonia: a retrospective observation analysis**
Han Jia Chew (SARAWAK, Malaysia), Yee Yew Loong, Tung Ung John Tang, Cheng Foong Cheah

PA3870 **Impact of immune status on the clinical characteristics, treatment outcomes and mortality of pulmonary nocardiosis: A retrospective analysis in a tertiary care hospital from a low to middle-income country**
Yasmin Rahim (Kettering, United Kingdom), Syed Muhammad Zubair, Muhammad Mustansir Mehdi Khan, Hamza Ahmed Ibad, Muhammad Irfan

PA3871 **Lung contusion due to military chest injury as a risk factor for bacterial pneumonia and other respiratory infections.**
Oleh Yakovenko (Lutsk, Ukraine), Eduard Khodosh, Iryna Gritsiyk

PA3872 **Accuracy of A2DS2 score as a predictor of stroke associated pneumonia (SAP) and in-hospital death among acute stroke patients admitted in a cardiovascular center in Metro Manila, Philippines**
Kelvin Mar Bartolome (Quezon City, Philippines), Ma.Encarnita Blanco-Limpin, Aileen Guzman-Banzon

PA3873 **Bacteriological spectrum and drug susceptibility in post tuberculosis bronchiectasis**
Tehreem Ahmad (Karachi, Pakistan), Faisal Faiyaz Zuberi

PA3874 **The Neutrophil-to-Lymphocyte ratio as a biomarker of severity in bronchiectasis**
Mariem Friha (Ariana, Tunisia), Ines Moussa, Hana Mrassi, Sarra Ben Sassi, Sarra Trimech, Chirine Zaier, Imen Sahnoun, Leila Douik El Gharbi

PS-15 in poster area Session 382 08:00 - 09:30

Poster session: Lung cancer challenges in real clinical settings

Disease(s) : Thoracic oncology | Interstitial lung diseases | Airway diseases | Pulmonary vascular diseases

Method(s) : Epidemiology | General respiratory patient care | Imaging | Pulmonary function testing | Endoscopy and interventional pulmonology | Public health | Surgery

Tag(s) : Clinical

Chairs : Armin Frille (Leipzig, Germany), Chair to be confirmed

PA3875 **Development and validation of a predictive score of venous thromboembolism in patients with lung cancer: Tunisian Survey**
Houda Rouis (Ariana, Tunisia), Chirine Moussa, Islem Mejri, Hela Kamoun, Soumaya Debiche, Nourchene Khalfallah, Linda Ben Hamida, Amel Khattab, Zied Moetamri, Mohamed Amine Megdiche, Sonia Maâlej

PA3876 **Treatment with low-molecular-weight heparin negatively effects lung cancer patient survival**
Julia Held (Hannover, Germany), Marc A. Schneider, Tobias Welte, Sabina Janciauskiene, Thomas Muley

PA3877 **Thromboembolic events in lung cancer patients : what special features?**
Lenda Ben Hmida (Rades, Tunisia), Chaima Habouria, Nidhal Belloumi, Sirine Daoud, Hend Abid, Imen Bachouch, Fatma Chermiti, Soraya Fenniche

PA3878 **ETIOLOGICAL PROFILE OF SUPERIOR CAVE SYNDROME**
meryem zadi (CASABLANCA, Morocco)

PA3879 **The Assess Respiratory Risk in Surgical Patients in Catalonia (ARISCAT) score overestimates postoperative complications' risk in thoracic surgery.**
Georgia Hardavella (Athens, Greece), Ioannis Karampinis, Maria Salomidou, Irma Bracka, Theodoris Daskalos, Antonia Zachariou, Elli Keramida, Elena Bellou, Fotis Kyriakou, Despoina Zorpidou, Panagiotis Demertzis, Nikolaos Anastasiou

PA3880 **The clinicopathological characteristics of 1139 cases of small cell lung cancer patients**
Lei Li (Chengdu (Sichuan), China), Liang Zhou, Weimin Li

PA3881 **Clinicopathologic characteristics of NSCLC patients with uncommon EGFR mutations in Korea**
YOO JUNG LEE (Incheon, Republic of Korea), Chang Dong Yeo, Chan Kwon Park, Sung Kyoung Kim, Ju Sang Kim, Yong Hyun Kim, Jin Woo Kim, Seung Joon Kim, Sang Haak Lee, Hye Seon Kang

PA3882 **Clinicopathological features and prognostic factors of lung adenocarcinoma in never smokers**
Lan Yang (Chengdu, China), Dan Liu, Weimin Li

PA3883 **Agreement between clinical and pathologic stage in NSCLC: the T component**
Diogo André Barroso Ferreira (Vila Nova De Famalicão, Portugal), Patrícia Castro, Marta Castro, Margarida Dias, Daniel Coutinho, Eloísa Silva, José Miranda, Ana Barroso

PA3884	**Survival of patients with KRAS G12C mutated stage IV non-small cell lung cancer with and without brain metastases treated with immune checkpoint inhibitors** Anneloes L. Noordhof (Leeuwarden, Netherlands), Esther M. Swart, Ronald A. M. Damhuis, Peter W. A. Kunst, Dirk K. M. De Ruysscher, Lizza E. L. Hendriks, Wouter H. Van Geffen, Mieke J. Aarts
PA3885	**Nationwide real-world overall survival in advanced EGFR mutated NSCLC using different TKI.** Rolof G.P. Gijtenbeek (Leeuwarden, Netherlands), Ronald A.M. Damhuis, Anthonie J. Van Der Wekken, Lizza E.L. Hendriks, Harry J.M. Groen, Wouter H. Van Geffen
PA3886	**Lung cancer associated to idiopathic pulmonary fibrosis: prediction ranking and data mining analysis** Giulia Maria Stella (Pavia (PV), Italy), Sara Lettieri, Silvia Mancinelli, Lucia Del Frate, Anisa Cala, Chandra Bortolotto, Davide Piloni
PA3887	**Impact of COPD on lung cancer symptom burden: A population-based study** Stacey J Butler (Toronto, Canada), Alexander V Louie, Rinku Sutradhar, Lawrence Paszat, Dina Brooks, Andrea S Gershon
PA3888	**HIV accelerates the development and progression of lung cancer: a single-centre prospective study** Raisa Bhikoo (Cape Town, South Africa), Brian Allwood, Elvis M Irusen, Coenraad Fn Koegelenberg
PA3889	**The Impact of COVID-19 on Lung Cancer diagnoses and treatment at St George's Hospital, London** Praveen Natarajan (London, United Kingdom), Eunice Xing, Danyal Jajbhay, Jamie Arberry, Jessica Gates, Jon Panaguiton, Eilish Yarham, Hassan Ahmed, Roshan Siddique, Raminder Aul, Yee Ean Ong, Adrian Draper
PA3890	**Has the covid pandemic influenced the diagnosis of patients with lung cancer?** Imanol Gonzalez Muñoz (Barakaldo, Spain), Jone Solorzano Egurbide, Elena Garay Llorente, Joseba Andia Iturrate, Beatriz Gonzalez Quero, Edurne Echevarria Guerrero, Laura Cortezon Garces, Teresa Bretos Dorronsoro, Larraitz Garcia Echeberria
PA3891	**Impact of coronavirus disease 2019 on the clinical course of thoracic malignancies** Osamu Kanai (Kyoto, Japan), Takanori Ito, Zentaro Saito, Takuma Imakita, Issei Oi, Yuki Yamamoto, Kohei Fujita, Masayuki Hashimoto, Hiromasa Tachibana, Satoru Sawai, Tadashi Mio
PA3892	**Clinical Profile and Outcomes of Patients with Primary Intrathoracic Cancer who were admitted due to COVID 19 at Lung Center of the Philippines** IVARRENE CAHINDE (PALO, Philippines), John Carlo Custodio, Guia Elena Ladrera
PA3893	**Late Breaking Abstract - Did changes in referral pathways during the Covid 19 pandemic influence lung cancer diagnosis and staging** Zanfur Khan (Shipley, United Kingdom), Kwee Yen Goh, Abhishek Gupta, Sanjay Kumar
PA3894	**Metastatic lung cancer: another symptom of Long COVID?** Rebecca Evans (London, United Kingdom), Rohan Pancharatnam, Burhan Khan

PS-16 in poster area Session 383 08:00 - 09:30

Poster session: Basic mechanism and novel treatment targets in pulmonary fibrosis

Disease(s) : Interstitial lung diseases

Method(s) : Cell and molecular biology Physiology Pulmonary function testing Imaging

Tag(s) : Basic science, Translational

Chairs : ARGYRIS TZOUVELEKIS (Patras, Greece), Vanesa Vicens Zygmunt (Castelldefels (Barcelona), Spain)

PA3895	**Impact of Bifidobacterium longum BB536 on nausea caused by pirfenidone in a mouse model of pellagra** Koji Kuronuma (Sapporo, Japan), Natsumi Susai, Takeshi Yoshioka, Atsushi Saito, Hirofumi Chiba
PA3896	**Fcor/FOXO1 axis regulates GLUT1-mediated mitochondrial oxidative stress and metabolic reprogramming in angiotensin II-induced fibroblast activation** Wei Wang (Guangzhou, China), Ying Meng
PA3897	**Novel waveform analysis reveals persistent pathophysiological changes in rodent model of pulmonary fibrosis** Maria Volovaya (London, United Kingdom), Miquel Serna Pascual, Yujia Wu, Philip Aston, Carolyn Lam, Aileen Milne, Mary Mcelroy, Manasi Nandi
PA3898	**Regenerative capacity of alveolar type 2 cells is proportionally reduced following disease progression in IPF-derived organoid cultures** Hyeon Kyu Choi (Souel, Republic of Korea), Ju Hye Shin, Mi Hwa Shin, Ala Woo, Sang Hoon Lee, Eun Young Kim, Hyo Sup Shim, Ha Eun Kim, Joo Hyeon Lee, Chul Hoon Kim, Moo Suk Park

PA3899	**Abnormal phosphorylation of Per2 induces myofibroblast transformation and promotes the development of pulmonary fibrosis** Mei Chen (Chengdu (Sichuan), China), Lian Liu
PA3900	**Data-driven processing of electronic medical record (EMR) and serum exosome proteomics data of idiopathic pulmonary fibrosis (IPF) patients identified pathological networks and its regulatory molecules** Mari Nogami-Itoh (Ibaraki-shi, Japan), Masataka Kuroda, Yoshito Takeda, Yuya Shirai, Takatoshi Enomoto, Jun Adachi, Sadao Kurohashi, Eiji Aramaki, Toshihiro Takeda, Yasushi Matsumura, Masahiro Yanagawa, Yayoi Natsume-Kitatani, Kenji Mizuguchi, Naonori Ueda, Atsushi Kumanogoh
PA3901	**Bleomycin does not directly cause fibrosis in precision-cut lung slices, PCLS** Satoshi Kanazawa (Nagoya, Japan), Yoko Miura
PA3902	**A multicenter study of extracellular vesicles profile in bronchoalveolar lavage from patients affected by IPF, HP and sarcoidosis** Miriana d'Alessandro (Siena, Italy), Sara Gangi, Piera Soccio, Elisabet Cantó, Ruben Osuna, Laura Bergantini, Paolo Cameli, Gaia Fabbri, Sara Croce, Giulia Scioscia, Giorgia Moriondo, Giusy Montuori, Matteo Fanetti, Fabrizio Mezzasalma, Diego Castillo, Donato Lacedonia, Silvia Vidal, Elena Bargagli
PA3903	**Aging disturbed lysosomes to modulate efferocytosis-induced SPP1-expressing macrophage and inhibit pulmonary fibrosis reversal** Yue Zhang (Guangzhou, China), Hua Zhang
PA3904	**Use of invasive lung function assessment (DSI/Buxco) to quanity changes in lung function parameters in a rat bleomycin model of lung fibrosis.** Mary McElroy (Edinburgh (Edinburgh), United Kingdom), Rachel Macfarlane, Jennifer Dowie, Kirsten Maclellan, Shyloh Solomon, James Baily
PA3905	**Iron status and the risk of idiopathic pulmonary fibrosis: a mendelian randomization study** Jian Zhou (Chengdu, China), Menglin He, Rurong Wang, Xuehan Li
PA3906	**Microcomputed tomography to study the in vivo development of IPF-like disease in conditional Nedd4-2 deficient mice** Dominik Leitz (Berlin, Germany), Philip Konietzke, Willi Wagner, Julia Duerr, Hans-Ulrich Kauczor, Marcus A. Mall, Mark O. Wielpütz
PA3907	**Imatinib treatment for fibrotic lung disorders: ex vivo assessment on human lungs.** Cecilia Bagnera (Pavia, Italy), Sara Bozzini, Eleonora Bozza, Matteo Della Zoppa, Silvia Mancinelli, Federica Briganti, Giulio Melloni, Federica Meloni
PA3908	**A novel senolytic drug, ARV-825, ameliorates experimental lung fibrosis** Seidai Sato (Hamilton (ON), Canada), Kazuya Koyama, Hirohisa Ogawa, Kojin Murakami, Yuya Yamashita, Nandin-Erdene Danzan, Hiroki Bando, Keiko Haji, Nobuhito Naito, Hiroshi Kawano, Eiji Hara, Yasuhiko Nishioka
PA3909	**A clinical-stage RNAi therapeutic candidate for IPF mediates durable MMP7 silencing in nonhuman primates and human lung tissue** Tingting Yuan (VERONA, United States), Szymon Klossowski, Maria Afrazi, Holly Hamilton, Julia Hegge, James Hamilton, Tao Pei, Erik Bush
PA3910	**Hyaluronic acid decorated-liposome loaded with Imatinib (XHALIP): delivered intratracheally are effective in a Bleomycin model of lung fibrosis** Roberta Fusco (Messina, Italy), Veronica Codullo, Sara Bozzini, Eleonora Bozza, Cecilia Bagnera, Rosanna Di Paola, Silvia Arpicco, Federica Meloni, Salvatore Cuzzocrea
PA3911	**CycloZ reduces inflammation in bleomycin-induced idiopathic pulmonary fibrosis model mice.** Seoyeong Baek (Pohang, Gyeongbuk, Republic of Korea), Dohyun Lee, Jongsu Jeon, Onyu Park, Xiaoxu Li, Alessia Demasi, Gayeong Hur, Seung-Hyo Lee, Johan Auwerx, Hoe-Yune Jung
PA3912	**CycloZ improves pulmonary fibrosis in bleomycin-induced idiopathic pulmonary fibrosis model mice by modulating the pathogenic transcriptome.** Dohyun Lee (Pohang, Republic of Korea), Jongsu Jeon, Seoyeong Baek, Onyu Park, Xiaoxu Li, Alessia Demasi, Johan Auwerx, Gayeong Hur, Seung-Hyo Lee, Heo-Yune Jung
PA3913	**Preclinical evaluation of Ezetimibe for repurposing to pulmonary fibrosis.** Chanho Lee (Seoul, Republic of Korea), Se Hyun Kwak, Jisu Han, Ju Hye Shin, Yu Seol Lee, Jeong Su Park, Beom Jin Lim, Jin Gu Lee, Young Sam Kim, Song Yee Kim, Soo Han Bae
PA3914	**Intratracheal administration of a PROTAC with subnanomolar potency induces BRD4 degradation in the lung without systemic target engagement** Ulf Hedström (Mölndal, Sweden), Antonio Piras, Rikard Pehrson, Jianming Liu, Amy Wilson, Karin Carlsson, Karin Ribbing, Cecilia Forss, Oliwia Slettengren, Madeleine Engsevi, Johan Jirholt, Martin Hemmerling

PS-17 in poster area Session 384 08:00 - 09:30

Poster session: New kids on the interstitial lung disease block: COVID-19 and checkpoint inhibitors

Disease(s) : Interstitial lung diseases | Respiratory critical care | Thoracic oncology

Method(s) : Epidemiology | Imaging | Respiratory intensive care | General respiratory patient care | Pulmonary function testing | Cell and molecular biology | Pulmonary rehabilitation

Tag(s) : Translational

Chairs : Veronika Müller (Budapest, Hungary), Raquel Guillamat Prats (Badalona, Spain)

PA3915	**Cytoimmunological pattern of bronchoalveolar lavage in interstitial lung pathology related to post-COVID-syndrome: attempt to assess the predictive significance.** Piotr Kopiński (Kraków, Poland), Grzegorz Przybylski, Ewa Wypasek, Ewelina Wędrowska, Tomasz Wandtke, Tomasz Senderek, Maciej Gagat
PA3916	**Effects of COVID-19 on telomere length and its relationship to pulmonary fibrosis** Alba Mulet Arabi (Valencia, Spain), Jaime Signes-Costa Miñana, Pilar González Cabo, Nora Juciute, Estrella Fernández Fabrellas, José Antonio Rodríguez Portal, José Antonio Ros Lucas, Ada Luz Andreu Rodríguez, Federico Pallardó Calatayud
PA3917	**The inflammatory subtypes and vivo models of checkpoint inhibitor pneumonitis after immunotherapy** Tingyue Luo (Guangzhou, China), Hangming Dong, Shaoxi Cai
PA3918	**Prevalence and Management of Post Covid fibrosis in tertiary care unit – A single centre experience** Sugeesha Wickramasinghe (Kadawath, Sri Lanka), Sharada Gudur, Thomas Southworth, Britney Vernon, Yussef Haider, Timothy Gatheral
PA3919	**Physical exercise in post-COVID patients** Jaume Bordas Martinez (barcelona, Spain), Vanesa Vicens Zygmunt, Pablo Carrasco, Miquel Berga, Ferran López, Héctor Sanchis-Gilabert, Anna Pulido-Expósito, Mariagna Sampere-Aymerich, Maria Jesús González-Frechina, Jaume Bordas-Martínez, Guadalupe Bermudo-Peloche, Maria Molina-Molina, Esther García-Lerma, Cristian Tebé-Cordomí, Guillaume Lefebvre, Rosa Planas-Balague
PA3920	**Enhanced liver fibrosis (ELF) test as a biomarker of pulmonary fibrosis (PF) secondary to COVID-19 pneumonia.** Alexa Gabriela Nuñez Dubon (Barcelona, Spain), Cristina Aljama, Cristina Esquinas, Gerard Orriols, Georgina Farago, Galo Granados, Pablo Gabriel-Medina, Francisco Rodriguez-Frias, Mònica Pons, Marc Miravitlles, Miriam Barrecheguren
PA3921	**Role of virtual multidisciplinary team meetings in the post-COVID era: a global survey to evaluate the ILD diagnostic pathway** Graham Lough (Glasgow, United Kingdom), Rayid Abdulqawi, Gina Amanda, Katerina Antoniou, Arata Azuma, Ahmed Bayoumy, Milind Baldi, Jürgen Behr, Elisabeth Bendstrup, Demosthenes Bouros, Kevin Brown, Nazia Chaudhuri, Tamera J Corte, Vincent Cottin, Bruno Crestani, Kevin Flaherty, Ian Glaspole, Leticia Kawano-Dourado, Michael Keane, Martin Kolb, Fernando J Martinez, Maria Molina-Molina, Ferran Morell, Iñigo Ojanguren, Laurence Pearmain, Ganesh Raghu, Paola Rottoli, Stefan Cristian Stanel, Gabriela Tabaj, Carlo Vancheri, Brenda Varela, Bonnie Wang, Athol Wells, Pilar Rivera-Ortega
PA3922	**SAFETY PROFILE OF PIRFENIDONE IN COVID19 RESPIRATORY DISTRESS SYNDROME** Marta Hernández Argudo (Barcelona, Spain), Guadalupe Bermudo Peloche, Maria Molina Molina, Vanesa Vicens Zygmunt, Guillermo Suarez Cuartin, Jaume Bordas Martinez, Salud Santos Perez, Santiago Bolivar Cuevas, Belen Del Rio Carrero, Joan Sabater Riera, Mari Paz Fuset Cabanes
PA3923	**Long-COVID syndrome and interstitial lung disease following COVID-19** Dorottya Fesu (Érd, Hungary), Lorinc Polivka, Eniko Barczi, Marcell Foldesi, Gabor Horvath, Aniko Bohacs, Veronika Muller
PA3924	**Characterization of fibrosis-associated pathways in human lung tissue samples in COVID-19 and fibrotic lung diseases** Cathrin Kodde (Berlin, Germany), Torsten Blum, Tilman Klassert, Svea Eichler, Sergej Griff, Dominik Driesch, Armin Frille, Lothar Jaensch, Marco Von Ham, Ana Salas Pérez, Susann Stephan-Falkenau, Hortense Slevogt, Torsten Bauer
PA3925	**Neuroendocrine Cell Hyperplasia of Infancy (NEHI) during the Pandemic Era.** Vasilis Grammeniatis (Athens, Greece), Marios Papadopoulos, Elisavet Arkoumani, Efthymia Alexopoulou, Kostas Priftis, Kostas Douros
PA3926	**The risk factors for developing post COVID-19 pulmonary fibrosis** Adriana Petronela Fildan (Constanta (Constanta), Romania), Roxana-Elena Cirjaliu, Doina-Ecaterina Tofolean, Elena Dantes, Oana Cristina Arghir, Laurențiu-Tony Hangan

PA3927	**Comparative study assessing the pulmonary function sequalae in post Covid -19 patients during 1st and 2nd wave.** Rajesh Agrawal (Bareilly, India), Chinkita Agrawal, Javied Ahmad Malik
PA3928	**Checkpoint inhibitor pneumonitis – a tertiary centre's experience** Su Latt Phyu (Oxford, United Kingdom), Nicholas Coupe, Miranda Payne, Ling-Pei Ho, Emily Fraser, Rachel Hoyles, Peter Saunders
PA3929	**Bronchoalveolar Lavage and post-COVID-19 interstitial lung disease** Sabrine Majdoub Fehri (Nabeul, Tunisia), WAFA MADI, Racem Ammar, Hamida Kwas
PA3930	**Interstitial lung disease pattern in the upper lobes: etiologies, characteristics and prognosis** BOUGACHA MARWA (tunis, Tunisia), Chirine Moussa, Houda Rouis, Line Kaabi, Feten Mhiri, Amel Khattab, Leila Bayahi, Ibtihel Khouaja, Ines Zendah, Sonia Maalej
PA3931	**Epidemiology and antifibrotic therapy of post-COVID-19 interstitial lung disease.** Oleh Yakovenko (Lutsk, Ukraine), Alexander Khanin, Sergej Griff, Tetiana Yakovenko, Eduard Khodosh, Yaroslav Dziublyk
PA3932	**Late Breaking Abstract - Characterising cough in hypersensitivity pneumonitis** Zhe Wu (London, United Kingdom), David J.F Smith, Leda Yazbeck, Toby M Maher, Jaclyn A Smith, Philip L Molyneaux
PA3933	**Late Breaking Abstract - Surfactant related chILD: a systematic review** Georgia-Emmanouela Dendrinou (ATHENS, Greece), Athanasios Kondylis, Maria Christodoulou, Konstantinos Douros
PA3934	**Late Breaking Abstract - Inhaled BTI615 regulates lung fibrotic-niche via confining TGF-β1 pathway in bleomycin rat-model** Qiu Jiang (Chengdu, China), Rui Chen, Ling Xiao, Fei Wang, Suxia Shi, Ruijun Cheng, Yan Zhang, Na Wang, Pan Zhong, Jiabao Yue, Xiaomei Li, Yi Ding

PS-18 in poster area — Session 385 — 08:00 - 09:30

Poster session: New approaches in rare interstitial lung diseases

Disease(s) : Interstitial lung diseases, Airway diseases

Method(s) : General respiratory patient care, Epidemiology, Cell and molecular biology, Pulmonary function testing, Imaging

Tag(s) : Basic science, Translational

Chairs : Cormac McCarthy (Dublin 4, Ireland), Chair to be confirmed

PA3935	**Efficacy of Jak inhibitors in children with intra-alveolar haemorrhage not related to COPA gene mutations** Anaïs LE (Paris, France), Thomas Perrin, Philippe Drabent, David Drummond, Philippe Reix, Marie-Louise Fremond, Alice Hadchouel
PA3936	**Cyclic AMP-dependent up-regulation of surfactant protein B in differentiating alveolar basal cells** Petra Khan (Basel, Switzerland), Sabrina Blumer, Spasenija Savic, Lars Knudsen, Danny Jonigk, Mark P. Kuehnel, Michael Tamm, Katrin E. Hostettler
PA3937	**Myeloid-dependent immunosuppressive features drive IPF progression** Dmytro Sirokha (Munich, Germany), Theodoros Kapellos, Valeria Viteri, Flavia Greiffo, Altana Namsaraeva, Lukas Heumos, Daniela Dietel, Marion Frankenberger, Oliver Eickelberg, Nikolaus Kneidinger, Ali Öender Yildirim, Herbert Schiller, Jürgen Behr, Isis Enlil Fernandez
PA3938	**WT SP-A restores abnormal oligomerization and secretion of mutant SFTPA1 and SFTPA2** Tifenn Desroziers (Paris, France), Yohan Soreze, Camille Fletcher, Serge Amselem, Florence Dastot Le Moal, Valérie Nau, Camille Louvrier, Marie Legendre, Sonia Karabina, Nadia Nathan
PA3939	**Altered regulation and pro-proliferative role of RNA binding proteins in idiopathic pulmonary fibrosis** Poornima Mahavadi (Gießen, Germany), Lisa Arnold, Martina Korfei, Andreas Guenther
PA3940	**Hypomorphic mutation in SFTPB leads to adult pulmonary fibrosis** Tifenn Desroziers (Paris, France), Grégoire Prévot, Aurore Coulomb, Valérie Nau, Florence Dastot-Le Moal, Aurélie Le Borgne, Serge Amselem, Marie Legendre, Nadia Nathan
PA3941	**Induced pluripotent stem cell derived type 2 alveolar epithelial cells: A novel platform for exploring telomere biology in pulmonary fibrosis** Mari Ozaki (Dublin 2, Ireland), Anj Schweikert, Fernanda Gutierrez-Rodrigues, Emma Groarke, Killian Hurley
PA3942	**Efficacity and safety of CFTR modulators in patients with interstitial lung disease caused by ABCA3 transporter deficiency** Mathilde Le Brun (Paris, France), Nadia Nathan, Marie Legendre, Justine Frija-Masson, Mwetty Onanga, Clairelyne Dupin, Lise Morer, Marie-Pierre Debray, Isabelle Fajac, Pierre-Régis Burgel, Bruno Crestani, Raphaël Borie

PA3943 **Necroptosis study in an epithelial in vitro model expressing surfactant protein A1**
Ioannis Tomos (Athens (P. Faliro), Greece), Camille Fletcher, Tifenn Desroziers, Angela Arenas Garcia, Aphroditi Daskalopoulou, Camille Louvrier, Serge Amselem, Sonia Karabina, Nadia Nathan

PA3944 **Correlation between Quantitative 3D HRCT analysis and Lung Function in Diffuse Cystic Lung Diseases**
Yasuhito Sekimoto (Dublin, Ireland), Evelyn Lynn, Brian Gaffney, Joseph Morrow, Marissa O'Callaghan, Amina Jouida, Jonathan D. Dodd, David Murphy, Michael P. Keane, Cormac Mccarthy

PA3945 **Characterization of fibrodysplasia ossificans progressiva (FOP) by respiratory oscillometry (Osc)**
Anastasiia Vasileva (Toronto, Canada), Joyce K. Y. Wu, Lianne Tile, Irene Ho, Angela M. Cheung, Chung-Wai Chow

PA3946 **Flow cytometric evaluation of whole lung lavage (WLL) fluid from patients with pulmonary alveolar proteinosis (PAP): preliminary findings**
Lutz-Bernhard Jehn (Essen, Germany), Victoria Berg, Artur Kibler, Eda Boerner, Julia Waelscher, Bettina Budeus, Marc Seifert, Christian Taube, Francesco Bonella

PA3947 **Correlation between childhood interstitial lung disease (chILD) phenotype and ABCA3 variants**
Simona Taverna (Palermo, Italy), Giuseppe Cammarata, Nicola Ullmann, Annalisa Allegorico, Velia Malizia, Anna Masucci, Stefania La Grutta, Renato Cutrera

PA3948 **Machine learned decision tree for diagnosis of ASMD among patients with unexplained ILD**
Imre Noth (Charlottesville, United States), Francesco Bonella, Wim A Wuyts, Pauline Guilmin, Margaux Törnqvist, Stefaan Sansen, Alexandra Dumitriu, Neha Shah, Maja Gasparic, Martin Montmerle

PA3949 **Interleukin-6 and krebs von den lungen-6 in lymphangioleiomyomatosis patients**
Beatrice Perea (SIENA, Italy), Miriana D'Alessandro, Laura Bergantini, Sara Gangi, Benedetta Zilio, Paolo Cameli, Elena Bargagli

PA3950 **Implication of the complement cascade in the establishment of the pre-metastatic niche through the induction of the epithelial-to-mesenchymal transition by circulating exosomes in lymphangioleiomyomatosis (LAM)**
Amina JOUIDA (Dublin, Ireland), Patrick Mcfadden, Grace Buckley, Evelyn Lynn, Marissa O'Callaghan, Yasuhito Sekimoto, Aurelie Fabre, Michael P Keane, Cormac Mccarthy

PA3951 **DIAGNOSTIC VALUE OF KL-6 AND GDF-15 IN LYMPHANGIOLEIOMYOMATOSIS.**
Marta Garcia Moyano (Barakaldo, Spain), Borja Santos Zorrozua, Eva Tabernero Huguet, Francisco Javier Martinez Núñez, Vanessa Zorrilla Lorenzo, Beatriz González Quero, Beatriz Gómez Crespo, Leticia Ceberio Hualde, Edurne Echevarria Guerrero, Laura Cortezón Garcés, Raquel Perez Garay

PA3952 **Cystatin C is associated with interstitial lung abnormalities features**
Yuchen Zhang (Chengdu, China), Min Zhu, Huajing Wan, Fengming Luo

PA3953 **Impact of familial character and/or the existence of a mutation in telomere-related genes in patients with pleuroparenchymal fibroelastosis**
Alice Camboulive (Asnières-sur-Seine, France), Raphael Borie, Marjorie Latrasse, Marie-Pierre Debray, Diane Bouvry, Bruno Crestani, Nadia Nathan, Lucile Sese, Pierre-Yves Brillet, Caroline Kannengiesser, Hilario Nunes

PA3954 **Determining the diagnostic yield of genomic testing in interstitial lung disease in Ireland**
Jisha Jasmin (Dublin 2, Ireland), Wan Lin Ng, Anja Schweikert, Laura Durcan, Donough Howard, Gianpiero L. Cavalleri, Katherine A. Benson, Killian Hurley

PS-19 in poster area Session 386 08:00 - 09:30

Poster session: Risk factors to guide pulmonary hypertension management

Disease(s) : Pulmonary vascular diseases Interstitial lung diseases

Method(s) : Cell and molecular biology Epidemiology Pulmonary function testing General respiratory patient care Respiratory intensive care Physiology Public health

Tag(s) : Clinical

Chairs : Athénaïs Boucly (Le Kremlin Bicètre, France), Vasile Foris (Graz, Austria)

PA3955 **Identification of novel biomarkers for use in clinical trials in BMPRII pulmonary hypertension**
Rowena Jones (CB2 0BD, United Kingdom), Nina Deliu, Sofia Villar, Mark Toshner

PA3956 **Capillary NT-proBNP is a valid tool for remote risk assessment in pulmonary hypertension.**
Harrison Stubbs (Glasgow, United Kingdom), John Cannon, Charlotte Durrington, Wendy Gin-Sing, Martin Johnson, Daniel Knight, Jim Lordan, John Wort

PA3957 **Follow-up of Calcium-Channel Blockers Responders and Risk Factors of Treatment Failure**
Antoine Beauvais (Paris 18e Arrondissement, France), Athénaïs Boucly, Marc Humbert, David Montani, Olivier Sitbon

PA3958	**Four-strata risk assessment in pulmonary arterial hypertension (PAH) patients treated with selexipag in real-world settings: Insights from EXPOSURE** Tobias Lange (Bad Reichenhall, Germany), Pilar Escribano, Audrey Muller, Martina Fontana, Stefan Soderberg, Sean Gaine
PA3959	**Biomarkers of angiogenesis in pulmonary arterial hypertension and pulmonary hypertension due to left heart diseases** Francesca Macera (Brussels, Belgium), Céline Dewachter, Laurence Dewachter, Emeline Hupkens, Antoine Bondue, Jean-Luc Vachiéry, Ana Roussoulières
PA3960	**Comparison between REVEAL Lite 2.0 and COMPERA 2.0 for risk stratification in Pulmonary Arterial Hypertension** Sandeep Sahay (Houston, United States), Nelson Villasmil-Hernandez, Frederick Wang, Matthew Wooten, Duc Nguyen, Raymond Benza, Edward Graviss
PA3961	**Phenotyping vasodilator responsiveness in idiopathic pulmonary arterial hypertension: any role for the cardiopulmonary exercise test?** gayathiri sivasubramaniam (London, United Kingdom), Andrea Baccelli, Gulammehdi Haji, Francesco Lo Giudice, Claire Weaver, Stefano Centanni, Luke Howard, Rachel Davies
PA3962	**The MRC Dyspnoea scale may predict survival in pulmonary arterial hypertension.** Folawemimo Arogundade (Glasgow, United Kingdom), Melanie Brewis, Colin Church, Martin Johnson, Harrison Stubbs
PA3963	**Clinical and economic burden of patients with PH-LD and PH-ILD in France** Vincent Cottin (Lyon, France), Olivier Sitbon, Nicoleta Petrica, Catia C. Proenca, Gabriela Bacchini Jeanneret, Miriam Fernandez Delgado
PA3964	**Have Physicians Learned What's New in the 2022 ESC/ERS Pulmonary Hypertension Guidelines? Areas of Improvement and Areas of Further Education Need** Christy Rohani-Montez (Duillier, Switzerland), Anna-Maria Hoffmann-Vold, Göran Rådegran
PA3965	**A patient preference study in pulmonary arterial hypertension (PAH): what matters most?** Wenjing Li (Allschwil, Switzerland), Michael Preiss, Monika Brand, Rachael DiSantostefano, Amélie Beaudet, Holger Gunz, Andrew Sadler, Ellen Janssen, Axel Mühlbacher
PA3966	**Concordance between physician and patient reported presence of symptoms in patients with pulmonary arterial hypertension in the US, Europe and Japan** Rogier Klok (Twello, Netherlands), R James White, Julia Harley, Mark Small, Carmine Dario Vizza, Dominik Lautsch
PA3967	**Higher circulating prolactin associates with lower mortality in pulmonary arterial hypertension** Wen-Hui Wu (Shanghai, China), Hui Zhao
PA3968	**Lowering of Mean Pulmonary Arterial Pressure is a Prognostic Marker in Pulmonary Hypertension Patients treated with Subcutaneous Treprostinil** Roela Sadushi-Kolici (Wien, Austria), Inbal Shafran, Nika Skoro-Sajer, Christian Gerges, Irene Lang
PA3969	**Health related quality of life in pulmonary arterial hypertension in the US, Europe and Japan** Rogier Klok (Twello, Netherlands), Carmine Dario Vizza, Julia Harley, Mark Small, R James White, Dominik Lautsch
PA3970	**Biomarkers for diagnosis and disease severity in precapillary pulmonary hypertension.** Katarzyna Rososinska (Kirkel, Germany), Philipp Markwirth, Ralf Kaiser, Franziska Trudzinski, Bettina Weingard, Robert Bals, Heinrike Wilkens
PA3971	**Prognostic impact of pulmonary diffusing capacity for carbon monoxide in pulmonary hypertension** Milan Mohammad (Østerbro, Denmark), Jacob Peter Hartmann, Jørn Carlsen, Jann Mortensen, Ronan Martin Griffin Berg
PA3972	**Residual risk identified in routine non-invasive follow-up assessments in pulmonary arterial hypertension** Jonna Ostermann (Hamburg, Germany), Julian Pott, Jan K Hennigs, Kevin Roedl, Christoph Sinning, Lars Harbaum, Hans Klose
PA3973	**Vasoreactivity in combined pre- and post-capillary pulmonary hypertension and survival** Eileen Harder (Boston, United States), Farbod Rahaghi, Miguel Divo, George Washko, Aaron Waxman
PA3974	**Role of 6-MWT and NT-proBNP in the evaluation of survival in Pulmonary Arterial Hypertension** Chiara Milano (Monza , Italy), Andrea Lombi, Lorenzo Volpiano, Giulia Pittalis, Marta Tundo, Riccardo Ripamonti, Paola Alfieri, Paola Faverio, Fabrizio Luppi, Giuseppe Paciocco

PS-20 in poster area — Session 388 — 08:00 - 09:30

Poster session: Ongoing imaging-related clinical studies in chronic obstructive pulmonary disease, asthma, interstitial lung disease and other pulmonary diseases

Disease(s) : Airway diseases | Interstitial lung diseases | Thoracic oncology

Method(s) : Imaging | Pulmonary function testing | Surgery | General respiratory patient care | Endoscopy and interventional pulmonology

Tag(s) : Clinical

Chairs : Anna Kerpel-Fronius (Budapest, Hungary)

PA3994	**Side-specific assessment of lung function in children with congenital diaphragmatic hernia - functional matrix pencil decomposition MRI as a promising diagnostic tool** Carmen Streibel (Bern, Switzerland), C Corin Willers, Grzegorz Bauman, Orso Pusterla, Oliver Bieri, Marion Curdy, Matthias Horn, Carmen Casaulta, Steffen Berger, Gabriela Marta Dekany, Elisabeth Kieninger, Andreas Bartenstein, Philipp Latzin
PA3995	**Multisite Hyperpolarized 129Xe MRI Study of Pediatric Primary Ciliary Dyskinesia** Wallace Wee (Toronto (ON), Canada), Brandon Zanette, Samal Munidasa, Sharon Braganza, Daniel Li, Rachel Eddy, Jonathan Rayment, Felix Ratjen, Giles Santyr, Sharon Dell
PA3996	**Seven years of functional lung MRI in children: experiences of more than 900 matrix-pencil decomposition (MP-)MRI measurements in clinics and research** Carmen Streibel (Bern, Switzerland), C. Corin Willers, Grzegorz Bauman, Orso Pusterla, Oliver Bieri, Enno Stranzinger, Ben Brabandt, Marion Curdy, Yasmin Salem, Carmen Casaulta, Insa Korten, Sophie Yammine, Philipp Latzin, Elisabeth Kieninger
PA3997	**Higher pulmonary artery and vein volumes are associated with disease severity and mortality in smokers with and without COPD** A. K. A. L. Kwee (Utrecht, Netherlands), T. Van Der Veer, L. Gallardo Estrella, Eleni Rosalina Andrinopoulou, Jean-Paul Charbonnier, Harm A. W. M. Tiddens, Stephen M. Humphries, David A. Lynch, Pim A. De Jong, E. Pompe
PA3998	**Radiologic features of COPD exacerbations: quantitative analysis of thorax computerised tomography** Selin Ercan (Gothenburg, Sweden), Ali Canturk, Emre Ruhat Avci, Naciye Sinem Gezer, Saliha Selin Ozuygur Ermis, Gozde Tokatli, Gokcen Omeroglu Simsek, Pinar Balci, Aylin Ozgen Alpaydin
PA3999	**Defining a CT phenotype of severe COPD patients who develop hypercapnia** Renzo Boersma (Groningen, Netherlands), Peter Wijkstra, Jorine Hartman, Marieke Duiverman
PA4000	**Correlation between frailty and reduced cortical thickness in Chronic Obstructive Pulmonary Disease.** Ayumi Fukatsu-Chikumoto (Ube-city, Japan), Tsunahiko Hirano, Shun Takahashi, Takuya Ishida, Tomihiro Donishi, Kazuyoshi Suga, Keiko Doi, Keiji Oishi, Shuichiro Ohata, Yoriyuki Murata, Yoshikazu Yamaji, Maki Asami-Noyama, Nobutaka Edakuni, Tomoyuki Kakugawa, Kazuto Matsunaga
PA4001	**Inter-disease variability in Dynamic Chest Radiography measurements and Pulmonary Function Tests in patients with Asthma, COPD and ILD** Rachel Burton (Liverpool, United Kingdom), Michael Cheung, Ryan Robinson, Fred Fyles, Thomas Fitzmaurice, Hassan Burhan
PA4002	**Comparison of HRCT and SPECT in the estimation of emphysema heterogeneity for endoscopic lung volume reduction** Meropi Karakioulaki (Freiburg im Breisgau, Germany), Tim Jonas Hallenberger, Desiree Schumann, Michael Tamm, Daiana Stolz
PA4003	**Optimized detection of pulmonary emphysema on CT scans of lung cancer screening participants** Hailan Liu (Groningen, Netherlands), Daiwei Han, Marleen Vonder, Marjolein Heuvelmans, Jaeyoun Yi, Zhaoxiang Ye, Harry De Koning, Matthijs Oudkerk
PA4004	**The clinical significance of CT-Thorax in the assessment of difficult to treat Asthma** AMER ALMAGHRABI (BIRMINGHAM, United Kingdom), Ali Bahron, Julie Marsh, Adel Mansur
PA4005	**Needle based confocal laser endomicroscopy for real-time granuloma detection** Saskia van Heumen (Amsterdam, Netherlands), Tess Kramer, Lizzy Wijmans, Christopher Manley, Sandeep Bansal, Dawn Jeannerat, Martijn De Bruin, Peter Bonta, Jouke Annema
PA4006	**Sensitivity of chest x-ray for visualisation of one brand of indwelling pleural catheter** Sophie Edgell (Newcastle, Australia), John Harrington, Vineeth George
PA4007	**HRCT composite fibrosis score correlates with clinical and physiological parameters in IPF** Nils Hoyer (København NV, Denmark), Michael Brun Andersen, Lenne Collatz Laustrup, Saher Burhan Shaker
PA4008	**Significance of FDG uptake in nodes of IPF patients undergoing PET imaging** Jagdeep Sahota (Letchworth Garden City, United Kingdom), Balaji Ganeshan, Thida Win, Francesco Fraioli, Raymondo Endozo, Robert Shortman, Ashley M Groves, Joanna C Porter

PA4009 **Assessing the impact of local lung cancer screening on our regional interstitial lung diseases service**
Raja Muthusami (Hereford, United Kingdom), Shiva Bikmalla, Imran Hussain, Helen Stone

PA4010 **Endoscopic measurement of parenchymal near infrared radiation transmittance correlates with HRCT derived lung tissue density in lung fibrosis patients.**
Jiří Votruba (Praha 2, Czech Republic), Zuzana Šestáková, Tomas Bruha

PA4011 **A missed opportunity - fibrosis on previous abdominal CTs in patients referred to an ILD clinic**
Jude Wellens-Mensah (Perth, United Kingdom), Matthew Embley, Paul Cadden, Mudher Al-Khairalla, Peter Williamson, Mark Spears

PA4012 **Observer agreement in the diagnosis of interstitial lung diseases**
Rebecca Saray Marchesini Stival (Rio Grande (RS), Brazil), Bruno Pedrazzani, Ariele Haagsma, Cristina Pellegrino Baena

PA4013 **Spirometry and chest HRCT abnormalities in symptomatic and asymptomatic patients with inflammatory bowel disease**
Asmaa Mohammed Elshazly (Alexandria, Egypt), Rasha Dabees, Mahmoud Reda, Fahmy Hablas, Ahmed Samir, Nashwa Abdel-Wahab

PS-3 in poster area Session 389 08:00 - 09:30

Poster session: Supporting patients with acute respiratory failure: new insight in acute non-invasive ventilation and high-flow nasal therapy

Disease(s) : Airway diseases | Respiratory critical care | Sleep and breathing disorders | Interstitial lung diseases

Method(s) : General respiratory patient care | Respiratory intensive care | Palliative care | Physiology

Tag(s) : Clinical

PA4014 **Efficacy and safety of high flow nasal oxygen therapy compared to conventional oxygen therapy in postoperative pulmonary complications: a systematic review and metaanalysis**
Jonni Fay Teves (Quezon City, Philippines), Noreen Ada Mangugan, Joann Kathleen Garcia

PA4015 **Ratio of oxygen saturation index and outcomes of high flow oxygen in post-extubated patients: a cohort study**
THITI SRICHAROENCHAI (Bangkok, Thailand), Metanee Songrin

PA4016 **Systematic review of high-flow noninvasive support (HF) for respiratory failure (RF): identifying sources of survival variation with meta-regression.**
Daniel Black (Chermside, Queensland, Australia), Liliana Black, Simon Black

PA4017 **The reverse flow in upper airways during asymmetrical nasal high flow ventilation**
Natalia Kabaliuk (Christchurch, New Zealand), Zane Goggin, Stanislav Tatkov

PA4018 **The effect of the asymmetrical Optiflow nasal cannula on aerosol performance**
Elena Fernández Fernández (Galway, Ireland), Marc Mac Giolla Eain, Mary Joyce, Ronan Mac Loughlin

PA4019 **Effective flow rates and decarboxylation differs between nasal high-flow devices**
Jens Bräunlich (Leipzig, Germany), Hubert Wirtz

PA4020 **Nosocomial Pneumoniae in Patients with SARS-CoV-2 ARDS undergoing NIV**
Federica Olmati (Roma, Italy), Alessandra Oliva, Pia Baiocchi, Angelo Petroianni, Corina Tomsa, Gianluca Paciucci, Flavio Mirabelli, Claudio Maria Mastroianni, Paolo Palange

PA4021 **Determinants of in-hospital mortality in Acute Non-invasive Ventilation (NIV): is door-to-mask time a strong predictor?**
Ahmed Alqahtani (Birmingham, United Kingdom), Ellen Snell, Alastair Watson, Pearlene Antoine-Pitterson, Bethany Jones, Biman Chakraborty, Rahul Mukherjee

PA4022 **HACOR SCALE TO PREDICT FAILURE IN NONINVASIVE VENTILATION (NIV): CLINIMETRIC PROPERTIES**
Adriana C. Lunardi (São Paulo (SP), Brazil), Matheus Pereira, Kaoany Moreira

PA4023 **Impact of HACOR Score and ROX index on Noninvasive Ventilation Failure in patients with acute hypercapnic respiratory failure**
Dhouha Ben Braiek (Sousse, Tunisia), Sourour Bel Haj Youssef, Yosri Ben Ali, Hend Zorgati, Azer Yaacoub, Nadine Boukadida, Arij Hammedi, Rihab Boubtane, Rahma Ben Jazia, Ameni Kacem, Anis Maatallah, Jihene Ayachi

PA4024 **Evaluation of a 'level of dependency withdrawal of NIVs framework' in end-of-life respiratory failure patients.**
Mary Lafferty (Sydney, Australia), Mary Dunford, Heidi Green, Alexandra Smith, Caitlin Sheehan, Ritin Fernandez

PA4025	**Conservative oxygen supplementation during helmet CPAP therapy in patients with COVID-19 and respiratory failure: a pilot study** ALESSANDRA IACOVELLI (Bellegra, Italy), Maria Luisa Nicolardi, Valentina Baccolini, Federica Olmati, Ilenia Attilia, Pia Baiocchi, Letizia D'Antoni, Ilaria Menichini, Ambra Migliarini, Daniela Pellegrino, Angelo Petroianni, Daniel Piamonti, Angela Tramontano, Paolo Villari, Paolo Palange
PA4026	**Multicentric study of patients treated outside the intensive care unit with non-invasive respiratory therapies during the first five waves of COVID-19 in the Madrid Area** Daniel López Padilla (Madrid, Spain), Soledad López Martín, Luis Puente Maestú, Silvia Martín Bote, Beatriz Arias Arcos, Ariela Candelaria Cáceres, Elizabeth González Revilla, Roberto Larrosa Barrero, Andrea Albuja Hidalgo, Ana Santiago Recuerda, Ester Zamarrón De Lucas, Carlos Carpio Segura, Enrique Zamora García, Elena García Castillo, Elena Ávalos Pérez-Urria, María Teresa Ramírez Prieto, José Andrés García Romero De Tejada, Raúl Moreno Zabaleta
PA4027	**Mortality in admitted patients with ILD and respiratory failure: Observational analysis** Sameen Toor (Leicester, United Kingdom), Rachel Mundin, Felix Woodhead, Padmavathi Parthasarathy, Syed Geelani, Hassan Choudry, Charlotte Swales
PA4028	**Nasal High Flow Therapy (NHFT) for Acute Respiratory Failure (ARF) in Interstitial Lung Disease (ILD) patients** Cindy Eng (Leeds, United Kingdom), Shan Liung Liew, Laura Horgan, Muthu Thirumaran, Akshay Dwarakanath
PA4029	**Use of UCL Ventura (Wayrachi) device as CPAP or HFNC in patients with severe respiratory failure due to COVID 19 pneumonia** Cecilia Lucía Pérez Muñante (Lima, Peru), Edwin Hernando Herrera Flores, Mario Daniel Danilla Dávila, Shanery Norma Gonzáles Vargas, Tatiana Luz Mirella Coba Taboada, Nancy Pamela Tapia Mantilla, Marco Ricardo Pérez Valencia
PA4030	**Audit of NIV Settings Initiation in Acute Hypercapnic Respiratory Failure** Ghulam Haider Khan (Westmalling, United Kingdom)
PA4031	**High flow nasal cannula and non-invasive ventilation for patients with COVID-19** David Shu Cheong Hui (Shatin, Hong Kong), Louise Yung, Ken Chan, Susanna Ng, Grace Lui, Fanny Ko, Tat On Chan, Karen Yiu, Matthew Chan, Hui Ling Yen
PA4032	**High intensity non invasive ventilation in management of acute hypercapnic respiratory failure of COPD** Khaled Hussein (Assiut, Egypt), Samiaa Hamdy, Ahmed Hamed, Maha Eissa
PA4033	**Inhaled delivery of nezulcitinib with nasal high-flow oxygen in healthy participants** Edmund Moran (South San Francisco, United States), Nathan Pfeifer, Wayne Yates, Rajeev Saggar, David Bourdet

PS-4 in poster area — Session 390 — 08:00 - 09:30

Poster session: Novel insights in respiratory disease-related mechanisms

Disease(s) : Airway diseases | Interstitial lung diseases | Pulmonary vascular diseases

Method(s) : Cell and molecular biology | Physiology | Pulmonary function testing

Tag(s) : Translational

Chairs : Reinoud Gosens (Groningen, Netherlands), Serena Di Vincenzo (Palermo (PA), Italy)

PA4034	**Exploring the role of non-coding RNAs in alveolar epithelial damage in pulmonary fibrosis** Chiara De Santi (Dublin, Ireland), Konstantinos-Dionysios Alysandratos, Fiorella Calabrese, Killian Hurley
PA4035	**The effect of highly selective furin inhibition on matrix metalloproteinases in cystic fibrosis** Bethany Montgomery (Belfast, United Kingdom), Lisa Douglas, Tatjana Ondrlji, Lorraine Martin
PA4036	**The emergence of myeloid-derived suppressor cells in a murine model of pulmonary fibrosis** Saeed Kolahian (Marburg, Germany), Nora Vedder, Philipp Gercke, Nikoleta Lautenschlager, Chiel Van Geffen, Jakob Schieb, Tobias Brunn, Tim Lange, Charlotte Vetter, Harald Renz
PA4037	**The involvement of myeloid-derived suppressor cells in the pathogenesis and lung functional impairment in bronchiectasis** Andreas M. Matthaiou (Drafi, Rafina-Pikermi, Attica, Greece), Nikoleta Bizymi, Georgios Pitsidianakis, Nikolaos Tzanakis, Katerina M. Antoniou
PA4038	**IL-17A drive oxidative stress and cell growth in A549 cell line: potential protective action of Mediterranean diet** Mirella Profita (Palermo (PA), Italy), Angela Marina Montalbano, Rosalia Paola Gagliardo, Giusy Daniela Albano
PA4039	**Loss of PTEN activity in COPD airway epithelial cells is modulated by miR-21** Vanessa Ho (London, United Kingdom), Jonathan R Baker, Keith R Willison, David R Klug, Peter J Barnes, Louise E Donnelly

PA4040 **Small extracellular vesicles mediated pathological communications between dysfunctional airway epithelium cells and skeletal muscle cells as a novel mechanism induced skeletal muscle dysfunction in COPD**
Mingming Deng (Beijing, China), Gang Hou

PA4041 **Terminal cell morphology and fitness is influenced by Cigarette Smoke Exposure in Drosophila melanogaster with ORMDL and Scca1 dysregulation**
Birte Ehrhardt (Borstel, Germany), Beate Höschler, Susanne Krauss-Etschmann, Thomas Roeder

PA4042 **TSLP and oxidative stress: two associated events reflecting airway epithelium injury upon cigarette smoke exposure**
Elisabetta Pace (Palermo (PA), Italy), Serena Di Vincenzo, Maria Ferraro, Bernardo Patella, Paola Pinto, Valentina Lazzara, Rosalinda Inguanta

PA4043 **The activity of the anti-inflammatory mediator lipoxin A4 in COPD**
Nataliia Habshydze (Dnipro, Ukraine), Tetyana Pertseva, Nataliia Sanina, Svitlana Panina

PA4044 **High-fat and high-sugar diet does not impair lung function parameters assessed by double chamber plethysmography in juvenile male Brown Norway rats**
Kamil Ziarniak (Poznan, Poland), Wojciech Langwiński, Paweł Antoni Kołodziejski, Ewa Pruszyńska-Oszmałek, Anna Łukomska, Maciej Sassek, Dawid Szczepankiewicz, Aleksandra Szczepankiewicz

PA4045 **Transcriptomic and chromatin accessibility analysis of human small airway epithelial cells reveals epigenetic regulatory mechanisms in circadian genes under cigarette smoke exposure**
Zijian Zeng (CHENGDU, China), Ke Wang, Mengxin Cheng, Lijuan Gao, Jun Chen, Tao Wang, Fuqiang Wen

PA4046 **The senolytic effect of Dasatinib and Quercetin on cellular senescence in COPD in vitro and in vivo models**
Jonathan Baker (London, United Kingdom), Genki Kimura, Yuki Nishimoto, Shyreen Hassibi, Yasuo Kizawa, Kazuhiro Ito

PA4047 **REV-ERBα regulates cigarette smoke (CS)-induced macrophage polarization**
Mengxin Cheng (Chengdu, China), Jun Hu, Zijian Zeng, Lijuan Gao, Ke Wang, Jun Chen, Tao Wang, Fuqiang Wen

PA4048 **Azithromycin improves wound repair but does not change permeability of preterm airway epithelial cells**
Samantha A. McLean (Nedlands (WA), Australia), Denby J. Evans, Anthony Kicic, Shannon J. Simpson

PA4049 **The Effect of Bariatric Surgery on Serum Adiponectin, Leptin, Serum Interleukin 13 (IL-13), microRNA-192-5P (MIR-192-5P), and Asthma Control in Obese Asthma Patients**
Fatma Gülsüm Karakas (erzurum, Turkey), Zeynep Ferhan Özşeker

PA4050 **Smad3-mediated lncRNA HSALR1 enhances the non-classic signaling pathway of TGF-β1 in HBFs by binding to HSP90AB1**
Erakng Yi (Guangzhou, China), Pixin Ran

PA4051 **Preclinical analyses reveal spleen tyrosine kinase as regulator of pulmonary vasoconstriction**
Christoph Tabeling (Berlin, Germany), Julia Herbert, Ekaterina Boiarina, Andreas C. Hocke, Olga Danov, Katherina Sewald, Birgitt Gutbier, Martin Russ, Philipp A. Pickerodt, Claudia Spies, Mei Li, Laura Michalick, Jörg Scheffel, Marcus Maurer, Heinz Fehrenbach, Norbert Suttorp, Armin Braun, Norbert Weissmann, Wolfgang M. Kuebler, Martin Witzenrath

PA4052 **Hypoxia activates caspase-1 in pulmonary epithelium, inducing caspase-1-dependent pulmonary inflammation in the development of pulmonary hypertension**
Karl-Otto Larsen (Oslo, Norway), Bente Halvorsen, Xiang Yi Kong, Kuan Yang, Else Marit Løberg, Geir Christensen, Ole Henning Skjønsberg, Camilla Udjus

PA4053 **AhR controls pulmonary inflammation from cannabis smoke**
Emily Wilson (Montreal, Canada), David Eidelman, Carolyn Baglole

PS-5 in poster area Session 391 08:00 - 09:30

Poster session: Inflammatory endotyping: the macrophage across disease areas

Disease(s) : Airway diseases Interstitial lung diseases Thoracic oncology Respiratory critical care

Method(s) : Cell and molecular biology General respiratory patient care Pulmonary function testing Endoscopy and interventional pulmonology Epidemiology Public health Respiratory intensive care

Tag(s) : Basic science, Translational

Chairs : Niki L. Reynaert (Maastricht, Netherlands)

PA4054 **LSC - 2023 - Transcriptomic analysis suggests susceptibility to lung diseases post Sars-Cov-2 infection**
Deepesh Dhakad (Munich, Germany), Theodore S Kapellos, Gregor Ebert, Thomas M Conlon, Ali Önder Yildirim

PA4055 **Peripheral blood monocyte count and outcomes in patients with interstitial lung disease: A systematic review and meta-analysis**
Bohyung Min (Calgary, Canada), Amanda Grant-Orser, Kerri Johannson

PA4056	**Altered cholesterol metabolic pathways in macrophages contribute to granuloma formation in progressive sarcoidosis** Clarice Lim (Vienna, Austria), Anna Redl, Ram Vinay Padey, Markus Hengstschläger, Georg Stary, Thomas Weichhart
PA4057	**Anthracosis particulate matter causes changes in macrophages inflammatory response and in expression of genes related to xenobiotics metabolism in co-culture of macrophages with BEAS-2B airway cells** Daniela Perroni Frias (São Paulo (SP), Brazil), Gabriela Lima Vieira, Juliana Smelan, João Paulo Amorim De Lacerda, Thais Mauad, Marisa Dolhnikoff, Mariangela Macchione
PA4058	**Macrophages and their Stress Response – Environmental Triggers of Respiratory Diseases** Edith Katharina Plucinski (Hannover, Germany), Jan-Christopher Kamp, Jamie Soto, Xutong Sun, Stephen Black, Tobias Welte, Marius Hoeper, Danny David Jonigk, Mark Kühnel
PA4059	**Population pharmacokinetic (pop-PK) model of GB0139 as a tool to characterise the biomarker response in patients with idiopathic pulmonary fibrosis (IPF)** Vassilios Aslanis (Copenhagen, Denmark), Darius Schweinoch, Alison Mackinnon, Nikhil Hirani, Jie Wang-Jairaj, Brigitta Bodák, Anne Kümmel
PA4060	**Vimentin serum biomarkers are differentially related to disease progression in idiopathic pulmonary fibrosis (IPF)** Filipa B Simões (Herlev, Denmark), Nils Hoyer, Thomas S Prior, Henrik Jessen, Peder Fredriksen, Morten Karsdal, Diana J Leeming, Elisabeth Bendstrup, Jannie M B Sand, Saher B Shaker
PA4061	**β-glucan enhances LPS-induced acute lung injury via alveolar macrophages reprogramming** Renaud Prével (Bordeaux, France), Erwan Pernet, Sadek Abderrahmane, Shradha Wali, Kim Tran, Mina Sadeghi, Renata Sindeaux, Leonardo Jurado, Jérémie Poschmann, Maziar Divangahi
PA4062	**Micheliolide exerts immunomodulatory effect by reducing Oxidative Stress-Induced mitochondrial dysfunction in acute lung injury** WenHan Li (guangzhou, China), Ying Meng
PA4063	**MAIT cells contribute to protection against bleomycin-induced lung tissue damage by promoting monocyte differentiation into type 1 conventional dendritic cells** Xiawei Zhang (Headington, Oxford, United Kingdom), Shuailin Li, Wojciech Lason, Sophie Morgan, Paul Klenerman, Timothy Hinks
PA4064	**PPARγ inhibits small airway remodeling through mediating the polarization homeostasis of alveolar macrophages in COPD** Dan Wang (Chongqing, China)
PA4065	**Alveolar macrophage carbon is associated with COPD severity.** James Baker (MANCHESTER, United Kingdom), Sophie Booth, Josiah Dungwa, Andrew Higham, Dave Singh, Simon Lea
PA4066	**Profiling inflammatory cell populations in endobronchial biopsies from patients with asthma COPD overlap (ACO)** Wenying Lu (Newnham, Australia), Surajit Dey, Archana Vijay Gaikwad, Prem Bhattarai, Josie Larby, Collin Chia, Greg Haug, Heinrich C. Weber, Sally Young, Pabuddha S. Pathinayake, Peter A.B. Wark, Mathew Suji Eapen, Sukhwinder Singh Sohal
PA4067	**LSC - 2023 - Clinical significance of macrophage-lymphocyte rosettes(MLRos) formation in patients with bronchia l asthma(BA)** Tamar Saralidze (Tbilisi, Georgia), Tamari Svanidze, Marina Noniashvili, Medea Jgarkava
PA4068	**Bedaquiline is effective in the treatment of Mycobacterium abscessus complex infection** Wei-Chang Huang (Taichung, Taiwan), Yi-Wen Huang, Chiou-Ying Yang, Hui-Chen Chen
PA4069	**Late Breaking Abstract - The Distinct Role of Itaconate in the Activation of Bone Marrow-derived Macrophages and Tissue-resident Alveolar Macrophages** Mengtian Shan (Shanghai, China), Linyu Ran, Huimin Wan, Quan Zhou, Shengjie Deng, Zhongliang Guo, Feilong Wang
PA4070	**Late Breaking Abstract - Large scale phenotyping of long COVID inflammation reveals mechanistic subtypes of disease.** Felicity Liew (London, United Kingdom), Claudia Efstathiou, Sara Fontanella, William Greenhalf, Matthew Richardson, Ruth Saunders, Rachael A. Evans, Louise V. Wain, Christopher Brightling, Lance Turtle, Ryan S. Thwaites, Peter J.M. Openshaw
PA4071	**Dysbiosis of lung commensal microbiota suppressed the progression of lung adenocarcinoma via spp1+ macrophages** jin jing (Chengdu, China), Hou Wang, Li Shiyue
PA4072	**Identifying the common denominator: Dectin-1 as a promising marker for macrophage modulation in lung cancer and fibrosis** Safaa Naiel (Burlington, Canada), Anna Dvorkin-Gheva, Megan Vierhout, Anmar Ayaub, Takuma Isshiki, Pareesa Ali, Spencer Revill, Amir Reihani, Pavithra Parthasarthy, Hemisha Patel, Ashgar Naqvi, Martin Kolb, Kjetil Ask

PS-6 in poster area Session 392 08:00 - 09:30

Poster session: Telemedicine and diagnostic tools for sleep-disordered breathing

Disease(s) : Sleep and breathing disorders Airway diseases

Method(s) : Physiology Epidemiology Public health General respiratory patient care Pulmonary rehabilitation

Tag(s) : Clinical

Chairs : Ludger Grote (Göteborg, Sweden), Mafalda van Zeller (Porto, Portugal)

PA4073	**Evaluation of sleep disordered breathing (OSA/OHS) service during the covid -19 pandemic in a west of ireland tertiary hospital** Katherine Finan (Sligo (County Sligo), Ireland), Mary Doherty
PA4074	**Revolutionizing OSA management: a hybrid healthcare pathway powered by telemedicine improves patient outcomes and enhances healthcare sustainability** Ana Rita Peixoto Pedroso (Vila De Prado, Portugal), Joana Naia, Marta Silva, Diana Pimenta, Ana Luísa Vieira, Lurdes Ferreira
PA4075	**Are OSA patients really inclined to use telemedicine services? A single centre Italian survey** Francesco Fanfulla (Pavia (PV), Italy), Irene Risi, Paola Crotti, Elena Robbi, Simona Arcovio
PA4076	**Initiating CPAP with automatic modalities have no differences with conventional clinical practice** ignacio vicente (sabadell, Spain), Aida Muñoz-Ferrer, Borja Domnigo Cardenal, Cristina Esquinas López, Susana Pou Serramia, Juan Treviño Benavente, Toni Zapata Comas, Jorge Abad Capa
PA4077	**A retrospective review of the impact of virtual CPAP set-up on outcomes** Jo Leng Lum (London, United Kingdom), Chevanthy Gnanalingam, Sandip Banerjee
PA4078	**TELEMONITORING SLEEP APNEA TREATMENT Telemonitoring sleep apnea treatment** María Aguado Agudo (Zaragoza, Spain), Jorge Rodriguez Sanz, Teresa Martín Carpi, Luisa Cabrera Pimentel, Marta Miranda
PA4079	**Role of telemedicine (TM) in home positive airway pressure (hPAP) treatment: data from the MIMOSA (modern integrated management of obstructive sleep apnea [OSA] and/or chronic respiratory failure) study** Federica Di Giorgi (Caltavuturo (Palermo), Italy), Francesco Gambino, Massimiliano Desideri, Vanessa Lo Nano, Claudia Meschi, Alessandra Castrogiovanni, Chiara Cappiello, Marta Amata, Eva Palano, Laura Carrozzi, Maria Rosaria Bonsignore
PA4080	**Telemonitoring of obstructive sleep apnoea (OSA) patients on positive airway pressure (PAP) therapy in Malaysia** Mei Ching Yong (Kuching (Sarawak), Malaysia), Yik Hon Ho, Caryn Sujean Lim, Nga Hung Ngu, Chan Sin Chai, Swee Kim Chan, Sze Shyang Kho, Siew Teck Tie
PA4081	**Acceptance and cost-effectiveness of telemedicine in patients with obstructive sleep apnea: a single-center randomized controlled trial** Qiong Ou (Guangzhou, China), Guo Pei, Miaochan Lao, Longlong Wang, Yanxia Xu, Jiaoying Tan, Gaihong Zheng
PA4082	**EFFECT OF TELEREHABILITATION ON SLEEP DISORDERS IN OBESE CHILDREN AND ADOLESCENTS DURING THE COVID-19 PANDEMIC: A QUASI-EXPERIMENTAL STUDY WITH FOLLOW-UP** Evelim Gomes (São Paulo (SP), Brazil), Josiane Luiz, Manoella Andrade, Luciana Sampaio, Dirceu Costa
PA4083	**Quality assessment of sleep studies – comparison between face-to-face teaching and video demonstration** Joana Vieira Naia (Porto, Portugal), Diana Pimenta, Elisabete Santa Clara, Filipa Carriço, Daniela Rodrigues, Mafalda Van Zeller, Marta Drummond
PA4084	**Inline inspiratory infrasound detection during bilevel mask ventilation** Neil Skjodt (Lethbridge (AB), Canada)
PA4085	**CORRELATION BETWEEN CONNECTED BRACELETS AND POLYSOMNOGRAPHY IN SLEEP ASSESSMENT** Maha Ezzine (Fes, Morocco), Salma Animi, HALIMA ELBOUJAMAI, Mohamed Elbiaze, Mohamed Elbiaze, Amara Bouchra, Serraj Mounia, Mohamed Chakib Benjelloun
PA4086	**Model for the selection of candidate patiens for respiratory polygraphy** Javier Sánchez Masa (Palencia, Spain), María Ángeles Escobar Valero, Ana Pérez Dublang, Inés Salazar Lozano, Esther Alonso Sastre, Daniel Álvarez Gonzalez, Sara Barakat Fernández, María Covadonga Alonso Payo, Alba Daniela García Molina, Bea Cartón Sánchez, María Irene Alaejos Pascua, Enrique Alonso Mallo, Ana Isabel García Gonzalo, Francisco Javier Pagán Buzo, Ana María Andrés Porras, Jesús Andres De Llano, Andrea Crespo Sedano
PA4087	**In what body positions do people with OSA sleep?** Belinda Rose Miller (Melbourne (VIC), Australia), Christiaan Yu, Renel Cuesta, Eldho Paul, Teanau Roebuck

PA4088	**Night-to-night short-term variability in apnea-hypopnea index: analysis of the associated conditions** Renaud Tamisier (Grenoble, France), Jean-Benoit Martinot, Jean-Louis Pépin, Sébastien Bailly, Nhat-Nam Le-Dong
PA4089	**Drug induced sleep endoscopy in obstructive sleep apnea** IGNACIO JARA (Madrid, Spain), Sara González, Ana Victoria Castillo, María Ponte, Winnifer Briceño, Ana Retegui, Diego Durán, Camen Rodríguez, Alberto Carreño, Rafael Barberá, Antonio Pedrera, Lourdes Montes, Andrea Pérez, Aldara García, Irene Cano, Eva Mañas
PA4090	**Evaluation of anxiety and depression in patients with obstructive sleep apnea syndrome** yosra braham (Monastir, Tunisia), Imen Touil, Elhem Chaouch, Soumaya Bouchareb, Soumaya Boujneh, Maha Ben Mechlia, Leila Boussoffara, Jalel Kneni, Nadia Boudawara
PA4091	**PSG differences in sleepy versus non-sleepy obstructive sleep apnea (OSA) patients** Izolde Bouloukaki (Heraklion (Crete), Greece), Theofilis Vouis, Antonios Velidakis, Violeta Moniaki, Eleni Mavroudi, Giorgos Stathakis, Michail Fanaridis, Sophia Schiza
PA4092	**Obstructive sleep apnoea during rapid-eye movement sleep is predictive for response to treatment in patients with parasomnia** Fatima Saqib (Manchester, United Kingdom), Saad Aleem, Bryn Morris, Andras Bikov

PS-7 in poster area — Session 393 — 08:00 - 09:30

Poster session: Unravelling the potential of interleukin-5 pathways in asthma

Disease(s) : Airway diseases

Method(s) : Public health General respiratory patient care Cell and molecular biology Pulmonary function testing Epidemiology

Tag(s) : Clinical

Chairs : Asger Sverrild (Valby, Denmark), Zuzana Diamant (Lund, Sweden)

PA4093	**Mepolizumab improves small airway disease in severe eosinophilic asthmatics** Francesca Cefaloni (Rome, Italy), Cristina Boccabella, Luca Richeldi, Matteo Bonini
PA4094	**A retrospective cohort study to determine if Interluekin 5 inhibitors reduce oral corticosteroid burden in Severe Asthma in real life** Zoe Chan (leeds, United Kingdom), Dinesh Saralaya, Janice Ting
PA4095	**Mepolizumab for the treatment of Eosinophilic Granulomatosis Polyangitis(EGPA) at Jersey General Hospital: A case review series; clinical features, diagnostic tests and management.** Kesavaperumal Vijayasaratha (Birmingham, United Kingdom), Duarte Vieira, Karen Hughes, Elisabete Da Silva
PA4096	**Mepolizumab and Benralizumab: new therapeutic perspectives for Severe Eosinophilic Asthma and Eosinophilic Granulomatosis with Polyangiitis** Paola Scarano (Roma, Italy), Cecilia Cisternino, Giulia Lo Muzio, Olimpia Calò, Arianna Sanna, Alessia Steffanina, Francesca De Filippis, Maria Teresa Leporini, Paolo Palange, Elda Graziani
PA4097	**Long-term effectiveness of Mepolizumab in patients with refractory severe eosinophilic asthma.** Víctor García García (Sevilla, Spain), BELEN Muñoz Sánchez, Francisco Javier Álvarez Gutiérrez, Juan Francisco Medina Gallardo, Auxiliadora Romero Falcón, Maria Victoria Maestre Sánchez, Ana Gomez Bastero Fernández, Stefan Cimbollek, Julio Delgado Romero, Ana Ruiz Bernal, Marta Ferrer Galvan
PA4098	**Real-world effectiveness and characteristics of Super-Responders to Mepolizumab and Benralizumab in severe eosinophilic asthma and EGPA** Andrea Portacci (Taranto, Italy), Raffaele Campisi, Enrico Buonamico, Santi Nolasco, Corrado Pelaia, Nunzio Crimi, Alida Benfante, Massimo Triggiani, Giuseppe Spadaro, Maria Filomena Caiaffa, Giulia Scioscia, Aikaterini Detoraki, Giuseppe Valenti, Francesco Papia, Alessandra Tomasello, Nicola Scichilone, Girolamo Pelaia, Claudia Crimi, Giovanna Elisiana Carpagnano
PA4099	**Disease remission in severe asthma patients on mepolizumab treatment and its duration after treatment discontinuation.** Piotr Damiański (Lodz, Poland), Piotr Kuna, Maciej Kupczyk
PA4100	**Switching things up: experience of second line anti-interleukin-5 therapy for severe asthma** Fred Fyles (Liverpool, United Kingdom), Amy Nuttall, Hannah Joplin, Laura Watkins, Hassan Burhan
PA4101	**The experience of reslizumab treatment for frequent relapsing chronic eosinophilic pneumonia accompanying asthma: a case series** Seung-Eun Lee (Seoul, Republic of Korea), Won-Jin Lee, Eun-Jeong Son, Tae-Hwa Kim, Doo-Soo Jeon, Yun-Seong Kim

PA4102	**Implementation of the FEOS score in patients with severe eosinophilic asthma treated with Reslizumab.** Katiuska Herminia Liendo Martinez (madrid, Spain), Crishian Alonso Correa Gutierrez, Stephany Ivonne Briones Alvarado, Manuel Mor Martínez, Luis Puente Maestu, Julia García De Pedro
PA4103	**Efficacy of Mepolizumab in a cohort of patients with severe eosinophilic asthma after 5 years of treatment: a single centre study** Gerardo Nazzaro (Caserta, Italy), Antonio Caso, Ferdinando Damato, Alessandra Bruno, Lorena Gallotti, Anna Agnese Stanziola
PA4104	**Outcomes of blocking IL-5 in severe asthma elderly patients** David Bañas Conejero (Madrid, Spain), Eva Martínez Moragón
PA4105	**Benralizumab effectiveness in patients with severe asthma regardless of prior biologic use: A real-world Canadian experience** Sheena Kayaniyil (Mississauga, Canada), Parameswaran Nair, Charles St. Pierre, Katherine Osenenko, Tina Li, Karissa Johnston, Gina Lacuesta, Irfan Khan, Syed Anees, Yew Hon Lai, Parisa Rahimi, Vivek Dhawan, Delbert Dorscheid, Andréanne Côté
PA4106	**Impact of age on the efficacy of mepolizumab in severe uncontrolled asthma** Francisco-Javier Gonzalez Barcala (Santiago de Compostela, Spain), Marina Blanco-Aparicio, Juan-Jose Nieto-Fontarigo, Nagore Blanco-Cid, Coral Gonzalez-Fernandez, Mar Mosteiro-Añon, Uxio Calvo-Alvarez, Luis Perez-De-Llano, Maria-Dolores Corbacho-Abelaira, Luis Dominguez-Juncal, Carlos Crespo-Diz, Raquel Dacal-Quintas, Abel Pallares-Sanmartin, David Dacal-Rivas, Raquel Ruiz-Ferreras, Francisco-Javier Salgado
PA4107	**Retrospective study to assess response to benralizumab in elderly asthma patients** Eve Coleborn (Bristol, United Kingdom), Elizabeth Gamble, Catherine Hyams
PA4108	**Evaluation of the effects of Benralizumab on Nasal Inflammation in Severe Eosinophilic Refractory Asthma and Nasal Polyposis** Claudio Candia (Naples, Italy), Francesco Coppa, Maria D'Amato, Debora Paris, Annabella Tramice, Pasquale Ambrosino, Antonio Molino, Antonino Di Stefano, Andrea Motta, Mauro Maniscalco
PA4109	**Asthma outcomes in patients (pts) with severe eosinophilic asthma (SEA), with and without comorbid chronic rhinosinusitis with nasal polyps (NP), treated with benralizumab in the real-world XALOC-1 study** Alicia Padilla Galo (Malaga, Spain), Girolamo Pelaia, Claudia Loureiro, Justin Kwiatek, Trung N. Tran, Silvia Boarino, Sheena Kayaniyil, Javier Nuevo, Michael Watt, Marisa Pardal, Vivian H. Shih, David Cohen, Anat Shavit, Benjamin Emmanuel, David J. Jackson, Parameswaran Nair
PA4110	**Real-world benralizumab effectiveness in patients with severe eosinophilic asthma on a 3 year follow up.** Giulia Lo Muzio (Roma, Italy), Olimpia Calò, Cecilia Cisternino, Paola Scarano, Arianna Sanna, Francesca De Filippis, Alessia Steffanina, Paolo Palange, Elda Graziani
PA4111	**Late Breaking Abstract - Anti-IL-5 therapy is associated with sustained improvement in FEV1 in severe eosinophilic asthma patients.** Nathan Blekic (Uccle, Belgium), Alain Van Muylem, Jean-Pierre Makhoul, Amaryllis Haccuria, Andreï Malinovschi, Alain Michils
PA4112	**Late Breaking Abstract - Durability of response after 96 weeks of treatment with benralizumab: results from the Italian ANANKE study** Giorgio Walter Canonica (Milano (MI), Italy), Maria Aliani, Elena Altieri, Pietro Bracciale, Luisa Brussino, Maria Filomena Caiaffa, Paolo Cameli, Cristiano Caruso, Stefano Centanni, Maria D'Amato, Fausto De Michele, Stefano Del Giacco, Fabiano Di Marco, Francesco Menzella, Girolamo Pelaia, Paola Rogliani, Micaela Romagnoli, Pietro Schino, Jan Walter Schroeder, Gianenrico Senna, Andrea Iurlaro, Giulia Manfrini, Silvia Boarino, Alessandra Vultaggio

PS-8 in poster area — Session 394 — 08:00 - 09:30

Poster session: Novel research data on asthma management and clinical applications

Disease(s) : Airway diseases

Method(s) : Epidemiology General respiratory patient care Pulmonary function testing Cell and molecular biology Imaging Physiology

Tag(s) : Clinical

Chairs : Vibeke Backer (Copenhagen, Denmark), Manali Mukherjee (Hamilton (ON), Canada)

PA4113	**Use of short synacthen testing to detect iatrogenic adrenal insufficiency among severe asthma patients** Fred Fyles (Liverpool, United Kingdom), Hannah Joplin, Amy Nuttall, Laura Watkins, Hassan Burhan

PA4114	**Severe asthma care trajectories in the French RAMSES cohort.** Camille Taillé (Paris, France), Jeanne-Marie Perotin-Collard, Nicolas Just, Gilles Devouassoux, Cécile Chenivesse, Arnaud Bourdin, Gilles Garcia, Pascal Chanez, Philippe Bonniaud, Amel Boudjemaa, Christel Saint Raymond, Toufik Didi, Antoine Beurnier, Pauline Roux, Cyril Maurer, Maud Russier, Nathalie Freymond, Colas Tcherakian, Lisa Gauquelin, Sylvie Guillo, Candice Estellat
PA4115	**Early effects of anti-IL4R on cognitive functions in patients with severe asthma.** Charlotte Bernhoff (Copenhagen, Denmark), Andreas Elleby Jespersen, Nanna Dyhre-Petersen, Emilie Johanning Bari, Kamilla W Miskowiak, Celeste M Porsbjerg
PA4116	**Dupilumab is effective in real-life severe asthma patients with smoking history** Andreas Renner (Wien, Austria), Katharina Marth, Karin Patocka, Marco Idzko, Robab Breyer-Kohansal, Wolfgang Pohl
PA4117	**Extent and impact of SABA inhaler overuse among asthma patients in India** Sundeep Santosh Salvi (Pune (Maharashtra), India), Raja Dhar, Viswesvaran Balasubramanian, Meena Lopez, Vaishali Naik, Jaideep Gogtay
PA4118	**Adherence to inhaled corticosteroid therapy and treatment escalation of the Swedish asthma population** Sylvia Packham (Sollentuna, Sweden), Caroline Stridsman
PA4119	**Bronchodilator effect of oral doxofylline and procaterol in asthma: a randomized crossover study** Natthapon Noomon (bangkok, Thailand), Narongkorn Saiphoklang, Pimchanok Patanayindee, Pitchayapa Ruchiwit, Orapan Poachanukoon
PA4120	**Intramuscular triamcinolone for access to biologic therapy in asthma- a retrospective cohort analysis** Alexander Chadwick (Preston, United Kingdom), Kathryn Prior, Aashish Vyas
PA4121	**Asthma control in Greek patients receiving FDC of Budesonide/Formoterol as maintenance and/or as-needed treatment. The NOTOS study** Maria Bertoli (Pikermi, Greece), Nikoletta Rovina, Konstantinos Samitas, Georgios Krommidas, Dimitrios Latsios, Alexandros Ginis
PA4122	**Characteristics of patients with asthma using single inhaler triple therapy (SITT) in the USA** Stephen G Noorduyn (Mississauga, Canada), Kristin Kahle-Wrobleski, Rosirene Paczkowski, Lydia Lee, Phani Veeranki, Mary Johnson, Afisi S Ismaila, Emmeline Igboekwe, Julie Nack, Noelle N Gronroos
PA4123	**Quality of life in Greek asthmatic patients receiving FDC Budesonide/Formoterol as maintenance and/or as-needed treatment. The NOTOS study** Maria Bertoli (Pikermi, Greece), Konstantinos Kostikas, Paschalis Steiropoulos, Nikolaos Kareklas, Panagiotis Boglou, Polyanthi Papanastasiou
PA4124	**Short-acting β2-agonists over-prescription in patients with asthma: an Indian subset analysis of international SABINA III study.** Latha Sarma (Hyderabad, India)
PA4125	**Effectiveness and cost of a comprehensive severe asthma management strategy guided by airway inflammometry** Owen Treleaven (Hamilton, Canada), Sylvia Lauks, Parameswaran Nair, Terence Ho, Melanie Kjarsgaard, Chynna Huang, Katherine Radford, Nicola Calma, Carmen Venegas, Sarah Svenningsen, Manali Mukherjee, Anurag Bhalla, Huifang Lim, Michael Surette, Susan Waserman, Gerard Cox
PA4126	**Biologic agents licensed for severe asthma: A systematic review and meta-analysis of randomised controlled trials** Dimitrios Potonos (Ioannina, Greece), Chris Kyriakopoulos, Athena Gogali, Georgios Markozannes, Vanesa Bellou, Georgios Ntritsos, Konstantinos Kostikas
PA4127	**Assessing ICS responsiveness in severe asthma using BDP/formoterol NEXThaler™ dose-counting** Hnin Wint Aung (Market Harborough, United Kingdom), Claire E Boddy, Eleanor Hampson, Mark Bell, Lauren Parnell, Jemma Metcalf, Kumaran Balasundaram, Anna Murphy, Shamsa Naveed, Peter Bradding
PA4128	**Real life biological therapy effectiveness in patients with severe eosinophilic asthma: a comparison with randomized trial** Olimpia Calò (Roma, Italy), Giulia Lo Muzio, Paola Scarano, Cecilia Cisternino, Veronica Capuano, Alessia Steffanina, Francesca De Filippis, Arianna Sanna, Maria Teresa Leporini, Paolo Palange, Elda Graziani
PA4129	**Does bronchodilator responsiveness depend on age in asthma?** Rim Kammoun (Sfax, Tunisia), Asma Haddar, Molk Maalej, Fatma Zahra Medyedali, Hana Trabelsi, Hela Zouari, Kaouthar Masmoudi
PA4130	**Late Breaking Abstract - Efficacy and safety of benralizumab in patients with severe uncontrolled asthma despite ICS-LABA: a randomised, double-blind, placebo-controlled phase 3 trial in Asia (MIRACLE)** Kefang Lai (Guangzhou, China), Dejun Sun, Ranran Dai, Ronnie Samoro, Hae-Sim Park, Annika Åstrand, David Cohen, Maria Jison, Vivian Shih, Viktoria Werkström, Yuhui Yao, Yajuan Zhang, Wenying Zheng, Nanshan Zhong

PA4131 **Late Breaking Abstract - Patients with severe eosinophilic asthma achieved remission over 2 years with benralizumab: Integrated analysis of the >1000-patient, multinational, real-world XALOC-1 study**
Girolamo Pelaia (Tiriolo (CZ), Italy), David J. Jackson, Parameswaran Nair, Benjamin Emmanuel, Trung N. Tran, Andrew Menzies-Gow, Michael Watt, Sheena Kayaniyil, Silvia Boarino, Javier Nuevo, Marisa Pardal, Anat Shavit, Vivian Shih, David Cohen, Claudia Loureiro, Alicia Padilla-Galo

PA4132 **Late Breaking Abstract - An innovative inhaled solution of budesonide-cyclodextrin complex is safe and prevents the methacholine-induced hyperreactivity in asthmatics better than a commercial budesonide suspension: a breezy story (BOREAS).**
Didier Cataldo (Liege, Belgium), Marie-Astrid Albert, Natacha Rocks, Najate Ait Mahmoude, Ludivine Petit, Paul Maes

PS-9 in poster area Session 395 08:00 - 09:30

Poster session: Clinical aspects in chronic obstructive pulmonary disease

Disease(s) : Airway diseases

Method(s) : General respiratory patient care Epidemiology Imaging Pulmonary function testing Public health Pulmonary rehabilitation Physiology

Tag(s) : Clinical

Chairs : Pavol Pobeha (Košice, Slovakia), Mona Bafadhel (London, United Kingdom)

PA4133 **Prognostic value of the GOLD 2023 classification system.**
Kristian Brat (Brno, Czech Republic), Michal Svoboda, Jaromir Zatloukal, Marek Plutinsky, Eva Volakova, Patrice Popelkova, Barbora Novotna, Tomas Dvorak, Vladimir Koblizek

PA4134 **The joint effect of different diet styles on mortality in chronic obstructive pulmonary disease**
Jiun-Long Wang (Taichung, Taiwan), Yi-Ting Tsai, Chia-Lin Lee

PA4135 **The CCQgraphic: a solution for patients with COPD with adequate or limited health literacy.**
Erlijn Tiel Groenestege (Willemstad, Curaçao), Bea Sloothaak, Iris Van Geer, Aimee Van De Maat, Naomi Coenraad, Ellen Van Heijst, Natascha Huijzer-Van Reenen, Kaying Kan, Marjan Kerkhof, Cindy Lentjes, Thys Van Der Molen, Maret Zonneveld, Johannes In ´t Veen, Janwillem Kocks

PA4136 **CT indices of airway wall thickness in chronic bronchitis, COPD and healthy controls**
Huai Chen (Guangzhou, China), Hongjia Meng, Tingting Xia, Xuefei Li, Tiantian Liu, Sarah Lee, Chenjuan Gu, Shuling Hu, Nanshan Zhong, Paul Jones

PA4137 **Dynapenia and sarcopenia are two different phenotypes in patients with COPD: a prospective cohort study**
Shih-Yu Chen (Hsinchu, Taiwan), Jung-Yien Chien, Chong-Jen Yu

PA4138 **Anxiety and depression in Chronic Obstructive Pulmonary Disease: a systematic review and meta-analysis**
Alina Miah (READING, United Kingdom), Ruihua Hou

PA4139 **Initial findings from two US-based early COPD cohorts: MAP COPD and SOURCE**
Wassim Labaki (Ann Arbor, United States), Catherine A. Meldrum, Susan Murray, Craig J. Galban, Ella A. Kazerooni, R. Graham Barr, Igor Barjaktarevic, Russell P. Bowler, Alejandro P. Comellas, Christopher B. Cooper, David J. Couper, Gerard J. Criner, Mark T. Dransfield, Nadia N. Hansel, Eric A. Hoffman, Jerry A. Krishnan, Robert Paine Iii, Stephen P. Peters, Prescott G. Woodruff, Jeffrey L. Curtis, Fernando J. Martinez, Meilan K. Han

PA4140 **AI-text mining for the identification of informative COPD subtypes**
Florent Baty (St. Gallen, Switzerland), Laura Rechsteiner, Martin Brutsche

PA4141 **Distance covered in the six-minute walk test in COPD patients as a predictor of mortality: A cohort study**
Audrey Borghi Silva (São Carlos (SP), Brazil), Izadora Dourado, Cássia Goulart, Aldair Darlan Santos-De-Araújo, Renan Shida Marinho, MURILO OLIVEIRA, Renata Mendes

PA4142 **The importance of image standardization through kernel conversion of COPD in a multicenter cohort**
Mira Cho (Seoul, Republic of Korea), Youlim Kim, Hyun Lee, Seong Yong Lim, Jae Jeong Shim, Ki Suck Jung, Kum Ju Chae, Kwang Ha Yoo

PA4143 **COPD Virtual Wards offer more than just home comforts**
Andrew Barlow (Chalfont St. Giles, United Kingdom), Harry Mitchell, Neel Kapoor, Michael Shaw, Eleanor Zinkin, Rahul Mogal, Ajitha Jayaratnam, Jonathan Phimister, Maria Buxton, Hannah O'Keeffe, Niall Keenan, Dominique Auger, Michael Van Der Watt

PA4144 **Characterising radiological abnormalities in early COPD**
Andrew Ritchie (London, United Kingdom), Gavin Donaldson, Eric Hoffman, James Allinson, Chloe Bloom, Charlotte Bolton, Aaron Braddy-Green, Gourab Chouhury, Sarah Gerard, Junfeng Guo, Luana Alves-Moreira, Lorcan Mcgarvey, Elizabeth Sapey, Rob Stockley, Dave Singh, Tom Wilkinson, Malin Fageras, Kristoffer Ostridge, Olaf Joens, Enrica Bucchioni, Chris Compton, Paul Jones, Karen Mezzi, Jorgen Vestbo, Peter Calverley, Jadwiga Wedzicha

PA4145	**COPD Assessment Test (CAT) Score according to the presence/absence of accelerated lung function decline in young adult smokers with normal FEV1** Aaron Braddy-Green (London, United Kingdom), Andrew I Ritchie, Jordina Mah, Dexter J Wiseman, Mairi A Macleod, James P Allinson, Gavin C Donaldson, Chloe Bloom, Charlotte Bolton, Gourab Choudhury, Luana Alves-Moreira, Lorcan Mcgarvey, Elizabeth Sapey, Robert Stockley, Dave Singh, Tom Wilkinson, Malin Fageras, Kristoffer Ostridge, Olaf Jons, Enrica Bucchioni, Chris Compton, Paul Jones, Karen Mezzi, Jorgen Vestbo, Peter Ma Calverley, Jadwiga A Wedzicha
PA4146	**Etiotypes of persistent airflow obstruction in the general population in different age bins** Marie Grasl (Wien, Austria), Alvar Agusti, Caspar Schiffers, Owat Sunanta, Marie-Kathrin Breyer, Sylvia Hartl, Robab Breyer-Kohansal
PA4147	**Validation of the Smart Air spirometer and screening for chronic obstructive pulmonary disease** Abir Bouhamdi (Fez, Morocco), Nassiba Bahra, Yassine Chefchaou, Rajae Amiali, Btissam Essabahi, Mounia* Serraj, Mohamed Chakib Benjelloun, Karima Elghazi, Bouchra Amara, Mohamed Elbiaz
PA4148	**Differences in drinking habits and educational level in men with and without COPD in a Danish rural population** Line Bjerrehave Nielsen (Aalborg, Denmark), Signe Juul Riddersholm, Ulla Møller Weinreich
PA4149	**Do social determinants of health and inequality in health influence the severity of chronic obstructive pulmonary disease?** Salih Yigit (Izmir, Turkey), Oguz Kilinc, Ahmet Naci Emecen, Bulent Kilic
PA4150	**CAT versus mMRC to allocate COPD patients to clinically relevant phenotypes identified using Classification and Regression Trees** Nicolas Roche (Paris, France), El-Hassane Ouaalaya, Jean-Louis Paillasseur, Pierre-Régis Burgel
PA4151	**Preserved ratio but impaired spirometry (PRISm): Are these subjects different?** Lancelot Pinto (Montréal (QC), Canada), Ashwini Chawhan, Dhara Thakrar, Trupti Mane
PA4152	**Detection of and factors influencing medication adherence in patients with severe COPD** Maximilian Wollsching-Strobel (Köln, Germany), Anna Werner, Doreen Kroppen, Daniel Majorski, Friederike Magnet, Melanie Berger, Tim Mathes, Sarah Schwarz, Wolfram Windisch

Gold — Session 396 — 08:30 - 10:00

Endoscopy session: Cutting-edge concepts for diagnosis of peripheral lesions: the future is here!

Aims : to present a practical demonstration of the novel and rapidly evolving techniques in the diagnosis of peripheral pulmonary opacities; to provide a step-by-step guide for performing the techniques and technologies demonstrated.

Disease(s) : Airway diseases | Interstitial lung diseases | Thoracic oncology | Respiratory infections

Method(s) : Endoscopy and interventional pulmonology

Target audience : Adult pulmonologist/Clinician, Physician in Pulmonary Training, Respiratory critical care physician, Thoracic oncologist, Thoracic surgeon, Radiologist

Chairs : Amanda Dandanell Juul (Odense S, Denmark), Mohammed Munavvar (Preston (Lancashire), United Kingdom)

08:30	**Introduction** All Speakers	**4153**
08:35	**Augmented fluoroscopy** Amir Abramovich (Hasolelim, Israel)	**4154**
08:50	**Cone beam** Pallav L. Shah (London, United Kingdom)	**4155**
09:05	**Robotic bronchoscopy** Felix J.F. Herth (Heidelberg, Germany)	**4156**
09:20	**Bronchoscopic tumour ablation** Kelvin Lau (London, United Kingdom)	**4157**
09:35	**Discussion and Q&A** All Speakers	**4158**

Silver — Session 397 — 08:30 - 10:00

State of the art session: Paediatric

Aims : to discuss important topics in paediatric respiratory medicine such as: 1) treatment options for severe paediatric asthma, 2) an insight into neutrophilic inflammation following preterm birth and other relevant lung diseases, 3) management of persistent obstructive sleep apnoea (OSA) in children and 4) high-flow nasal cannula therapy in paediatric respiratory insufficiency;

Disease(s) : Paediatric respiratory diseases | Respiratory infections | Sleep and breathing disorders

Method(s) : General respiratory patient care | Pulmonary function testing | Respiratory intensive care

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Medical Student, Nurse, Respiratory critical care physician, Paediatrician, Patient, Respiratory physiotherapist, Respiratory therapist

Chairs : Alexander Möller (Zürich, Switzerland), Refika Hamutcu Ersu (Ottawa, Canada), Erol Gaillard (Leicester (Leicestershire), United Kingdom)

08:30	**Therapeutic strategies in paediatric severe asthma** Marielle W.H. Pijnenburg (Rotterdam, Netherlands)	**4159**
08:45	**Neutrophilic inflammation throughout the ages** Rory Morty (Heidelberg, Germany)	**4160**
09:00	**Management of persistent OSA in children** An Boudewyns (Edegem (Antwerp), Belgium)	**4161**
09:15	**High-flow nasal cannula (HFNC) therapy for bronchiolitis and in continuous treatment for respiratory insufficiency** Padmanabhan Ramnarayan (London, United Kingdom)	**4162**
09:30	**Discussion and Q&A** All Speakers	**4163**

Coral 4+5 Session 398 08:30 - 10:00

Symposium: Pulmonary embolism and its implication with other clinical respiratory settings and specialties

Aims : to provide an update on the management of PE in pregnancy; to describe the distinctive features of patients with lung cancer-associated thrombosis (CAT); to highlight the relationship between PE and obstructive sleep apnoea (OSA); and to provide an update about the role of residual pulmonary vascular obstruction (RPVO) in the assessment of the risk of venous thromboembolism (VTE) recurrences, as for patients' evolution with the newly suggested chronic thromboembolic pulmonary disease (CTEPD) syndrome; to provide an update about correct diagnosis and treatment in this population, which is crucial for all pulmonologists, who may be involved in many different steps (ruling out the diagnosis, managing some difficult cases, proposing secondary thromboprophylaxis, etc.). to provide an update about management, outcomes and phenotypes of patients with lung CAT; to present information about the relationship between OSA and PE that suggest a possible connection between OSA and abnormal haemostasias; to review current evidence about the association between OSA and PE, as well as PE prognosis in patients with OSA; to discuss the key role of respiratory physicians in the follow-up of patients with PE.

Disease(s) : Pulmonary vascular diseases | Sleep and breathing disorders | Thoracic oncology

Method(s) : General respiratory patient care | Imaging

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Respiratory critical care physician, Physician in Pulmonary Training

Chairs : Yochai Adir (Haifa, Israel), Pilar Escribano- Subias (Madrid, Spain), Marc Humbert (Le Kremlin-Bicêtre, France)

08:30	**Management of pulmonary embolism in pregnancy** Cécile Tromeur (Brest, France)	**4164**
08:45	**Distinctive feature of lung cancer-associated thrombosis** Luis Jara-Palomares (Sevilla, Spain)	**4165**
09:00	**Obstructive sleep apnoea and pulmonary embolism: what do we know and what do we need to know?** Alberto García Ortega (Valencia, Spain)	**4166**
09:15	**Role of residual pulmonary vascular obstruction in VTE recurrences and CTEPH** Olivier Sanchez (Paris, France)	**4167**
09:30	**Discussion and Q&A** All Speakers	**4168**

Coral 3 Session 399 08:30 - 10:00

Symposium: The organ-wide reach of exercise in chronic respiratory disease
A holistic approach

Aims : to explain the role of inter-organ crosstalk and cellular communication in relation to exercise; to describe the beneficial effects of exercise training on skeletal muscle; to explain how to identify persons with chronic respiratory disease (CRD) that need additional support during exercise training to have optimal organ-wide effects; to allow participants to engage in discussion on the controversial idea that exercise can regenerate the lung.

Disease(s) : Airway diseases | Interstitial lung diseases | Pulmonary vascular diseases

Method(s) : Cell and molecular biology | Physiology | Pulmonary rehabilitation

Tag(s) : Translational

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Patient, Physiologist, Respiratory physiotherapist, Scientist (basic, translational)

Chairs : Silke Ryan (Dublin, Ireland), Matteo Bradicich (Zollikerberg, Switzerland), Jana De Brandt (Umeå, Sweden)

08:30	**Exercise: the role of inter-organ crosstalk and cellular communication**	**4169**
08:45	**Effect of exercise training on the muscle in CRD: success guaranteed!** Lorna Latimer (Rugby (Warwickshire), United Kingdom)	**4170**
09:00	**Helping out the muscle-brain axis during exercise in fibrosing interstitial lung disease: we are on our way!** Mathieu Marillier (Echirolles, France)	**4171**
09:15	**Patient's perspective** Speaker to be confirmed	**4172**
09:20	**Effect of exercise training on lung regeneration in CRD: an illusion or a future reality?** Ulrik Winning Iepsen (Copenhagen, Denmark)	**4173**
09:35	**Discussion and Q&A** All Speakers	**4174**

Coral 1 Session 400 08:30 - 10:00

Symposium: Prevention of tuberculosis

Aims : to present the latest evidence on the use of immunodiagnostic methods (interferon-gamma release assays (IGRAs) and tuberculin skin test) and preventive therapies for best clinical practice to prevent tuberculosis in adults.

Disease(s) : Paediatric respiratory diseases | Respiratory critical care | Respiratory infections

Method(s) : Epidemiology | General respiratory patient care | Public health

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Respiratory critical care physician, Paediatrician, Patient, Radiologist, Scientist (basic, translational), Respiratory therapist, Journalist

Chairs : Giovanni Sotgiu (Sassari, Italy), Onno Akkerman (Groningen, Netherlands), Delia Goletti (Roma (RM), Italy)

08:30	**Patient's perspective** Speaker to be confirmed	**4175**
08:35	**How we prevent transmission once the case has been identified** Cécile Magis-Escurra (Nijmegen, Netherlands)	**4176**
08:50	**IGRAs or tuberculosis skin test? How do they compare for identification of individuals at risk of developing tuberculosis?** Francesca Saluzzo (Milano, Italy)	**4177**
09:05	**Effectiveness of tuberculosis preventive therapy by age and Mycobacterium tuberculosis infection status** Ibrahim Abubakar (London, United Kingdom)	**4178**
09:20	**The global roadmap for a new tuberculosis vaccine** Helen McShane (Oxford (Oxfordshire), United Kingdom)	**4179**
09:35	**Discussion and Q&A** All Speakers	**4180**

Coral 2 Session 401 08:30 - 10:00

Hot topics: Preconception origins of respiratory disease and allergy: what about immunity and infections?

Aims : to provide an overview of the concept of preconception origins of respiratory disease and allergy with a specific focus on immunity and infectious disease; to provide an overview of the current epidemiological evidence and to provide insights into possible mechanisms; to provide an overview of the field and explain how exposures and individual factors may be able to affect respiratory health and allergy in future generations.

Disease(s) : Airway diseases | Paediatric respiratory diseases | Respiratory infections

Method(s) : Cell and molecular biology | Epidemiology | Public health

Tag(s) : Translational

Target audience : Adult pulmonologist/Clinician, Medical Student, Respiratory critical care physician, Paediatrician, Scientist (basic, translational), Journalist

Chairs : Rafael E. de la Hoz (New York, United States), Ane Johannessen (Bergen, Norway)

08:30	**A general overview of the concept of preconception origins of respiratory disease: what is the epidemiological evidence so far?** Cecilie Svanes (Bergen, Norway)	**4181**
08:45	**The experimental view of how infections may impact health and disease across generations** William Horsnell (Cape Town, South Africa)	**4182**
09:00	**Transgenerational epigenetic impacts of parental infection on offspring health and disease susceptibility** Antony J Hannan (Melbourne, Australia)	**4183**
09:15	**Can COVID-19 and tuberculosis influence epigenetic signalling in a way that can impact immunity of the next generation?** Maria Lerm (Linköping, Sweden)	**4184**
09:30	**Discussion and Q&A** All Speakers	**4185**

Purple Session 402 08:30 - 10:00

Mini symposium: Complex pleural disease: management in the critically ill patient

Aims : to present most common problems that surgeons, chest physicians, intensivists and even radiologists can face for diagnosis and treatment in the critically ill patients; to emphasize the need of multidisciplinary approacht o these patients; to clarify diagnosis and treatment of patients with pneumothorax and patients on mechanical ventilation, patients with pulmonary disease listed for lung transplantation and pneumothorax after a bronchoscopic procedure, surgical procedure or talc pleurodesis (to distinguish 'true' pneumothorax from the residual air space); to distinguish free empyema and complex empyema and try to create a protocol for critically ill patients (intrapleural fibrinolytic therapy, dornase alfa, additional drainage tubes, medical thoracoscopy and surgical procedures); to discuss chylothorax after surgical procedures, spontaneous chylothorax, conservative treatments, surgical options and bronchopleural fistulas (fistulas after lung transplantation, fistulas after cancer surgery, conservative treatments, bronchoscopic treatments and surgical options).

Disease(s) : Respiratory critical care | Respiratory infections | Thoracic oncology

Method(s) : Endoscopy and interventional pulmonology | General respiratory patient care | Surgery

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Patient, Physiologist, Radiologist, Thoracic oncologist, Thoracic surgeon, Respiratory therapist, Journalist

Chairs : Katerina Antoniou (Heraklion, Greece), Federica Meloni (Pavia (PV), Italy)

08:30	**Pneumothorax in critically ill patients** Marco Nardini (Leeds, United Kingdom)	**4186**
08:45	**Complex empyema in critically ill patients** David Sanchez (Barcelona, Spain)	**4187**
09:00	**Chylothorax and bronchopleural fistulas** Mario Nosotti (Milano (MI), Italy)	**4188**
09:15	**Discussion and Q&A** All Speakers	**4189**

Studio (White) Session 403 08:30 - 08:45

News from the studio: News from the studio

Chairs : Arzu Yorgancıoğlu (Konak, Turkey), Christopher E. Brightling (Leicester (Leicestershire), United Kingdom)

08:30	**Discussion and Q&A** All Speakers	**4190**

Studio (White) Session 404 09:10 - 10:00

Experts interview: Making sense of chronic cough/An update on environmental and occupational exposure in interstitial lung diseases

Tag(s) : Clinical

Chairs : Arzu Yorgancıoğlu (Konak, Turkey), Christopher E. Brightling (Leicester (Leicestershire), United Kingdom)

09:10	**Making sense of chronic cough: hypersensitivity, hyper-reactivity or idiopathic patient phenotypes?** Lorcan McGarvey (Belfast, United Kingdom)	**4191**
09:25	**Discussion and Q&A** All Speakers	**4192**
09:35	**Environmental and occupational exposure in interstitial lung diseases: an update** Francois Huaux (Bruxelles, Belgium)	**4193**
09:50	**Discussion and Q&A** All Speakers	**4194**

Red 1+2 Session 405 09:30 - 10:45

Oral presentation: Unravelling pulmonary fibrosis mechanisms

Disease(s) : Interstitial lung diseases

Method(s) : Cell and molecular biology General respiratory patient care

Tag(s) : Clinical, Translational

Chairs : Phil Molyneaux (London, United Kingdom), Michael Gerckens (München, Germany)

OA4195	**Late Breaking Abstract - Morphine sulfate for the treatment of cough in Idiopathic Pulmonary Fibrosis The PAciFy Cough Randomized Clinical Trial** Phil Molyneaux (London, United Kingdom), Zhe Wu, Lisa G Spencer, Winston Banya, Nazia Chaudhuri, Pilar Rivera-Ortega, Ira Jakupovic, Brijesh Patel, Muhunthan Thillai, Alex West, John Westoby, Marlies Wijsenbeek, Toby M Maher, Jaclyn A Smith	
OA4196	**LSC - 2023 - Two lung immuno-endotypes in IPF associated with diferent pathological features** Tamara Cruz Santa Cruz (Barcelona, Spain), Nuria Mendoza, Sandra Casas, Guillaume Noel, Fernanda Hernandez, Maria Molina, Mauricio Rojas, Alvar Agusti, Jacobo Sellares, Rosa Faner	
OA4197	**LSC - 2023 - Defining and modelling the fibrotic niche in lung fibrosis** Joseph Bell (Southampton, United Kingdom), Michael Eyres, Elizabeth Davies, Zijian Xu, Yihua Wang, Gayle Marshall, Donna Davies, Emily Offer, Mark Jones	
OA4198	**Spatial transcriptomic analysis reveals similar gene expression patterns in the Long COVID and IPF lungs.** Aurélien Justet (Caen, France), Claudia Ravaglia, Amy Zhao, Nibal Al Hussein, Taylor Adams, Agshin Balayev, Joe Deluliis, Naftali Kaminski, Sara Tomassetti, Venerino Poletti	
OA4199	**STING inhibitor ameliorates senescence via inhibiting cGAS-STING pathway in Idiopathic Pulmonary Fibrosis** Lorena Rosas (Columbus, United States), Natalia-Del Pilar Vanegas, Madeline Riley, Erica L Dale, Victor Peters, Sean D Stacey, Marc Kaestle, Peter Seither, Ana L Mora, Mauricio Rojas	
OA4200	**Targeting pro-inflammatory and pro-fibrotic monocyte phenotype using novel mitochondria-targeted hydrogen sulfide delivery** Elena Leonova (Exeter, United Kingdom), S.L. Barratt, M.A. Lindsay, M.A. Gibbons, M. Whiteman, C.J. Scotton	
OA4201	**Hyaluronic acid decorated-liposome loaded with Imatinib: an in vitro study as targeted drug delivery system for lung fibrosis** eleonora bozza (pavia, Italy), Sara Bozzini, Cecilia Bagnera, Valeria Bincoletto, Ilaria Andreana, Barbara Stella, Laura Pandolfi, Elisa Cacciatore, Sara Lettieri, Silvia Arpicco, Federica Meloni	
OA4202	**Therapeutic effects of ALK5i on pulmonary function and fibrosis in a high-fat diet + bleomycin-induced and spirometry-confirmed mouse model of IPF** Asbjørn Graver Petersen (Hørsholm, Denmark), Jamal Bousamaki, Laura Jul Andreasen, Denise Oró, Jonas Damgård Schmidt, Yaohui Nie, Jordan Butts, Manuel Roqueta-Rivera, Henrik Björk Hansen, Michael Feigh	

OA4203	**SMAC Mimetic as potential anti-fibrotic therapy in an in vivo model of Bleomycin-induced Pulmonary Fibrosis** Natalia Vanegas (Columbus, United States), Lorena Rosas, Paula Agudelo Garcia, Stephanie Scott, Madeline Riley, Erica L. Dale, Jazmin Calyeca, Victor Peters, Marc Kaestle, Peter Seither, Ana L. Mora, Mauricio Rojas
OA4204	**A 3D organoid model mimicking honeycomb cysts in idiopathic pulmonary fibrosis** Petra Khan (Basel, Switzerland), Sabrina Blumer, Spasenija Savic, Lars Knudsen, Danny Jonigk, Mark P. Kuehnel, Michael Tamm, Katrin E. Hostettler
OA4205	**Discussion and Q&A** All Speakers

Brown 3 Session 406 09:30 - 10:45

Oral presentation: Interactions at the host-environment interface governing the scale and phenotype of airway inflammation

Disease(s) : Airway diseases

Method(s) : Cell and molecular biology Pulmonary function testing Physiology

Tag(s) : Basic science, Translational

Chairs : Robert Snelgrove (London, United Kingdom), Chair to be confirmed

OA4206	**Late Breaking Abstract - Carnitine palmitoyltransferase 1A and its fatty acid oxidation as a protector of airway epithelial barrier** Muyun Wang (Shanghai, China), Kun Wang, Wei Gao, Qiang Li
OA4207	**Single-cell RNA Sequencing Of Pulmonary Neuroendocrine Cells Reveals Genetic Heterogeneity And Epithelial Adoption In Chronic Airway Inflammation** Masahiro Nemoto (Chiba, Japan), Masahiro Kiuchi, Kaori Tsuji, Ami Aoki, Toshinori Nakayama, Kiyoshi Hirahara
OA4208	**Airway inflammation and hyperresponsiveness in asthma is regulated by the circadian clock through REV-ERBα** Amlan Chakraborty (Manchester, United Kingdom), Jafar Cain, Robert Maidstone, Karolina Krakowiak, Vishvangi Deugi, Nicola Begley, Julie Gibbs, Hannah Durrington
OA4209	**Epithelial alarmins enhance mast cell-dependent contractions of isolated human small bronchi** Maria Belikova (Stockholm, Sweden), Jesper Säfholm, Mamdoh Al-Ameri, Ann-Charlotte Orre, Sven-Erik Dahlén, Mikael Adner
OA4210	**Epithelium-derived cystatin SN inhibits HDM protease activity in allergic asthma** Xin Yao (Nanjing (Jiangsu), China), Lei Yao, Ian Adcock
OA4211	**Neutrophilic responses in a subacute and chronic mouse model of pollutant-aggravated allergic asthma** Tania Maes (Ghent, Belgium), Joyceline De Volder, Annelies Bontinck, Katrien De Grove, Guy Joos, Guy Brusselle
OA4212	**Respiratory effects of cold air and diesel exposure in exercise-induced bronchoconstriction in mice** Nora Marain (Leuven, Belgium), Marieke Colemont, Dominique Bullens, Lieven Dupont, Jeroen Vanoirbeek
OA4213	**LSC - 2023 - Inflammatory type 2 cDCs acquire features of cDC1s and macrophages to orchestrate immunity t o respiratory virus infection** Cedric Bosteels (Zwijnaarde, Belgium), Katrijn Neyt, Hamida Hammad, Bart Lambrecht
OA4214	**LSC - 2023 - Resolution of inflammation in long COVID** Sean Knight (Manchester, United Kingdom), Madhvi Menon, Bethany Pott, Tracy Hussell, Nawar Bakerly, Thomas Williams, John Grainger, Joanne Konkel, Elizabeth Mann, Angela Simpson, Laurence Pearmain, Alexander Mathioudakis, Geoffrey Lowman, Shruti Sarda, Altan Turkoglu, Loni Pickle, Michelle Toro
OA4215	**Patients on mepolizumab, benralizumab, or dupilumab have diminished post-vaccination antibody and B cell responses to SARS-CoV-2.** Pedro Lamothe (Decatur, United States), Martin Runnstrom, Katia Faliti, Narayanaiah Cheedrala, Alberto Moreno, Mehul Suthar, Rishika Nahata, Mayuran Ravindran, Andrea Morrison-Porter, Richard Ramonell, Matthew Woodruff, Robert Swerlick, Colin Swenson, Carmen Polito, Wendy Neveu, Natalia Smirnova, Caroline Kim, Ian Hentenaar, Shuya Kyu, Zhenxing Guo, Hao Wu, Natalie Haddad, Jiwon Park, John Daiss, Suneetha Cheedarla, Andrew Neish, John Roback, Sunita Sharma, Fernando Holguin, Ignacio Sanz, Frances Eun-Hyung Lee
OA4216	**Discussion and Q&A** All Speakers

Brown 1+2 Session 407 09:30 - 10:45

Oral presentation: Updating pulmonary rehabilitation outcomes and chronic management

Disease(s) : Pulmonary vascular diseases | Airway diseases | Respiratory critical care

Method(s) : Pulmonary rehabilitation | General respiratory patient care | Physiology | Public health | Respiratory intensive care

Tag(s) : Clinical

Chairs : Ana Oliveira (Aveiro, Portugal), Chair to be confirmed

OA4217	**Late Breaking Abstract - Effects of symptom-based rehabilitation compared to usual care in post COVID-19 – a randomized controlled trial: preliminary results of the Reload-study** Tessa Schneeberger (Schönau am Königssee, Germany), Inga Jarosch, Daniela Leitl, Rainer Gloeckl, Clancy John Dennis, Andreas Rembert Koczulla
OA4218	**Symptom burden in COPD: a clustering approach** Sarah Houben-Wilke (Horn, Netherlands), Qichen Deng, Daisy Janssen, Frits Franssen, Martijn Spruit
OA4219	**High-intensity interval training (HIIT) versus constant-load exercise (CLE) on the short-acute beta agonist (SABA) consumption and peak-expiratory flow (PEF) in subjects with moderate to severe asthma** Ronaldo Aparecido Da Silva (São Paulo (SP), Brazil), Thiago Fernandes, Rafael Stelmach, Alberto Cukier, Regina Maria Carvalho-Pinto, Celso R. F. Carvalho
OA4220	**Functional capacity testing in patients with pulmonary hypertension (PH) using the one-minute sit-to-stand test (1-min STST)** Christina Kronberger (Vienna, Austria), Roya Mousavi, Begüm Öztürk, Robin Willixhofer, Brigitte Litschauer, Roza Badr Eslam
OA4221	**Feasibility of personalised health behaviour coaching to support symptoms and activities of daily living in those with Long COVID-19.** Matthew Armstrong (Bournemouth, United Kingdom), Rebecca Owen, Ioannis Vogiaztis
OA4222	**Effects of association of aerobic and breathing exercises on clinical controls, physical capacity, and psychosocial status in patients with moderate to severe asthma: an RCT** Adriana C. Lunardi (São Paulo (SP), Brazil), Fabiana Kim, Jaqueline Rocha, Denielli Bos, Eloise Santos, Cibele Marques Da Silva, Alberto Cukier, Celso Carvalho
OA4223	**Inspiratory muscle training, with or without concomitant pulmonary rehabilitation, for COPD: state of the evidence from a Cochrane review** Omar Ammous (Göttingen, Germany), Walid Feki, Tamara Lotfi, Assem M Khamis, Rik Gosselink, Ahmed Rebai, Samy Kammoun
OA4224	**Post-hospitalisation COVID-19 healthcare pathways and 1 year health-related quality of life (HRQoL): effect of clinical assessment and rehabilitation** Rachael A. Evans (Leicester (Leicestershire), United Kingdom), Andrew Ibbetson, Linzy Houchen-Wolloff, Archie Walters, Michael Marks, Andrew Briggs
OA4225	**Minimally important differences based on baseline for clinical outcomes of pulmonary rehabilitation** Alex Jenkins (Nottingham (Nottinghamshire), United Kingdom), Miriam Groenen, Anouk Vaes, Daisy Janssen, Emiel Wouters, Frits Franssen, Martijn Spruit
OA4226	**Long-term effectiveness of a Pulmonary Telerehabilitation in Post-COVID-19 patients.** Bruna Scharlack Vian (Campinas, Brazil), Laís Bacchin De Oliveira, Ana Lúcia Cavallaro Baraúna Lima, Luciana Castilho De Figueirêdo, Mariângela Ribeiro Resende, Paulo Mendes, Hugo Dugolin Ceccato, Julian Furtado Silva, Lucieni De Oliveira Conterno, Pedro Maximink Esteves Villar, Lígia Dos Santos Roceto Ratti, Mônica Corso Pereira
OA4227	**Discussion and Q&A** All Speakers

Blue 1+2 | Session 408 | 09:30 - 10:45

Oral presentation: Selected tobacco and nicotine research

Disease(s) : Airway diseases

Method(s) : Epidemiology | Public health | General respiratory patient care | Pulmonary function testing | Cell and molecular biology

Tag(s) : Clinical

Chairs : Elif Dagli (Istanbul, Turkey), Stamatoula Tsikrika (Athens, Greece)

OA4228	**Late Breaking Abstract - Alpha-1 Antitrypsin deficiency and risk of cancer: A Nationwide cohort study** Nanna Korsbæk (Køge, Denmark), Eskild Landt, Sarah Marott, Børge Nordestgaard, Morten Dahl

OA4229	**Embedding smoking cessation support into targeted lung health checks in the UK increases long-term smoking abstinence, 12-month follow-up data from two clinical randomised controlled trials.** Parris Williams (London, United Kingdom), Keir Philip, Sara Buttery, Emily Bartlett, Anand Devaraj, Jamie Addis, Jane Derbyshire, Michelle Chen, Anthony Laverty, Nicholas Hopkinson
OA4230	**The causal relationship between smoking conditions and telomere length: a mendelian randomization study in UK biobank** Siyu Dai (Hangzhou, China), Feng Chen
OA4231	**E-cigarette use and quality of life in young adults: a Canadian health measure survey study** Teresa To (Toronto (ON), Canada), Cornelia M. Borkhoff, Chung-Wai Chow, Theo J. Moraes, Robert Schwartz, Nicholas T. Vozoris, Chirstopher Langlois, Kimball Zhang, Emilie Terebessy, Jingqin Zhu
OA4232	**Tobacco control or tobacco investment ? : Incentives given to tobacco industry** Elif Dagli (Istanbul, Turkey), Tanzer Gezer, Osman Elbek, Banu Salepci, Pinar Bostan, Pinar Ay, Murat Ceyhan, Fusun Yıldız, Murat Guner
OA4233	**Perceptions of general practitioners in Istanbul on e-cigarettes as smoking cessation aids** Melis Selamoglu (Melbourne, Australia), Bircan Erbas, Ayşe Emel Önal, Selma Karabey, Meryem Merve Ören, Mahmut Talha Ucar, Chris Barton
OA4234	**Smoking status in women with normal and complicated pregnancy.** Bohdana Basina (Dnipropetrovsk, Ukraine), Nataliia Kravchenko, Tetiana Kirieieva, Tetiana Pertseva
OA4235	**Acute vascular effects following e-cigarette inhalation** Amelie Brynedal (Umeå, Sweden), Mikael Kabéle, Jenny Bosson, Lukasz Antoniewicz, Magnus Lundbäck, Anders Blomberg
OA4236	**Oscillometry in the assessment of early smoking-induced airway changes** Christoph Valach (Vienna, Austria), Chiara Veneroni, Emiel Wouters, Pasquale Pio Pompilio, Alessandro Gobbi, Raffaele Dellaca, Owat Sunanta, Sylvia Hartl, Marie-Kathrin Breyer, Caspar Schiffers, Charles G. Irvin, Robab Breyer-Kohansal
OA4237	**Vaping-derived Δ8-THC quinones form cysteine adducts and alter the respiratory epithelium transcriptome** Charlotte Love (Chapel Hill, United States), Hye-Young Kim, Keri Tallman, Ned Porter, Phillip Clapp, Ilona Jaspers
OA4238	**Discussion and Q&A** All Speakers

Yellow 1+2+3 Session 409 09:30 - 10:45

Oral presentation: New basic insights into the mechanisms of acute and chronic lung diseases

Disease(s) : Airway diseases | Thoracic oncology | Interstitial lung diseases | Pulmonary vascular diseases

Method(s) : Cell and molecular biology | Imaging | Transplantation

Tag(s) : Basic science, Translational

Chairs : Audrey Joannes (RENNES, France), Olivier Burgy (Dijon, France)

OA4239	**Late Breaking Abstract - Factor inhibiting HIF (FIH) as a metabolic switch in lung fibroblasts** Siyuan Wang (southampton, United Kingdom), Liudi Yao, Yilu Zhou, Franco Conforti, Nullin Divecha, Jonathan Swann, Charlie Birts, Donna Davis, Mark Jones, Yihua Wang
OA4240	**Association between airway MMP-12 and DNA methylation in BAL cells in COPD** Jonas Eriksson Ström (Umeå, Sweden), Simon Kebede Merid, Robert Linder, Jamshid Pourazar, Anders Blomberg, Anne Lindberg, Annelie F Behndig, Erik Melén
OA4241	**Fucosyltransferase-2 improves the COPD phenotype through its regulation of E-cadherin** Venkataramana Sidhaye (Baltimore, United States), Carter Swaby, Shreeti Thapa, Bonnie Yeung-Luk, Sahana Ramaswamy
OA4242	**Mettl3-mediated m6A modification of FSP1 mRNA induces ferroptosis by diminishing the FSP1 level in COPD** Yan Wu (Wuxi, China), Yue Yang, Weiyu Shen, Tao Bian
OA4243	**Blocking CXCR4 improves pulmonary and cardiac outcomes in a mouse model of early COPD** Isabelle Dupin (Bordeaux, France), Pauline Henrot, Elise Maurat, Reshed Abohalaka, Sébastien Chaigne, Dounia El Hamrani, Edmée Eyraud, Renaud Prevel, Pauline Estèves, Marilyne Campagnac, Marielle Dubreuil, Guillaume Cardouat, Clément Bouchet, Olga Ousova, Jean-William Dupuy, Thomas Trian, Matthieu Thumerel, Hugues Bégueret, Pierre-Olivier Girodet, Roger Marthan, Maéva Zysman, Véronique Freund-Michel, Patrick Berger
OA4244	**Airway dysbiosis disturbs lung clock gene expression in a chronic smoke-exposed murine model** Wei Xiao (, China), Juan-Juan Fu, Ti-Wei Miao, Bing Mao

OA4245	**"Super Survivor" after Lung Transplantation – Protective Role of Macrophages?** Edith Katharina Plucinski (Hannover, Germany), Jan-Christopher Kamp, Jens Gottlieb, Tobias Welte, Marius Hoeper, Hans-Heinrich Kreipe, Danny David Jonigk, Lavinia Neubert, Mark Philipp Kühnel	
OA4246	**Tissue-specific gene expression of immune-related genes in different COVID-19 severities** Alberto Gómez Carballa (Santiago de Compostela, Spain), Irene Rivero-Calle, Jacobo Pardo-Seco, Jose Gómez-Rial, Ana Dacosta-Urbieta, Xabier Bello, Sara Pischedda, María José Currás-Tuala, Sandra Viz-Lasheras, Federico Martinón-Torres, Antonio Salas	
OA4247	**Identification of the mesenchymal subpopulation responsible for lung tumorigenesis by using single-cell RNA-seq** Shigehisa Yanagi (Miyazaki, Japan), Hironobu Tsubouchi, Taiga Miyazaki	
OA4248	**A primary ciliary dyskinesia model of static cilia for research application** Claire L Jackson (Southampton (Hampshire), United Kingdom), Janice Coles, Katie Horton, Regan Doherty, Gemma Fryatt, Jane S Lucas	
OA4249	**Discussion and Q&A** All Speakers	

Gold — Session 411 — 10:15 - 11:45

Endoscopy session: Innovative interventions in pulmonology: freeze, fry or fume?

Aims : to demonstrate the performance of a variety of interventional procedures, including tips and tricks from experts; to explain the details of the new techniques and technologies demonstrated.

Disease(s) : Thoracic oncology | Airway diseases | Interstitial lung diseases

Method(s) : Endoscopy and interventional pulmonology

Target audience : Adult pulmonologist/Clinician, Pathologist, Physician in Pulmonary Training, Thoracic surgeon, Respiratory critical care physician

Chairs : Mohammed Munavvar (Preston (Lancashire), United Kingdom), Amanda Dandanell Juul (Odense S, Denmark)

10:15	**Introduction** All Speakers	**4250**
10:20	**Rheoplasty and cryo spray** Konstantina Kontogianni (Heidelberg, Germany)	**4251**
10:35	**Endoscopic lung volume reduction** Michela Bezzi (Brescia, Italy)	**4252**
10:50	**Indwelling pleural catheter placement and troubleshooting** Mª Rosa Cordovilla Perez (Salamanca, Spain)	**4253**
11:05	**Cryobiopsy** Sara Tomassetti (Florence, Italy)	**4254**
11:20	**Discussion and Q&A** All Speakers	**4255**

Silver — Session 412 — 10:15 - 11:45

Clinical cases: Lungs on fire: paediatric respiratory diseases

Aims : to present real-life clinical cases as part of an interactive session. Cases vary in difficulty and may require differential diagnosis. This session is led by two discussants who will present cases submitted by respiratory health professionals to a panel of experts and will drive the discussion in a step-by-step approach, encouraging dialogue and reflection among the panel, who have no prior knowledge of these cases. As the cases are discussed, the discussants will invite the audience to participate in determining which diagnostic and therapeutic options would be best for these patients.

Disease(s) : Paediatric respiratory diseases

Chairs : Alexander Möller (Zürich, Switzerland), Refika Hamutcu Ersu (Ottawa, Canada), Erol Gaillard (Leicester (Leicestershire), United Kingdom)

Discussants : Marielle W.H. Pijnenburg (Rotterdam, Netherlands), David Drummond (Paris, France)

10:15	**Case 1 incl. panel discussion and Q&A - Author: J. N. Eze (Nigeria)** Marielle W.H. Pijnenburg (Rotterdam, Netherlands)	**4256**
10:37	**Case 2 incl. panel discussion and Q&A - Author: M. Cameron (Australia)** David Drummond (Paris, France)	**4257**

10:59	**Case 3 incl. panel discussion and Q&A - Author: N. Kula (Turkey)** Marielle W.H. Pijnenburg (Rotterdam, Netherlands)	**4258**
11:21	**Case 4 incl. panel discussion and Q&A - Author: S. Hartfiel (Germany)** David Drummond (Paris, France)	**4259**

Coral 4+5 Session 413 10:15 - 11:45

Respiratory medicine meets other disciplines: Pulmonary hypertension related to heart and lung disease

ERS(ESC joint session

Aims : to define the different physiological and clinical characteristics of pulmonary hypertension (PH) associated with different forms of heart or lung diseases; to explain the up-to-date treatment approach for PH associated with heart or lung disease; to explain the different physiological responses of the right ventricle in different types of PH and its impact on the correct treatment and its efficacy; to describe the up-to-date treatment of PH associated with heart failure, with an emphasis on HFpEF-PH.

Disease(s) : Airway diseases | Interstitial lung diseases | Pulmonary vascular diseases

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, General practitioner, Medical Student, Nurse, Patient, Physician in Pulmonary Training

Chairs : Yochai Adir (Haifa, Israel), Pilar Escribano- Subias (Madrid, Spain), Marc Humbert (Le Kremlin-Bicêtre, France)

10:15	**The spectrum of PH in lung diseases** Isabel Blanco Vich (Barcelona, Spain)	**4260**
10:30	**Genetic pulmonary vascular disorders as a cause of pulmonary hypertension in adults** David Montani (Le Kremlin-Bicêtre, France)	**4261**
10:45	**Right ventricle adaptation in different types of PH** Frances S. de Man (Amsterdam, Netherlands)	**4262**
11:00	**Any progress in the management of PH in heart failure?** Jean-Luc Vachiery (Bruxelles, Belgium)	**4263**
11:15	**Discussion and Q&A** All Speakers	**4264**

Coral 3 Session 414 10:15 - 11:45

Hot topics: Precision medicine in obstructive sleep apnoea

Aims : to describe the road map for implementing precision medicine in obstructive sleep apnoea (OSA); to explain that deep phenotyping is a perquisite for precision medicine in OSA; to describe the endotypes or pathophysiological traits allowing to indicate personalised therapy; to perform risk stratification by describing OSA-specific metrics that were designed to capture the hypoxic burden, intensity of respiratory arousal events and cardiac autonomic response to acute events; to explain how to identify continuous positive airway pressure (CPAP) treatment failures by telemonitoring platforms and to propose early interventions.

Disease(s) : Sleep and breathing disorders

Method(s) : Epidemiology | General respiratory patient care | Respiratory intensive care

Tag(s) : Basic science

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Technical Assistant, Respiratory critical care physician, Paediatrician, Patient, Scientist (basic, translational)

Chairs : Matteo Bradicich (Zollikerberg, Switzerland), Silke Ryan (Dublin, Ireland), Jana De Brandt (Umeå, Sweden)

10:15	**Clinical and sleep phenotypes** Stefania Redolfi (Cagliari, Italy)	**4265**
10:30	**Physiological phenotypes/endotypes and treatable traits** Danny Eckert (Bedford Park (SA), Australia)	**4266**
10:45	**OSA risk stratification beyond the apnoea-hypopnea index and its relevance to patient-reported outcome measures** Raphael Heinzer (Lausanne, Switzerland)	**4267**
11:00	**Detection of CPAP treatment failures by telemonitoring platforms and proposal of early interventions** Jean-Louis Pépin (Grenoble, France)	**4268**
11:15	**Discussion and Q&A** All Speakers	**4269**

Coral 1 Session 415 10:15 - 11:45

Symposium: UNITE4TB: tuberculosis renewed

European Union project

Aims : to explain how to use and discuss the methods used to diagnose tuberculosis (TB) and identify resistance; to describe the different drugs and regimens being studied for TB treatment; to explain the advances and challenges in the development of biomarkers; to explain the importance of treatment adherence and the different interventions in use.

Disease(s) : Respiratory infections

Method(s) : Respiratory intensive care

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Respiratory critical care physician, Physician in Pulmonary Training, Scientist (basic, translational), Journalist

Chairs : Giovanni Sotgiu (Sassari, Italy), Onno Akkerman (Groningen, Netherlands), Delia Goletti (Roma (RM), Italy)

10:15	**Patient's perspective** Speaker to be confirmed	**4270**
10:20	**New developments in tuberculosis diagnosis** Daniela Maria Cirillo (Milano (MI), Italy)	**4271**
10:35	**Tuberculosis treatment monitoring and outcome measures** Derek Sloan (ST ANDREWS, United Kingdom)	**4272**
10:50	**New drugs, new regimens and new ways to design clinical trials** Christoph Lange (Borstel, Germany)	**4273**
11:05	**Interventions to enhance treatment adherence** Raquel Duarte (Porto, Portugal)	**4274**
11:20	**Discussion and Q&A** All Speakers	**4275**

Coral 2 Session 416 10:15 - 11:45

Symposium: Occupational and environmental determinants of common respiratory diseases

From Epidemiology to the Clinic and Back

Aims : to present updates and interesting and challenging cases underscoring the important (and often missed) role that occupational and environmental exposures play in the aetiology, diagnosis, treatment and prevention of common and well-known chronic respiratory diseases. to highlight the influence of early life determinants and diet on the risk of chronic obstructive pulmonary disease (COPD), the added value of association studies based on the exposome concept and the impact of diet in adulthood for prevention of asthma and COPD and improvement of lung health.

Disease(s) : Airway diseases Interstitial lung diseases

Method(s) : Epidemiology General respiratory patient care Public health

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Physician in Pulmonary Training

Chairs : Rafael E. de la Hoz (New York, United States), Ane Johannessen (Bergen, Norway)

10:15	**Updates on occupational COPD: towards an expanded view of causation for better prevention** Sara De Matteis (Cagliari, Italy)	**4276**
10:30	**Diet: an underappreciated but promising approach to COPD prevention** Raphaëlle Varraso (Villejuif, France)	**4277**
10:45	**Impact of work-related risks on diagnostics and treatment of asthma** Irmeli Lindström (Helsinki, Finland)	**4278**
11:00	**Hypersensitivity pneumonitis: multiple exposures and one disease** Martina Koziar Vasakova (Praha 10, Czech Republic)	**4279**
11:15	**Discussion and Q&A** All Speakers	**4280**

Purple — Session 417 — 10:15 - 11:45

Mini symposium: Symptom burden in interstitial lung disease

Aims : to provide the audience with updates on the pathogenesis, epidemiology and pharmacological and nonpharmacological management of dyspnoea, cough and fatigue in ILD; to learn about the impact of these symptoms on general and emotional well-being and daily activities of the patient; to provide an overview of the most common and burdensome symptoms in patients with ILD; toupdatd on the most recent scientific evidence with regards to the pathophysiology and management of dyspnoea, cough and fatigue, and their impact on patients.

Disease(s) : Interstitial lung diseases

Method(s) : General respiratory patient care Palliative care Pulmonary rehabilitation

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Patient, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist, Scientist (basic, translational), Respiratory therapist, Journalist

Chairs : Katerina Antoniou (Heraklion, Greece), Federica Meloni (Pavia (PV), Italy)

10:15	**Patient's perspective** John Solheim (Sætre, Norway)	**4281**
10:20	**Management of dyspnea in ILD** Yet Hong Khor (Melbourne (VIC), Australia)	**4282**
10:35	**Pathophysiology and treatment of cough in ILD** Zhe Wu (London, United Kingdom)	**4283**
10:50	**Fatigue in ILD: a major problem for patients and physicians** Karen Moor (Rotterdam, Netherlands)	**4284**
11:05	**Discussion and Q&A** All Speakers	**4285**

10:30-11:15
INDUSTRY SKILLS LAB WORKSHOP SEE PAGE 1

ERS Stand/World Village — Session 420 — 10:30 - 11:30

Public: Coffee and Clean Air - 3

Studio (White) — Session 421 — 10:30 - 11:15

Pro-Con debate: Are β-blockers beneficial in chronic obstructive pulmonary disease?

Aims : to discuss the use of β-blockers in patients with chronic obstructive pulmonary disease (COPD); to consider the risk-benefit assessment of β-blocker therapy in COPD; to answer the open question of whether there is a place for use of β-blockers in our patients.

Disease(s) : Airway diseases

Method(s) : Epidemiology Physiology Public health

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Patient, Physician in Pulmonary Training, Respiratory physiotherapist, Scientist (basic, translational)

Chairs : Arzu Yorgancıoğlu (Konak, Turkey), Christopher E. Brightling (Leicester (Leicestershire), United Kingdom)

10:45	**Pro: Are β-blockers beneficial in COPD?** Alan Kaplan (Stouffville (ON), Canada)	**4289**
10:30	**Con: Are β-blockers beneficial in COPD?** Daiana Stolz (Freiburg, Germany)	**4288**
11:00	**Discussion and Q&A** All Speakers	**4290**

Amber 1+2 — Session 422 — 10:40 - 13:00

Skills workshop: SW11 Clinical-radiological-pathological correlation in pulmonary hypertension

Aims : to develop a systematic approach to interpretation of radiological investigations (with a focus on computed tomography) in patients with suspected pulmonary hypertension (PH); to provide practical experience in performing and interpreting echocardiography in patients with PH; to improve knowledge and understanding of pathological changes associated with PH; to improve skills in integrating clinical, radiological and right heart catheter data to enable the correct diagnosis of patients with suspected PH.

Disease(s) : Pulmonary vascular diseases

Method(s) : Imaging

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Pathologist, Physician in Pulmonary Training, Radiologist

Chairs : Anton Vonk Noordegraaf (Amsterdam, Netherlands)

10:40	**Introduction** All Speakers	**4291**
10:40	**Radiological assessment of pulmonary hypertension** Deepa Gopalan (LONDON, United Kingdom)	**4292**
10:40	**Pathological assessment of pulmonary hypertension** Teodora Radonic (Amsterdam, Netherlands)	**4293**
10:40	**Echocardiography in pulmonary hypertension** Marielle van de Veerdonk (Amsterdam, Netherlands), Abdul Hameed (Sheffield (South Yorkshire), United Kingdom)	**4294**
10:40	**Clinical assessment of pulmonary hypertension** Anton Vonk Noordegraaf (Amsterdam, Netherlands)	**4295**

Red 1+2 Session 423 11:00 - 12:15

Oral presentation: Innovative approaches to managing asthma and chronic obstructive pulmonary disease: a translational perspective

Disease(s) : Airway diseases Interstitial lung diseases

Method(s) : Cell and molecular biology Endoscopy and interventional pulmonology Imaging Pulmonary function testing Pulmonary rehabilitation Transplantation General respiratory patient care Physiology

Tag(s) : Translational

Chairs : Lena Uller (Lund, Sweden), Manali Mukherjee (Hamilton (ON), Canada)

OA4296	**Late Breaking Abstract - Early improvement in asthma small airway dysfunction after one dose of SAR443765, a novel bispecific anti-thymic stromal lymphopoietin/anti-IL-13 nanobody molecule** Annemie Deiteren (Gent, Belgium), Emmanuel Krupka, Karine Imberdis, Naimish Patel, Heribert Staudinger, Selcuk Bas, Benjamin Suratt	
OA4297	**Autologous transplantation of P63+ lung progenitor cells for chronic obstructive pulmonary disease therapy** Wei Zuo (Shanghai, China), Yujia Wang, Zili Meng, Ming Liu, Yueqing Zhou, Difei Chen, Yu Zhao, Ting Zhang, Nanshan Zhong, Xiaotian Dai, Shiyue Li	
OA4298	**Relationship between IL-33 expression and epithelial remodelling in COPD small airways** Sophie Booth (WHITE - English/Welsh/Scottish/Northern Irish or B, United Kingdom), Danen Cunoosamy, Jørgen Vestbo, Dave Singh, Andrew Higham	
OA4299	**A novel senotherapeutic approach for COPD via activating autophagy-lysosome axis** Sachi Matsubayashi (Tokyo, Japan), Yusuke Hosaka, Saburo Ito, Jun Araya, Yuta Hirano, Shota Fujimoto, Hironori Kawamoto, Naoaki Watanabe, Tsukasa Kadota, Yu Fujita, Daisuke Takekoshi, Shunsuke Minagawa, Takanori Numata, Hiromichi Hara, Kazuyoshi Kuwano	
OA4300	**SIL-6Rα amplified IL-6 signaling in bronchial epithelial cells defines a subgroup of asthma patients low in sputum eosinophils** Reinoud Gosens (Groningen, Netherlands), Zaid El-Husseini, Dmitry Khalenkow, Andy Lan, Maarten Van Den Berge, Djoke Van Gosliga, Martijn Nawijn, Judith Vonk, Gerard Koppelman	
OA4301	**Mepolizumab alters the phenotype and activation status of peripheral blood eosinophils in patients with severe eosinophilic asthma** Pablo Miguéns-Suárez (Santiago de Compostela, Spain), Sara Vázquez-Mera, Laura Martelo-Vidal, Uxío Calvo-Álvarez, Raquel Ruiz-Ferreras, Marina Blanco-Aparicio, Coral González-Fernández, Mar Mosteiro-Añón, María Dolores Corbacho-Abelaira, Paula Méndez-Brea, Juan José Nieto-Fontarigo, Francisco Javier Salgado, Francisco Javier González-Barcala	
OA4302	**Effect of add-on therapies (mepolizumab, omalizumab or azithromycin) on asthma remission in severe asthma** Dennis Thomas (New Lambton Heights, Australia), Vanessa Mcdonald, Sean Stevens, Erin Harvey, Melissa Baraket, Philip Bardin, Jeff Bowden, Simon Bowler, Jimmy Chien, Li Ping Chung, Andrew Gillman, Mark Hew, Sandra Hodge, Alan James, Christine Jenkins, Constance Katelaris, Gregory Katsoulotos, David Langton, Joy Lee, Guy Marks, Matthew Peters, Naghmeh Radhakrishna, Paul Reynolds, Janet Rimmer, Pathmanathan Sivakumaran, John Upham, Peter Wark, Ian Yang, Peter Gibson	

OA4303	**Effect of in vitro azithromycin treatment on epithelial antiviral immunity in eosinophilic and non-eosinophilic asthma phenotypes** Muzhda Ghanizada (Copenhagen, Denmark), Sofia Malm Tillgren, Nihaya Mahmoud Said, Helle Frost Andreassen, Louise Munkholm Andreassen, Lise Lotte Eriksen, Nanna Dyhre-Petersen, Mandy Menzel, Samuel Cerps, Asger Sverrild, Lena Uller, Celeste Porsbjerg, Therese Lapperre
OA4304	**NK cell maturation and proliferation in severe asthmatic patients after Benralizumab therapy** Laura Bergantini (siena, Italy), Miriana D'Alessandro, Tommaso Pianigiani, Elena Bargagli, Paolo Cameli
OA4305	**The inhaled PDE4 inhibitor tanimilast shows efficacy in both Th2 and non-Th2 murine models of asthma** Anna Rita Pisano (Parma (PR), Italy), Debora Fragni, Andrew Allen, Marina Tondelli, Alice Pappani, Davide De Angelis, Maurizio Civelli, Gino Villetti, Daniela Miglietta
OA4306	**Discussion and Q&A** All Speakers

Brown 3 Session 424 11:00 - 12:15

Oral presentation: Physical activity, exercise, and rehabilitation in lung disease

Disease(s) : Airway diseases

Method(s) : Pulmonary rehabilitation Transplantation General respiratory patient care

Tag(s) : Clinical

Chairs : Deniz Inal-Ince (Ankara, Turkey), Daniel Langer (Leuven, Belgium)

OA4307	**Late Breaking Abstract - Group-based Tele-Yoga improves exercise capacity, respiratory and cognitive function and quality of life in obstructive sleep apnea syndrome** Naciye Vardar Yağlı (Ankara, Turkey), Filiz Eyuboglu, Deniz Inal-Ince, Berna Karamancioglu, Naciye Vardar-Yagli, Defne Kaya-Utlu, Orhan Dalkilic, Goksel Somay
OA4308	**A randomized trial of three months physical activity telecoaching in patients post lung transplantation** Sofie Breuls (Leuven, Belgium), Astrid Blondeel, Marieke Wuyts, Wim Janssens, Robin Vos, Thierry Troosters, Heleen Demeyer
OA4309	**Physical activity tele coaching in COPD: intermediate effects** Astrid Blondeel (Leuven, Belgium), Fien Hermans, Sofie Breuls, Marieke Wuyts, Eric Derom, Wim Janssens, Heleen Demeyer, Thierry Troosters
OA4310	**Effects of an online behaviour change intervention to promote physical activity in adults with asthma: preliminary data of a randomized controlled trial** Joice Mara Oliveira (Londrina, Brazil), Ariele Pedroso, Natielly Soares Correia, Denner Ildemar Feitosa Melo, Caroline Sydloski Bidoia, Fabio Pitta, Manuela Karloh, Thiago Sousa Matias, Fabiano Francisco Lima, Marieta Cabral Amaral Da Cunha, Celso R F Carvalho, Karina Couto Furlanetto
OA4311	**Effectiveness of PersonalIsed CommUnity-based Physical activities for people with chronic obstructive pulmonary disease (PICk UP)** Alda Sofia Pires De Dias Marques (Aveiro, Portugal), Patrícia Filipa Sobral Rebelo, Guilherme Rodrigues, Cíntia Dias, Ana Grave, Ana Sofia Rijo, Maria João Moura, Ana Carolina Oliveira, João Cravo, Maria Aurora Mendes, André Teixeira, Rodolfo Pinto, Dina Brooks
OA4312	**Is improving physical activity after pulmonary rehabilitation in COPD left to chance?** Joana Antão (Aveiro, Portugal), Patrícia Rebelo, Frits Franssen, Martijn Spruit, Alda Marques
OA4313	**Physical Activity coaching in people with COPD: a systematic literature review** Nicola Sante Diciolla (Madrid, Spain), María José Yuste-Sánchez, Alda Marques
OA4314	**The impact of pulmonary rehabilitation on the physical activity level of COPD patients across BMI groups** Heleen Demeyer (Leuven, Belgium), Marthe Van Overbeke, Lucas Vanden Bossche, Astrid Blondeel, Sofie Breuls, Marieke Wuyts, Lode Claes, Ysys Denutte, Andreas Von Leupoldt, Wim Janssens, Thierry Troosters
OA4315	**Pulmonary telerehabilitation vs. Conventional pulmonary rehabilitation – Secondary responder analysis** Henrik Hansen (Dragør, Denmark), Andre Torre, Thomas Kallemose, Charlotte Suppli Ulrik, Nina Skavlan Godtfredsen
OA4316	**Benefits of pulmonary rehabilitation in low compared to high-resource settings in COPD** Alda Sofia Pires De Dias Marques (Aveiro, Portugal), Joana Antão, Cátia Paixão, Patricia Rebelo, Ana Machado, Sara Souto-Miranda, Ana Sofia Grave, Cíntia Dias, Guilherme Rodrigues, Tânia Pinho, M Aurora Mendes, Ana Olivera
OA4317	**Discussion and Q&A** All Speakers

Brown 1+2 Session 425 11:00 - 12:15

Oral presentation: Best abstracts in clinical problems

Disease(s) : Pulmonary vascular diseases Airway diseases Respiratory critical care Sleep and breathing disorders

Method(s) : General respiratory patient care Pulmonary function testing Public health Cell and molecular biology Pulmonary rehabilitation Physiology Epidemiology

Tag(s) : Clinical

Chairs : Georgios Kaltsakas (Athens, Greece), Anne Orholm Nielsen (Gentofte, Denmark)

OA4318	**Late Breaking Abstract - Obstructive sleep apnea and chronic cough: is there really a link?** Laurent Guilleminault (Toulouse Cedex, France), Jérémie Riou, Sandrine Pontier, Kamila Sedkaoui, Frédéric Gagnadoux, Trzepizur Wojciech
OA4319	**Prevalence of abnormal oscillometry among ambulatory Long COVID patients** Anthony Byrne (Allambie Heights, Australia), Nick Lees, Elli Asgary, Emma Stumbles
OA4320	**Effect of treatment with tobramycin on the airway microbiota and resistome in bronchiectasis patients chronically colonised with Pseudomonas aeruginosa: iBEST study** Michael M Tunney (Belfast (Belfast), United Kingdom), Gisli G Einarsson, Andrew J Lee, Aya Alkhatib, Jack Carson, Andrew Marshall, Stephen Carson, Deirdre F Gilpin, Gerhild Angyalosi, Vincent Malaterre, James D Chalmers, Michael R Loebinger, Francesco Blasi, Charles S Haworth, J Stuart Elborn
OA4321	**Effects of saline nebulisation on SARS-CoV2 spreading and exhaled bio-aerosol particles in COVID-19 patients** Francesca BUTTINI (Parma, Italy), Leonardo Gori, Fabio Morecchiato, Andrea Bartolini, Gian Maria Rossolini, Alessandro Bartoloni, Jessica Mencarini, Ruggero Bettini, Federico Lavorini
OA4322	**Two-year cohort study after GM-CSF inhalation therapy for autoimmune pulmonary alveolar proteinosis** Koh Nakata (Niigata, Japan), Ryushi Tazawa, Page Research Group, Nobutaka Kitamura
OA4323	**Correlation between endothelial dysfunction and Left ventricular global strain in patients with COVID-19 (from the TUN ENDCOV Study)** oussama Tabka (Evry courcouronnes, France), Imen Touil, Ibn Haj Amor Hassen, Charfeddine Salma, Kraiem Salma, Tabka Oussama, Hammami Rania, Mahmoud Anis, Torjmen Slim, Knani Jalel, Abdesslem Salem, Abid Leila
OA4324	**Prevalence and associated factors to post-COVID-19 functional respiratory complaints (FRCs) identified by the Nijmegen questionnaire (NQ)** Thomas Gille (Bobigny, France), Lucile Sesé, Simon Chauveau, Bénédicte Giroux-Leprieur, Aurélie Hervé-Carrega, Morgane Didier, Gary Silvera, Mannelle Mokrani, Yousra Coulibaly, Marcilia Da Silva, Anabel Moreno, Stéphanie Groutteau, Emeline Saindoy, Hilario Nunes, Yurdagül Uzunhan, Carole Planès
OA4325	**One year health-outcomes in adults hospitalised with COVID-19 who received systemic corticosteroid treatment: prospective cohort study** Richard Russell (Leicester, United Kingdom), Olivia Leavy, Steven Kerr, Ewen Harrison, Annemarie Docherty, Nazir Lone, Louise Wain, Aziz Sheikh, Chris Brightling, Rachael Evans
OA4326	**Hyperventilation syndrome (HVS) after COVID 19 pneumonia : what are the predisposing factors?** Hela Cherif (Tunis, Tunisia), Mariem Friha, Salma Mokaddem, Oumaima Belakhel, Mariem Triki, Ferdaous Yangui, Mohamed Ridha Charfi
OA4327	**How is lung function affected in children with long-COVID?** Zeynep Reyhan Onay (Istanbul, Turkey), Sinem Can Oksay, Deniz Mavi, Gulay Bilgin, Yetkin Ayhan, Ferit Durankus, Saniye Girit
OA4328	**Discussion and Q&A** All Speakers

Blue 1+2 Session 426 11:00 - 12:15

Oral presentation: Mechanisms underlying the influence of obesity on respiratory diseases

Disease(s) : Airway diseases Sleep and breathing disorders Thoracic oncology

Method(s) : Epidemiology Cell and molecular biology Imaging General respiratory patient care Physiology Public health

Tag(s) : Clinical, Translational

Chairs : Niki Ubags (Epalinges, Switzerland)

OA4329	**Late Breaking Abstract - Perinatal obesity induces premature alveolar aging by AT2 cell depletion via IL-6-driven transcriptional and genome instability** Jaco Selle (Köln, Germany), Oleksiy Klymenko, Bastian Abend, Tobias Trojan, Chrysa Nikopoulou, Stephanie Stephan, David Meyer, Gabriela Riederer, Christina Vohlen, Rebecca Wilke, Ana-Ivonne Vazquez-Armendariz, Baktybek Kojonazarov, Peter Tessarz, Susanne Herold, Norbert Weißmann, Werner Seeger, Jörg Dötsch, Leo Kurian, Björn Schumacher, Miguel A. Alejandre Alcazar
OA4330	**Western dietary pattern during pregnancy increases risk of childhood asthma dependent on social circumstances** Mina Ali (Copenhagen, Denmark), David Horner, Min Kim, Nicklas Brustad, Tingting Wang, Liang Chen, Casper-Emil T.Pedersen, Ann-Marie Malby Schoos, Jakob Stokholm, Klaus Bønnelykke, Morten A. Rasmussen, Bo Chawes
OA4331	**Genetic susceptibility to high BMI increases risk of early life asthma exacerbations and infections** Signe Kjeldgaard Jensen (København SV, Denmark), Anders Eliasen, Mathias Elsner Melgaard, Nicklas Brustad, Julie Kyvsgaard, Ann-Marie Malby Schoos, Jakob Stokholm, Bo Chawes, Klaus Bønnelykke
OA4332	**Fully automated CT-based body composition analysis shows altered adipose tissue ratios in people with CF receiving CFTR modulator therapy** Dirk Westhölter (Essen, Germany), Johannes Haubold, Johannes Wienker, Matthias Welsner, Sivagurunathan Sutharsan, Christian Taube, Michael Forsting, Felix Nensa, Rene Hosch, Marcel Opitz
OA4333	**Specific association of extracellular vesicles-derived miRNA-17 and -106a clusters with pathomechanims of obesity-associated low type-2 asthma** Holger Garn (Marburg, Germany), Fahd Alhamdan, Timm Greulich, Christian Daviaud, Leigh M. Marsh, Frauke Pedersen, Clemens Thölken, Petra I. Pfefferle, Thomas Bahmer, Daniel P. Potaczek, Jörg Tost
OA4334	**Allergic inflammation modulates the adiponectin/adiponectin receptor 1 axis in lung regulatory T cells in vivo** Patricia Ramos-Ramírez (Glassboro, United States), Carina Malmhäll, Apostolos Bossios
OA4335	**Risk factors for asthma related hospital admissions in adults: Analysis of 1.2 million patients in England** Nicola Adderley (Birmingham, United Kingdom), Nikita Williams-Simms, Rasiah Thayakaran, Krishnarajah Nirantarakumar, Shamil Haroon, Prasad Nagakumar, Adel Mansur
OA4336	**Adipocyte-fibroblast bidirectional crosstalk promotes features of fibrosis** Nour Jalaleddine (Beirut, Lebanon), Mellissa Gaudet, Qutayba Hamid, Saba Al Heialy
OA4337	**Intermittent hypoxia exposure increases adipose insulin resistance and lipolysis in healthy humans: a randomized cross over trial.** Renaud Tamisier (Grenoble, France), Anne Briançon-Marjollet, Marie Netchitailo, Fanny Fabre, Elise Belaidi, Claire Arnaud, Anne-Laure Borel, Patrick Levy, Jean-Louis Pépin
OA4338	**Adipokines in cachexia of patients with lung cancer** Lukas Hofmann (Leipzig, Germany), Charlotte Frommelt, Malte Ossenberg, Jonas Oberhuber-Kurth, Johanna Pappisch, Teresa Kerkhoff, Nicolas Linder, Harald Busse, Thomas Ebert, Anke Tönjes, Sebastian Krämer, Hartmut Kuhn, Hubert Wirtz, Armin Frille
OA4339	**Discussion and Q&A** All Speakers

Yellow 1+2+3 Session 427 11:00 - 12:15

Oral presentation: Highway one to chronic lung allograft dysfunction

Disease(s) : Airway diseases | Interstitial lung diseases | Pulmonary vascular diseases | Thoracic oncology

Method(s) : Transplantation | Cell and molecular biology | Imaging | Pulmonary function testing

Tag(s) : Clinical

Chairs : Michael Perch (Copenhagen, Denmark), Berta Saez Gimenez (Barcelona, Spain)

OA4340	**Late Breaking Abstract - Functional prediction of post-operative lung physiology should really include diffusing capacity.** Sylvia Verbanck (Bruxelles, Belgium), Karolien Vekens, Dirk Smets, Shane Hanon, Eef Vanderhelst
OA4341	**Does early scalloping of the flow volume loop predict chronic lung allograft dysfunction (CLAD)/bronchiolitis obliterans syndrome (BOS) and survival post lung transplantation?** Han Loong Tan (Kuala Lumpur, Malaysia), James L Lordan, Gerard Meachery, Gareth Parry, Andrew J Fisher, Arun Nair
OA4342	**Mesenchimal stromal cells as rescue therapy for refractory Chronic Lung Allograft Dysfunction: preliminary data of an Italian monocentric cohort** Sara Lettieri (Pavia, Italy), Eleonora Bozza, Cecilia Bagnera, Sara Bozzini, Valentina Vertui, Stefania Croce, Chiara Valsecchi, Elisa Lenta, Antonia Avanzini, Federica Meloni, Patrizia Comoli

OA4343	**Donor-derived cell-free DNA in chronic lung allograft dysfunction phenotypes** Hanne Beeckmans (Leuven, Belgium), H De Loor, Tessa Goeminne, Nilufer Acet Öztürk, Saskia Bos, Pieterjan Kerckhof, Janne Kaes, Vincent Geudens, Emanuela Cortesi, Céline Aelbrecht, Astrid Vermaut, Lynn Willems, Marie Vermant, Tinne Goos, Gitte Aerts, Charlotte Hooft, Youssry Mohamady, Xin Jin, Jan Van Slambrouck, Laurens Ceulemans, Laurent Godinas, Maarten Naesens, Bart Vanaudenaerde, Robin Vos
OA4344	**Prediction of Chronic Lung Allograft Dysfunction by Serum KL-6 Levels** Marta Arjona Peris (Barcelona, Spain), Alberto Mendoza-Valderrey, Victoria Ruiz, Berta Saez-Gimenez, Marta Zapata-Ortega, Manuel Lopez-Meseguer, Maria Deu, Susana Gomez-Olles, Carlos Bravo, Cristina Berastegui
OA4345	**Effects of extracorporeal photo-apheresis in CLAD patients: PBMCs release of exosomal-miRNas, cytokines and growth factors** Sara Bozzini (Pavia, Italy), Cecilia Bagnera, Eleonora Bozza, Claudia Del Fante, Cesare Perotti, Federica Meloni
OA4346	**The local immune response after murine lung transplantation** Pieterjan Kerckhof (Leuven, Belgium), Janne Kaes, Jin Xin, Celine Aelbrecht, Vincent Geudens, Arno Vanstapel, Charlotte Hooft, Lynn Willems, Jan Van Slambrouck, Lucia Aversa, Hanne Beeckmans, Gitte Aerts, Astrid Vermaut, Marta Zapata, Dirk Van Raemdonck, Yousry Mohamady, Laurent Godinas, Laurens De Sadeleer, John Mdonough, Laurens Ceulemans, Robin Vos, Bart Vanaudenaerde, Yildrim Önder, Francesca Polverino, Joselyn Rojas Quintero, Juan Cala Garcia
OA4347	**Flow-cytometric assessment of T cell response to monitor immunosuppression** Torstein Watne (OSLO, Norway), Inga Leuckfeld, Arnt E. Fiane, Are M. Holm
OA4348	**Significance of chest CT opacities prior to CLAD onset in restrictive allograft syndrome** Hanne Beeckmans (Leuven, Belgium), Pieterjan Kerckhof, Janne Kaes, Saskia Bos, Geert Verleden, Lieven Dupont, Laurent Godinas, Laurens Ceulemans, Dirk Van Raemdonck, Bart Vanaudenaerde, Robin Vos
OA4349	**Discussion and Q&A** All Speakers

Amber 3+4 — Session 428 — 11:10 - 14:00

Skills workshop: SW14 Thoracic ultrasound basic principles

Aims : To describe the current use of thoracic ultrasound and to provide participants with the opportunity to perform this technique using training models, simulators, volunteers and patients.

Disease(s) : Thoracic oncology | Interstitial lung diseases

Tag(s) : Clinical

Chairs : John Wrightson (Oxford, United Kingdom)

11:10	**Introduction** John Wrightson (Oxford, United Kingdom)	**4350**
11:40	**Normal Thoracic Cavity** Morten Bendixen (Skejby, Denmark)	**4351**
11:40	**Pleural effusion and/or pleural thickening** Giovanni Volpicelli (Torino (TO), Italy), Pia Iben Pietersen (Odense C, Denmark)	**4352**
11:40	**Case studies** Radhika Banka (Mumbai (Maharashtra), India)	**4353**
11:40	**Guided interventions** Gilles Mangiapan (Creteil, France), Dinesh Addala (Oxford, United Kingdom)	**4354**

Studio (White) — Session 429 — 11:45 - 13:20

Year in review: Scientific year in review

Aims : to provide an overview of basic and translational scientific highlights and major achievements in the respiratory field within the past year, focusing on abnormal lung tissue damage and repair; to provide an overview of various key publications that are expected to have a major impact on the respiratory field and with high clinical relevance based on promising results in preclinical models; to cover a variety of pulmonary diseases; to discuss the potential of novel therapeutic strategies to be translated into the clinic.

Disease(s) : Airway diseases | Interstitial lung diseases | Respiratory infections

Method(s) : Cell and molecular biology

Tag(s) : Translational

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Respiratory critical care physician, Paediatrician, Pathologist, Scientist (basic, translational)

Chairs : Sara Cuevas Ocaña (Nottingham, United Kingdom), H. Irene Heijink (Groningen, Netherlands)

11:45	**Chronic obstructive pulmonary disease pathogenesis: understanding the contributions of gene-environment interactions across the lifespan in abnormal lung tissue damage and repair** Rosa Faner Canet (Barcelona, Spain)	**4355**
12:00	**Novel insights into the defective alveolar niche in chronic lung disease** Speaker to be confirmed	**4356**
12:15	**Discussion and Q&A** All Speakers	**4357**
12:30	**Break** All Speakers	**4358**
12:35	**Novel proregenerative and antiageing targets for the treatment of fibrotic lung disease** Melanie Konigshoff (Pittsburgh, United States)	**4359**
12:50	**Tissue barrier dysfunction as a therapeutic target in pathogen-associated respiratory failure** Wolfgang M. Kübler (Berlin, Germany)	**4360**
13:05	**Discussion and Q&A** All Speakers	**4361**

12:15-13:15
INDUSTRY LUNCHTIME SYMPOSIUM SEE PAGE 1

PS-1 in poster area Session 435 12:30 - 14:00

Poster session: Clinical problems in respiratory medicine (1)

Disease(s) : Airway diseases | Interstitial lung diseases | Thoracic oncology | Respiratory critical care

Method(s) : General respiratory patient care | Pulmonary function testing | Cell and molecular biology | Epidemiology | Public health | Imaging | Palliative care

Tag(s) : Clinical

Chairs : Margarida Afonso (Castelo Branco, Portugal), Chair to be confirmed

PA4379	**Comparison of functional status in patients who have post-COVID lung injury or idiopathic pulmonary fibrosis** Deniz Kizilirmak (Manisa, Turkey), Secil Sari, Fatma Can, Yavuz Havlucu
PA4380	**Can biomarkers predict survival in idiopathic pulmonary fibrosis?** Abdullah Kayikci (Eskisehir, Turkey), Fusun Alatas, Huseyın Yıldırım
PA4381	**Characteristics in patients with Progressive Fibrosing Interstitial Lung Disease (PFILD) treated with Nintedanib: data from a specialist centre** janet johnston (Manchester, United Kingdom), Lachlan Stranks, Kate Newman, Theresa Garfoot, Laurence Pearmain, Stefan Stanel, Conal Hayton, Colm Leonard, Greaves Melanie, Pilar Rivera-Ortega
PA4382	**COPD assessment test (CAT) in patients with COPD and compensated heart failure** Bohdana Basina (Dnipropetrovsk, Ukraine), Nataliia Sanina, Tetyana Pertseva, Tamara Turlyun
PA4383	**Unexplained or refractory chronic cough and mental health disorders: review of this relationship and response to pregabalin therapy** Mathieu Saint-Pierre (Ottawa, Canada)
PA4384	**Factors involved in poor asthma medication adherence and barriers to the control of the disease** Younes Asma (Sfax, Tunisia), Rahma Gargouri, Souha Abdenneji, Rim Khemakhem, Ilhem Yangui, Walid Feki, Sammy Kammoun
PA4385	**Humoral and cellular immunity monitoring of Sinopharm/BBIBP COVID-19 vaccine** Zhangkai Cheng (Guangzhou, China), Huimin Huang, Peiyan Zheng, Mingshan Xue, Zhiman Liang, Baoqing Sun
PA4386	**Exploring secondary breathlessness outcomes: the Morphine vs Placebo trial** Diana Ferreira (Adelaide (SA), Australia), Magnus Ekstrom, Vanessa Brunelli, Sandra Louw, Philip Mccloud, Miriam Johnson, Katherine Clark, David Currow
PA4387	**Oxygen prescribing: can we meet the desired standards?** Laura White (Manchester, United Kingdom), Kamal Ibrahim, Zartasht Carmichael, Kyle Cromey

PA4388 **Responder rates in patients with acute cough treated with ivy leaves dry extract clearly exceed placebo response**
Ralph Mösges (Köln, Germany), Esther Raskopf, Andreas Völp

PA4389 **A Composite Screening Method to maximise the Detection-Rate of Obstructive Sleep Apnoea in Train Drivers**
Syeda Nafisa (Nottingham, United Kingdom), Lanre Ogunyemi, Tanya Stacey, Milind Sovani

PA4390 **Rigorous cardiac assessment helps clarify causes of recurrent admission in patients with COPD**
Joseph Kibbler (Carlton, United Kingdom), Eduwin Pakpahan, David Ripley, Stephen C Bourke, John Steer

PA4391 **Efficacy of Blonanserin Transdermal Patch on Terminal Delirium in Patients with Respiratory Diseases**
Katsutoshi Ando (Meguro, Japan), Ayumi Suzuki, Azumi Motosaku

PA4392 **Knowledge of COPD among Adults in Saudi Arabia's Eastern Province: An interim Results**
Jaber S. Alqahtani (Dammam, Saudi Arabia), Areej Hassan Alamri, Roaa Saleh Bajahlan, Afrah Fahad Alanazi, Asalah Ahmed Hakami

PA4393 **Factors associated with treatment failure in an adult population of chronic coughers**
Alessia Catalisano (Firenze, Italy), Mariangela Cascio Mariana, Claudia Mannini, Guja Bernacchi, Giovanni Colapietro, Giovanni Fontana, Federico Lavorini

PA4394 **Respiratory symptoms (RS) and pulmonary function (PF) in patients (pts) with chronic lymphoproliferative diseases (CLPD)**
Kateryna Gashynova (Dnipro, Ukraine), Ganna Usenko

PA4395 **Characterisation of progressive fibrosing phenotype (PF-ILD) in patients with hypersensitivity pneumonitis (HSP)**
Ahmed Suleman Haque (Gillingham, United Kingdom), Katherine Brignall, Shanthi Paramothayan, Vijayakumar Ganesh

PA4396 **Bronchiolitis obliterans syndrome after hematopoietic stem cell transplantation - single center experience**
Özlem Isik (Ankara, Turkey), Güldane Cengiz Seval, Serhat Erol, Selami Koçak Toprak, Özlem Özdemir Kumbasar

PA4397 **Biologic agents in idiopathic hypereosinophilic syndrome: a case series**
Ourania Papaioannou (Patras, Greece), Theodoros Karampitsakos, Eirini Zarkadi, Panagiota Tsiri, Electra Koulousousa, Eva Theochari, Vasilina Sotiropoulou, Georgios Tsirikos, Ioannis Christopoulos, Matthaios Katsaras, Elli Malakounidou, Vassiliki Georgiopoulou, Kyriakos Karkoulias, Dimosthenis Lykouras, Alexandros Kaparianos, Dionysios Papalexatos, Fotios Sampsonas, Argyrios Tzouvelekis

PA4398 **Blood biomarkers in patients with Alpha-1 Antitrypsin Deficiency from the EARCO CRC Registry**
Cristina Aljama Vizcarra (Reus, Spain), Alexa Nuñez, Cristina Esquinas, Hanan Tanash, Eva Bartošovská, Gerard Orriols, Georgina Farago, Galo Granados, Miriam Barrecheguren, Marc Miravitlles

PS-10 in poster area Session 436 12:30 - 14:00

Poster session: Subverted inflammation and remodelling in defining the pathogenesis of airways disease

Disease(s) : Airway diseases

Method(s) : Cell and molecular biology Imaging Endoscopy and interventional pulmonology

Tag(s) : Basic science, Translational

Chairs : Susanne Krauss-Etschmann (Borstel, Germany), Patricia Ramos-Ramírez (Glassboro, United States)

PA4399 **Claudin-3 deficiency attenuated ovalbumin-induced airway hyperresponsiveness and eosinophilic airway inflammation in mice**
Ayaka Shiota (, Japan), Yumiko Ishii, Keiko Kan-O, Tomohiro Ogawa, Norio Yasamamoto, Seiji Shinozaki, Storu Fukuyama, Koichiro Matsumoto, Sachiko Tsukita, Isamu Okamoto

PA4400 **Regulation of eosinophil function in allergic airway inflammation by lysosome**
Yinling Han (Hangzhou, China), Yun Zhao, Songmin Ying, Wen Li, Zhihua Chen, Huahao Shen

PA4401 **Effect of IL-3, IL-5 and GM-CSF on reactive oxygen species production by blood eosinophil subtypes in allergic asthma**
Airidas Rimkunas (Kaunas, Lithuania), Andrius Januskevicius, Egle Vasyle, Jolita Palacionyte, Kestutis Malakauskas

PA4402 **Chemokine Receptor CCR1: A New Target for Asthma Treatment**
Huahao Shen (Hangzhou, China), Zhehua Shao, Chao Zhang, Xufei Du, Yan Zhang, Songmin Ying

PA4403 **Biased signaling of chemokine receptor CCR1 in asthma**
Zhehua Shao (Hangzhou, China), Qingya Shen, Bingpeng Yao, Songmin Ying, Yan Zhang, Huahao Shen

PA4404 **Airway inflammation alters mast cell-related responses in isolated guinea pig intra-lobular bronchi**
Jielu Liu (Vallentuna, Sweden), Yujiao Xiang, Mu Nie, Anthony Wong, Jesper Säfholm, Mikael Adner

PA4405 **Defining the prostanoid component in mast cell-dependent constriction of isolated human small airways**
Jesper Säfholm (Solna, Sweden), Sven-Erik Dahlén, Mikael Adner

PA4406 **Biological and biochemical analysis of T cell derived bronchoconstriction**
Akio Mori (Sagamihara (Kanagawa prefecture), Japan), Satoshi Kouyama, Akemi Ohtomo-Abe, Yuichiro Kawasaki, Maki Iwata, Yuto Nakamura, Yuto Hamada, Yosuke Kamide, Kiyoshi Sekiya, Yuma Fukutomi, Takayuki Ohtomo, Osamu Kaminuma

PA4407 **Peripheral innate lymphoid cell and T cell phenotypes are associated with treatable traits in young adults with asthma**
Maura Kere (Stockholm, Sweden), Sophia Björkander, Christopher Andrew Tibbitt, Jenny Mjösberg, Erik Melén

PA4408 **IgE+ PCs arise in lung draining lymph nodes during HDM exposure, acquire distinct phenotype over time and accumulate in the bone marrow after chornic allergic inflammation**
Andrea Vecchione (Tarrytown, United States), Navneet Kaur, Li-Hong Ben, Andrew Murphy, Matthew Sleeman, Andre Limnander, Seblewongel Asrat, Jamie Orengo

PA4409 **NLRP3 affects airway responsiveness in an OVA and ozone-induced asthma model with neutrophil infiltration through regulation of IL-1β**
Yishu Xue (Shanghai, China), Yilin Pan, Lei Zhao, Huijuan Hao, Min Zhang, Wuping Bao

PA4410 **Development of OVA induced allergic airway inflammation emerge with gut inflammatory manifestations**
Balachandar Selvakumar (Sharjah, United Arab Emirates), Mariam Wed Eladham, Shirin Hafezi, Narjes Sahebsharif-Askari, Ola Salam Bayram, Fatemeh Sahebsharif-Askari, Saleh Ibrahim, Rabih Halwani

PA4411 **The role of Gln27Glu polymorphism of the β2-adrenoreceptor gene in asthma development**
Anna Kovchun (Sumy, Ukraine), Vladyslava Kachkovska, Liudmyla Prystupa

PA4412 **Early-life dysbiosis increases airway hyperresponsiveness in mice**
Schmaiel Shirdel (Lübeck, Germany), Jaclyn W. Mcalees, Adrienne N. Wilburn, Yves Laumonnier, Jan Rupp, Simon Graspeuntner, Peter König, Ian P. Lewkowich, Inken Schmudde

PA4413 **The role of mTOR in Particulate Matter induced steroid-resistant asthma mouse model**
Hyun Seung Lee (Seoul, Republic of Korea), Heung-Woo Park, Kyoung-Hee Lee

PA4414 **Loss of small airway attachments during ageing in healthy subjects**
Andrew Higham (Manchester (Greater Manchester), United Kingdom), Josiah Dungwa, Dave Singh

PA4415 **Late Breaking Abstract - Effect of inhaled triple therapy on small airway remodeling in patients with moderate to severe COPD accessed by endobronchial optical coherence tomography**
Guo Zuyuan (Guangzhou, China), Zhou Ziqing, Li Shiyue, Zhong Nanshan

PA4416 **Profiling of B cell signatures and eosinophils in COPD lung tissues**
Julia Mercier (Lund, Sweden), Renan Marrichi Mauch, Premkumar Siddhuraj, Manar Alyamani, Jimmie Jönsson, Caroline Lindö, Caroline Sanden, Hodan Abdshill, Daisy Bornesund, Jonas Sten Erjefält

PA4417 **Profiling of CD4 and CD8 T cells in relation to eosinophil infiltration in COPD lungs**
Renan M. Mauch (Lund, Sweden), Julia Mercier, Manar Alyamani, Premkumar Siddhuraj, Jimmie Jönsson, Johan Ahlgren, Caroline Lindö, Caroline Sandén, Daisy Bornesund, Hodan Abdshill, Jonas S. Erjefält

PA4418 **Association of Th1/Th2 phenotype with changes in the frailty status among COVID-19 older survivors**
Daniela Cataneo (Mexico City, Mexico), Leslie Chavez-Galan, Ranferi Ocaña-Guzman, Armando Castorena-Maldonado, Ivette Buendía-Roldán

PS-11 in poster area — Session 437 — 12:30 - 14:00

Poster session: Chronic cough, bronchitis, and major chronic respiratory diseases

Disease(s) : Airway diseases Thoracic oncology

Method(s) : Public health Epidemiology General respiratory patient care Pulmonary function testing

Tag(s) : Clinical

Chairs : Vanessa Garcia-Larsen (Baltimore, United States), Imran Satia (Hamilton, Canada)

PA4419 **Is refractory chronic cough a genetic disease?**
Laurent Guilleminault (Toulouse Cedex, France), Pauline Chazelas, Boris Melloni, Corinne Magdelaine, Thomas Villeneuve, Danielle Brouquières, Anne-Sophie Lia, Laurent Magy

PA4420	**A register-based study; Chronic Chough in the adult population in Sweden** Lotta Walz (Linkoping, Sweden), Össur Emilsson, Kristoffer Illergård, Henrik Johansson
PA4421	**Comparison of differences in refractory and unexplained chronic cough patients in Germany: VICHAS study** Christina Jannowitz (Haar, Germany), Peter Kardos, Heinrich Worth, Martin Horack, Ulrich Köhler, Barbara Karmann, Adrian Gillissen
PA4422	**Heterogeneity in reporting respiratory symptoms: a global survey** Alexander Müller (Wien, Austria), Hazim Abozid, Emiel Wouters, Sylvia Hartl, Daisy Janssen, André Amaral
PA4423	**Heritability of cough across two generations: the RHINESSA study** Össur Ingi Emilsson (Uppsala, Sweden), Henrik Johansson, Ane Johannessen, Christer Janson, Andreas Palm, Karl Franklin, Anna Oudin, Francisco Gómez Real, Mathias Holm, Thorarinn Gislason, Rain Jõgi, Vivi Schlünssen, Andrei Malinovschi, Cecilie Svanes, Magnus Ekström
PA4424	**The association between indoor airborne bacteria and allergic respiratory diseases – a Northern European study** Christine Cramer (Aarhus, Denmark), Hesham Amin, Christer Janson, Rain Jogi, Tejs Ehlers Klug, Henrik Albert Kolstad, Dan Norback, Torben Sigsgaard, Tina Šantl-Temkiv, Hulda Thorarinsdottir, Randi Jacobsen Bertelsen, Vivi Schlünssen
PA4425	**K-means cluster analysis of characteristic patterns of allergen in different age: real life study** Lei Zhao (Shanghai, China), Yong Ji, Jie Fang, Yingying Zhang, Xin Zhou, Junfeng Yin, Min Zhang, Wuping Bao
PA4426	**Maternal asthma and the role of stress, sensitisation, and lung function on pregnancy outcomes – a cohort study** Gustaf Rejnö (Bromma, Sweden), Cecilia Lundholm, Bronwyn Brew, Catarina Almqvist
PA4427	**Comorbidity between inflammatory bowel disease and asthma and allergic diseases - a genetically informed study** Tong Gong (Stockholm, Sweden), Bronwyn Brew, Cecilia Lundholm, Awad Smew, Arvid Harder, Ralf Kuja-Halkola, Jonas F Ludvigsson, Yi Lu, Catarina Almqvist
PA4428	**Prevalence of refractory and unexplained chronic cough patients in Germany: VICHAS study** Christina Jannowitz (Haar, Germany), Peter Kardos, Heinrich Worth, Martin Horack, Barbara Karmann, Adrian Gillissen
PA4429	**Outcomes in pregnant Ontarians with asthma and allergic diseases during COVID-19** Emilie Terebessy (Toronto (ON), Canada), Jingqin Zhu, Kimball Zhang, Cornelia M. Borkhoff, Andrea Gershon, Tetyana Kendzerska, Smita Pakhale, Nicholas T. Vozoris, Christopher Licskai, Teresa To
PA4430	**Blood basophils, nocturnal cough and asthma in the Constances cohort** Rachel Nadif (Villejuif, France), Joseph Henny, Tajidine Tsiavia, Celine Ribet, Marcel Goldberg, Marie Zins, Laurent Orsi, Nicolas Roche
PA4431	**Impact of chronic pain in adult-onset asthma** Sofia Winsa Lindmark (Luleå, Sweden), Caroline Stridsman, Linnea Hedman, Nikolai Stenfors, Tomi Myrberg, Anne Lindberg, Eva Rönmark, Helena Backman
PA4432	**Characteristics of severe asthma patients included in the French Palomb Cohort.** Nolwenn Jestin-Guyon (Bordeaux, France), El Hassane Ouaalaya, Annaig Ozier, Cécilia Nocent, Alain Bernady, Laurent Nguyen, Emilie Berteaud, Magali Dupuy-Grasset, Frédéric Le Guillou, Boris Melloni, Laurent Portel, Anne Prud'Homme, Alain Didier, Mathieu Molimard, Laurent Guilleminault, Chantal Raherison-Semjen
PA4433	**Adults with a history of severe childhood asthma compared to the background population: A registry-based study** Osman Savran (Hvidovre, Denmark), Charlotte Suppli Ulrik, Klaus Bønnelykke
PA4434	**Risk factors associated with symptoms of asthma in India** Nishtha Singh (Jaipur (Rajasthan), India), Sheetu Singh, Meenu Singh, Sundeep Salvi, Daya Krishan Mangal, Shally Awasthi, Padukudru Anand Mahesh, Sushil K. Kabra, Sabir Mohammed, Thevaruparambil U. Sukumaran, Aloke G. Ghoshal, Monica Barne, Sanjeev Sinha, Sanjay K. Kochar, Udaiveer Singh, Kamalesh Kumar Patel, Arvind Kumar Sharma, Bhushan Girase, Anil Chauhan, Niranjan Sit, Jayaraj B. Siddaiah, Virendra Singh
PA4435	**Prevalence and Epidemiological Characteristics of Incidental Pulmonary Nodules in China: A Prospective Multicenter Trial of 10,560 Cases** Wenhua Liang (Guangzhou, China), Bo Wang, Jian Zhang, Dan Liu, Minhua Peng, Jianxing He, Jianbing Fan, Nanshan Zhong, - On Behalf Of The Nct 03651986 Trial Investigators
PA4436	**Estimation of RSV-attributable hospitalizations and deaths in Spain between 2015–2019** Mariana Haeberer (ALCOBENDAS, Spain), Antoni Torres, Robin Bruyndonckx, Aleksandra Polkowska-Kramek, Charles Nuttens, Francesca Lemme, Thao Mai Phuong Tran, Caihua Liang, Cristina Mendez Diaz, Bradford Gessner, Elizabethh Begier

PA4437	**Clinical Characteristics of Non-Malignant Effusions: Results from the ERS International Collaborative Effusion (ICE) Database** Hugh Welch (Bristol, United Kingdom), J Kerkhoff, J Janssen, S Bielsa, C Civit, J Porcel, K Fjaellegaard, J Petersen, U Bodtger, E Grabczak, R Krenke, M Ellayah, D Addala, R Hallifax, J Wrightson, N Rahman, K Jackson, E Pellas, I Khan, M Chohan, A Aujayeb, G Labarca, I Dhaliwal, M Mitchell, A Rozman, M Marc-Malovrh, S Anevlavis, M Foudrakis, P White, R Bhatnagar, N Maskell

PS-12 in poster area Session 438 12:30 - 14:00

Poster session: Epidemiology in pulmonary function and sleep-disturbed breathing in children

Disease(s) : Sleep and breathing disorders

Method(s) : General respiratory patient care Physiology Epidemiology Public health Pulmonary function testing Imaging Cell and molecular biology Respiratory intensive care

Tag(s) : Clinical

Chairs : Refika Hamutcu Ersu (Ottawa, Canada)

PA4438	**Utility of overnight oximetry indices in the evaluation of children with suspected Obstructive Sleep Apnea** Yu Qian Koh (Singapore, Singapore), Arun Pugalenthi, Yi Hua Tan, Ooh Hoe Teoh, Zai Ru Cheng, Duo Tong Cheng, Anne Goh, Oh Moh Chay, John Carson Allen Jr, S G Tan, M Lim, Jasmine Tan, Biju Thomas
PA4439	**One night home pulse oximetry is sufficient in the investigation of sleep disordered breathing** Jane Doran (Dublin, Ireland), Susan Keogh, Aidan Beegan, Ruth O'Reilly
PA4440	**Clinical characteristics of children with positive Pediatric Sleep Questionnaire with or without hypoxemia** Magdalena Vocos (Ciudad Autónoma Buenos Aires, Argentina), Gimena Donth Leger, Carlos Velasco, Tania Flores, Doris Primerose, Marcela Roque, Juan Manuel Figueroa
PA4441	**Nocturnal Carbon Dioxide recording in children without comorbidities according to obstructive sleep apnoea** Julie Cassibba (Paris, France), Houda Guillo-Saleh, Marie-Claude La Rocca, Nicole Beydon
PA4442	**Comparison of mobile video clips, questionnaire and polygraphy parameters for detection of pediatric obstructive sleep apnea** Refika Hamutcu Ersu (Ottawa, Canada), Henrietta Blinder, Naomi Dussah, Vid Bijelic, Nick Barrowman, Sherri Lynne Katz
PA4443	**Idiopathic Apnea In Term Newborns And Infants Under 6 Months Of Age: A Multicenter Study** Jean-marc Gilardoni (Nice, France), Julie Mazenq, Anne-Marie Maillote, Isabelle Pin, Geraldine Labouret, Océane Cheyrou, Antoine Tran, Jessica Taytard, Lisa Giovannini-Chami
PA4444	**Inter-rater reliability of video clips to assess for obstructive sleep apnea in children** Refika Hamutcu Ersu (Ottawa, Canada), Henrietta Blinder, Naomi Dussah, Vid Bijelic, Nick Barrowman, Sherri Lynne Katz
PA4445	**Home sleep studies in children with neurodisabilities: any impact on clinical decision making?** Mihaela Diaconu (London, United Kingdom), Andrew Bush, Hui-Leng Tan
PA4446	**Evaluation of sleep disordered breathing in children with allergic rhinitis** Zeynep Reyhan Onay (Istanbul, Turkey), Sinem Toprak, Deniz Mavi, Sinem Can Oksay, Gulay Bilgin, Yasemin Mocan Caglar, Begum Yoruk, Ozge Ulgen, Saniye Girit
PA4447	**Reproducibility of home spirometry in children with neuromuscular disease** miriam murlis (cambridge, United Kingdom), Laura Lowndes, Ashleigh Gibby, Theofilos Polychronakis
PA4448	**Validation of the conditional change score for FEV1 in children with asthma** Andrew Zikic (Toronto, Canada), David Wilson, Lucy Perrem
PA4449	**Oxygen therapy in infants with extreme periodic breathing** Luana Nosetti (Luino (VA), Italy), Marta Vergani, Marco Zaffanello, Massimo Agosti, Simri Sleep Disordered Breathing Group
PA4450	**The effect of being born moderate-late preterm on lung function at 9 years** Cassidy Du Berry (Melbourne, Australia), Liam Welsh, Nicole Westrupp, Tara Fitzgerald, Rheanna Mainzer, Sarath Ranganathan, Lex Doyle, Jeanie Cheong
PA4451	**Early-life risk-factors determine distinct lung function trajectories for those born preterm** Elizabeth Smith (Beaconsfield (WA), Australia), Rachel Foong, Naomi Hemy, Graham Hall, Andrew Wilson, Shannon Simpson

PA4452	**Progression of structural lung abnormality from 11 to 19 years in those born <32 weeks.** Andrew Wilson (Perth (WA), Australia), Elizabeth Smith, Conor Murray, Jasmine Grdosic, Naomi Hemy, Graham Hall, Shannon Simpson
PA4453	**Investigating the relationship between inflammatory biomarkers and lung function in survivors of very preterm birth** Denby Evans (Nedlands, Australia), Jake Puglia, Rhea Urs, Tiffany Bradshaw, Naomi Hemy, Elizabeth Smith, Shannon Simpson
PA4454	**Do childhood cancer survivors have reduced pulmonary function compared to healthy individuals?** Elisabeth Edvardsen (Oslo, Norway), Mari Bratteteig, Norunn Iren Matthews, Thomas Halvorsen, Ellen Ruud, Trine Stensrud
PA4455	**Could chronic obstructive pulmonary disease be a pediatric condition?** Amani SAYHI (tunis, Tunisia), Khansa Derbel, Soumaya Khaldi, Balsam Barkous, Yosra Abdelhedi, Arwa Yahyaoui, Mariem Abdesslem, Fatma Guezguez, Ines Ghannouchi, Sonia Rouatbi
PA4456	**Efficacy of melatonin in children with chronic somatic cough** Ahmad Kantar (Bergamo (BG), Italy)
PA4457	**Late Breaking Abstract - A novel CPAP device with an integrated oxygen concentrator for low-resource countries: in vitro validation and usability test in field** Sofia Poletto (Milan, Italy), Emanuela Zannin, Giovanni Putoto, Moses Obizu, Samuel Okori, Jerry Ictho, Peter Lochoro, Raffaele L. Dellacà

PS-13 in poster area — Session 439 — 12:30 - 14:00

Poster session: Non-cystic fibrosis bronchiectasis and other chronic lung infections in children

Disease(s) : Airway diseases Interstitial lung diseases

Method(s) : General respiratory patient care Imaging Pulmonary function testing Epidemiology Public health Cell and molecular biology

Tag(s) : Clinical, Translational

Chairs : Stefan Unger (Edinburgh (Edinburgh), United Kingdom)

PA4458	**Is it time to change diagnostic criteria for paediatric bronchiectasis?** Aisha Mir (Edinburgh, United Kingdom), Kirstin Unger, Alan Quigley, Stefan Unger
PA4459	**Paediatric non-CF bronchiectasis: a cross-sectional study** HELEANNE VAN KUIJK (Leicester, United Kingdom), Manisha Ramphul
PA4460	**International consensus statement on core outcomes for clinical trials in children and adolescents with bronchiectasis – Child-BEAR-net ERS CRC** Carolina Arez Constant (Lisboa, Portugal), Jeanette Boyd, Andrew Bush, Adam T Hill, Zena Powell, Angela Zacharasiewicz, Efthymia Alexopoulou, Andrew J Collaro, James D Chalmers, Kostas Douros, Rebecca Fortescue, Matthias Griese, Jonathan Grigg, Andreas Hector, Bulent Karadag, Oleksandr Mazulov, Fabio Midulla, Alexander Möller, Marijke Proesmans, Christine Wilson, Stephanie T Yerkovich, Keith Grimwood, Ahmad Kantar, Anne B Chang
PA4461	**Predictive factors of bad outcomes in pediatric bronchiectasis** Sabrine Louhaichi (Ariana, Tunisia), Besma Hamdi, Ella Nemsi, Tarek Cherif, Khouloud Chaibi, Jamel Ammar, Agnès Hamzaoui
PA4462	**Do distinct etiologies cause clinical differences in non-CF bronchiectasis in children?** Meltem Akgül erdal (ANKARA, Turkey), Halime Nayır Büyükşahin, Ismail Güzelkaş, Birce Sunman, Didem Alboğa, Hanife Avcı, Nagehan Emiralioğlu, Ebru Yalçın, Deniz Doğru, Nural Kiper, Uğur Özçelik
PA4463	**Does timing of diagnosis effect outcome in primary ciliary dyskinesia?** Dvir Gatt (Toronto, Canada), Michelle Shaw, Fiona Kritzinger, Melinda Solomon, Sharon Dell, Felix Ratjen
PA4464	**Nasal Mucociliary Clearance of 99mTc-albumin colloid: a quantitative test of nasal ciliary function and potential outcome parameter in primary ciliary dyskinesia** June Kehlet Marthin (Bagsvaerd, Denmark), Kim Gjerum Nielsen, Jann Mortensen
PA4465	**Use of Immunofluorescence Staining in Primary Ciliary Dyskinesia Diagnosis** Mine Kalyoncu (Istanbul, Turkey), Rim Hjeij, Mürüvvet Yanaz, Aynur Gulieva, Merve Selçuk, Şeyda Karabulut, Neval Metin Çakar, Pınar Ergenekon, Ela Erdem Eralp, Yasemin Gokdemir, Heymut Omran, Bulent Karadağ
PA4466	**Repeating ciliary videomicroscopy improves the specificity for PCD diagnosis** Lionel Benchimol (Liege, Belgium), Noemie Bricmont, Romane Bonhiver, Doriane Calmes, Anne-Lise Poirrier, Marie-Christine Seghaye, Renaud Louis, Philippe Lefebvre, Celine Kempeneers

PA4467	**Genomics of Haemophilus influenzae strains in a paediatric Primary Ciliary Dyskinesia cohort** Klara Schmidthaler (Vienna, Austria), René Gaupmann, Magda Diab-El Schahawi, Birgit Willinger, Zsolt Szépfalusi, Eleonora Dehlink
PA4468	**Disease manifestations in siblings with primary ciliary dyskinesia** Dvir Gatt (Toronto, Canada), Michelle Shaw, Fiona Kritzinger, Melinda Solomon, Sharon Dell, Felix Ratjen
PA4469	**Patterns of E-cigarette Usage Among Adolescents with Primary Ciliary Dyskinesia and Cystic Fibrosis** Dvir Gatt (Toronto, Canada), Rahul Verma, Jacob Mccoy, Lyzette Garcia Bonila, Andrew Zikic, Shaima Alkhouri, Rawan Alfouzan, Kate Gent, Jackie Chiang
PA4470	**Nurse led Education on e-cigarette use in adolescents.** Mira Osinibi (London, United Kingdom), Cara Bossley
PA4471	**A novel pediatric polycystic lung disease caused by CCR2 deficiency** Bruce Trapnell (Cincinnati, United States), Anna-Lena Neehus, Marija Landekic, Darawan Rinchai, Patricia Panikulam, Quentin Philippot, Tom Le Voyer, Masato Ogishi, Jérémie Rosain, Mana Momenilandi, Carlos Andrés Arango Franco, Marta Martin-Fernandez, Taushif Khan, Jonathan Bohlen, Jeremy Manry, Ji Eun Han, Alexandre Deslys, Tania Gajardo-Carrasco, Camille Soudée, Melanie Migaud, Yoann Seeleuthner, Eirini Nikolouli, Simin Seyedpour, Hugues Begueret, Chantal Brouzes, Pablo Vargas, Nico Lachmann, Raphael Boire, Nico Marr, Dusan Bugonovic, Mohammadreza Modaresi, Larry Nogee, Daniel Craven, Iraj Mohamadzadeh, Nima Rezai, Mohammad Shahrooei, Stephanie Boisson-Dupuis, Fernando Sepulveda, Vivien Béziat, Nathalie Aladjidi, Laurent Abel, Philippe Gros, Danielle Malo, Lisa Young, Robin Deterding, Gail Deutsch, Brenna Carey, Jean-Laurent Casanova, Jacinta Bustamante
PA4472	**Multiple-breath washout for the detection of lung disease in patients with inborn errors of immunity** Leonie Marie Busack (Berlin, Germany), Stephanie Thee, Jobst Röhmel, Renate Krüger, Marcus A. Mall, Horst Von Bernuth, Mirjam Stahl
PA4473	**Respiratory care burden in children with aspiration** Christopher Edwards (Leeds (West Yorkshire), United Kingdom), Jennifer Unwin, Ayesha Jannat, Liz Franklin
PA4474	**Evaluation of sputum cultures in children with spinal muscular atrophy** Hagit Levine (Even Yehuda, Israel), Yoram Nevo, Julia Katz, Huda Mussaffi, Gabriel Chodick, Meir Mei-Zahav, Stafler Patrick Stafler, Guy Steuer, Ophir Bar-On, Hadas Mantin, Dario Prais, Sharon Aharoni
PA4475	**Effects of selumetinib treatment for neurofibromatosis type 1 on pulmonary function in children and young adults** Elettra Zuliani (Trieste, Italy), Sergio Ghirardo, Francesco Baldo, Irene Bruno, Andrea Magnolato, Egidio Barbi, Massimo Maschio
PA4476	**Late Breaking Abstract - Management of RRTIs in children with the Trained Immunity-based Vaccine MV130: A retrospective study** Laura Conejero Hall (Madrid, Spain), Karla Montalbán, Ana Cogollo, Patricia Girón De Velasco, Raquel Caballero, Miguel Casanovas, José Luis Subiza
PA4477	**Late Breaking Abstract - Bronchiolitis epidemiology and clinical features: a retrospective analysis** Luigi Matera (Rome, Italy), Raffaella Nenna, Enea Bonci, Antonella Frassanito, Laura Petrarca, Maria Giulia Conti, Greta Di Mattia, Enrica Mancino, Chiara Moriano, Fabio Midulla

PS-14 in poster area Session 440 12:30 - 14:00

Poster session: Lung transplantation

Disease(s) : Airway diseases | Pulmonary vascular diseases | Respiratory critical care | Interstitial lung diseases

Method(s) : Transplantation Physiology General respiratory patient care Respiratory intensive care Epidemiology Pulmonary function testing Pulmonary rehabilitation Cell and molecular biology Endoscopy and interventional pulmonology Imaging Surgery Palliative care

Tag(s) : Clinical, Translational

Chairs : Peter Jaksch (wien, Austria), Merel Hellemons (Rotterdam, Netherlands)

PA4478	**Central versus peripheral adaptations after lung transplantation in patients with end-stage chronic obstructive pulmonary disease** Jacob Peter Hartmann (København V, Denmark), Camilla Koch Ryrsø, Thomas Kromann Lund, Michael Perch, Pia Thaning, Lasse Gliemann, Ylva Hellsten, Gregers Winding Munch, Bente Klarlund Pedersen, Ronan Martin Griffin Berg, Ulrik Winnig Iepsen
PA4479	**ECG-based detection of an atrial cardiomyopathy allows identification of patients at risk for postoperative supraventricular arrhythmias after lung transplant** Paula Kuss (Freiburg, Germany), Martin Eichenlaub, Ina Hettich, Sebastian Fähndrich, Björn Frye, Daiana Stolz

PA4480	**Regional spirometry by electrical impedance tomography in the postoperative follow-up of Single-Lung Transplantation: Case series** Ignacio Fernández Ceballos (Buenos Aires, Argentina), Joaquin Ems, Miriam Gabriela Marcos, Leiniker Navarro Rey, Juan Martín Nuñez Silveira, Emilio Steinberg, Julieta Gonzalez Anaya, Indalecio Carboni Bisso, Graciela Svetliza, Maria Laura Orazi, Enrique Beveraggi, Marcos Las Heras, Gabriel Elias Vega
PA4481	**The association between neutrophil-lymphocyte ratio and short-term survival after lung transplantation.** Hyeon Kyeong Bae (seoul, Republic of Korea), Eun Young Kim, A La Woo, Moo Suk Park, Ha Eun Kim, Jin Gu Lee, Su Hwan Lee
PA4482	**MI-Edon study: the role of respiratory physiotherapy as a tool for the optimization of the lung donor.** Gonzalo Ballesteros Reviriego (Algeciras, Spain), Irene Bello Rodríguez, Eduardo Miñambres, Jose María Manciño, Bernat Planas Pascual, Joan Daniel Martí, Ángela Suarez, Joan Marcobal, Aroa Gómez Brey, Cristopher Mazo, María Deu, David Paredes, Gerard Sanchez, Marc Boada, Alba Gómez Garrido, Belén Garcés, Meritxell Peñalver, Adriana Martín, Andrea Pérez, Alberto Sandiumenge Camps
PA4483	**Survival of idiopathic pulmonary fibrosis patients treated with antifibrotics versus lung transplantation** Martina Šterclová (Praha, Czech Republic), Monika Zurkova, Vladimira Lostakova, Martina Plackova, Radka Mokosova, Vladimir Bartos, Martina Doubkova, Lubica Sykorova, Ladislav Lacina, Michaela Cimrova, Pavlina Lisa, Radka Bittenglova, Hana Suldova, Pavlina Musilova, Jana Psikalova, Tomas Dolezal, Petra Ovesna, Lucie Valentova-Bartakova, Robert Lischke, Martina Koziar-Vasakova
PA4484	**Peripheral airway monitoring in lung transplant recipients using IOS and MBW** Madeleine Driskel (Manchester, United Kingdom), John Blaikley, Karthik Santhanakrishnan, Catherine Fullwood, Rajamiyer Venkateswaran, Alex Horsley
PA4485	**Nezulcitinib (TD-0903), an inhaled JAK inhibitor reduces ConA-induced lung inflammation and lung injury in mice** Elad Kaufman (South San Francisco, United States), Reuben Sana, Joseph Chen, Matthew Frates, Ilaria Badagnani, Glenmar Obedencio, David Bourdet, Edmund Moran
PA4486	**Effect of paclitaxel and methotrexate associated with cholesterol-rich nanoemulsions on ischemia-reperfusion injury after unilateral lung transplantation in rats** Angela Battochio (São Paulo, Brazil), Elaine Tavares, Aristides Correia, Francine Almeida, Priscila Carvalho, Maria Guido, Paulo Pêgo-Fernandes, Raul Maranhão, Rogerio Pazetti
PA4487	**Pre-lung transplant VO2max predicts functional outcomes post-lung transplantation** Emma Bakelants (Kessel-Lo, Belgium), Hanne Beeckmans, Marius Brusselmans, Geert Verleden, Lieven Dupont, Laurent Godinas, Dirk Van Raemdonck, Laurens Ceulemans, Geert Celis, Iris Coosemans, Wim Janssens, Stephanie Everaerts, Robin Vos
PA4488	**Virtual home-based pre-habilitation program in lung transplant candidates** Tania Janaudis-Ferreira (Montréal (QC), Canada), Nicholas Bourgeois, Larry C Lands, Karina Prévost, Charles Poirier
PA4489	**Low baseline FVC predicts enhanced risk of CLAD and death in lung transplant recipients** Henrik Mangseth (Oslo, Norway), Michael Thomas Durheim, Inga Leuckfeld, Are Martin Holm
PA4490	**Functional pattern of baseline lung allograft dysfunction after lung transplantation.** Martin Bon (Cenon, France), Guillaume Verdy, Claire Bon, Elodie Blanchard, Julie Macey, Hadrien Golhen, Clement Boisselier, Benjamin Repusseau, Régis Seramondi, Patrick Reynier, Eline Bonnardel, Christelle Pellerin, Jerome Ridolfo, Eloise Gallo, Pierre Khan, Hadrien Roze, Arnaud Rodriguez, Yaniss Belaroussi, Benjamin Chevalier, Frederic Delcambre, Matthieu Thumerel, Jacques Jougon, Xavier Demant
PA4491	**Donor-derived cell-free DNA levels in combined heart-lung transplant recipients using a novel PCR-based assay.** Owais Tisekar (Bangalore, India), Md Moiz Lalani, Vijil Rahulan, Samuel Devi, Manjunath N, Menander M, Manish Sharma, Prabhat Dutta, Sandeep Attawar
PA4492	**Longitudinal monitoring of LCI in spirometrically stable lung transplant recipients** Madeleine Driskel (Manchester, United Kingdom), John Blaikley, Karthik Santhanakrishnan, Catherine Fullwood, Rajamiyer Venkateswaran, Alex Horsley
PA4493	**Repetitive remote ischemic conditioning (RIC) effect size (ES) on composite indices apropos to primary graft dysfunction (PGD)** Daniel Black (Chermside, Queensland, Australia), Liliana Black, Simon Black
PA4494	**Perspectives of an uncontrolled donation after circulatory death lung transplantation program** Alessandro Palleschi (Milano (MI), Italy), Valeria Musso, Alberto Zanella, Letizia Corinna Morlacchi, Valeria Rossetti, Marco Sacchi, Elena Benazzi, Tullia De Feo, Giuseppe Piccolo, Mario Nosotti
PA4495	**Machine-learning based BAL cytology of lung transplant patients** Michael Gerckens (München, Germany), Carlo Muemmler, Johannes Strodel, Gerald Burgstaller, Jürgen Behr, Nikolaus Kneidinger

PA4496 **End-of-life care for lung transplant recipients: a new role for palliative medicine.**
Letizia Corinna Morlacchi (Milano (MI), Italy), Maria Pappalettera, Valeria Rossetti, Ilaria Righi, Francesco Damarco, Mario Nosotti, Roberto Ercole Moroni Grandini, Francesco Blasi

PS-15 in poster area Session 441 12:30 - 14:00

Poster session: Techniques in respiratory physiology

Disease(s) : Pulmonary vascular diseases | Airway diseases | Interstitial lung diseases | Sleep and breathing disorders

Method(s) : Pulmonary function testing | Physiology | Imaging | Epidemiology

Tag(s) : Clinical

Chairs : Rachel Ong-Salvador (Amsterdam, Netherlands), Matthew Rutter (Cambridge (Cambridgeshire), United Kingdom)

PA4497 **Evaluating efficiency of autotitrating CPAP (continuous positive airway pressure): role of available tools**
Gianni Prest (Imperia (IM), Italy), Chiara Cardani, Serena Garibaldi, Silvia Tamborino, Francesco Balbi, Enrico Perretta

PA4498 **Use of a wearable sleep sensor in an OSA clinic: a service evaluation**
Rhodri Curtis (Cardiff, United Kingdom), Joleta Hooper-Lee, Alex Perkins

PA4499 **Development and validation of novel individualized FeNO cut-offs**
Rita Amaral (Porto, Portugal), Tiago Jacinto, Andrei Malinovschi, Christen Janson, Bernardo Sousa-Pinto, Anna-Carin Olin, Kjell Torén, Linda Ekerljung, Hannu Kankaanranta, Jörgen Syk, João A. Fonseca, Kjell Alving

PA4500 **Xe-MRI bronchodilator response to assess disease severity in patients with asthma and/or COPD**
Laurie Smith (Sheffield (South Yorkshire), United Kingdom), Helen Marshall, Alberto Biancardi, Guilhem Collier, Ho-Fung Chan, Dave Capener, Jody Bray, Demi Jakymelen, Laura Saunders, Joshua Astley, Bilal Tahir, Ryan Munro, Oliver Rodgers, James Ball, Paul Hughes, Smitha Rajaram, Andy Swift, Neil Stewart, Graham Norquay, Martin Brook, Leanne Armstrong, Latife Hardakar, Titti Fihn-Wikander, Rod Hughes, Jim Wild

PA4501 **Effects of adopting GLI reference equations on lung volumes interpretation**
Danny Brazzale (Macleod, Australia), Warren Ruehland, Celia Lanteri, Emma Smith

PA4502 **The FIVC should be used as an acceptable substitute for the FVC when evaluating the FVC in neuromuscular disease, experience in a clinical trial for adult myotonic dystrophy (DM)**
Kevin McCarthy (Matthews, United States), Carrie Heusner, Phd, Jose Ramos, Dawn Patterson, Phil Lake, Marc Baumle

PA4503 **Nebuliser characterisation with saline results in inaccurate methacholine PD20 values.**
James Dean (Holmes Chapel, United Kingdom), Dave Singh

PA4504 **Respiratory rate and chest wall motion assessment by a new 6-hour recording device**
Manuel D'Onofrio (Rome, Italy), Emiliano Musso, Vincenzo Ambrogi

PA4505 **The partial pressure of transcutaneous carbon dioxide can be monitored with a wearable**
Alessandra Angelucci (Milano, Italy), Sara Bernasconi, Luca Colombo, Mauro Contini, Paola Gugliandolo, Piergiuseppe Agostoni, Andrea Aliverti

PA4506 **Respiratory Sound Classification Of Four Lung Sounds Using Supervised and Self-supervised Learning**
Lee Sunju (Daejeon, Republic of Korea), Taeyoung Ha, Yunkyong Hyon, Chaeuk Chung, Yoonjoo Kim, Song-I Lee, Seong-Dae Woo

PA4507 **Role of lung function testing in investigation of persisting breathlessness following acute pulmonary embolus**
Jason Burge (Wolverhampton, United Kingdom), Joanna Shakespeare, Sarah Shuker, David G. Parr

PA4508 **Lung diffusion capacity in older and young endurance elite athletes**
Biljana Lazovic (Beograd, Republic of Serbia)

PA4509 **Diffusion Capacity: Equipment quality control**
Irene Steenbruggen (Zwolle, Netherlands), Peter De Laat

PA4510 **Smallest detectable difference of DLCO within clinical relevance?**
Herman Groepenhoff (Lijnden, Netherlands), Annette Fiedler, Juergen Riess, Margriet Kaldenbach

PA4511 **Exploring physiological concordance between spirometry and gas transfer in IPF.**
Absari Choudhury (Coventry, United Kingdom), Joanna Shakespeare, David G Parr

PA4512 **Relationships between same-day FVC and FIVC from forced spirometry and IVC from DLCO; findings in an IPF clinical trial**
Jose Ramos (North Olmsted, OH, United States), Kevin McCarthy, Phil Lake, Marc-Aurel Baumle, Dawn Patterson

PA4513 **Characterisation of physiological discordance in patients with idiopathic pulmonary fibrosis.**
Absari Choudhury (Coventry, United Kingdom), Joanna Shakespeare, David G Parr

PA4514 **Effects of CPAP levels on ventilation in healthy subjects**
Lu Wang (China, China), Simin Liu, Yan Chen, D. Andrew Wellman, Joerg Steier, Danny Eckert, R. Doug Mcevoy, Yuanming Luo

PA4515 **Investigation of Respiratory Physiopathology by Determination of Pulmonary Gas Exchange and Ventilation Dynamics in Chronic Lung Diseases**
Necmiye Funda Coşkun (Bursa, Turkey), Fadıl Özyener, Aslı Görek Dilektaşlı, Dane Ediger

PS-16 in poster area Session 442 12:30 - 14:00

Poster session: Novelties in respiratory physiotherapy for health and COVID-19

Disease(s) : Airway diseases Respiratory critical care Interstitial lung diseases

Method(s) : General respiratory patient care Pulmonary function testing Pulmonary rehabilitation Respiratory intensive care Public health Epidemiology

Tag(s) : Clinical

Chairs : Celso Ricardo Fernandes de Carvalho (São Paulo (SP), Brazil), Maria Koulopoulou (London, United Kingdom)

PA4516 **Reliability of kinetics-on and kinetic-off oxygen uptake during six-minute step test in male**
Cássia Goulart (São Carlos, Brazil), MURILO OLIVEIRA, Shida Marinho, Aldair Araújo, Izadora Dourado, Meliza Roscani, Renata Mendes, Audrey Borghi-Silva

PA4517 **Incremental and constant load endurance respiratory muscle tests in healthy adults**
Ana Lista Paz (A Coruña, Spain), Margarita Barral Fernández, Cristina Jácome, Linde Holmstock, Loena Van Baelen, Daniel Langer

PA4518 **Reference values for maximal respiratory pressures in Spanish population: a multicentre study**
Ana Lista Paz (A Coruña, Spain), Margarita Barral Fernández, Luz González Doniz, Sonia Souto-Camba, Alejandro Quintela Del Río, Daniel Langer, Ana B Varas De La Fuente, Cristina Serrano Veguillas, Ane Arbillaga-Etxarri, Elena Gimeno-Santos, Jordi Vilaró, Rodrigo Torres-Castro, Pilar Bravo Cortés, Esther García Delgado, Concepción Martín Cortijo, Marina Francín-Gallego, Beatriz Herrero-Cortina, Yolanda Sanesteban Hermida, Esther Giménez Moolhuyzen, Rocío Martín-Valero, Jorge Álvarez Rivas, José Luis Valera Felices, Carolina González Montáñez, Antonio Tomás Ríos-Cortés, Guilherme Fregonezi

PA4519 **Clinical definition of respiratory muscle weakness based on reference values for maximal respiratory pressures**
Ana Lista Paz (A Coruña, Spain), Daniel Langer, Margarita Barral Fernández, Luz González Doniz, Sonia Souto-Camba, Alejandro Quintela Del Río, Elena Gimeno-Santos, Ane Arbillaga-Etxarri, Beatriz Herrero-Cortina, Rodrigo Torres-Castro, Jordi Vilaró, Pilar Bravo Cortés, Ana B Varas De La Fuente, Cristina Serrano Veguillas, Concepción Martín Cortijo, Esther García Delgado, Carolina González Montáñez, Yolanda Sanesteban Hermida, Esther Giménez Moolhuyzen, José Luis Valera Felices, Rocío Martín-Valero, Marina Francín-Gallego, Jorge Álvarez Rivas, Antonio Tomás Ríos-Cortés, Guilherme Fregonezi

PA4520 **Virtual Reality Rehabilitation for Improving Exercise Performance and Mental Well-being in Post-Acute Sequelae of COVID-19 Patients**
Sebastian Rutkowski (Opole, Poland), Anna Rutkowska, Katarzyna Bogacz, Jan Szczegielniak, Richard Casaburi

PA4521 **Predictors of weaning failure from mechanical pulmonary ventilation in patients affected by COVID-19**
Natalia Trindade da Silva (Londrina, Brazil), Larissa A Castro, Walter Sepúlveda-Loyola, Josiane M Felcar, Carrie C R Galvan, Vanessa S. Probst

PA4522 **Effectiveness of Post-COVID rehabilitation and impact of frailty in Post-COVID Syndrome**
Kola Akinlabi (London, United Kingdom), Binny Patel, Ana-Maria Barfa, Patrick Mallia, Radoslav Trojak, Gavin Sandercock

PA4523 **International Physical Activity Questionnaire for people post COVID-19: a validation study**
Nicola Sante Diciolla (Madrid, Spain), Alda Marques, Ana Jiménez-Martín, Sara García-De Villa, F. Javier Redondo-García, Marís Torres-Lacomba, María José Yuste-Sánchez

PA4524 **Micro-choice based concentrated rehabilitation for patients with post COVID-19 condition, a 3-month follow-up study.**
Bente Frisk (Sandsli, Norway), Marte Jurgensen, Birgitte Espehaug, Kiri Lovise Njøten, Eirik Søfteland, Bernt Bøgvald Aaarli, Gerd Kvale

PA4525 **Association of dyspnea and physical activity level in adult patients with CF during COVID-19**
Aydan Asli Aksel Uylar (Ankara, Turkey), Naciye Vardar-Yagli, Merve Firat, Melda Saglam, Ebru Calik-Kutukcu, Ebru Damadoglu

PA4526	**Factors affecting participation of long COVID-19 patients in pulmonary rehabilitation programmes** Christiana Lekka (Athens, Greece), Nikolaos Chynkiamis, Angelos Vontetsianos, Christina Anagnostopoulou, Stavrina Zaneli, Zoi Sotiropoulou, Georgios Kaltsakas, Andriana Papaioannou, Ioannis Vogiatzis, Antonia Koutsoukou, Nikolaos Koulouris
PA4527	**Respiratory, mental and physical aspects in people following COVID-19 infection: a six-month follow-up** Karina Marcela Morro Pozo (Presidente Prudente, Brazil), Isis Grigoletto, Paloma Borges, Matheus Pedroso, Elaine Maldonado Bertacco, Thamirys Serafim, Vinicius Cavalheri, Rafael Mesquita, Ercy Mara Cipulo Ramos
PA4528	**Effectiveness of physical activity counseling in patients with COVID-19** Zeliha Celik (Ankara, Turkey), Nihan Kafa, Nevin A. Guzel, Nurdan Kokturk
PA4529	**Functional recovery over 1 year after hospitalization for COVID-19: results from waves 1 and 2 of the pandemic** Marla Beauchamp (Hamilton, Canada), Renata Kirkwood, Andrew Costa, Mylinh Duong, Terence Ho, Rebecca Kruisselbrink, Aaron Jones, Parminder Raina
PA4530	**Is the endothelial dysfunction in patients with exacerbation of COPD and COVID-19 comparable?** Renata Gonçalves Mendes (Sao Carlos (SP), Brazil), Naiara Tais Leonardi, Alessandro Domingos Heubel, Erika Zavaglia Kabbach, Nathany Souza Schafauser, Débora Mayumi Kawakami, Stephanie Nogueira Linares, Ariane Viana, Vanessa Teixeira Do Amaral, Gustavo Yudi Orikassa De Oliveira, Audrey Borghi-Silva, Emmanuel Gomes Ciolac
PA4531	**Relationship between cognitive impairment and upper limb motor skills in Long-COVID patients** Laura Lopez Lopez (Granada, Spain), Miguel Hernández Serrano, Alba Navas Otero, Javier Martín Núñez, Araceli Ortiz Rubio, Irene Torres Sánchez, Marie Carmen Valenza
PA4532	**Evaluation of the learning effect on the six-minute walking distance in patients with long COVID.** Tess Volckaerts (Edegem, Belgium), Kirsten Quadflieg, Chris Burtin, Kevin De Soomer, Ellie Oostveen, Ella Roelant, Iris Verhaegen, Michiel Thomeer, Maarten Criel, David Ruttens, Thérèse S. Lapperre, Dirk Vissers
PA4533	**Cardiac Hemodynamics and Functional Capacity After Covid-19: Case Series** Larissa Nascimento (Natal, Brazil), Emilly Bandeira, Guilherme Fregonezi, Vanessa Resqueti
PA4534	**The effect of COVID-19 on exercise capacity in young people** Dilek Çağrı Arslan (ATAŞEHİR, Turkey), Meryem Bektaş Karakuş, Semiramis Özyılmaz
PA4535	**Factors Associated with Exercise Capacity and Functional Balance in Post-COVID-19 Syndrome** Ebru Calik Kutukcu (Ankara, Turkey), Melike Sura Oksuz Capanoglu, Oguz Abdullah Uyaroglu, Naciye Vardar Yagli, Melda Saglam, Deniz Inal Ince, Lale Ozisik, Nursel Calik Basaran, Gulay Sain Guven

PS-17 in poster area Session 443 12:30 - 14:00

Poster session: What is new in treatment of drug-susceptible tuberculosis, drug-resistant tuberculosis and tuberculosis infection?

Disease(s) : Airway diseases

Method(s) : Public health General respiratory patient care Cell and molecular biology Epidemiology Respiratory intensive care

Tag(s) : Clinical

Chairs : Liga Kuksa (Dobele, Latvia), Jan Heyckendorf (Hamburg, Germany)

PA4536	**Effect of tuberculosis preventive treatment on household contacts of rifampin-resistant tuberculosis patients: A nationwide investigation** Kang-Mo Gu (Seoul, Republic of Korea), Sun-Young Jung, Jae-Eun Lee, Joo-Hyeon Eom, Kyungeun Lee, Yong-Joon Park, Yunhyung Kwon, Youmi Kim, Jae Chol Choi
PA4537	**The use of weekly rifapentine and isoniazid (3HP) for latent TB infection in Australia.** Vicky Chang (Sydney (NSW), Australia), Greg Fox
PA4538	**Relationship between PTLD and multidrug resistance to Tuberculosis** Angela María Giraldo Montoya (Pereira, Colombia), Giovanni Garcia Castro, Luisa Fernanda Sierra Garzon, Laura Sofia Garcia Giraldo
PA4539	**Efficacy and safety of 6-month and 4-month anti-tuberculosis regimens: A review of literature and meta-analysis** Stephanie Palacios (Iloilo, Philippines), Glenford Refre, Patricio Palmes, Ma. Cecilia Momville
PA4540	**Carbapenems and amoxicillin together with B-lactamase inhibitors for the treatment of Tuberculosis, a systematic review.** Carlijn Veldman (Zwolle, Netherlands), Simon Tiberi, Huib Kerstjens, Onno Akkerman

PA4541	**Characterization of tuberculosis drug resistance patterns in the early days of XDR-TB** André Filipe Santos Nunes (Ponta Delgada, Portugal), Sofia Fontão Alves, Luís Mateus, Maria Cavaco, Ricardo Cordeiro, Carina Rolo Silvestre, Joana Ferra, Daniel Duarte, Carla Cardoso, Aurora Bragança, Paula Raimundo, Natália André, António Domingos, Teresa Falcão
PA4542	**Side effects of 2nd line anti-tuberculous drugs: impact on compliance and therapeutic efficacy** Soumaya Ben Saad (Ariana, Tunisia), Issraa EL WHADHANE, Amani Ben Mansour, Azza Slim, Hafaoua Daghfous, Fatma Tritar
PA4543	**Molecular Characterization of Drug Resistant pattern of Mycobacterium tuberculosis** Sushma Yadav (Gwalior, India), Surya Kant, Amita Jain, Jyoti Bajpai
PA4544	**Adjunctive Corticosteroid Therapy for severe tuberculosis: Risk factors for poor outcomes?** Amani Ben Mansour (Tunisia, Tunisia), Jallouli Nour Lahbib, Slim Azza, Ben Saad Soumaya, Daghfous Hafaoua, Tritar Fatma
PA4545	**Study of Moxifloxacin and Silver Nanoparticle Composite Efficacy on pre-XDR Mycobacterium Tuberculosis Strains** Teona Avaliani (Tbilisi, Georgia), Nino Kiria, Giorgi Phichkhaia, Nino Bablishvili, Nana Kiria
PA4546	**Linezolid-induced peripheral neuropathy in patients receiving MDR-TB treatment** Erik Skyllberg (London, United Kingdom), Rebekah Young, Akhilesh Sharma, Christabelle Chen, Simon Tiberi, Veronica White, Heinke Kunst
PA4547	**Outcome of Multi drug resistant(MDR)TB patients on Shorter MDR TB Regimen** Jyoti Bajpai (Lucknow (Uttar Pradesh), India), Darshan Kumar Bajaj, Sandeep Kumar, R A S Kushwaha, Surya Kant, Richa Tyagi, Ankit Kumar, Anand Srivastava, Rajiv Garg, Naveen Kumar
PA4548	**Isoniazid resistant tuberculosis(Hr-TB): a problem well stated is a problem half solved!** KETAN MALU (AURANGABAD, India), Avinash Lamb
PA4549	**A 15 year Retrospective Analysis of the Impact of Hearing Loss following IV Aminoglycoside use for Multi-Drug Resistant Tuberculosis** Ciara Ottewill (Dublin 4, Ireland), Tobias Maharaj, Maria Kane, Lorraine Dolan, Joseph Keane, Anne Marie Mclaughlin
PA4550	**TREATMENT OUTCOMES OF EXTENSIVELY DRUG-RESISTANT TUBERCULOSIS (XDR-TB) IN MONGOLIA: RETROSPECTIVE STUDY** Bolyskhan Baigabyl (Ulnaanbaatar, Mongolia), Bolor Rash, Oyunchimeg Adilaa, Yanjindulam Purevsuren, Dorjderem Radnaa
PA4551	**Seventeen drugs, one sample: analyzing multiple anti-TB drugs simultaneously using one method** Mathieu S. Bolhuis (Groningen, Netherlands), Erwin M. Jongedijk, Onno W. Akkerman, Daan J. Touw, Marieke G.G. Sturkenboom
PA4552	**Release of potassium ions from leukocytes in patients with tuberculosis with toxic-allergic reactions to medicines** Galyna Gumeniuk (Kyiv, Ukraine), Yuliia Matviienko, Olena Rekalova, Viktoriia Zhadan, Oksana Panasiukova, Svitlana Yasir, Andriy Taranenko, Maryna Budyonna, Galina Gumeniuk
PA4553	**Features of the treatment outcome of patients with multidrug-resistant tuberculosis and Beijing lineage 2 of Mycobacterium tuberculosis in Kharkiv region, Ukraine** Dmytro Butov (Kharkiv, Ukraine), Tetiana Butova, Natalia Rudova, Nadiya Sapelnik, Olena Borysova, Oleksii Solodiankin
PA4554	**Dexamethasone Reduces Metabolic Function and Subsequent Activation of Human Macrophages to Mycobacterium Tuberculosis.** Lorraine Thong (Co. Cork, Ireland), Donal Cox, Joseph Keane

PS-18 in poster area Session 444 12:30 - 14:00

Poster session: COVID-19 outcomes

Disease(s) : Airway diseases | Respiratory critical care | Sleep and breathing disorders

Method(s) : Epidemiology | General respiratory patient care | Public health | Pulmonary function testing | Respiratory intensive care | Imaging | Pulmonary rehabilitation | Physiology

Tag(s) : Clinical

Chairs : Arietta Spinou (London, United Kingdom), Tony De Soyza (Newcastle-upon-Tyne, United Kingdom)

PA4555	**Does pre-existing respiratory disease affect 3-month outcome following severe COVID: a matched prospective cohort across 4 waves** Olivia Vandekerckhove (Sint-Pieters-Rode, Belgium), Eveline Claeys, Nele Steyaert, Walter De Wever, Wim Janssens, Lieven Dupont, Pascal Van Bleyenbergh, Greet Hermans, Natalie Lorent

PA4556	**Risk factors for secondary organizing pneumonia in patients with COVID-19 pneumonia** Alisa Aikwanich (Pathum-Thani, Thailand), Dararat Eksombatchai, Tananchai Petnak, Tanapat Tassaneyasin, Viboon Boonsarngsuk
PA4557	**Long-term outcomes of COVID-19 patients admitted to a tertiary care hospital in Peshawar, Pakistan.** Muhammad Imran (Peshawar, Pakistan), Azhar Uddin, Zafar Iqbal, Yousal Ali, Abdul Jalil Khan
PA4558	**12-Month follow-up study of patients after hospitalization for COVID-19** Ivan Rosas (Houston, United States), James A. Mckinnell, Reena Shah, Michael Waters, Bradley Hunter, Robert Jeanfreau, Alejandra Benitez, Larry Tsai, Margaret Neighbors, Ben Trzaskoma, Rita De Cassia Castro, Fang Cai
PA4559	**Applying machine learning algorithms to predict outcomes in hospitalized COVID-19 patients** Ahmed Dhia El Euch (Sfax, Tunisia), Soumaya Triki, Nour Kallel, Rahma Gargouri, Nesrin Kallel, Walid Feki, Imed Gargouri, Samy Kammoun
PA4560	**A close respiratory follow-up after acute COVID-19 – is it necessary?** Amir Bar-Shai (Tel-Aviv, Israel), Ophir Freund, Anna Breslavsky, Rotem Givoli-Vilensky, Evgeni Gershman, Avraham Unterman, Nadav Zacks, Ori Wand, Natalya Bilenko
PA4561	**Persistent symptoms, lung function and imaging abnormalities at 1-year follow-up for severe COVID-19** Arturo Cortes-Telles (Merida (Yucatan), Mexico), Luis Alberto Solís-Díaz, Heideger Norberto Mateos-Toledo, Esperanza Figueroa-Hurtado, Diana Lizbeth Ortíz Farías, Yuri Noemí Pou-Aguilar, Saúl Vázquez-López
PA4562	**Association between pre-hospital inhaled corticosteroid use and COVID-19 outcomes** Marija Vukoja (Sremska Kamenica, Republic of Serbia), Aysun Tekin, Nereida Parada, Javaughn Gray, Alan Mallouhi, Tiana Roddy, Amos Lal, Yuanhao Zu, Joshua Denson
PA4563	**Pulmonary lung function and blood gas analysis in patients after severe Covid-19 pneumonia** Plamena Stoimenova (Plovdiv, Bulgaria), Stoilka Mandadzhieva, Blagoi Marinov
PA4564	**Secondary infectious complications of the airways in patients with post-COVID-19 syndrome** Galyna Gumeniuk (Kyiv, Ukraine), Yurii Feshchenko, Mykola Gumeniuk, Viktoria Ignatieva, Maryna Polianska, Svitlana Opimakh, Mykola Lynnyk, Svitlana Moskalenko, Nataliia Vlasova, Dmytro Butov
PA4565	**Tabacco smoking and post COVID-19 syndrome** Mariem Friha (Ariana, Tunisia), Hajer Racil, Mariem Chaabane, Sarra Maazaoui, Ameny Touil, Sonia Habibech, Nawel Chaouch
PA4566	**Co-infection and secondary infection in critically ill Omicron variant COVID-19 patients in a university hospital** Yi-Ting Chen
PA4567	**Functional and radiological correlation of ICU survivors with severe COVID-19 at 1 year follow up from the OUTSTRIP COVID-19 prospective cohort study** Merlin Thomas (Doha, Qatar), Mousa Hussein, Mansoor Hameed, Jaweria Akram, Rajalekshmi Nair, Rajendra Kumar, Amal Rashid, Aisha Aladab, Saibu George, Mushtaq Ahmad, Maysa Abdelhafeez, Aalaa Kambal, Tasleem Raza
PA4568	**3-month clinical, functional and radiological outcomes of hospitalised COVID-19 patients in the first versus the second wave** Elise Peys (Antwerpen, Belgium), Yannick Vande Weygaerde, Cedric Bosteels, Bihiyga Salhi, Sven Verschraegen, Pieter Depuydt, Sandra Oeyen, Eric Derom, Heleen Demeyer, Eva Van Braeckel
PA4569	**Habits and predictors of poor sleep quality in post-Covid 19** Nouha Guediri (Tunis, Tunisia), Rania Kaddousii, Hadhemi Rejeb, Hela Kammoun, Iteb Ben Limem, Imen Ben Salah, Hanene Smadhi, Dorra Greb, Ines Akrout, Hela Hassen, Hager Benabdelghaffar, Leila El Fekhih, Mohamed Lamine Megdiche
PA4570	**Forty step desaturation test does not have prognostic value in COVID-19 due to omicron variant** Balamugesh Thangakunam (Vellore (Tamil Nadu), India), Devasahayam J Christopher, Barney Isaac, Rajasekar Sekar, Rathijit Pal, Hema Paul, Mathew Varghese, Abhilash Paul Prabhakar
PA4571	**Identification of long COVID phenotypes based on clinical presentation at 3 to 6 months post SARS-CoV-2 infection: results from the P4O2 consortium** Jelle M. Blankestijn (Amsterdam, Netherlands), Mahmoud I. Abdel-Aziz, Nadia Baalbaki, Somayeh Bazdar, Inés Beekers, Rosanne J.H.C.G. Beijers, Lizan D. Bloemsma, Merel E.B. Cornelissen, Debbie Gach, Laura Houweling, Sebastiaan Holverda, John J. Jacobs, Renée Jonker, Ivo Van Der Lee, Paulien M.A. Linders, Firdaus A.A.M. Hoesein, Lieke C.E. Noij, Marianne A. Van De Pol, Daphne W. Schaminee, Annemie M.W.J. Schols, Lisanne T. Schuurman, Brigitte Sondermeijer, J.J. Miranda Geelhoed, Joop P. Van Den Bergh, Els J.M. Weersink, Esther J. Nossent, Yolanda De Wit-Van Wijck, Anke H. Maitland-Van Der Zee

PA4572 **Long covid symptoms in hospitalized and non-hospitalized patients**
CHRISTOFOROS PROIMOS (, Greece), GEORGIA CHASAPIDOU, Eleni Eleftheriadou, Maria Konstadinidou, Dionisia Samara, Dimitra Daiou, Mei Gramenou, Efi Kamariotou, Panagiotis Georganakis, Eleana Giovani, Valentina Peglidou, Petros Ekoutsidis, Lefteris Doulgerakis, Diamantis Chloros

PA4573 **Prospective evaluation of post-covid patients being hospitalized in a Greek clinic**
Konstantinos Eleftheriou (Athens, Greece), Vasilis Vlahakos, Athanasia Papalampidou, Theofani Rimpa, Apostolis Pappas, Zafiria Barmparessou, Eftichia Polidora, Rafaela Siampani, Ioannis Kaolomenidis

PA4574 **Fatigue in post COVID-19 patients: the P4O2 COVID-19 study**
Merel E.B. Cornelissen (Nijmegen, Netherlands), Lizan D. Bloemsma, Nadia Baalbaki, Somayeh Bazdar, Jelle M. Blankestijn, Inés Beekers, Rosanne J.H.C.G. Beijers, Joop P. Van Den Bergh, Debbie Gach, J.J. Miranda Geelhoed, Sebastiaan Holverda, Laura Houweling, John J. Jacobs, Renée Jonker, Ivo Van Der Lee, Paulien M.A. Linders, Lieke C.E. Noij, Esther J. Nossent, Marianne A. Van De Pol, Daphne W. Schaminee, Annemie M.W.J. Schols, Lisanne T. Schuurman, Brigitte Sondermeijer, Anouk W. Vaes, Els J.M. Weersink, Yolanda De Wit-Van Wijck, Martijn A. Spruit, Anke H. Maitland-Van Der Zee

PS-19 in poster area Session 445 12:30 - 14:00

Poster session: COVID-19 vaccines and immunity

Disease(s) : Airway diseases Respiratory critical care

Method(s) : General respiratory patient care Imaging Epidemiology Public health Cell and molecular biology

Tag(s) : Translational

Chairs : Pierre-Régis Burgel (Paris, France), Adrian Ceccato (Barcelona, Spain)

PA4575 **Association between mRNA vaccination and COVID-19 hospitalization and disease severi**
Adamadia Liapikou (Athens, Greece), Alexandra Kote, Aggeliki Sotiropoulou, Panagiotis Peristeris, Ioanna Augerinou, Ioannis Dimitroulis, Stella Kourelea

PA4576 **Impact of IFN-γ and IL-2 measurement in the assessment of the cellular immunity against SARS-CoV-2**
Guillem Safont-Gonzalez (Breda, Spain), Raquel Villar-Hernández, Daria Smalchuk, Zoran Stojanovic, Alicia Marín, Alicia Lacoma, Cristina Pérez-Cano, Anabel López-Martínez, Bárbara Molina-Moya, Alan Jhunior-Solis, Fernando Arméstar, Joan Matlló, Sergio Díaz-Fernández, Iris Romero, Irma Casas, Kevin Strecker, Rosemarie Preyer, Antoni Rosell, Irene Latorre, Jose Domínguez

PA4577 **Effect of vaccination status in outcomes of mexican patients hospitalized with severe COVID-19 during the omicron wave: a single-center experience**
Arturo Cortes-Telles (Merida (Yucatan), Mexico), Victor Aaron Álvarez-Sánchez, M. Alejandra Salcedo-Parra, Gustavo Bonnabel-Becerra

PA4578 **Comparative Analysis of COVID-19 Vaccination Coverage in the Hungarian Population and COPD Patients.**
Janos Tamas Varga (Budapest, Hungary), Monika Fekete, Alpar Horvath, Balazs Santa, Gabor Tomisa, Gergo Szollosi, Zoltan Ungvari

PA4579 **Seroprevalence of SARS-CoV-2 specific IgG antibodies in rural population of Western Maharashtra, India**
Dhiraj Agarwal (Pune (Maharashtra), India), Rutuja Patil, Sudipto Roy, Harshpreet Kaur, Sanjay Mehandale, Ashish Bavdekar, Harish Nair, Sanjay Juvekar, Girish Dayma

PA4580 **SARS-CoV-2 viral persistence and clinical relapse in immunocompromised patients**
Francesca Simioli (Napoli (NA), Italy), Anna Annunziata, Antonietta Coppola, Angela Irene Mirizzi, Antonella Marotta, Pasquale Imitazione, Giuseppe Fiorentino

PA4581 **Immunosuppressed COVID-19 patients: experience from a tertiary Chest hospital in Athens, Greece**
Iris-Theodora Vlachantoni (Athens, Greece), Anastasia Levounets, Romina Chatzipetrou, Andrea Kyriacou, Eirini Skontzou, Lamprini Vlassi, Chrysa Kontogianni, Konstantinos Samitas, Zafeiris Sardelis, Evangelos Markozannes, Theoplasti Grigoratou, Eleftherios Zervas, Lykourgos Kolilekas

PA4582 **Investigation of antibody levels during three doses of Sinopharm/BBIBP vaccine inoculation**
Baoqing Sun (Guangzhou (Guangdong), China)

PA4583 **Sequelae after severe Covid-19 infection at 6 months of follow-up according to previous vaccination status.**
Laura Alcarraz Vázquez (Zaragoza (Zaragoza), Spain), Iván D. Benítez, María Aguilà, Sally Santisteve, Aida Monge, Clara Gort-Paniello, David De Gonzalo-Calvo, Ferran Barbé, Jessica González

PA4584 **PROphylaxis for vulnerable paTiEnts at risk of COVID-19 infecTion (PROTECT-V) – Sotrovimab arm**
Louise Crowley (Birmingham (England), United Kingdom), Michael Chen-Xu, Francis Dowling, Wendi Qian, Raksha Adhikari, Diane Griffiths, Emma Bruce, Jennifer Han, Rona Smith, Davinder Dosanjh

PA4585	**Influence of vaccination status on the course of hospitalization in elderly COVID-19 patients: Single center experience of a tertiary COVID-19-hospital.** Markus Hofer (Zürich, Switzerland), Wyss Seraina, Reutemann Luzia, Bansal Vineeta
PA4586	**Nodal analysis determined nasal mucosal-associated mediators were associated with accelerated clinical recovery from SARS-CoV-2 infection** Steven Cass (London, United Kingdom), Jonathan Baker, Christine Mwasuku, Sanjay Ramakrishnan, Mahdi Mahdi, Peter Barnes, Louise Donnelly, Richard Russell, Dan Nicolau Jr., Rocio Martinez-Nunez, Mona Bafadhel
PA4587	**Comparison Of serum Anti-Spike (S) IgG Covid-19 Antibody between Breakthrough Infection And recent COVID-19 Infections in unvaccinated** Sajal De (Raipur, India), Dibakar Sahu, Diksha Mahilang, Anudita Bhargava
PA4588	**Differences in immunological profiles between vaccinated and recovered COVID-19 patients.** Shira Cohen Rubin (Beer Sheva, Israel), Natalya Bilenko, Ophir Freund, Anna Breslavsky, Tal Moshe Perluk, Rotem Givoli-Vilensky, Ori Wand, Nadav Zacks, Amir Bar-Shai
PA4589	**Variable outcomes from infection by different SARS-CoV-2 variants among vaccinated maintenance hemodialysis patients** Ori Wand (Kfar Sava, Israel), Idan Drori, Yael Einbinder, Naomi Nacasch, Sydney Benchetrit, Anna Breslavsky, Keren Cohen-Hagai
PA4590	**Successful Use of Monoclonal and Antiviral Therapy in Immunocompromised Patients With Persistent and/or Relapsing COVID-19** Leonardo Gori (Florence, Italy), Michele Spinicci, Lucia Graziani, Paola Parronchi, Alessandro Bartoloni, Diletta Cozzi, Edoardo Cavigli, Gianmaria Rossolini, Elisabetta Rosi, Federico Lavorini, Valentina Luzzi, Leonardo Giuntoli, Camilla Comin, Luca Ciani, Sara Tomassetti
PA4591	**The role of immunosuppressive therapy in post-COVID-19 interstitial lung disease** Sule Gül, Barıs Demirkol, Ramazan Eren, Kursad Nuri Baydili, Burcu Babaoğlu Elkhatroushi, Şerife Nur Ulusan, Mustafa Çörtük, Erdoğan Çetinkaya
PA4592	**Severe COVID19 pneumonia management in patients receiving Rituximab in a pragmatic clinical setting.** Elli Keramida (Athens, Greece), Georgia Hardavella, Maria Salomidou, Irma Bracka, Thodoris Daskalos, Antonia Zachariou, Eleni Bellou, Fotis Kyriakou, Ioannis Karampinis, Panagiotis Demertzis, Despoina Zorpidou
PA4593	**Inhaled therapies in the treatment of respiratory symptoms and prevention of health resources use in patients with COVID-19.** Suzana Erico Tanni (Botucatu (SP), Brazil), Robson Prudente, Estefânia Franco, Fernando Wehrmeister, Carlos Breda Neto, Luana Pagan, Mariana Gatto, Letícia Vieira, Liana Coelho, Diane Batista, Luiz Machado, Gustavo Mota, Marina Gaiato, Felipe Santaella, Elisangela Campos, Lize Hosoune, Marina Okoshi
PA4594	**Real-world study on effectiveness of molnupiravir and nirmatrelvir-ritonavir in unvaccinated patients with chronic respiratory diseases with confirmed SARS-CoV-2 infection managed in out-patient setting** Wang Chun Kwok (Hong Kong, Hong Kong), Man Fung Tsoi, Sze Him Isaac Leung, Ching Ki Tsui, Terence Chi Chun Tam, James Chung Man Ho, David Chi Leung Lam, Mary Sau Man Ip, Pak Leung Ho

PS-2 in poster area — Session 446 — 12:30 - 14:00

Poster session: Asthma diagnosis and management in primary care

Disease(s) : Airway diseases

Method(s) : Public health General respiratory patient care Epidemiology Cell and molecular biology Pulmonary function testing

Tag(s) : Clinical

Chairs : María Mar Martínez Vázquez (Bilbao (Bizkaia), Spain), Miguel Román Rodriguez (Palma De Mallorca, Spain)

PA4595	**Prevalence of asthma and allergies among children in the United Arab Emirates: A crosssectional study** Naseem Abdalla (Dubai, United Arab Emirates), Fatima Al Meleh, Fatime Al Marzouqi, Fatima Al Jassim, Hisham Farouk, Mohamed Alsayed
PA4596	**Clinical factors associated with asthma-related mortality in Alberta, Canada** Subhabrata Moitra (Edmonton, Canada), Andrew Fong, Alim Hirji, Mohit Bhutani
PA4597	**Preventing Summer Holiday Drop in Prescription Uptake for School-Age Children with Asthma: A Pragmatic Cluster Randomized Controlled Trial of a Letter to GP Practices (TRAINS)** Rami Alyami (Sheffield, United Kingdom), Phillip Oliver, Rebecca Simpson, Steven Julious
PA4598	**Outcomes-driven Asthma data application, Emirates Health Services (EHS)- United Arab Emirates** Naseem Abdalla (Dubai, United Arab Emirates)

PA4599 **Asynchronous digital health interventions (aDHI) for reviewing asthma: a mixed-methods systematic review**
Nazim Uzzaman (The University of Edinburgh, United Kingdom), Vicky Hammersley, Kirstie Mcclatchey, Jessica Sheringham, Monsur Habib, Hilary Pinnock

PA4600 **Post-hospitalisation asthma management in primary care: a retrospective cohort study**
Shamil Haroon (Birmingham (West Midlands), United Kingdom), Dhanusha Punyadasa, Nikita Simms-Williams, Nicola Adderley, Rasiah Thayakaran, Adel Mansur, Krishnarajah Nirantharakumar, Prasad Nagakumar

PA4601 **A pulmonary transition clinic: the first Italian experience from Sacco University Hospital**
Francesca Mandurino Mirizzi (LECCE, Italy), Lisa Milani, Marina Saad, Giuseppe Fuccia, Luca Perotto, Fiammetta Danzo, Andrea Farolfi, Gian Vincenzo Zuccotti, Pierachille Santus, Dejan Radovanovic

PA4602 **Addition of LAMA to current or former smoking asthmatics**
Marios Ioannou (ATHENS, Greece), Stavros Patrinos, Niki Gianniou, Andreas Asimakos, Efrosini Dima, Ioanna Sigala, Paraskevi Katsaounou

PA4603 **Efficiency assessment of 15 nebuliser systems by the respirable drug delivery rate**
Ralf Fischer (Starnberg, Germany), Filip Jukic, Rosina Ledermüller

PA4604 **Usability and acceptance of a novel compact spacer in patients with asthma and/or COPD**
Amber Eikholt (Zwolle, Netherlands), Titia Klemmeier, Luc Steenhuis, Job Van Boven

PA4605 **Oral corticosteroid (OCS) burden and healthcare resource utilization (HCRU) in patients with chronic rhinosinusitis with nasal polyps (CRSwNP) who did or did not undergo functional endoscopic sinonasal surgery (FESS) in US real-world practice**
Juby Anne Jacob-Nara (Hillsborough, United States), Asif H. Khan, Danielle Isaman, Stella Lee, Anju Peters, Peter Hwang, Sietze Reitsma, Natalia Petruski-Ivleva, Scott Nash, Juby Jacob-Nara

PA4606 **Validity and reliability evidence of the fear of COVID-19 scale in Greek patients with asthma**
Mirada Karameri (Athens, Greece), Irini Patsaki, Maria Moutzouri, Georgios Koumantakis, Dimitris Tsimouris, Aikaterini Haniotou, Eirini Grammatopoulou

PA4607 **Late Breaking Abstract - Consensus quality standard for implementing inhaler regimen switch in patients with respiratory disease**
Omar S. Usmani (London, United Kingdom), Nicolas Roche, Job Van Boven, Jane Scullion, José Miguel Padhila, Tonya Winders, Andreja Šajnić, John Bell, Anna Lawson, Alison Evans, Adam Ben Taieb, Heather Wellam, Janwillem Kocks

PA4608 **Late Breaking Abstract - Mexican Primary Care Physician´s Knowledge about Asthma and COPD: Results of an exploratory survey**
Rosaura Esperanza Benítez Pérez (México, Mexico), Angélica Margarita Portillo-Vasquez, Robert Camargo-Ángeles, Diana Ruiz-Ascencio, Adela Reyes-Herrera, Fatima Leticia Luna-Lopez, Ruy Lopez-Ridaura, Laura Graciela Gochicoa-Rangel

PA4609 **Late Breaking Abstract - 20-Year Secondary Care and Cost Burdens of Asthma and COPD in Singapore**
Wenjia Chen (Vancouver, Canada), Laura Huey Mien Lim, Yah Ru Juang

PA4610 **Late Breaking Abstract - Reducing Short Acting Beta Agonist (SABA) prescribing in Antrim/Ballymena GP Federation through SENTINEL Plus**
Joanne Caldwell (, United Kingdom), Aislinn Mccarry, Michael Crooks

PS-20 in poster area Session 447 12:30 - 14:00

Poster session: Interventional bronchoscopy: exciting times and developments ahead

Disease(s) : Thoracic oncology | Airway diseases | Interstitial lung diseases | Respiratory critical care

Method(s) : Endoscopy and interventional pulmonology | Imaging | Cell and molecular biology

Tag(s) : Clinical

Chairs : Mohammed Munavvar (Preston (Lancashire), United Kingdom), Sara Tomassetti (Florence, Italy)

PA4611 **Impact of endobronchial valve treatment on lung function decline**
Jorine E. Hartman (Groningen, Netherlands), Karin Klooster, T. David Koster, Orestes A. Carpaij, Marlies Van Dijk, Dirk-Jan Slebos

PA4612 **Bronchoscopic lung volume reduction with endobronchial valves improves respiratory muscles function in patients with severe emphysema**
Aurélien Brindel (Thionville, France), Romane Fumat, Marion Dupuis, Romain Barthes, Florent Favard, Yannick Simonneau, Matthieu Dusselier, Valentin Héluain, Gavin Plat, Thomas Egenod, Nicolas Guibert

PA4613	**Metered Cryospray improves patient-reported outcome measures at 6-months post-crossover treatment, in patients with COPD with chronic bronchitis** Christopher M Orton (London, United Kingdom), James Tonkin, Ley Chan, Anand Tana, Francesca Conway, Bavithra Vijayakumar, Laura Avanzi, Jorine Hartman, Karin Klooster, John Thornton, Jan Lukas Robertus, Dirk-Jan Slebos, Pankaj Bhavsar, Pallav L Shah
PA4614	**The impact of emphysema heterogeneity on treatment response after endobronchial valve treatment** Sharyn A. Roodenburg (Groningen, Netherlands), Karin Klooster, Dirk-Jan Slebos, Jorine E. Hartman
PA4615	**Insights in biofilm infections on endobronchial valves in COPD patients after endoscopic lung volume reduction** Eva Pappe (Berlin, Germany), Ralf-Harto Hübner, Laura Kursawe, Kurosh Sarbandi, Jacopo Saccomanno, Martin Witzenrath, Alexandra Wiessner, Annette Moter, Judtih Kikhney
PA4616	**Endobronchial valve (EBV) insertion for emphysema quickly improves sarcopenia** Julia Rubenstein (Talence, France), Ilyes Benlala, Anne-Claire Toublanc, Marina Guecamburu, Claire Bon, Charlotte Vergnenegre, Arnaud Maurac, Leo Grassion, Pauline Henrot, Maeva Zysman
PA4617	**Bronchoscopic lung volume reduction with a next generation coil.** Kathleen Jahn (Basel, Switzerland), Christoph Steven, Daiana Stolz, Michael Tamm
PA4618	**Combination of endobronchial and intrabronchial valves for endoscopic therapy of advanced emphysema** Konstantina Kontogianni (Heidelberg, Germany), Ann- Sophie Unterschemmann, Franziska Trudzinski, Judith Brock, Daniela Gompelmann, Felix Jf Herth, Ralf Eberhard
PA4619	**Endobronchial valve implantation for major hemoptysis.** Kathleen Jahn (Basel, Switzerland), Daiana Stolz, Michael Tamm
PA4620	**Lobar deflation predicts FEV1 following valve therapy in patients with severe emphysema** Daniela Gompelmann (Vienna, Austria), Stefanie Schuler, Matthias Rötting, Ines Richter, Markus Polke, Nilab Polke, Ralf Eberhardt, Claus Peter Heussel, Felix Herth
PA4621	**PERSISTENT AIRLEAK TREATED WITH ENDOBRONCHIAL VALVES, A TERCIARY HOSPITAL EXPERIENCE.** Cristina Sánchez Fernández (Oropesa, Spain), Katiuska Herminia Liendo Martínez, Christian Reynaldo Castro Riera, Paola Antonella Benedetti, José Javier García López, Luis Puente Maestu
PA4622	**ROLE OF CRYOBIOPSY IN THE INTERSTITIAL LUNG DISEASE DIAGNOSTIC ALGORITHM** Alejandro Golfe Bonmatí (Valencia, Spain), Marina Alcaraz Barcelona, Wanda Almonte Batista, Javier Cruz Ruíz, Concepción Patricia López Miguel, Jesús Jiménez López, Raúl Godoy Mayoral, Álvaro Hurtado Fuentes, Rafaela Sánchez-Simón Talero, Ana Núñez Ares
PA4623	**The influence of the interventionalist's gender on the outcome and complications of transbronchial lung cryobiopsy** Franziska Trudzinski (Heiderberg, Germany), Christos Athanasiou, Ralf Eberhardt, Julia D. Michels, Julia Carmen Schäfer, Mavi Schellenberg, Monika Eichinger, Markus Polke, Felix J. F. Herth, Michael Kreuter, Judith Brock
PA4624	**Women in interventional pulmonology - results from a worldwide survey** Judith Brock (Heidelberg, Germany), Sonja Zehetmayer, Daniela Gompelmann
PA4625	**Evaluation of safety of Trans-Bronchial Cryo-Biopsy in patients with pulmonary hypertension: A prospective single center study** David Shitrit (Kfar Saba, Israel), Hadas Gilboa, Ayal Romem
PA4626	**Impact of ultrathin cryoprobe on conventional radial EBUS guided transbronchial cryobiopsy of lung nodules** Sze Shyang Kho (Kuching (Sarawak), Malaysia), Chan Sin Chai, Nga Hung Ngu, Rong Lih Ho, Mei Ching Yong, Siew Kim Chan, Adam Malik Ismail, Siew Teck Tie
PA4627	**Safety and cost-effectiveness of transbronchial lung cryobiopsy with or without a pre-placed balloon in diagnosing interstitial lung disease** Gang Hou (Beijing, China), Yiding Bian, Mingming Deng
PA4628	**Healthy volunteer symptom profile following research bronchoscopy** Hazel Morrison (Bridgwater (Somerset), United Kingdom), Susan Jackson, Julia Marshall, Celia Mitton, Raquel Lopez Ramon, Timothy Fredsgaard-Jones, Andrew Mawer, Clare Wilkins, Henry Bettinson, Timothy Hinks, Helen Mcshane
PA4629	**Shape Sensing Robotic-Assisted Bronchoscopy for Diagnosis of Ground-Glass and Subsolid Pulmonary Nodules** David Abia-Trujillo (St Johns, United States), Nikitha C. Chandra, Alejandra Yu Lee-Mateus, Anoop Koratala, Sina Neshat, Neal M. Patel, Katherine L. Walsh, Ryan M. Chadha, Sebastian Fernandez-Bussy
PA4630	**Diagnostic yield of bronchoalveolar lavage in the investigation of lung cancer** Laetitia Amar (Montreal, Canada), Ping Shi Zhu

PS-3 in poster area Session 448 12:30 - 14:00

Poster session: Exercise capacity in respiratory diseases

Disease(s) : Airway diseases | Interstitial lung diseases | Pulmonary vascular diseases | Respiratory critical care | Thoracic oncology | Sleep and breathing disorders

Method(s) : General respiratory patient care | Physiology | Pulmonary rehabilitation | Surgery | Pulmonary function testing | Public health | Respiratory intensive care

Tag(s) : Clinical

Chairs : Christina M. Spengler (Zürich, Switzerland), J. Alberto Neder (Kingston (ON), Canada)

PA4631	**Unraveling fatigue in fibrotic interstitial lung disease: perceived and performance mechanisms** Mathieu Marillier (Echirolles, France), Mathieu Gruet, Anne-Catherine Bernard, Samuel Vergès, Onofre Moran-Mendoza, J. Alberto Neder
PA4632	**Description of breathing pattern disorder using sample entropy index in post-COVID19 dyspnoea** Ivan Guerreiro (Geneva, Switzerland), Aurélien Bringard, Pascal Weber, Viva Leverington, Anna Taboni, Frédéric Lador
PA4633	**Importance of Cardiopulmonary Exercise Testing to differ Long COVID-19 Symptoms in Adults considering gender** Cássia Goulart (São Carlos, Brazil), Guilherme Areas, Guilherme Dionir Back, Fernanda Facioli Dos Reis Borges, Jefferson D. Silva-Valente, Camila Sato Barros Do Amaral, Edival Ferreira De Oliveira Júnior, Eduardo Fernandes Da Silva Junior, Thaís Jordão Perez Sant'Anna Motta, Audrey Borghi-Silva, Fernando Val
PA4634	**Identical breath-by-breath and mixing-chamber gas exchange values of cardio-pulmonary exercise test systems by metabolic simulator** Herman Groepenhoff (Lijnden, Netherlands), Janmarten Burg Van Den, Joachim Schwertberger, Tjeu Souren
PA4635	**Association between the first ventilatory threshold and the lean mass** Vitalie Faoro (Brussels, Belgium), Corentin Scoubeau, Alexis Gillet, Olivier Taton, Marine Carpentier, Julie Carpentier, Malgorzata Klass
PA4636	**Minute ventilation and heart rate relationship: a simplified approach for cardiopulmonary exercise testing.** Matteo Morviducci (Roma, Italy), Flavio Marco Mirabelli, Luigi Panza, Daniel Piamonti, Roberto Flore, Giulia Lo Muzio, Altea Lecci, Dario Angelone, Paolo Palange
PA4637	**Ventilation rate and bronchial response in diagnosis of exercise-induced bronchospasm in asthmatic** Debora Carneiro de Mendonca (Vitória de Santo Antão, Brazil), Glívia Maria Barros Delmondes, Bruno Rafael Vieira Souza Silva, Laienne Carla Barbosa De Barros Albuquerque, José Ângelo Rizzo, Claudio Gonçalves De Albuquerque, Steve Hunter, Nadia Gaua, Edil Albuquerque Rodrigues Filho, Decio Medeiros, Emilia Chagas Costa, Marcos André De Moura Santos, Marco Aurélio De Valois Correia Júnior
PA4638	**Proportional Tidal Volume Variation during cardio-pulmonary exercise testing to diagnose Dysfunctional Breathing in Patients with Exertional Dyspnoea** Florent Baty (St. Gallen, Switzerland), Georg Knöpfel, Friedrich Uhl, Lukas Kern, Martin Brutsche
PA4639	**Exercise capacity in myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS) treated with long-term pyridostigmine** Sarra Al-Zayer (Boston, United States), Johanna Squires, David Systrom
PA4640	**Validation of a new modified 6-minute walk test (6MWT)** Winfried Baden (Tübingen, Germany), Richard Spallek, Ludger Sieverding
PA4641	**Comparison of the 6-minute walk test (6MWT) with submaximal cardiopulmonary exercise testing (CPET) in patients diseased with transthyretin amyloidosis with cardiomyopathy (ATTR-CM)** Robin Willixhofer (Vienna, Austria), Dadjar Immanuel Hostermann, Farideh Alasti, David Niederseer, Roza Badr-Eslam
PA4642	**The mBorg/6MWD ratio – a method to assess exertional breathlessness and leg fatigue using the 6-minute walk test: the CanCOLD study** Magnus Ekström (Lund, Sweden), Pei Zhi Li, Hayley Lewthwaite, Jean Bourbeau, Wan Tan, Dennis Jensen
PA4643	**6MWT performance of COPD exacerbators** Zlatina Ivanova (Pleven, Bulgaria), Nikolay Kyuchukov, Yavor Ivanov
PA4644	**Assessment of physical performance (PP) in patients with wild-type Transthyretin Amyloid Cardiomyopathy (ATTR-CM) evaluated by cardiopulmonary exercise testing (CPET) – a long-term follow-up study** Robin Willixhofer (Vienna, Austria), Rene Rettl, Christina Kronberger, Franz Duca, Christina Binder, Andreas Kammerlander, Johannes Kastner, Jutta Bergler-Klein, Roza Badr-Eslam
PA4645	**HR/V'O2 and HR/V'CO2 slope: new tools for CPET evaluation?** Flavio Marco Mirabelli (Roma, Italy), Matteo Morviducci, Luigi Panza, Daniel Piamonti, Roberto Flore, Giulia Lo Muzio, Altea Lecci, Dario Angelone, Paolo Palange

PA4646 **Re-evaluating the optimal threshold for the VE/VCO2-slope in risk stratification before lung cancer surgery**
Karolina Kristenson (Linköping, Sweden), Johan Hylander, Miklos Boros, Anna Fyrenius, Kristofer Hedman

PA4647 **Altered ventilation efficiency at exercise after recovery from COVID-19 infection versus healthy controls**
Emilie Maufroy (Bruxelles, Belgium), Corentin Scoubeau, Kevin Forton, Manon Bellaches, Cyril Tordeur, Vitalie Faoro, Gael Deboeck

PA4648 **Severity and phenotypes of dyspnea in asthma: impact of comorbidities**
Cécile Chenivesse (Lille Cedex, France), Awa Bousso, Celine Chuffart, Maxime Leroy, Alice Gicquello, Aurelie Cottereau, Florence Hennegrave, Antoine Beurnier, Thomas Stoup, Sophie Pereira, Capucine Morelot-Panzini, Camille Taille, Nathalie Bautin, Stephanie Fry, Thierry Perez, Gilles Garcia

PA4649 **Assessment of a novel 15 Watt/minute incremental ramp treadmill protocol for cardio-pulmonary exercise testing in Indian population.**
Geetanjali Bade (New Delhi (Delhi), India), Abhijith K Anil, Kumar Nischay Jaiswal, Anjana Talwar

PA4650 **Late Breaking Abstract - Phenotyping dynamic and "static" lung volumes in COPD: implications for exertional dyspnoea and exercise tolerance**
J. Alberto Neder (Kingston (ON), Canada), Danilo C. Berton, Franciele Plachi, Cecilia Rodenbusch, Devin Phillips, Reggie Smyth, Matthew James, Sophie Crinion, Juan Pablo De-Torres, Denis E. O'Donnell

PS-4 in poster area Session 449 12:30 - 14:00

Poster session: How to optimise non-invasive ventilation: how to initiate, what to monitor and how to adjust?

Disease(s) : Airway diseases | Sleep and breathing disorders | Respiratory critical care | Pulmonary vascular diseases

Method(s) : General respiratory patient care | Pulmonary function testing | Respiratory intensive care | Physiology

Tag(s) : Clinical

Chairs : Maxime Patout (Paris, France), Tim Raveling (Groningen, Netherlands)

PA4651 **Ventilation titration: different signals, different settings?**
Anna Ridgers (Heidelberg, Australia), Warren Ruehland, Liam M Hannan, David J Berlowitz, Mark E Howard

PA4652 **Reliability of nocturnal transcutaneous capnography in a real-world scenario**
Cristhian Correa (Madrid, Spain), Daniel Lopez Padilla, Stephany Briones Alvarado, Manuel Mor Martínez, Katiuska Herminia Liendo Martínez, Elena Ojeda Castillejo, Ilaf Latif Essa, Francisco Jose Caballero Segura, Luis Puente Maestu, Soledad López Martin

PA4653 **Automatic detection of ineffective efforts (IE) in non-invasive ventilation (NIV)**
Pablo Florez Solarana (Sabadell, Spain), Cristina Lalmolda Puyol, Marta Corral-Blanco, Ana Hernández Voth, Concepción Montón Soler, Xavier Pomares Amigó, Javier Sayas Catalán, Manel Luján Torné

PA4654 **The forced oscillation technique is useful for evaluation of high-flow nasal cannula. Federation of National Public Service Personnel Mutual Aid Association**
miyuki okuda (neyagawa, Japan)

PA4655 **Development of a Questionnaire for Therapy Adherence and Comfort in Non-invasive Ventilation: a simple Instrument for the Assessment of Patient-relevant Parameters**
Doreen Kroppen (Köln, Germany), Maximilian Wollsching-, Daniel Majorski, Maximilian Zimmermann, Melanie Berger, Wolfram Windisch, Sarah Schwarz

PA4656 **Within- and between-day reliability of inspiratory responses to rapid bilateral magnetic phrenic nerve stimulation**
Kyle Boyle (Zurich, Switzerland), Andrea Beglinger, Heinrich Häusler, Patrick Schön, Christina Spengler

PA4657 **Deventilation syndrome in COPD patients receiving non-invasive ventilation: A systematic scoping review**
Maximilian Wollsching-Strobel (Köln, Germany), Karsten Stannek, Daniel Majorski, Friederike Magnet, Doreen Kroppen, Melanie Berger, Maximilian Zimmermann, Wolfram Windisch, Sarah Schwarz

PA4658 **The use of home-based nocturnal capnography and oxymetry in personalized long-term non-invasive ventilation in COPD patients**
Line Storgaard (Aabybro, Denmark), Nicolas Siadous, Anne-Mette Meldgaard, Ulla M. Weinreich

PA4659 **Adaptation of non-invasive mechanical ventilation at home vs adaptation in hospital**
Cristina Sánchez Fernández (Oropesa, Spain), Daniel Eduardo López Padilla, Virginia Gallo González, Katiuska Herminia Liendo Martínez, Soledad López Martínez, Elena Ojeda Castillejo, Luis Puente Maestu, Teresa Gómez García

PA4660 **Outpatient initiation of non-invasive home ventilation. Two-year experience in a referral hospital. Real-life observational study.**
Ane Lopez Gonzalez (Barcelona, Spain), Cristina Aljama Vizcarra, María Saéz López, Júlia Sampol, Míriam Barrecheguren, Mercedes Pallero, Nuria Rodés, Gabriel Sampol, Sergi Martí

PA4661 **The evaluation of home non-invasive ventilation with telemonitoring in stable hypercapnic COPD patients: A retrospective case-control study**
Lok Yan Lee (Hong Kong, Hong Kong), Huilin Cheng, Alice Yuen Loke, Suk Fong Wai, Kah Lin Choo

PA4662 **Successful ongoing experience of outpatient/telemedicine NIV initiation and follow-up in ALS patients during and after COVID pandemic**
Pierluigi Intiglietta (Bari (BA), Italy), Paola Pierucci, Gualtiero Romano, Marialuisa De Candia, Simone Rizzelli, Alberto Carrassi, Alessandro Pilon, Chiara Massaro, Giovanna Elisiana Carpagnano

PA4663 **Implementation of an advanced clinical practitioner led NIV follow up service in a secondary care setting**
Hannah Petty (Manchester, United Kingdom), Emma Gray, Nashad Mohiuddin, Peter Mulgrew, Thomas Bongers

PA4664 **Validation of the S3-NIV-questionnaire in Danish and symptom burden in COPD patients in long-term non-invasive ventilation treatment**
Line Storgaard (Aabybro, Denmark), Nicolas Siadous, Anne-Mette Meldgaard, Ulla M. Weinreich

PA4665 **Effect of Non-Invasive Ventilation on FVC and diaphragm thickening fraction improvement in AE-COPD with hypercapnic acidosis and acute respiratory failure**
Salvatore Longobardi (Milan, Italy), Sara Bombelli, Claudia D'Antoni, Fabrizio Nava, Sara Mariani, Michele Chiericozzi, Paolo Tarsia

PA4666 **Comparison of constant-minute-volume vs. constant-bolus systems for ambulatory long-term-oxygen therapy in patients with severe COPD – a randomized crossover trial**
Daniel Majorski (Cologne, Germany), Saba Khan, Sarah Schwarz, Maximilian Wollsching-Strobel, Doreen Kroppen, Tim Mathes, Friederike Magnet, Wolfram Windisch

PS-5 in poster area Session 450 12:30 - 14:00

Poster session: Increasing understanding of host-microbe interactions in lung diseases

Disease(s) : Airway diseases Respiratory critical care Interstitial lung diseases

Method(s) : Cell and molecular biology Physiology Epidemiology Respiratory intensive care

Tag(s) : Basic science, Translational

Chairs : Sara Rolandsson Enes (Lund, Sweden), Chair to be confirmed

PA4667 **The effect of Porphyromonas gingivalis on inflammatory pathology in normal or COPD airway**
Noriki Takahashi (Kumamoto, Japan), Toru Kariu, Megumi Hayashi, Tomoki Kishimoto, Choyo Ogasawara, Ayami Fukuyama, Keisuke Kawano, Mary Ann Suico, Hirofumi Kai, Tsuyoshi Shuto

PA4668 **Effects of hypercapnia on alveolar epithelial cells and macrophages infected with pneumonia-causing bacteria**
Elena Campaña-Duel (Sabadell, Spain), Luís Morales-Quinteros, Adrian Ceccato, Aina Areny-Balagueró, Pamela Conde, Lluís Blanch, Laia Fernández, Antonio Artigas, Marta Camprubí-Rimblas

PA4669 **Prone position ventilation decreased the susceptibility to murine Pseudomonas aeruginosa pneumonia**
Jingjing Li (Cambridge, United Kingdom), Matthias Felten, Chunjiang Tan, Sebastian Ferencik, Theresa Firsching, Achim Gruber, Martin Witzenrath

PA4670 **Virlaza™ Inhibits SARS-CoV-2-induced Inflammatory Response of Bronchial Epithelial Cells and Pulmonary Fibroblasts**
Rodolfo De Paula Vieira (Anápolis, Brazil), Maysa Alves Rodrigues Brandao-Rangel, Dobroslav Melamed, Anamei Silva-Reis, Lucas Dos Santos Zamarioli, Sergei Urusov, Tatyana Mostepan, Evgenya Kravchenko, Carlos Rocha Oliveira, Rubens Santos-Silva, Razi Ronen

PA4671 **Epithelial recovery post COVID-19**
Bavithra Vijayakumar (London, United Kingdom), James Tonkin, Christopher M Orton, Justin L Garner, David J S Smith, Richard J Hewitt, Philip L Molyneaux, James A Harker, Pallav L Shah, Clare M Lloyd

PA4672 **LPS treatment enhances the immunomodulatory effect of mesenchymal stromal cells-derivedextracellular vesicles**
Aina Areny Balagueró (Sabadell, Spain), Marta Camprubí-Rimblas, Elena Campaña-Duel, Adrián Ceccato, Daniel Closa, Antonio Artigas

PA4673 **Expression levels of receptors for avian-type flu and SARS-CoV-2 are reciprocally correlated with differentiation in primary human bronchial epithelial cells**
Misako Nakayama (Otsu, Japan), Yuri Morikawa, Takako Sasamura, Jun Terai, Thanh Cong Nguyen, Yasushi Itoh

PA4674 **LSC - 2023 - Activated -inflammatory states of airway cells in Long COVID**
Nadia Baalbaki (Bennekom, Netherlands), Merel Cornelissen, Cornelis Van Drunen, Laura Houweling, Lieke Noij, Marco Van De Werken, Golebski Korneliusz, Anke-Hilse Maitland-Van Der Zee

PA4675 **Relative abundance of Haemophilus as a component of the respiratory microbiome is not associated with airway epithelial MUC5AC staining**
Sarah Diver (Nottingham, United Kingdom), Kairobi Haldar, Latifa Khalfaoui, Fiona Symon, Simon Couillard, Beverley Hargadon, Rekha Chaudhuri, Steve Bicknell, Adel Mansur, Rahul Shrimanker, Timothy Hinks, Ian Pavord, Stephen Fowler, Vanessa Brown, Lorcan Mcgarvey, Liam Heaney, Cary Austin, Peter Howarth, Joseph Arron, David Choy, Peter Bradding On Behalf Of The Investigators For The Uk Mrc Refractory Asthma Stratification Program (rasp-Uk)

PA4676 **Post-biotics preferentially induce human macrophages M1 polarization: a valuable effect to balance allergic immune responses and to control infections**
Elisabetta Pace (Palermo (PA), Italy), Serena Di Vincenzo, Maria Ferraro, Simona Taverna, Velia Malizia, Marco Buscetta, Chiara Cipollina, Valentina Lazzara, Paola Pinto, Marco Bassano, Stefania La Grutta

PA4677 **Cellular stress and senescence in alpha-1 antitrypsin deficiency: therapeutic opportunities**
Mark Murphy (Dublin, Ireland), Lasya Kanchi, Malcolm Herron, Tomás Carroll, Gerry Mcelvaney

PA4678 **Modification of azithromycin to counter its arrest of autophagy**
Eugenio Roscioli (Adelaide (SA), Australia), Anton Blencowe, Susan E Lester, Matthew M Miller, Vesna Munic Kos, Benjamin T Kopp, Hubertus P A Jersmann, Paul N Reynolds

PA4679 **Effects of patient serum containing different profiles and magnitudes of inflammatory markers on human microvascular lung endothelial and bronchial epithelial cells**
Kokilavani Sivaraman (Hannover, Germany), Julia Held, Thomas Illig, Sonja Volland, Tobias Welte, Sabine Wrenger, Sabina Janciauskiene

PA4680 **In vivo inflammation resolving effect of EP395**
Yanira Riffo-Vasquez (London, United Kingdom), Michael J. Parnham, Clive Page, Jennifer A. Kricker

PA4681 **Eosinophilia and the microbiome in COPD**
Gunnar Reksten Husebø (Fana, Norway), Rune Nielsen, Kristel Knudsen, Andreu Paytuví-Gallart, Walter Sanseverino, Tomas Eagan

PA4682 **Counter-Regulation of the proteasome activator PA200 and the immunoproteasome in lung Fibrobroblasts– Implications for anti-viral immune responses in IPF**
Fatme Mourtada (Borstel, Germany), Vanessa Welk, Johannes Nowak, Angelique Sanchez Dafun, Dušan Zivković, Julien Marcoux, Marie-Pierre Bousquet, Juergen Behr, Silke Meiners

PA4683 **Biomass particles activate IKB-α, P-38 and ERK pathways in human macrophages.**
Peter Fenwick (London, United Kingdom), Rebecca Holloway, Sundeep Salvi, Peter Barnes, Louise Donnelly

PA4684 **Cigarette smoke impact on human macrophage cell death and inflammation: role of caspase-8, -3/7 and Gasdermin E**
Marta Cristaldi (Palermo, Italy), Marco Buscetta, Maura Cimino, Agnese La Mensa, Fabio Bucchieri, Francesca Rappa, Pia Ferrigno, Giovanna Lo Iacono, Giorgia Tancredi, Santina Amato, Tommaso Silvano Aronica, Elisabetta Pace, Alessandro Bertani, Chiara Cipollina

PA4685 **Cigarette smoke exposure promotes tumorigenesis via G-quadruplex destabilization in a vitro model of macrophages**
Davida Mirra (Caserta, Italy), Giuseppe Spaziano, Renata Esposito, Francesca Panico, Salvatore Di Maro, Erica Salvati, Erika Cione, Luca Gallelli, Sandro Cosconati, Bruno D'Agostino

PA4686 **Cigarette smoke activates the pro-inflammatory axis caspase-8/caspase-3/7/GSDME in human lung fibroblasts**
Chiara Cipollina (Palermo (PA), Italy), Agnese La Mensa, Marco Buscetta, Marta Cristaldi, Maura Cimino, Paola Dino, Maria Rita Giuffre', Fabio Bucchieri

PS-6 in poster area Session 451 12:30 - 14:00

Poster session: Navigating the latest chronic obstructive pulmonary disease therapeutic trends

Disease(s) : Airway diseases

Method(s) : Epidemiology General respiratory patient care Public health Pulmonary function testing Physiology

Tag(s) : Clinical

Chairs : Carolina Gotera (Madrid, Spain), Gareth Hynes (Oxford (Oxfordshire), United Kingdom)

PA4687 **Step up to ICS/LAMA/LABA vs switch to LAMA/LABA in patients with COPD on ICS/LABA: post hoc analysis of KRONOS**
Dave Singh (Manchester, United Kingdom), Mona Bafadhel, Karin Bowen, Niki Arya, Jonathan Marshall, Himanshu Parikh, Mehul Patel

PA4688	**Persistence to inhaled long-acting maintenance therapy in patients with COPD in UK routine clinical practice** Kieran J. Rothnie (London, United Kingdom), Robert P. Wood, Beade Numbere, Monica Seif, Gema Requena, Christina Diomatari, Emma C. Goodall, Stephen G. Noorduyn, Charley Cooper, Raj Sharma, Chris Compton, Afisi S. Ismaila
PA4689	**Heterogeneous treatment effect estimation of LABA/LAMA/ICS on COPD exacerbation risk in the IMPACT trial** Kenneth Verstraete (Leuven, Belgium), Iwein Gyselinck, Helene Huts, Maarten De Vos, Wim Janssens
PA4690	**Experience of clinicians on dual bronchodilator therapy in COPD (EXPAND) in Nepal** Ramesh Chokhani (Kathmandu, Nepal), Sanjeet Krishna Shrestha, Sharad Bhattarai, Aniruddha Mukhopadhayay, Vaibhav Gaur, Jaideep Gogtay
PA4691	**Clinically important deterioration and COPD treatments: a pairwise meta-analysis** Gian Marco Manzetti (Marino, Italy), Luigino Calzetta, Mario Cazzola, Paola Rogliani
PA4692	**Methods to assess adherence to COPD medication in electronic healthcare databases: a systematic review** Delphine Vauterin (Ghent, Belgium), Frauke Van Vaerenbergh, Anna Vanoverschelde, Jennifer K Quint, Katia Verhamme, Lies Lahousse
PA4693	**Adherence to COPD treatment during the war: can we maintain the previously achieved results ?** Andrii Sidorov (Vinnitsa, Ukraine), Yuriy Mostovoy, Nataliia Slepchenko, Nataliia Tsymbaliuk
PA4694	**Adherence to COPD treatment and concomitant diseases: is there influence ?** Andrii Sidorov (Vinnitsa, Ukraine), Yuriy Mostovoy, Nataliia Slepchenko, Nataliia Tsymbaliuk
PA4695	**Tulobuterol Transdermal Patch as an add on therapy in Stable COPD** Beena Thomas (Kollam (Kerala), India), Parakkal Sukumaran, Thomas Beena, R Radhika, M Midhun, P Rekha, K P Venugopal, Ninan Mathew, Rekha Parameswari
PA4696	**Inhaled triple therapy versus dual bronchodilation in smokers patients with COPD: a 3-year observational study** Angelo Petroianni (Roma (RM), Italy), Marco Bezzio, Silvia Magliulo, Manuel Santu, Paolo Palange
PA4697	**The national development in the use of inhaled corticosteroid treatment for chronic obstructive pulmonary disease in Denmark from 1995 to 2018** Allan Klitgaard (Vejle, Denmark), Rikke Ibsen, Ole Hilberg, Anders Løkke
PA4698	**Economic benefit of fluticasone furoate (FF)/umeclidinium (UMEC)/vilanterol (VI) by baseline blood eosinophil (EOS) count in COPD in the UK - The IMPACT trial** Afisi S Ismaila (Malvern, United States), Dhvani Shah, Alan Martin, Robyn Kendall, Stephen G Noorduyn, Priyadarsini Dasari, Nancy A Risebrough, Chris Compton
PA4699	**Does azithromycin modulate cardiovascular risk following acute pulmonary exacerbations of chronic obstructive pulmonary disease?** Freddy Frost (Liverpool, United Kingdom), Tomasso Bucci, Dennis Wat, Sarah Sibley, David Green, Gregory Lip
PA4700	**Safety and efficacy of home initiation of chronic non-invasive ventilation in patients with severe COPD and chronic hypercapnic respiratory failure.** Emma Parkes (Cardiff, United Kingdom), Eilish Yarham, Kirsty Eastwood, Michelle Davies, Stuart Packham
PA4701	**A meta-analysis on the importance of peak inspiratory flow variance in simplifying DPI prescribing for COPD patients** Monbi Stefanova Chakma (UPMINSTER, United Kingdom), Omar S Usmani, Liangfeng Han, Bryan Newman, Eslam Ibrahim, Darragh Murnane
PA4702	**Inhaler technique mastery in elderly COPD patients with cognitive impairment trained on different inhaler devices** Elsa Mazzarella (Florence, Italy), Letizia Dal Bosco, Guido Arena, Riccardo Soldaini, Amedeo Vannacci, Federico Lavorini
PA4703	**Extra-fine Particle Inhaled Corticosteroids Influence on the Risk of Hospitalization due to Pneumonia in Patients with Chronic Obstructive Pulmonary Disease - A Populations-Based Cohort Study** Christian Kjer Heerfordt (Hellerup, Denmark), Christian Rønn, Zitta Barrella Harboe, Pradeesh Sivepalan, Josefin Eklöf, Jens-Ulrik Stæhr Jensen
PA4704	**The Impact of Extrafine Beclometasone/Formoterol/Glycopyrronium on Sleep disturbance in Chronic Obstructive Pulmonary Disease (COPD) in an Italian Context of Real Life: The TRITRIAL Study.** Ulrica Scaffidi Argentina (PARMA, Italy), Luca Richeldi, Pietro Schino, Elena Bargagli, Alberto Ricci, Alberto Rocca, Francesca Marchesani, Alfio Pennisi, Gianna Camiciottoli, Mariella D'Amato, Francesco Macagno, Elena Garavelli, Eleonora Ingrassia, Alessio Piraino

PA4706	**Characteristics of COPD patients initiating budesonide/glycopyrronium/formoterol (BGF) and other triple therapy in Japan: a health-care claims-based real-world database study (MITOS program)** Koichiro Takahashi (Saga, Japan), Naoyuki Makita, Johann Castaneda, Ramzi Argoubi, Gregoire Nowacki, Seham Issa, Isao Matsumoto, Yuri Yoshida, Hana Mullerova

PS-7 in poster area Session 452 12:30 - 14:00

Poster session: Biological treatments for asthma: novel real-life insights

Disease(s) : Airway diseases

Method(s) : Pulmonary function testing General respiratory patient care Epidemiology Public health Cell and molecular biology

Tag(s) : Clinical, Translational

Chairs : Nicolas Roche (Paris, France), Simon Lea (Manchester (Greater Manchester), United Kingdom)

PA4707	**BIOLOGIC TREATMENT IN PERSISTENT SEVERE ASTHMA** Edurne Echevarría Guerrero (Barakaldo, Spain), Ana Gómez Larrauri, Jone Solorzano Egurbide, Imanol González Muñoz, Elena Garay Llorente, Teresa Bretos Dorronsoro, Silvia Pérez Fernández, Milagros Iriberri Pascual, Nuria Marina Malanda
PA4708	**Initiation, response assessment and switch of antibody therapies in patients with severe asthma – a survey among German specialists** Hendrik Suhling (Hannover, Germany), Carlo Mümmler, Dirk Skowasch, Karl Bergmann, Roland Buhl, Eckard Hamelmann, Marko Idzko, Christian Taube, Stephanie Korn, Katrin Milger
PA4709	**Follow-up of patients with severe eosinophilic asthma receiving benralizumab for one year (gReek rEAl Life regIStry of benralizuMab: REALISM Study)** Konstantinos Samitas (Athens, Greece), Chrysoula Kontogianni, Petros Bakakos, Nikolleta Rovina, Stelios Loukides, Andrianna Papaioannou, Nikolaos Tzanakis, Katerina Antoniou, Katerina Dimakou, Georgios Hillas, Sofia Koukidou, Aikaterini-Ioanna Sakellaropoulou, Konstantinos Katsoulis, Maria Kipourou, Niki Georgatou, Dimosthenis Papapetrou, Ourania Kotsiou, Nikolaos Zias, Evangelia Fouka, Konstantinos Porpodis, Maria Hatzimitrova, Despoina Papakosta, Paschalis Steiropoulos, Konstantinos Kostikas, Athena Gogali, Agapi Aggelopoulou, Konstantinos Tatsis, Ilias Papanikolaou, Eleftheria Chaini, Miltiadis Markatos, Stelios Vittorakis, Pantelis Avarlis, Eleni Gaki, Dimitrios Latsios, Eleni Tzortzaki, Eleftherios Zervas
PA4710	**Treating severe IgE mediated allergic adult asthmatics with omalizumab outside the dosing table** Etienne Ceci Bonello (Naxxar, Malta), Caroline Gouder
PA4711	**Agreement and discrepancies between past prescribing decisions and future prescribing preferences: An EU outlook** Samantha Valliant (Upper Providence, United States), Joshua Harvey, Shiyuan Zhang, Kelechi Emeanuru, Karina Brunini Pitta Palhares, Marine Andre, Rafael Alfonso-Cristancho
PA4712	**Biologic treatment patterns of severe asthma patients in the EU-4 and the UK** Samantha Valliant (Upper Providence, United States), Joshua Harvey, Shiyuan Zhang, Kelechi Emeanuru, Karina Brunini Pitta Palhares, Marine Andre, Rafael Alfonso-Cristancho
PA4713	**Real-world experience of biologics use and switching among adults with severe asthma at a tertiary care centre in United Arab Emirates** Yasser Alkassar (Abu Dhabi, United Arab Emirates), Aymen Abbas, Abeer Hassan, Emadullah Raidullah Raidullah, Rehab Al Maashari, Marwan Najib, Muhammad Tufail Tufail
PA4714	**Phenotypical distribution according to the age of asthma onset in patients evaluated for biologic therapy prescription in a referral center in Colombia** Abraham Ali Munive (Bogotá (Cundinamarca), Colombia), Yaicith Arevalo-Montenegro, Oscar Correa-Jimenez, Leidy Prada, Libardo Jimenez-Maldonado, Mauricio Duran, Juan Bedoya, Carlos A. Torres-Duque
PA4715	**An algorithm to identify patients with T2 diseases and Chronic Spontaneous Urticaria treated with biologics in outpatient care setting using a dynamic dispensing database** Jérémy Charriot (Montpellier Cedex 5, France), Vincent Descamps, Roger Jankowski, Milka Maravic, Arnaud Bourdin
PA4716	**The effect of biologicals on lung function, inflammation and asthma control in patients treated for severe eosinophilic or type-2 inflammatory asthma 4months after treatment initiation.** Peter Emil Folkersen (Århus C, Denmark), Johannes Schmid, Tina Skjold, Anne Sophie Bjerrum
PA4717	**The clinical experience of patients with severe asthma and previous treatment with omalizumab, choosing mepolizumab in Greece.** Maria Kallieri (Aspropyrgos, Greece), Andriana I. Papaioannou, Eleftherios Zervas, Evangelia Fouka, Konstantinos Porpodis, Marija Hadji Mitrova, Eleni Tzortzaki, Michael Makris, Maria Ntakoula, Panagiotis Lyberopoulos, Katerina Dimakou, Sofia Koukidou, Sevasti Ampelioti, Anastasia Papaporfyriou, Konstantinos Katsoulis, Maria Kipourou, Nikoletta Rovina, Katerina Antoniou, Stylianos Vittorakis, Petros Bakakos, Paschalis Steiropoulos, Katerina Markopoulou, Panteleimon Avarlis, Ilias C. Papanikolaou, Miltiadis Markatos, Eleni Gaki, Konstantinos Samitas, Konstantinos Glynos, Spyros A. Papiris, Despoina Papakosta, Nikolaos Tzanakis, Mina Gaga, Konstantinos Kostikas, Stelios Loukides

PA4718 **PERSISTENCE OF EOSINOPHILS IN BRONCHIAL MUCOSA BIOPSIES IN PATIENTS TREATED WITH DUPILUMAB FOR 6 MONTHS**
Francesco Bini (Pavia (PV), Italy), Bruno Dino Bodini, Andrea Cristiano, Adriano Vaghi

PA4719 **Eosinophils sub-types in patients with severe asthma treated with monoclonal antibodies.**
Alejandra Sánchez-Santos (Las Palmas de Gran Canaria, Spain), Carlos Cabrera-López, Angelina Lemes-Catellano, Sara Cazorla-Rivero, Enrique González-Dávila, Bartolomé Celli, Ciro Casanova-Macario

PA4720 **Long-term safety and efficacy of tezepelumab in adolescents with severe, uncontrolled asthma**
Guy Brusselle (Ghent, Belgium), Kaitlyn Lawson, Sandhia Ponnarambil, Andrew Lindsley, Daiana Stolz

PA4721 **Inhaled corticosteroid dose reduction with tezepelumab in patients with severe, uncontrolled asthma over 2 years**
Daiana Stolz (Freiburg, Germany), Njira Lugogo, Kaitlyn Lawson, Scott Caveney, Shradha Chandarana

PA4722 **On-treatment clinical remission with tezepelumab in patients with severe, uncontrolled asthma in the phase 3 DESTINATION study**
Michael E. Wechsler (Denver, United States), Guy Brusselle, J Christian Virchow, Liam G Heaney, Gillian Hunter, Sandhia Ponnarambil, Neil Martin, Jean-Pierre Llanos, Celeste Porsbjerg, Christopher E Brightling

PA4723 **Success of an oral corticosteroid withdrawal pathway for severe asthma patients on biologics**
Richard Russell (Leicester, United Kingdom), Claire Boddy, Mark Bell, Eleanor Hampson, Lauren Parnell, Shamsa Naveed, Karim Meeran, Salman Siddiqui, Peter Bradding

PA4724 **Successful steroid weaning in a severe asthma centre does not always require biologics**
Emma Graham (Plymouth, United Kingdom), Chellan Eames, Ciara Whitfield, Sumita Kerley, Eleanor Rayala-Montaniel, Peter Cook, Hans Michael Haitchi, Ramesh Kurukulaaratchy, Paddy Dennison, Nadia Zarif, Hitasha Rupani

PA4725 **Effectiveness and economic impact of Dupilumab in asthma: a population-based cohort study**
Pietro Curci (Monza, Italy), Paola Faverio, Raffaella Ronco, Matteo Monzio Compagnoni, Matteo Franchi, Giovanni Franco, Giulia Bonaiti, Martina Bonifazi, Federico Mei, Fabrizio Luppi, Giovanni Corrao

PA4726 **Asthma control in severe asthma patients treated with tezepelumab: A prospective, observational, real-world evidence study in Europe and Canada (ASCENT)**
Katrin Milger-Kneidinger (Munich, Germany), Del Dorscheid, Christian Gessner, Fredrik Sundbom, Daiana Stolz, Hannah Urbanski, Tham Le, Benjamin Emmanuel, Trung Tran, Deborah Clarke, Jean-Pierre Llanos, Nicole Clarke, Tim Ruckh, Sheena Kayaniyil, Neil Martin, Neda Stjepanovic, Celeste Porsbjerg

PS-8 in poster area — Session 453 — 12:30 - 14:00

Poster session: Severe asthma

Disease(s) : Airway diseases Respiratory critical care

Method(s) : General respiratory patient care Pulmonary function testing Physiology Epidemiology Public health Cell and molecular biology

Tag(s) : Clinical

Chairs : Fabio L. M. Ricciardolo (Torino, Italy), Stylianos Loukides (Athens, Greece)

PA4727 **Improved spirometric and oscillometric indices in severe asthma with clinical remission by anti-IL-5/IL-5 receptor alpha antibodies**
Taisuke Akamatsu (Shizuoka, Japan), Kohei Okawa, Keita Hirai, Toshihiro Shirai

PA4728 **Small airway changes assessed by impulse oscillometry in severe asmathic patients treated with Benralizumab**
Cristina De Juana Izquierdo (VALENCIA, Spain), Andrés Sánchez Vera, Eva María Abril Ródenas, Elisa Lillo González, Vicente Abella Sanchís, Alejandro Álvarez Brito, Eva Martínez Moragón

PA4729 **Effect of prior anti-IL5 treatment on benralizumab outcomes in severe asthma**
Gaël Tavernier (Manchester (Greater Manchester), United Kingdom), Mina Naderisemiromi, Taqdees Qureshi, Leanne Holmes, Lynn Elsey, Thomas Pantin, Stephen Fowler

PA4730 **Well-controlled severe asthmatics: who they really are?**
Venere Piluso (Rome, Italy), Francesca Cefaloni, Cristina Boccabella, Luca Richeldi, Matteo Bonini

PA4731 **Parasite screening in a large pre-biologic severe eosinophilic asthma population**
Irene Berrar Torre (london, United Kingdom), Kena Simpson, Rachel Stead, Victoria Nicholas, Darius Armstrong-James, Breda Cushen, Pujan Patel

PA4732 **Severe Asthma Questionnaire (SAQ) And Asthma Control Questionnaire (ACQ) As Early Predictors Of Biologic Response In Severe Asthma.**
Drew Davies (exeter, United Kingdom), Joseph Lanario, Micheal Hyland, Mathew Masoli

PA4733	**Adrenal insufficiency in corticosteroids dependent asthma: a single center experience** ERICA FALZONE (Orbassano (TO), Italy), Giuseppe Reimondo, Stefano Pizzimenti, Cristina Botto, Anna Maria Elena Perini, Vitina Carriero, Francesca Bertolini, Elisa Arrigo, Stefano Levra, Massimo Terzolo, Fabio Luigi Massimo Ricciardolo, Giuseppe Guida
PA4734	**Assessment of the impact of infection SARS-CoV-2 on the control and Lung function of patients with severe asthma** Ana Pedro Cunha Craveiro (Boidobra-Covilhã, Portugal), Margarida Gomes, Julia Cunha Silva, Ana Mendes, Maria Elisa Pedro
PA4735	**What adds the new definition of bronchodilator responsiveness in asthmatic adults?** Hela Fakhfakh (sfax, Tunisia), Rim Kammoun, Emna Eleuch, Asma Haddar, Molk Maalej, Ines Kammoun, Kawthar Masmoudi
PA4736	**A retrospective real-life study on the switch of biologics in severe asthma** Sonia Garino (Rivalta di Torino, Italy), Giuseppe Guida, Elisa Riccardi, Vitina Carriero, Francesca Bertolini, Mattia Brusamento, Stefano Pizzimenti, Stefano Levra, Fabio Luigi Massimo Ricciardolo
PA4737	**The effect of anti-IL-5 biologics on lung function in adults with severe eosinophilic asthma.** Samuel Wallbanks (BIRMINGHAM, United Kingdom), Maximillian Thomas, Brendan Cooper, Julie Sullivan, Lisa White, Anilkumar Pillai, Adel Mansur
PA4738	**Effectiveness of anti-IL5 biologics in severe asthma, based on real world observational studies: a systematic review** Dimitrios Potonos (Ioannina, Greece), Konstantinos Exarchos, Christina Aggelopoulou, Evangelos Beris, Aggelos Ladias, Christos Kyriakopoulos, Athena Gogali, Konstantinos Kostikas
PA4739	**“Head-to-head” comparison between biologics in severe asthma: a real-world study** Elisa Riccardi (Massino Visconti, Italy), Giuseppe Guida, Sonia Garino, Francesca Bertolini, Vitina Carriero, Mattia Brusamento, Stefano Pizzimenti, Stefano Levra, Fabio Luigi Massimo Ricciardolo
PA4740	**Characterisation of asthma in patients with fixed obstructive ventilatory disorder** Hadhemi Rejeb (Sousse, Tunisia), SABRINE ELFIDHA, Rania Kaddoussi, Bochra Karaborni, Hanen Smadhi, Dorra Greb, Ines Akrout, Hajer Abdelghaffar, Hela Hassene, Leila Fekih, Hela Kammoun, Mohamed Lamine Megdiche
PA4741	**Effects of anti-IL5 receptor α in severe asthma: a real-life study** Francesco Ardesi (Milan, Italy), Martina Zappa, Patrizia Pignatti, Sarah Grossi, Rosella Centis, Dina Visca, Antonio Spanevello
PA4742	**Phenotyping severe asthma attacks in patients hospitalised with acute asthma** Mouaid Aljehani (Nottingham, United Kingdom), Tim Harrison, Matthew Martin
PA4743	**Characteristics of severe asthma patients and predictors of asthma control in the Swiss Severe Asthma Registry** Fabienne Jaun (Liestal, Switzerland), Lydia Maria Troester, Stéphanie Giezendanner, Pierre-Olivier Bridevaux, Florian Charbonnier, Christian Clarenbach, Pietro Gianella, Anja Jochmann, Lukas Kern, David Miedinger, Nikolay Pavlov, Thomas Rothe, Claudia Steurer-Stey, Christophe Von Garnier, Joerg Daniel Leuppi
PA4744	**Persistent airflow limitation in severe asthma: should we talk about a specific phenotype?** Francesca Cefaloni (Rome, Italy), Cristina Boccabella, Luca Richeldi, Matteo Bonini
PA4745	**Effects of benralizumab therapy in patients with severe eosinophilic asthma: a single-center experience** Borislav Božanić (Niš, Republic of Serbia), Marija Topalović, Ivana Stanković, Tatjana Pejčić
PA4746	**Late Breaking Abstract - Novel Index assesses severe asthma care across 29 OECD countries** Patrick Gallen (Copenhagen K, Denmark), Bogi Eliasen, Joe-Max Wakim, José Manuel Jerez Pombo, Emilie Balk Møller

PS-9 in poster area Session 454 12:30 - 14:00

Poster session: The impact of comorbidities and infection on the outcome of airways disease and response to treatment

Disease(s) : Airway diseases Interstitial lung diseases Pulmonary vascular diseases

Method(s) : Cell and molecular biology Imaging General respiratory patient care Pulmonary function testing Epidemiology Public health Endoscopy and interventional pulmonology

Tag(s) : Clinical, Translational

Chairs : Cindy Barnig (Besançon, France)

PA4747	**Burden of asthma and risk factors associated with hospitalization: results of 290 centers of the SWORD OPD survey** Sheetu Singh (Jaipur (Rajasthan), India), Bharat Bhushan Sharma, Arvind Sharma, Krishna Kumar Sharma, Kp Suraj, Tariq Mehmood, Kumar Utsav Samaria, Surya Kant, Nishtha Singh, Tejraj Singh, Aradhana Singh, Rajeev Gupta, Parvaiz A Koul, Sundeep Salvi, Virendra Singh

PA4748	**Real-life effects of dupilumab in patients with severe type 2 asthma, according to atopic trait and presence of chronic rhinosinusitis with nasal polyps** Corrado Pelaia (Catanzaro (CZ), Italy), Alida Benfante, Maria Teresa Busceti, Maria Filomena Caiaffa, Raffaele Campisi, Giovanna Elisiana Carpagnano, Nunzio Crimi, Maria D'Amato, Maria Pia Foschino Barbaro, Angelantonio Maglio, Elena Minenna, Santi Nolasco, Giuseppe Paglino, Francesco Papia, Girolamo Pelaia, Andrea Portacci, Luisa Ricciardi, Nicola Scichilone, Giulia Scioscia, Massimo Triggiani, Giuseppe Valenti, Alessandro Vatrella, Claudia Crimi
PA4749	**Asthma diagnosis and symptoms in an allergen immunotherapy trial treating grass pollen induced rhinoconjunctivitis** Bjarke Hviid-Vyff (Aarhus C, Denmark), Johannes Martin Schmid, Hans Jürgen Hoffmann
PA4750	**High-dose aspirin in severe uncontrolled asthma associated with chronic rhinosinusitis with nasal polyps (CRwNP) : the ASTHMIRINE trial** Mathilde Le Brun (Paris, France), Gilles Devouassoux, Cécile Chenivesse, Gilles Garcia, Philippe Bonniaud, Alain Didier, Frédéric De Blay, Catherine Neukirch, Arnaud Bourdin, Pascal Chanez, Guillaume Mahay, Angelica Tiotiu, Amandine Vial-Dupuy, Candice Estellat, Marina Esposito-Farèse, Camille Couffignal, Camille Taillé
PA4751	**Allergen-specific immunotherapy in adults with birch pollen-related asthma: real life evidence** Jiri Nevrlka (Brno, Czech Republic), Katarina Ditetova, Zlatica Nevrlkova, Lenka Zdrazilova-Dubska
PA4752	**German Asthma Net: Nasal polyposis in patients with severe asthma** Christina Bal (Wien, Austria), Katrin Milger, Dirk Skowasch, Monika Gappa, Cordula Koerner-Rettberg, Margret Jandl, Olaf Schmidt, Rainer Ehmann, Slagjana Stoshikj, Christian Taube, Eckard Hamelmann, Roland Buhl, Stephanie Korn, Marco Idzko
PA4753	**Effectiveness and Safety of Anti-IL-5/Rα Biologics in Eosinophilic Granulomatosis with Polyangiitis: A Two-Year Multicenter Observational Study** Santi Nolasco (Catania, Italy), Andrea Portacci, Raffaele Campisi, Enrico Buonamico, Corrado Pelaia, Alida Benfante, Massimo Triggiani, Giuseppe Spadaro, Maria Filomena Caiaffa, Giulia Scioscia, Aikaterini Detoraki, Giuseppe Valenti, Francesco Papia, Alessandra Tomasello, Nunzio Crimi, Nicola Scichilone, Girolamo Pelaia, Giovanna Elisiana Carpagnano, Claudia Crimi
PA4754	**Role of Galectin-10 (Gal-10) in nasal epithelium inflammation and remodeling of children with seasonal allergic rhinitis (SAR)** Rosalia Gagliardo (Palermo (PA), Italy), Olga Maria Manna, Stefania La Grutta, Velia Malizia, Alberto Fucarino, Francesca Rappa, Domiziana Picone, Salvatore Fasola, Mirella Profita, Fabio Bucchieri
PA4755	**Grading the severity of the local side effects induced by Sublingual Immunotherapy for Allergic Respiratory Disease** ASMA SAIDANE (TUNIS, Tunisia), Selsebil Daboussi, Meriem Chaabane, Marwa Kacem, Nouha Boubaker, Chiraz Aichaouia, Samira Mhamdi, Zied Moatameri
PA4756	**Obese asthma with positive type-2 inflammation markers: Cytokine profiles and potential pathogenesis** Masako To (Saitama, Japan), Natsue Honda, Kosuke Haruki, Yasuo To
PA4757	**Real-world outcomes with mepolizumab in patients with severe asthma and comorbid anxiety/depression: REALITI-A at 2 years** Rekha Chaudhuri (Glasgow (Glasgow), United Kingdom), Mark C. Liu, Diego Bagnasco, Andrea Matucci, Charles Pilette, Robert G. Price, Lydia Demetriou, Peter Howarth
PA4758	**Experience of the COVID-19 pandemic in asthmatic patients** Safa belkhir (Tunis, Tunisia), Soumaya Ben Saad, Amani Ben Mansour, Azza Slim, Hafaoua Daghfous, Fatma Tritar
PA4759	**The Burden of Allergic Bronchopulmonary Aspergillosis in Post-Tuberculosis Lung Disease Patients Presenting to a Tertiary Referral Centre** Animesh Ray (Kolkata (West Bengal), India), Anuj Ajay, Gagandeep Singh, Sanjeev Sinha, Immaculata Xess, Naveet Wig
PA4760	**Doctors Clinical-Decision making Algorithm for Allergy to Anti-Tuberculosis Drugs in Tunisia** ASMA SAIDANE (TUNIS, Tunisia), Selsebil Daboussi, Meriem Chaabane, Marwa Kacem, Nouha Boubaker, Chiraz Aichaouia, Samira Mhamedi, Zied Moatameri
PA4761	**The role of specific and total IgE in COPD** Meropi Karakioulaki (Freiburg im Breisgau, Germany), Caroline-Maria Berkemeier, Leticia Grize, Ingmar Heijnen, Antonis Goulas, Michael Tamm, Daiana Stolz
PA4762	**Patient burden on refractory and unexplained chronic cough: a qualitative survey in Japan** Takekazu Kubo (Tokyo, Japan), Naoya Ueda, Masakazu Igarashi, Anzu Yakushiji, Shigeru Tokita
PA4763	**IFNy release from the co-culture of monocyte-derived dendritic cells and T-cells is induced in severe asthmatics in response to bacteria and viruses** Daniel Weidinger (Bochum, Germany), Kaschin Jamal Jameel, Marcel Raczek, Eike Buelthoff, Paul Bürger, Simon Rohde, Faisal Yusuf, Juliane Kronsbein, Matthias Tenbusch, Marcus Peters, Jürgen Knobloch

PA4764	**Anti-staphylococcal enterotoxin A and B immunoglobulin E in COPD** Meropi Karakioulaki (Freiburg im Breisgau, Germany), Caroline-Maria Berkemeier, Ingmar Heijnen, Leticia Grize, Eleni Papakonstantinou, Antonis Goulas, Michael Tamm, Daiana Stolz	
PA4765	**Clinical relevance of Staphylococcus aureus nasal colonization and Staphylococcal enterotoxin-specific IgE sensitization in late-onset asthma** Ha-Kyeong Won (Seoul, Republic of Korea), Youngsang Yoo, Jiwon Lee, Noeul Kang, Ji-Hyang Lee, Jun-Pyo Choi, Tae-Bum Kim, Sang Heon Cho, Woo-Jung Song	
PA4766	**Modelling small airways disease at air-liquid-interface with extended NTHi biofilm co-culture: Implications in COPD.** Jake Weeks (Southampton, United Kingdom), C. Mirella Spalluto, M. Vicky Humbert, Tom Wilkinson, Kristoffer Ostridge, Karl Staples	

Red 1+2 — Session 455 — 12:45 - 13:45

Joint session: Healthcare based on Value … about time

an ERS / Industry Joint Session

Chairs : Jørgen Vestbo (Manchester (Greater Manchester), United Kingdom), Hilary Pinnock (Edinburgh (Edinburgh), United Kingdom)

12:45	**What is value based health care / Applicability in diverse healthcare contexts?** Airoldi Mara (Oxford, United Kingdom)	**4767**
13:00	**Panel on value-based healthcare in COPD - my view** Louise Jane Restrick (London, United Kingdom), Marc L.A. Decramer (Leuven, Belgium), Job F.M. van Boven (Groningen, Netherlands)	**4768**
13:20	**Questions and answers** All Speakers	**4769**

12:45-13:45
INDUSTRY LUNCHTIME SYMPOSIUM SEE PAGE 1

Blue 1+2 — Session 458 — 12:45 - 13:45

Joint session: Prevention is better than cure. Vaccination developments in the next century

an ERS / Industry Joint Session

Tag(s) : Clinical

Chairs : Tobias Welte (Hannover, Germany), Katherine O'Brien (Baltimore, United States)

12:45	**Development and technology of vaccines** Leif Erik Sander (Berlin, Germany)	**4777**
13:05	**Vaccine safety** Sabine Straus (, Netherlands)	**4778**
13:25	**Joint discussion and Q&A session** All Speakers	**4779**

Gold — Session 460 — 13:45 - 15:15

State of the art session: Interstitial lung diseases

Filling the gaps in care for interstitial lung diseases

Aims : to discuss: 1) the primary care setting, exploring symptom evaluation in ILDs; 2) the novel assessment of idiopathic pulmonary fibrosis (IPF) management in light of different phase 3 clinical trials of this disease; 3) hypersensitivity pneumonitis (HP) and recent guidelines from different societies, such as novel therapeutic advances after the introduction of antifibrotic therapy in progressive HP; 4) the lungs with the common disease (also in the primary care setting) rheumatoid arthritis, focusing on the ILD component, and, more specifically, address whether its pathogenesis starts from the lungs.

Disease(s) : Interstitial lung diseases

Method(s) : General respiratory patient care Physiology Pulmonary function testing

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Patient, Physician in Pulmonary Training, Physiologist, Scientist (basic, translational), Respiratory therapist

Chairs : Elena Bargagli (Siena, Italy), Paolo Spagnolo (Padova (PD), Italy), Antoine Froidure (Bruxelles, Belgium)

13:45	**Symptom management in ILD** Kerri Ilene Aronson (New York, United States)	**4785**
14:00	**Precision medicine in IPF** Athol Wells (London, United Kingdom)	**4786**
14:15	**New developments in HP diagnosis and therapeutic management** Martina Koziar Vasakova (Praha 10, Czech Republic)	**4787**
14:30	**Rheumatoid arthritis and the lungs: new concepts and treatments** Katerina Antoniou (Heraklion, Greece)	**4788**
14:45	**Discussion and Q&A** All Speakers	**4789**

Silver — Session 461 — 13:45 - 15:15

Symposium: The 'silent zone' is heard: latest insights and updates in small airways disease in asthma and chronic obstructive pulmonary disease

Aims : to provide an update on recent research into the increasing importance of small airways diseases in patients with asthma and chronic obstructive pulmonary disease (COPD); to describe new developments in the assessment of small airways diseases using physiological methods; to provide an update on evidence for the clinical impact of small airways diseases on patient-related outcomes; to highlight recent data regarding treatment targeted at small airways diseases and how this relates to clinical outcomes.

Disease(s) : Airway diseases

Method(s) : General respiratory patient care Physiology Pulmonary function testing

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Pathologist, Patient, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist, Scientist (basic, translational), Journalist

Chairs : James D. Chalmers (Dundee (Angus), United Kingdom), Arzu Yorgancıoğlu (Konak, Turkey)

13:45	**Small airways and early origins of airway disease: pathobiological considerations** Francesca Polverino (Houston, United States)	**4790**
14:00	**Advances in physiological assessments of small airways diseases in asthma and COPD for everyday clinical practice** Chung-Wai Chow (Toronto (ON), Canada)	**4791**
14:15	**Evidence for the clinical impact of small airways diseases on patient-related outcomes in patients with asthma and COPD** Monica Kraft (New York, United States)	**4792**
14:30	**Targeting and treating small airways disease in patients with asthma and COPD** Omar S. Usmani (London, United Kingdom)	**4793**
14:45	**Discussion and Q&A** All Speakers	**4794**

Coral 4+5 — Session 462 — 13:45 - 15:15

Clinical trials session: ALERT 3: Healthy Lungs for Life
#BeSmokeFree - #BreatheCleanAir

Chairs : Florence Schleich (Liège, Belgium), Chair to be confirmed

Discussants : Jonathan Grigg (London, United Kingdom), Discussant to be confirmed

13:45		**RCT4795**
13:52		**RCT4796**
13:59		**RCT4797**
14:06	**Wrap-up by discussant and discussion** Speaker to be confirmed	**RCT4798**
14:28		**RCT4799**
14:35		**RCT4800**

14:42		**RCT4801**
14:49	**Wrap-up by discussant and discussion** Jonathan Grigg (London, United Kingdom)	**RCT4802**
15:11	**Closing remarks** All Speakers	**RCT4803**

Coral 3 Session 463 13:45 - 15:15

Hot topics: Incidental findings in low dose computed tomography lung cancer screening programmes: be aware, be prepared!

Aims : to highlight potential benefits and harms of incidental findings in low dose computed tomography lung cancer screening programmes; to present complementary professional perspectives of latest evidence and to add up to multidisciplinary management strategies.

Disease(s) : Thoracic oncology

Method(s) : Endoscopy and interventional pulmonology Epidemiology Imaging

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Pathologist, Patient, Physician in Pulmonary Training, Radiologist, Thoracic oncologist, Thoracic surgeon, Respiratory therapist

Chairs : Elżbieta Magdalena Grabczak (Warszawa, Poland), Maria Joana Pereira Catarata (Porto, Portugal)

13:45	**Incidental findings: the Radiologist's experience** Jens Vogel-Claussen (Hannover, Germany)	**4804**
14:00	**Incidental findings: the AI's answers**	**4805**
14:15	**Patient's perspective**	**4806**
14:20	**Incidental findings: the GP's perspective**	**4807**
14:35	**The pulmonologist's new challenge: emphysema and ILA out of LDCT**	**4808**
14:50	**Discussion and Q&A** All Speakers	**4809**

Coral 1 Session 464 13:45 - 15:15

Symposium: Lung cancer screening: turning up the heat and moving onwards

Aims : to focus on the best practices and latest developments in lung cancer screening;to address topics relevant to an international audience by reviewing current data to highlight success and help remove barriers to increased adoption of efficient lung cancer screening programmes; to facilitate meaningful interaction between clinicians and researchers involved in different aspects of early detection (imaging, biomarkers, quality assurance, research, etc.) and relevant research.

Disease(s) : Thoracic oncology

Method(s) : Endoscopy and interventional pulmonology Imaging Public health

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Patient, Physician in Pulmonary Training, Radiologist, Thoracic oncologist, Thoracic surgeon

Chairs : Marcello Migliore (Riyadh, Saudi Arabia), Andriani Charpidou (Athens, Greece)

13:45	**Biomarkers in lung cancer screening: can they impact clinical management plans?** Ehab Billatos (Boston, United States)	**4810**
14:00	**Lung cancer detection by the electronic nose** Wouter H. van Geffen (Leeuwarden, Netherlands)	**4811**
14:15	**Emerging bronchoscopic options for early detection of lung cancer** Pallav L. Shah (London, United Kingdom)	**4812**
14:30	**Lung cancer screening in Europe: a first snapshot by SOLACE** Marie-Pierre Revel (Paris, France)	**4813**

14:45	**Discussion and Q&A** All Speakers	**4814**

Coral 2 — Session 465 — 13:45 - 15:15

State of the art session: Respiratory critical care

Noninvasive and invasive mechanical ventilation in acute respiratory diseases

Aims : to provide a state of the art overview of mechanical ventilation in acute respiratory failure, i.e., acute respiratory distress syndrome (ARDS), acute exacerbation of chronic obstructive pulmonary disease and beyond.

Disease(s) : Respiratory critical care

Method(s) : General respiratory patient care Respiratory intensive care

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Respiratory critical care physician, Patient, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist, Scientist (basic, translational), Respiratory therapist

Chairs : Dries Testelmans (Leuven, Belgium), Claudia Crimi (Catania (CT), Italy), Ignacio Martin-Loeches (Dublin, Ireland)

13:45	**Molecular mechanisms of ventilator induced lung injury** Martin Witzenrath (Berlin, Germany)	**4815**
14:00	**Evidence-based invasive mechanical ventilation in ARDS** Lise Piquilloud (Lausanne, Switzerland)	**4816**
14:15	**Extracorporeal membrane oxygenation in ARDS: state of the art** Christian Karagiannidis (Cologne, Germany)	**4817**
14:30	**Weaning from mechanical ventilation** Leo Heunks (Amsterdam, Netherlands)	**4818**
14:45	**Discussion and Q&A** All Speakers	**4819**

Purple — Session 466 — 13:45 - 15:15

Mini symposium: Genetics in paediatric respiratory diseases

Genetic heterogeneity underlies phenotype and therapeutic approaches

Aims : to present the main process and challenges of genetic data interpretation; to list the main genetic diagnostic tools and their limitations; to provide the audience with key tips to read a genetic report. to discuss importance of genotyping for three model monogenic diseases that can affect newborns or occur later in life (cystic fibrosis, surfactant disorders and primary ciliary dyskinesia): to illustrate the phenotype-genotype correlation diversity and gene/mutation(s) distinct consequences at the cell level; to explain the consequences of molecular diagnosis on vital prognosis at birth, follow-up, lung cancer risk later in life and genetic counselling; to explain how genotypes connect with current personalised treatments and their development.

Disease(s) : Airway diseases Interstitial lung diseases Paediatric respiratory diseases

Method(s) : Cell and molecular biology Epidemiology General respiratory patient care

Tag(s) : Translational

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Medical Student, Nurse, Respiratory critical care physician, Paediatrician, Pathologist, Patient, Physician in Pulmonary Training, Respiratory physiotherapist, Scientist (basic, translational), Thoracic oncologist, Respiratory therapist

Chairs : Nicole Beydon (Paris, France), Sinthia Bosnic-Anticevich (Strathfield (NSW), Australia)

13:45	**Patient's perspective**	**4820**
13:50	**Basics of genetic diagnostics** Marie Legendre (Paris, France)	**4821**
14:05	**Surfactant disorders: from neonatal respiratory distress to cancer predisposition** Lawrence Mark Nogee (Baltimore, United States)	**4822**
14:20	**Models for ciliated airway epithelial cells and personalised medicine** Andrew Berical (Boston, United States)	**4823**
14:35	**Discussion and Q&A** All Speakers	**4824**

14:00-14:45
INDUSTRY SKILLS LAB WORKSHOP SEE PAGE 1

Red 1+2 Session 468 14:15 - 15:30

Oral presentation: Pulmonary embolism: acute and long-term management (1)

Disease(s) : Pulmonary vascular diseases

Method(s) : General respiratory patient care Cell and molecular biology Epidemiology Pulmonary rehabilitation Imaging

Tag(s) : Clinical

Chairs : Laurent Bertoletti (Saint Etienne Cedex, France), Lucilla Piccari (Barcelona, Spain)

OA4826	**Late Breaking Abstract - Does ultrasound in suspected pulmonary embolism safely reduce referral to diagnostic imaging? – a randomized controlled trial** Casper Falster (Odense, Denmark), Rune Wiig Nielsen, Jacob Eifer Møller, Mikael Kjær Poulsen, Stefan Posth, Mikkel Brabrand, Christian B. Laursen
OA4827	**Pulmonary embolism diagnostic strategies in patients with COPD exacerbation: post-hoc analysis of the PEP trial** Francis Couturaud (Brest, France), Vicky Mai, Geoffroy Rambaud, Camille Motreff, Olivier Sanchez, Pierre-Marie Roy, Yannick Auffret, Raphael Le Mao, Frédéric Gagnadoux, Nicolas Paleiron, Jeannot Schmidt, Jean Pastre, Michel Nonent, Cécile Tromeur, Pierre-Yves Salaun, Patrick Mismetti, Philippe Girard, Karine Lacut, Catherine Lemarié, Guy Meyer, Christophe Leroyer, Grégoire Le Gal, Laurent Bertoletti
OA4828	**Evolution of cardiac biomarkers and short-term prognosis in pulmonary embolism** Laurent Bertoletti (Saint Etienne Cedex, France), Maxime Castan, Luc Janisset, Valentine Mismetti, Géraldine Poenou, Raphaël Lachand, Sandrine Accassat, Thibault Leconte, Elie Ayoub, Loic Villeneuve, Cyril Noto-Campanella, Alain Viallon
OA4829	**Outpatient management of cancer-related pulmonary embolism: a post-hoc analysis of the HOME-PE trial** Sérine Chaibi (Nogent sur Marne, France), Pierre-Marie Roy, Armelle Arnoux, Andrea Penaloza, Olivier Hugli, Antoine Elias, Francis Couturaud, Luc-Marie Joly, Raphaëlle Lopez, Laura M. Faber, Benjamin Planquette, Jérôme Bokobza, Damien Viglino, Jeannot Schmidt, Henry Juchet, Isabelle Mahé, Frits Mulder, Nicolas Falvo, Karine Montaclair, Charlotte Steinier, Stephan V. Hendriks, Ygal Benhamou, Tali-Anne Szwebel, Gilles Pernod, François-Xavier Lapebie, Nicolas Javaud, Alexandre Ghuysen, Mustapha Sebbane, David Jimenez, Menno V. Huisman, Frederikus A. Klok, Olivier Sanchez
OA4830	**The utility of routine systematic respiratory assessment following initial management of acute pulmonary embolism** Sarah Shuker (Coventry, United Kingdom), Emma Helm, Benjamin Bailiff, David Parr
OA4831	**MicroRNAs as predictors of chronic thromboembolic pulmonary hypertension** Remedios Otero Candelera (Sevilla, Spain), Julia Oto Martínez, Olga Tura Ceide, David Hervás Marín, Elena Arellano Orden, Isabel Blanco, Víctor Peinado, Pilar Medina Badenes, Joan Albert Barberá, Verónica Sánchez Lopez
OA4832	**HDAC6 regulates endothelial-to-mesenchymal transition in venous thrombosis** Catherine Lemarie (BREST, France), Marion Pilard, Virginie Gourdou-Latyszenok, Sara Robin, Francis Couturaud
OA4833	**Rehabilitation to improve exercise capacity and quality of life after pulmonary embolism** Øyvind Jervan (Fredrikstad, Norway), Stacey Haukeland Parker, Jostein Gleditsch, Mazdak Tavoly, Frederikus Klok, Kjetil Steine, Hege Hølmo Johannessen, Martijn Spruit, Dan Atar, Rene Holst, Anders Erik Astrup Dahm, Per Anton Sirnes, Knut Stavem, Waleed Ghanima
OA4834	**Rate of clinically relevant bleeding and recurrent venous thromboembolism according to location of the metastases in patients with cancer associated thrombosis.** Víctor García García (Sevilla, Spain), Maria Barca-Hernando, Samira Marin Romero, Sergio Lopez Ruz, Teresa Elias-Hernandez, Luis Jara Palomares
OA4835	**Case fatality rate of recurrent venous thromboembolism and clinically relevant bleeding in patients with cancer.** Maria Barca Hernando (Sevilla, Spain), Sergio Lopez-Ruz, Victor Garcia-Garcia, Samira Marin-Romero, Teresa Elias-Hernandez, Luis Jara-Palomares
OA4836	**Discussion and Q&A** All Speakers

Brown 3 Session 469 14:15 - 15:30

Oral presentation: Sleep apnoea phenotyping: clinical features, pathophysiology, and biomarkers

Disease(s) : Sleep and breathing disorders

Method(s) : General respiratory patient care Physiology Cell and molecular biology Epidemiology

Tag(s) : Clinical

Chairs : Athanasia Pataka (Thessaloniki, Greece), Renaud Tamisier (Grenoble, France)

OA4837	**Late Breaking Abstract - Obstructive sleep apnoea phenotypes in women: data from the ESADA cohort** Athanasia Pataka (Thessaloniki, Greece), Sebastien Bailly, Maria Bonsignore, Tarja Saaresranta, Sofia Schiza, Izolde Bouloukaki, Paschalis Steiropoulos, Georgia Trakada, Renata Riha, Zoran Dogas, Dries Testelmans, Ozen Basoglu, Stefan Mihaicuta, Jan Hedner, Ludger Grote, Jean-Louis Pepin, On Behalf Of The Esada Group
OA4838	**OSA phatophysiological traits in Milan and Monza-Brianza** Elisa Perger (Milano, Italy), Anna Monzani, Paolo Meriggi, Margarida V. Matias, Laura Garzillo, Marta Tundo, Antonio Foresi, Gianfranco Parati, Paola Faverio, Fabrizio Luppi, Carolina Lombardi
OA4839	**Modification of OSA endotypic traits by sulthiame** Erik Hoff (Göteborg, Sweden), Christian Strassberger, Ding Zou, Kaj Stenlöf, Ludger Grote, Jan Hedner
OA4840	**Redefining the Baveno Classification for obstructive sleep apnea** Sandhya Matthes (Solingen, Germany), Marcel Treml, Lars Hagmeyer, Winfried Randerath
OA4841	**Ischemia-modified albumin: an innovative biomarker evaluating cardiovascular risk in Obstructive Sleep Apnea patients.** Pilar Resano Barrio (Guadalajara, Spain), Enrique Alfaro García, Esther Solano Pérez, Carlota Coso Serrano, Carolina Cubillos Zapata, Elena Díaz García, Sofia Romero Peralta, María Esther Viejo Ayuso, Laura Silgado Martínez, Leticia Álvarez Balado, María Castillo García, Rosa Mediano San Andrés, Irene Cano Pumarega, Jorge Abad, Joaquín Durán Cantolla, Amaia Urrutia, María José Masdeu, Estrella Ordax Carbajo, Juan Fernando Masa, Mónica De La Peña, Mercè Mayos, Ramón Coloma, Josep María Montserrat, Eusebi Chiner, Jose Luis Izquierdo, Ferrán Barbé, Francisco García Río, Manuel Sánchez De La Torre, Olga Mediano
OA4842	**Obstructive sleep apnea with excessive daytime sleepiness is an independent risk factor for all-cause mortality: The Skara Sleep Cohort** Ding Zou (Gothenburg, Sweden), Ying Li, Ludger Grote, Ulf Lindblad, Jan Hedner*, Bledar Daka*
OA4843	**Prevalence of depression partly explains heterogeneity in prevalence of excessive daytime sleepiness in patients from different Countries in the European Sleep Apnea Database (ESADA)** Maria Rosaria Bonsignore (Palermo, Italy), Sebastien Bailly, Fabio Cibella, Alessandra Castrogiovanni, Sofia Schiza, Jan Hedner, Ludger Grote, Jean-Louis Pepin, On Behalf Of Esada
OA4844	**Excessive daytime sleepiness across Europe in OSA patients from the ESADA cohort: does cultural differences matters?** Izolde Bouloukaki (Heraklion (Crete), Greece), Renata Riha, Ludger Grote, Marisa Bonsignore, Jan Hedner, Jean-Louis Pépin, Athanasia Pataka, Winfied Randerath, Sébastien Bailly, Silke Ryan, Sophia Schiza
OA4845	**Overnight variation of premature ventricular complexes in patients with CSA and heart failure** Christoph Fisser (Regensburg, Germany), Amelie Ebert, Valentin Günzler, Florian Zeman, Dominik Linz, Holger Wöhrle, Renaud Tamisier, Martin R Cowie, Michael Arzt
OA4846	**Incongruence of the apnea\hypopnea index in detecting intermittent desaturations at very high altitude** Elisa Perger (Milano, Italy), Margarida V. Matias, Davide Soranna, Antonella Zambon, Javier Cantuarias, Simona Bertoli, Carolina Lombardi, Gianfranco Parati
OA4847	**Discussion and Q&A** All Speakers

Brown 1+2 Session 470 14:15 - 15:30

Oral presentation: Personalised medicine and deep learning in interstitial lung disease and chronic obstructive pulmonary disease imaging

Disease(s) : Airway diseases Interstitial lung diseases

Method(s) : Imaging Pulmonary function testing

Tag(s) : Clinical

Chairs : Ádám Domonkos Tárnoki (Budapest, Hungary), Chair to be confirmed

OA4848	**Late Breaking Abstract - Artificial intelligence-based dec---ision support for HRCT stratification in fibrotic lung disease; an international study of 116 observers from 37 countries.** Lucio Calandriello (Rome, Italy), John Mackintosh, Federico Felder, Aditya Agrawal, Omer Alamoudi, Laura Alberti, Giuseppe Aquaro, Juan Arenas-Jiménez, Iain Au-Yong, Sergey Avdeev, Maurizio Balbi, Bruno Baldi, Andrea Yu-Lin Ban, Ionela-Nicoleta Belaconi, Elisabeth Bendstrup, David Bennett, Hans-Christian Blum, Nicola Boscolo Bariga, Gracijela Bozovic, Marsel Broqi, John Bruzzi, Ivette Buendia-Roldan, Diana Calaras, Sérgio Campainha, Roberto G. Carbone, André Carvalho, Lorenzo Cereser, Gin Tsen Chai, Sachin Chaudhary, Nazia Chaudhuri, Patrick Alain Chui Wan Cheong, Wendy Cooper, Giuseppe Cutaia, Rosa D'Abronzo, Martijn D. De Kruif, Diemen Delgado-García, Sahajal Dhooria, Jesus J Diaz-Castanon, Glenn Eiger, Samantha Ellis, Rosa Estrada-Y-Martin, Yingying Fang

OA4849	**Alveolar collapse as a prognostic marker in patients with IPF: A CT-based assessment using an extended parametric response mapping technique** Sarah Scharm (Hannover, Germany), Jonathan Ehmig, Cornelia Schaefer-Prokop, Anton Schreuder, Jan Fuge, Frank Wacker, Antje Prasse, Hoen-Oh Shin
OA4850	**In-vivo endobronchial-PS-OCT for fibrosis quantification in ILD** Tatiana Soldati (Amsterdam, Netherlands), Margherita Vaselli, Kirsten Mooij - Kalverda, Erik Thunnissen, Michael Tanck, Onno Mets, Inge Van Den Berk, Jouke Annema, Peter Bonta, Johannes De Boer
OA4851	**Prognostic modeling in idiopathic pulmonary fibrosis using deep learning** Alexandre Coimbra (South San Francisco, United States), Neha Anegondi, Yixuan Zou, Xuefeng Hou, Mohammadreza Negahdar, Dorothy Cheung, Paula Belloni, Alex De Crespigny
OA4852	**A deep learning algorithm for predicting disease progression in idiopathic pulmonary fibrosis** Simon Walsh (London, United Kingdom), Yingying Fang, Federico Felder, Guang Yang, John Mackintosh, Lucio Calandriello, Mario Silva, Wendy Cooper, Ian Glaspole, Nicole Goh, Christopher Grainge, Peter Hopkins, Yuben Moodley, Navaratnam Vidya, Paul Reynolds, Athol Wells, Tamera Corte
OA4853	**Deep learning-based quantification of traction bronchiectasis severity for predicting outcome in idiopathic pulmonary fibrosis** Federico Felder (London, United Kingdom), Yang Nan, Guang Yang, John Mackintosh, Lucio Calandriello, Mario Silva, Ian Glaspole, Nicole Goh, Wendy Cooper, Christopher Grainge, Peter Hopkins, Yuben Moodley, Navaratnam Vidya, Paul Reynolds, Athol Wells, Tamera Corte, Simon Walsh
OA4854	**Comparison of parenchyma density scoring in RA-ILD vs IPF and iNSIP** Bálint Ács (Székesfehérvár, Hungary), Miklós Zsiray, Diana Solymosi, Réka Gajdócsi, Tünde Harkó, Vivien Leskó-Jancsó, Anna Kerpel-Fronius
OA4855	**Endobronchial polarization sensitive optical coherence tomography for airway wall imaging** Sofi Vassileva (Amsterdam, Netherlands), Pieta C. Wijsman, Tatiana Soldati, Margherita Vaselli, Annika W.M. Goorsenberg, Daniel M. De Bruin, Johannes F. De Boer, Jouke T. Annema, Peter I. Bonta
OA4856	**Towards precision medicine in COPD: Bioradiomic SPECT-CT quantification of active lung inflammation** Benjamin Welham (Whitchurch, United Kingdom), Michael Bennett, Kristoffer Ostridge, Matthew Guy, Clint Zvavamwe, Francis Sundram, Tom Wilkinson
OA4857	**Impaired xenon gas transfer observed two years after COVID-19 hospitalisation in patients with signs of interstitial lung disease** Laura Saunders (Hope Valley, United Kingdom), Guilhem Collier, Ho-Fung Chan, Paul Hughes, Laurie Smith, Helen Marshall, Martin Brook, Alberto Biancardi, Madhwesha Rao, Graham Norquay, Neil Stewart, James Grist, Kher Lik Ng, Amanda Goodwin, Jonathan Brooke, Galina Pavlovskaya, Iain Stewart, Andrew Swift, Smitha Rajaram, Phil Molyneaux, Kevin Johnson, Joseph Jacob, Fergus Gleeson, Ian Hall, Thomas Meersmann, Ling-Pei Ho, A A Roger Thompson, Gisli Jenkins, Jim Wild
OA4858	**Discussion and Q&A** All Speakers

Blue 1+2 Session 471 14:15 - 15:30

Oral presentation: Pneumonia

Method(s) : Imaging Epidemiology General respiratory patient care Public health Pulmonary rehabilitation Endoscopy and interventional pulmonology

Tag(s) : Clinical, Translational

Chairs : Oriol Sibila Vidal (Barcelona, Spain), Michal Shteinberg (Haifa, Israel)

OA4859	**Late Breaking Abstract - Efficacy of a respiratory syncytial virus (RSV) prefusion F protein vaccine (RSVPreF3 OA) in older adults with co-existing cardiorespiratory conditions** Alberto Papi (Cona, Ferrara, Italy), Robert G. Feldman, Raffaele Antonelli-Incalzi, Katie Steenackers, Dong-Gun Lee, Michael G. Ison, Laurence Fissette, Marie-Pierre David, Céline Maréchal, Marie Van Der Wielen, Lusine Kostanyan, Veronica Hulstrøm
OA4860	**CheXED artificial intelligence to detect radiographic pneumonia in urgent care clinic patients.** Nathan Dean (Murray, United States), James Hart, Kathryn Kuttler, Cara Van Uden, Curtis Langlotz, Chad Carman, Thea Sakata
OA4861	**Individualized treatment rule (ITR) for early steroid use in hospitalized patients with community acquired pneumonia (CAP)** Yewande Odeyemi (Washington, United States), Allison Lemahieu, Ognjen Gajic, Schulte Phillip

OA4862	**Molecular diagnostic resistance patterns in the BALF of hospitalised patients with pneumonia** Andrei Darie (Basel, Switzerland), Nina Khanna, Kathleen Jahn, Mirjam Osthoff, Desiree Schumann, Hans Hirsch, Martin Brutsche, Leticia Grize, Michael Tamm, Daiana Stolz
OA4863	**Diagnostic behaviours among patients with community acquired pneumonia in the age of CoVid-19** Phoebe Hazenberg (Liverpool, United Kingdom), Thomas Fitzmaurice, Ryan Robinson, Kev Bailey, Fred Fyles
OA4864	**Epidemiology of community-acquired pneumonia (CAP) in Europe during the COVID-19 pandemic –preliminary results of PNEUMO study Europe** Lisa Hessels (Alkmaar, Netherlands), Sebastiaan Hullegie, Rianne Jahja, Jesús Rodriguez-Baño, Francesco Blasi, Bruno François, James D. Chalmers, Grit Barten-Neiner, Manuel Recio Rufián, Rosario Menéndez Villanueva, Javier Cobo Reinoso, Damien Viglino, Fabiano Di Marco, Manuel Garcia Gutiérrez, Kelly D. Johnson, Thomas Weiss, Madelyn Ruggieri, Marc Bonten, Cristina Prat Aymerich
OA4865	**Not just a cold: chest CT features of rhinovirus lower respiratory tract infection in adults and comparison with other viruses** Lawrence A. Marinari (Bryn Mawr, United States), Michelle L. Hershman, Madeline A. Danny, Wallace T. Miller, Jr.
OA4866	**The clinical efficacy of cefoperazone-sulbactam versus piperacillin-tazobactam in the treatment of severe community-acquired pneumonia** Hsu-Yuan Chen (Taichung City, Taiwan), Chih-Cheng Lai, Wei-Chih Chen, Li-Kuo Kuo, Yao-Tung Wang, Pin-Kuei Fu, Shih-Chi Ku, Wen-Feng Fang, Chin-Ming Chen, Chih-Yen Tu, Wen-Chien Cheng, Chia-Hung Chen
OA4867	**Quality of life following CAP hospitalization: preliminary results from the PNEUMO study Europe** Lisa Hessels (Alkmaar, Netherlands), Sebastiaan Hullegie, Rianne Jahja, Jesús Rodriguez-Baño, Isabel Morales Barroso, Francesco Blasi, Bruno François, Rachel Froget, Manuel Recio Rufián, Angelo Corsico, Brigida Quindos, Kelly D Johnson, Thomas Weiss, Madelyn Ruggieri, Marc Bonten, Cristina Prat-Aymerich
OA4868	**Epidemiological and clinical characteristics of patients hospitalized with human metapneumovirus (hMPV) infection in Israel, 2015-2021** shlomit Keler (Kfar maas, Israel), Menucha Jurkowicz, Ilana S. Fratty, Hilda Sherbany, Nathan Keller, Eugene Leibovitz, Gilad Sherman, Or Kriger, Ella Mendelson, Michal Mandelboim, Michal Stein
OA4869	**Discussion and Q&A** All Speakers

Yellow 1+2+3 Session 472 14:15 - 15:30

Oral presentation: Best abstracts in behavioural science and health psychology

Disease(s) : Sleep and breathing disorders | Airway diseases | Interstitial lung diseases | Thoracic oncology

Method(s) : Epidemiology | Public health | General respiratory patient care | Palliative care | Physiology | Pulmonary rehabilitation

Tag(s) : Clinical

Chairs : Lisa Jane Brighton (London, United Kingdom), Andreas Von Leupoldt (Leuven, Belgium)

OA4870	**Neural gating of respiratory sensations during exercise-induced dyspnea** Lucas Vanden Bossche (Leuven, Belgium), Michele R. Schaeffer, Mingqi Zhao, Dante Mantini, Wim Janssens, Thierry Troosters, Daniel Langer, Andreas Von Leupoldt
OA4871	**Mechanism of dyspnea relief from menthol inhalation in healthy adults during loaded breathing trials** Michele Schaeffer (Leuven, Belgium), Lucas Vanden Bossche, Valentina Jelinčić, Kristin Verbeke, Daniel Langer, Andreas Von Leupoldt
OA4872	**Greater awareness of errors in patients with COPD** Ysys Denutte (Leuven, Belgium), Alicia Gonsalves, Thomas Reijnders, Wim Janssens, Thierry Troosters, Andreas Von Leupoldt
OA4873	**Characteristics of people with COPD associated with emotions of shame and guilt** Sara Lundell (Umea, Sweden), Sara Kalucza, Anna-Britt Coe, Senada Hajdarevic, Anders Blomberg
OA4874	**Improving performance in Chronic Obstructive Pulmonary Disease (COPD) through expectations: a Randomized Crossover Study** Eleonora Volpato (Milano (MI), Italy), Paolo Banfi, Elena Compalati, Francesco Pagnini
OA4875	**Physical inactivity and personality change in people with chronic respiratory diseases** Sébastien Kuss (Lodève, France), Nelly Héraud, Brice Canada
OA4876	**Psychosocial factors associated with short-term CPAP usage** Leanne Kaye (San Diego, United States), Vy Vuong, Adam Benjafield, Priyanshu Gupta, Meredith Barrett

OA4877	**Pilot Online Psychological Group Intervention for ILD patients** Victoria Singh (London, United Kingdom), Melissa Creese, Laura Fabbri, Elizabeth Renzoni	
OA4878	**Patient-reported outcomes encourage communication about psychosocial issues in patients with COPD.** Louise Muxoll Gronhaug (Vejle, Denmark), Ingeborg Farver-Vestergaard, Anders Løkke, Jannie Frølund	
OA4879	**Discussion and Q&A** All Speakers	

Amber 3+4 Session 473 14:20 - 17:10

Skills workshop: SW15 Thoracic ultrasound basic principles

Aims : To describe the current use of thoracic ultrasound and to provide participants with the opportunity to perform this technique using training models, simulators, volunteers and patients.

Disease(s) : Thoracic oncology Interstitial lung diseases

Tag(s) : Clinical

Chairs : Rahul Bhatnagar (Bristol, United Kingdom)

14:20	**Introduction** Rahul Bhatnagar (Bristol, United Kingdom)	**4880**
14:50	**Normal Thoracic Cavity** Giovanni Volpicelli (Torino (TO), Italy), Morten Bendixen (Skejby, Denmark)	**4881**
14:50	**Pleural effusion and/or pleural thickening** Valentina Pinelli (Sarzana, Italy), Konstantina Kontogianni (Heidelberg, Germany)	**4882**
14:50	**Case studies** Poppy Denniston (London, United Kingdom)	**4883**
14:50	**Guided interventions** Søren Helbo Skaarup (Aarhus C, Denmark), Helen Mcdill (Bristol (Avon), United Kingdom)	**4884**

Amber 1+2 Session 474 14:30 - 16:50

Skills workshop: SW12 Clinical-radiological-pathological correlation in pulmonary hypertension

Aims : to develop a systematic approach to interpretation of radiological investigations (with a focus on computed tomography) in patients with suspected pulmonary hypertension (PH); to provide practical experience in performing and interpreting echocardiography in patients with PH; to improve knowledge and understanding of pathological changes associated with PH; to improve skills in integrating clinical, radiological and right heart catheter data to enable the correct diagnosis of patients with suspected PH.

Disease(s) : Pulmonary vascular diseases

Method(s) : Imaging

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Pathologist, Physician in Pulmonary Training, Radiologist

Chairs : Robin Condliffe (Sheffield (South Yorkshire), United Kingdom)

14:30	**Introduction** All Speakers	**4885**
14:30	**Radiological assessment of pulmonary hypertension** Deepa Gopalan (LONDON, United Kingdom)	**4886**
14:30	**Pathological assessment of pulmonary hypertension** Peter Dorfmuller (Le Plessis-Robinson, France)	**4887**
14:30	**Echocardiography in pulmonary hypertension** Marielle van de Veerdonk (Amsterdam, Netherlands), Abdul Hameed (Sheffield (South Yorkshire), United Kingdom)	**4888**
14:30	**Clinical assessment of pulmonary hypertension** Robin Condliffe (Sheffield (South Yorkshire), United Kingdom)	**4889**

Gold Session 475 15:30 - 17:00

Clinical cases: Lungs on fire: interstitial lung diseases?

Aims : to present real-life clinical cases as part of an interactive session. Cases vary in difficulty and may require differential diagnosis. This session is led by two discussants who will present cases submitted by respiratory health professionals to a panel of experts and will drive the discussion in a step-by-step approach, encouraging dialogue and reflection among the panel, who have no prior knowledge of these cases. As the cases are discussed, the discussants will invite the audience to participate in determining which diagnostic and therapeutic options would be best for these patients.

Disease(s) : Interstitial lung diseases | Respiratory infections

Chairs : Elena Bargagli (Siena, Italy), Paolo Spagnolo (Padova (PD), Italy), Antoine Froidure (Bruxelles, Belgium)

Discussants : Michael Kreuter (Heidelberg, Germany), Marlies S. Wijsenbeek (Rotterdam, Netherlands)

15:30	**Case 1 incl. panel discussion and Q&A - Author: J. R. Macedo Pacheco (Portugal)** Marlies S. Wijsenbeek (Rotterdam, Netherlands)	**4890**
15:52	**Case 2 incl. panel discussion and Q&A - Author: P. Sharma (India)** Michael Kreuter (Heidelberg, Germany)	**4891**
16:14	**Case 3 incl. panel discussion and Q&A - Author: L. Benuzzi (Italy)** Marlies S. Wijsenbeek (Rotterdam, Netherlands)	**4892**
16:36	**Case 4 incl. panel discussion and Q&A - Author: R. G. Girolamo (Italy)** Michael Kreuter (Heidelberg, Germany)	**4893**

Silver — Session 476 — 15:30 - 17:00

Journal session: The best of the European Respiratory Journal

Aims : to review the best publications in the European Respiratory Journal (ERJ) on key topics in 2022–2023, covering environment and health, interstitial lung disease, COVID-19 and airways disease.

Disease(s) : Airway diseases | Interstitial lung diseases | Respiratory infections

Method(s) : Cell and molecular biology Epidemiology Public health

Tag(s) : Translational

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Respiratory critical care physician, Paediatrician, Pathologist, Patient, Physician in Pulmonary Training, Physiologist, Radiologist, Respiratory physiotherapist, Scientist (basic, translational), Respiratory therapist, Journalist

Chairs : James D. Chalmers (Dundee (Angus), United Kingdom), Arzu Yorgancıoğlu (Konak, Turkey)

15:30	**The best of the ERJ: air pollution and climate change** Isabella Annesi Maesano (Montpellier, France)	**4894**
15:45	**The best of the ERJ: airways disease** Mona Bafadhel (London, United Kingdom)	**4895**
16:00	**The best of the ERJ: COVID-19 and long COVID** Joan B Soriano (Madrid, Spain)	**4896**
16:15	**The best of the ERJ: interstitial lung disease** Martin Kolb (Hamilton (ON), Canada)	**4897**
16:30	**Discussion and Q&A** All Speakers	**4898**

Coral 4+5 — Session 477 — 15:30 - 17:00

Guidelines session: Palliative care for people with chronic obstructive pulmonary disease or interstitial lung disease / The use of "as-needed" inhaled corticosteroids/formoterol in mild asthma

1) European Respiratory Society clinical practice guideline on palliative care for people with chronic obstructive pulmonary disease or interstitial lung disease and 2) European Respiratory Society guideline on inhaled corticosteroids/formoterol on demand

Aims : to discuss two new published guidelines, namely, the European Respiratory Society (ERS) guideline on inhaled corticosteroids (ICS)/formoterol on demand and the ERS clinical practice guideline on palliative care for people with chronic obstructive pulmonary disease (COPD) or interstitial lung disease (ILD); to provide physicians, healthcare professionals, patients and other stakeholders information on the use of rescue ICS/formoterol for the treatment of adult and adolescent patients with mild asthma based on a systematic review of the literature and application of the Grading of Recommendations, Assessment, Development and Evaluation approach; to explain what palliative care entails for people with COPD or ILD and their informal caregivers and how to identify people with COPD or ILD who may benefit from palliative care; to describe a model to integrate palliative care in disease-modifying care for people with COPD or ILD; to discuss the clinical implications of both guidelines and barriers to their application in clinical practice.

Disease(s) : Airway diseases Paediatric respiratory diseases

Method(s) : General respiratory patient care

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Nurse, Paediatrician, Patient, Physician in Pulmonary Training

Chairs : Florence Schleich (Liège, Belgium), Chair to be confirmed

15:30	**Guidance towards timely initiation of palliative care for people with COPD or ILD** Daisy J.A. Janssen (Horn, Netherlands)	**4899**
15:45	**Patient and caregiver's perspectives** Albert Devillers (, Belgium), Chantal van den Dungen (Juprelle, Belgium)	**4900**
15:50	**Palliative care for people with COPD or ILD: the perspective of the patient and informal caregiver** Alda Sofia Pires De Dias Marques (Aveiro, Portugal)	**4901**
16:05	**Discussion and Q&A** All Speakers	**4902**
16:20	**Which is better, as-needed ICS/formoterol alone or regular low-dose ICS maintenance treatment?** Richard Beasley (Wellington, New Zealand)	**4903**
16:35	**Which is better, as-needed ICS/formoterol alone or as-needed SABA plus maintenance?** Ioana Agache (Brasov (Brasov), Romania)	**4904**
16:50	**Discussion and Q&A** All Speakers	**4905**

Coral 3 — Session 478 — 15:30 - 17:00

Symposium: Treatment of early stage, technically resectable mesothelioma

Aims : to review different international guidelines on treatment of mesothelioma; to present inconsistencies in the current set of guidelines; to help delegates understand the use of these guidelines in optimal patient care.

Tag(s) : Clinical

Chairs : Elżbieta Magdalena Grabczak (Warszawa, Poland), Maria Joana Pereira Catarata (Porto, Portugal)

15:30	**What is the early stage mesothelioma?** Speaker to be confirmed	**4906**
15:45	**Radical surgery should be offered to patients with early stage, technically resectable mesothelioma** Nuria Novoa Valentin (Majadahonda, Spain)	**4907**
16:00	**Radical surgery should not be offered to patients with early stage, technically resectable mesothelioma** Najib M. Rahman (ABINGDON, United Kingdom)	**4908**
16:15	**A look into the future: active trials and research strategies for early-stage mesothelioma** Kevin Blyth (Glasgow (Glasgow), United Kingdom)	**4909**
16:30	**Discussion and Q&A** All Speakers	**4910**

Coral 1 — Session 479 — 15:30 - 17:00

Symposium: Controversies on ground glass opacities of the lung

Ground glass opacities and lung cancer

Aims : to discuss lung ground glass opacity (GGO) and to emphasise the challenges that thoracic surgeons, physicians, pneumologists and thoracic oncologists are now facing and will face in future regarding GGOs after the COVID-19 pandemic.

Disease(s) : Thoracic oncology

Method(s) : Endoscopy and interventional pulmonology Public health Surgery

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Pathologist, Patient, Radiologist, Scientist (basic, translational), Thoracic oncologist, Thoracic surgeon

Chairs : Marcello Migliore (Riyadh, Saudi Arabia), Andriani Charpidou (Athens, Greece)

15:30	**Is GGO a real entity ?** William Travis (New York, United States)	**4911**

15:45	**Ground glass opacities of the lung after the COVID-19 pandemic** Katarzyna Zanowska (Krakow, Poland)	**4912**
16:00	**Should GGO always be closely follow-up?** Pallavi Purwar (New Delhi, India)	**4913**
16:15	**Screening programme for lung cancer GGO** Ugo Pastorino (Milan, Italy)	**4914**
16:30	**Discussion and Q&A** All Speakers	**4915**

Coral 2 — Session 480 — 15:30 - 17:00

Clinical cases: Lungs on fire: respiratory critical care/sleep and breathing disorders

Aims : to present real-life clinical cases as part of an interactive session. Cases vary in difficulty and may require differential diagnosis. This session is led by two discussants who will present cases submitted by respiratory health professionals to a panel of experts and will drive the discussion in a step-by-step approach, encouraging dialogue and reflection among the panel, who have no prior knowledge of these cases. As the cases are discussed, the discussants will invite the audience to participate in determining which diagnostic and therapeutic options would be best for these patients.

Disease(s) : Respiratory critical care | Sleep and breathing disorders

Chairs : Dries Testelmans (Leuven, Belgium), Claudia Crimi (Catania (CT), Italy), Ignacio Martin-Loeches (Dublin, Ireland)

Discussants : Christoph Fisser (Regensburg, Germany), Marieke L. Duiverman (Groningen, Netherlands)

15:30	**Case 1 incl. panel discussion and Q&A - Author: C. Tomsa (Italy)** Marieke L. Duiverman (Groningen, Netherlands)	**4916**
15:52	**Case 2 incl. panel discussion and Q&A - Author: J. Riera Del Brio (Spain)** Christoph Fisser (Regensburg, Germany)	**4917**
16:14	**Case 3 incl. panel discussion and Q&A - Author: R. Severin (United States of America)** Marieke L. Duiverman (Groningen, Netherlands)	**4918**
16:36	**Case 4 incl. panel discussion and Q&A - Author: T. Said Ahmed (United States of America)** Christoph Fisser (Regensburg, Germany)	**4919**

Purple — Session 481 — 15:30 - 17:00

Mini symposium: Next generation evidence-based decision-making in respiratory medicine
ERS/Respiratory Effectiveness Group joint session

Aims : to explore the contribution of data from real-life research studies to decision-making processes including guidelines development; to emphasize the complementarity of real-life research and randomized controlled trials for the assessment of interventions; to discuss the yield of m-Health tools and the contribution and challenges of registries.

Disease(s) : Airway diseases | Interstitial lung diseases | Paediatric respiratory diseases

Method(s) : General respiratory patient care

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Paediatrician, Patient, Physician in Pulmonary Training, Respiratory physiotherapist, Journalist

Chairs : Sinthia Bosnic-Anticevich (Strathfield (NSW), Australia), Nicole Beydon (Paris, France)

15:30	**Real-world" evidence vs randomized controlled trials: friends or foes?** Giorgio Walter Canonica (Milano (MI), Italy)	**4920**
15:45	**The future of evidence generation using mHealth tools** Hilary Pinnock (Edinburgh (Edinburgh), United Kingdom)	**4921**
16:00	**Building registries to inform decision-making: potential and challenges** David Price (Singapore, Singapore)	**4922**
16:15	**Discussion and Q&A** All Speakers	**4923**

15:30-16:15
INDUSTRY SKILLS LAB WORKSHOP SEE PAGE 1

Red 1+2 Session 483 15:45 - 17:00

Science slam: Science slam

Aims : Four scientists will present their research in an entertaining way for a non-specialist audience. The audience will elect, by means of electronic voting, the 2023 Science Slam winner.

Tag(s) : Translational

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Physician in Pulmonary Training, Scientist (basic, translational), Paediatrician, Medical Student, General practitioner

Chairs : Sara Cuevas Ocaña (Nottingham, United Kingdom), Thomas Gille (Bobigny, France)

15:45	**Introduction** All Speakers	**4925**
15:50		**4926**
16:02		**4927**
16:14		**4928**
16:26		**5447**
16:38	**Vote, presentation and interview of the winner** All Speakers	**5448**

Brown 3 Session 484 15:45 - 17:00

Oral presentation: Biomarker monitoring and severity classification in chronic obstructive pulmonary disease

Disease(s) : Airway diseases

Method(s) : Physiology Pulmonary function testing General respiratory patient care Imaging

Tag(s) : Clinical, Translational

Chairs : Maarten van den Berge (Groningen, Netherlands)

OA4929	**Late Breaking Abstract - ECG-derived risk factors for adverse cardiopulmonary outcomes in COPD patients: IMPACT post hoc analysis** Raymond Wade (Birmingham, United States), Fernando J. Martinez, Gerard J. Criner, Lee Tombs, David A. Lipson, Mark T. Dransfield
OA4930	**The impact of blood eosinophil levels on in-hospital mortality in a large cohort of 960 hospitalized AECOPD patients** Emine Sena Dikmentepe Yilmaz (Izmir, Turkey), Yelda Varol
OA4931	**Fibrinogen as a biomarker of cardiovascular risk in COPD** Mairi MacLeod (London, United Kingdom), Andrew Ritchie, Dexter Wiseman, Lydia Finney, Aaron Braddy-Green, Hassan Shahbakhti, Ralph Lopez, Jordina Mah, James P Allinson, Gavin C Donaldson, Jadwiga A Wedzicha
OA4932	**Do distinct phenotypes of heart failure coexisting with COPD influence endothelial function?** Renata Gonçalves Mendes (Sao Carlos (SP), Brazil), Viviane Castello-Simões, Cássia Da Luz Goulart, Alessandro Domingues Heubel, Erika Zavaglia Kabbach, Nathany Souza Schafauser, Rodrigo Polaquini Simões, Meliza Goi Roscani, Audrey Borghi-Silva
OA4933	**Regional CT features for predicting rapid lung function decline in COPD** Kalysta Makimoto (Ajax, Canada), Meghan Koo, James Hogg, Jean Bourbeau, Wan Tan, Miranda Kirby
OA4934	**Expiration CT texture-based radiomics: a new biomarker for quantifying gas trapping in COPD** Meghan Koo (Markham, Canada), Ryan Au, Wan Tan, Jim Hogg, Jean Bourbeau, Miranda Kirby
OA4935	**Accuracy of the CAPTURE questionnaire for population-screening for COPD** Lancelot Pinto (Montréal (QC), Canada), Thakrar Dhara, Chawhan Ashwini
OA4936	**Long-term outcomes in patients with Pre-COPD or PRISm in NOVELTY** Eleni Rapsomaniki (Cambridge, United Kingdom), Rod Hughes, Barry Make, Ricardo Del Olmo, Alberto Papi, David Price, Laura Belton, Stefan Franzen, Jørgen Vestbo, Hana Müllerová, Alvar Agusti
OA4937	**FEV1/FVC severity stages for chronic obstructive pulmonary disease** Surya Bhatt (Birmingham, United States), Arie Nakhmani, Frank Sciurba, Matthew Strand, Edwin Silverman, Sandeep Bodduluri

OA4938	**Automatic oxygen control during admission with exacerbation of COPD - a multicenter randomised controlled trial** Ejvind Frausing Hansen (Hvidovre, Denmark), Charlotte Sandau, Jens-Ulrik Jensen, Lars Pedersen, Charlotte Suppli Ulrik
OA4939	**Discussion and Q&A** All Speakers

Blue 1+2 Session 485 15:45 - 17:00

Oral presentation: Lung structure and function across the lifespan

Disease(s) : Airway diseases Interstitial lung diseases Respiratory critical care

Method(s) : Imaging General respiratory patient care Physiology Cell and molecular biology Respiratory intensive care Pulmonary function testing Epidemiology Public health

Tag(s) : Clinical

Chairs : Rory Morty (Heidelberg, Germany), Anne Greenough (London, United Kingdom)

OA4940	**Late Breaking Abstract - Differences in autophagy marker levels at birth in preterm vs. term infants** Noëmi Künstle (Basel, Switzerland), Olga Gorlanova, Andrea Marten, Loretta Müller, Pawan Sharma, Martin Röösli, Pablo Sinues, David Schürmann, Céline Rüttimann, Carla Rebeca Da Silva Sena, Uri Nahum, Jakob Usemann, Ruth Steinberg, Sophie Yammine, Sven Schulzke, Philipp Latzin, Urs Frey
OA4941	**Late Breaking Abstract - Prenatal exposure to air pollution affects newborns' autophagy, senescence and remodelling proteins** Olga Gorlanova (Bättwil, Switzerland), Heide Oller, Uri Nahum, Noemi Künstle, Loretta Müller, Andrea Marten, Céline Rüttimann, Danielle Vienneau, Kees De Hoogh, David Schürmann, Carla Rebeca Da Silva Sena, Martin Röösli, Pablo Sinues, Sven Schulzke, Ruth Steinberg, Jakob Usemann, Pawan Sharma, Urs Frey
OA4942	**Morphomolecular analysis of the capillary network in alveolar capillary dysplasia** Jan-Christopher Kamp (Hannover, Germany), Lavinia Neubert, Jonas C. Schupp, Christoph Wrede, Florian Laenger, Tobias Welte, Nicolaus Schwerk, Jakob Reichmann, Tim Salditt, Anke K. Bergmann, Sandra Von Hardenberg, Hans H. Kreipe, Karen M. Olsson, Jan Fuge, Da-Hee Park, Marius M. Hoeper, Danny D. Jonigk, Lars Knudsen, Mark P. Kuehnel
OA4943	**Bronchiolitis in infancy is associated with irreversible obstruction in early adulthood.** Sanna Saarikallio (Kangasala, Finland), Riikka Riikonen, Antti Tikkakoski, Eero Lauhkonen
OA4944	**Acinar dysplasia in a full term newborn with a NKX2.1 variation** Yohan SOREZE (Paris, France), Nadia Nathan, Julien Jegard, Erik Hervieux, Pauline Clermidi, Chiara Sileo, Camille Louvrier, Marie Legendre, Aurore Coulomb L'Herminé
OA4945	**A cigarette smoke exposure model using lung tissues to study emphysema** Venkataramana Sidhaye (Baltimore, United States), Ara Wally, Anuj Lagowala, Kai Wilmsen, Bonnie Yeung-Luk, Matthew Luk, Baishakhi Ghosh, Laine Feller, Ethan Tieng, Ethan Sherman, Nisha Upadaya, David Horsey, Vaishnavi Karanam
OA4946	**The upper respiratory tract microbiota across the human lifespan: a nationwide Dutch population study.** Mari-Lee Odendaal (The Netherlands, Netherlands), Wouter De Steenhuijsen Piters, Eelco Franz, Lidwien Smit, Debby Bogaert, Thijs Bosch
OA4947	**Transcriptomic analysis of the developing rabbit's lung: implication of premature birth and post-natal oxygen exposure** Matteo Storti (Parma, Italy), Barbara Montanini, Ilaria Minato, Nicola Casiraghi, Silvia Parolo, Enrico Domenici, Chiara Catozzi, Enrica Scalera, Giorgio Aquila, Francesca Stretti, Xabier Murgia, Francesca Ravanetti, Luisa Ragionieri, Roberta Ciccimarra, Matteo Zoboli, Gino Villetti, Maurizio Civelli, Francesca Ricci
OA4948	**In neonatal βENaC-transgenic mice CF-like lung disease causes a dilatation of the conducting airways which increases until adulthood** Sanja Blaskovic (Bern, Switzerland), Pinelopi Anagnostopoulou, Florian Kronig, Elena Borisova, Dominik Schittny, Zhe Zhou-Suckow, Marcus A. Mall, Christian M. Schlepütz, Marco Stampanoni, Johannes C. Schittny
OA4949	**Maternal obesity increases reflex bronchoconstriction in adult offspring in a diverse outbred mouse model** Zhenying Nie (Portland, United States), Kayla Williams, Allison Fryer, David Jacoby, Alina Maloyan
OA4950	**Discussion and Q&A** All Speakers

Brown 1+2 Session 486 15:45 - 17:00

Oral presentation: Imaging lung function in respiratory diseases

Disease(s) : Airway diseases Respiratory critical care Interstitial lung diseases

Method(s) : Imaging Pulmonary function testing Respiratory intensive care Physiology Pulmonary rehabilitation

Tag(s) : Clinical

Chairs : Sam Bayat (Grenoble, France), Francesca Pennati (Milano (MI), Italy)

OA4951	**Late Breaking Abstract - Systemic Determinants of Exercise Intolerance in Patients with Fibrosing Interstitial Lung Disease and a Severely Impaired DLCO** J. Alberto Neder (Kingston (ON), Canada), Reginald M. Smyth, Matthew D. James, Sandra G. Vincent, Kathryn M. Milne, Mathieu Marillier, Nicolle J. Domnik, Christopher M. Parker, Juan P. De-Torres, Onofre Moran-Mendoza, Devin B. Phillips, Denis E. O'Donnell
OA4952	**Age, sex and lung volume dependence of 129Xe MRI gas exchange metrics** Guilhem Collier (Sheffield (South Yorkshire), United Kingdom), Laura Saunders, L J Smith, Kher Ng, James Grist, A J Swift, Helen Davies, Alexander Horsley, A A R Thompson, Emily Fraser, Fergus Gleeson, J M Wild
OA4953	**Ventilation heterogeneity from X-ray Velocimetry predicts COPD severity** Sarath Raju (Baltimore, United States), Kyle Grealis, Ernesto Gonzalez, Kinjal Nakrani, Tamas Otvas, Jason Kirkness, Andreas Fouras, Robert Wise, Naresh Punjabi, Trishul Siddharthan
OA4954	**Longitudinal change in lung physiology and 129Xe MRI over 1 year in patients with asthma and/or COPD** Helen Marshall (Sheffield (South Yorkshire), United Kingdom), Laurie Smith, Alberto Biancardi, Guilhem Collier, Ho-Fung Chan, David Capener, Jody Bray, Demi Jakymelen, Laura Saunders, Joshua Astley, Bilal Tahir, Ryan Munro, Olly Rodgers, Jimmy Ball, Paul Hughes, Smitha Rajaram, Andy Swift, Neil Stewart, Graham Norquay, Martin Brook, Leanne Armstrong, Latife Hardaker, Titti Fihn-Wikander, Rod Hughes, Jim Wild
OA4955	**Phenotypes of functional CT imagining predict clinical outcome in ARDS patients** Mehdi Shekarnabi (Villeurbanne, France), Florian Sigaud, Maxime Gaillet, Alicia Guillien, Emmanuel Roux, Touria Ahaouari, Edouardo Davila, Loic Boussel, Gilbert Ferretti, Hodane Yonis, Mehdi Mezidi, William Danjou, Alwin Bazzani, François Dhelft, Laure Folliet, Mehdi Girard, Valérie Siroux, Laurent Bitker, Nicolas Terzi, Maciej Orkisz, Jean-Christophe Richard, Sam Bayat
OA4956	**Hyperpolarised helium MRI in direct and indirect asthmatic airway challenge** Chuan Tai Foo (Victoria, Australia), Kris Nilsen, Gary Cowin, Bruce Thompson, Francis Thien
OA4957	**Fractal dimension analysis to assess ventilation heterogeneity associated with Long-COVID breathlessness** Minsuok Kim (Loughborough, United Kingdom), Jeongeun Hwang, James T. Grist, Gabriele Abueid, Soo Ho Yoon, Vincente Grau, Emily Fraser, Fergus V. Gleeson
OA4958	**Ventilation biomarkers derived by micro-CT (µCT) quantify regional fibrosis progression and response to therapy in mouse** Francesca Pennati (Milano (MI), Italy), Erica Ferrini, Nicola Sverzellati, Davide Buseghin, Gino Villetti, Franco Fabio Stellari, Andrea Aliverti
OA4959	**COVID-19 associated ARDS: quantitative CT study from acute phase to 1-year follow-up** Chiara Milano (Monza , Italy), Bianca Corrò, Silvia Pagani, Stefania Raschi, Pierfranco Usai, Cristiano Bonacina, Roberta Cattaneo, Monica Bernareggi, Chiara Melacini, Serena Bencini, Martina Piluso, Francesca D'Arcangelo, Luca Parachini, Riccardo Ripamonti, Roberta Ciceri, Angela Brancaforte, Marcello Intotero, Paolo Scarpazza
OA4960	**Chest CT scan Pulmonary sequelae in ICU COVID-19 survivors** Amani Kacem (Sousse, Tunisia), Haifa Sfar, Safa Ben Mansour, Yosri Ben Ali, Dhouha Ben Braiek, Hend Zorgati, Oussama Saadaoui, Rahma Ben Jazia, Anis Maatallah, Abderrahmen Daadoucha, Jihene Ayachi
OA4961	**Discussion and Q&A** All Speakers

Yellow 1+2+3 Session 487 15:45 - 17:00

Oral presentation: New mechanisms and treatment strategies related to viral exposures

Disease(s) : Airway diseases

Method(s) : Cell and molecular biology Physiology

Tag(s) : Translational

Chairs : Anne M. van der Does (Leiden, Netherlands), Chair to be confirmed

OA4962	**Late Breaking Abstract - Age and vitamin D influence airway epithelial cells response to SARS-CoV-2 infection** Francesca Sposito (Liverpool, United Kingdom), Shaun Pennington, Christopher David, Jack Duggan, Sarah Northey, Giancarlo Biagini, Neill Liptrott, Amandine Charras, Paul Mcnamara, Christian Hedrich

OA4963	**Slower clearance of human rhinovirus in aged airway epithelial cells differentiated at air liquid interface** Jonathan Baker (London, United Kingdom), Hugo Ombredane, Shyreen Hassibi, Kazuhiro Ito
OA4964	**CC16 Induces Pulmonary Epithelial-Driven SPLUNC1 Expression by Signaling through VLA-2.** Julie Ledford (Tucson, United States), Natalie Iannuzo, Holly Welfley, Nicholas Li, Michael Johnson, Stefano Guerra, Xingnan Li, Darren Cusanovich, Paul Langlais
OA4965	**Repetitive rhinovirus infection primes for amplified IL-13 induced airway epithelial responses** Huan Ma (Borstel, Germany), Draginja Kovacevic, Holger Heine, Susanne Krauss-Etschmann
OA4966	**Clustering of bronchial epithelial immune response to a viral mimic identifies clinically recognizable viral exacerbation profiles.** Laurits Frøssing (Copenhagen V, Denmark), Juan-Jose Nieto-Fontarigo, Samuel Cerps, Sangeetha Ramu, Mandy Menzel, Morten Hvidtfeldt, Ditte K. Klein, Asger Sverrild, Linda Uller, Celeste Porsbjerg
OA4967	**Comparison of rhinovirus A16 and C15 induced transcriptomic profiles in airway epithelia** Ben Kam San Wong (Hong Kong, Hong Kong), Yan Wang, Joseph G S Tusn, Louisa L Y Chan, Renee WY Chan
OA4968	**Airway autoimmunity in asthma is associated with an aggravated inflammatory response to viral stimulation of the bronchial epithelium** Lise Lotte Eriksen (Copenhagen NV, Denmark), Samuel Cerps, Laurits Frøssing, Morten Hvidtfeldt, Ditte Klein, Mandy Menzel, Manali Mukherjee, Parameswaran Nair, Juan Jose Nieto-Fontarigo, Sangheeta Ramu, Alexander Silberbrandt, Ager Sverrild, Lena Uller, Celeste Porsbjerg
OA4969	**Pirfenidone, an alternative treatment for viral-induced exacerbations?** Julia Chitty (Berwick, Australia), Bruce Montgomery, Philip Bardin, Jane Bourke, Belinda Thomas
OA4970	**Expression of an aldehyde-sensitive olfactory receptor in airway epithelial cells after rhinovirus challenge in asthma** Christy Prawiro (London, United Kingdom), Ranch Clemeno, David J Jackson, Hugo Farne, Sebastian L Johnston, Salman Siddiqui
OA4971	**Discussion and Q&A** All Speakers

PS-1 in poster area — Session 489 — 16:00 - 17:30

Poster session: Precision rehabilitation

Disease(s) : Airway diseases | Interstitial lung diseases | Respiratory critical care | Sleep and breathing disorders | Pulmonary vascular diseases

Method(s) : Pulmonary rehabilitation General respiratory patient care Public health Pulmonary function testing

Tag(s) : Clinical

Chairs : Beatriz Abascal Bolado (Santander, Spain), Chair to be confirmed

PA4973	**Development of an exercise adherence prediction model; a prospective cohort study** Ellen Ricke (Hillegom, Netherlands), Eric Bakker
PA4974	**Toward a personalized non-invasive ventilation support during exercise training in chronic obstructive pulmonary disease** Paulo Müller (Campo Grande (MS), Brazil), Tiago Augusto, Rodrigo Koch, Gisele Barbosa, Fernanda Dias, Erlandson Saraiva, Wolfram Windisch
PA4975	**Virtual pulmonary rehabilitaion: Does one size fit all?** Oliver Smith (London, United Kingdom), Jennifer Kilduff, Eilinoir Davoren, Edoardo Castaneda, Daniel Bullock, Elisabetta Renzoni
PA4976	**The effectiveness of rehabilitation programs depending on the COPD risk group** Kostiantyn Shvets (Ivano-Frankivsk, Ukraine), Mykola Ostrovskyy, Oleksandr Varunkiv, Iryna Savelikhina, Mariana Kulynych-Miskiv, Galyna Korzh, Olga Molodovets, Nadiya Korzh, Uliana Shevchuk-Budz
PA4977	**Effect of adding motivational interventions to exercise training on health outcomes in patients with chronic respiratory diseases: a systematic review with meta-analysis** Adriana C. Lunardi (São Paulo (SP), Brazil), Cibele Marques Da Silva, Caroline Censo, Andrey Wirgues, Thiago Pinto, Eloise Arruda, Rafaella Xavier, Patricia Freitas, Celso Carvalho
PA4978	**The efficacy of remote pulmonary rehabilitation in the management of interstitial lung disease** Michael McGettrick (Glasgow (Glasgow), United Kingdom), Kirsty Murray, David Anderson

PA4979	**Prognostic implications of health-related quality of life in transthyretin amyloid cardiomyopathy** Christina Kronberger (Vienna, Austria), Michael Poledniczek, Robin Willixhofer, Nikita Ermolaev, Bernhard Cherouny, Theresa-Marie Dachs, René Rettl, Christina Binder-Rodriguez, Luciana Camuz-Ligios, Bernhard Gregshammer, Andreas Kammerlander, Johannes Kastner, Jutta Bergler-Klein, Franz Duca, Roza Badr Eslam
PA4980	**Six-minute Stepper Test to Set Pulmonary Rehabilitation Intensity in Patients with interstitial lung diseases** Clémence Roussel (Amiens, France), Tristan Bonnevie, Gaelle Tercé, Catherine Viacroze, Francis Edouard Gravier, Jean Sebastien Previnaire, David Debeaumont, Antoine Cuvelier, Jean Marie Grosbois, Elise Artaud Macari
PA4981	**Short- and longer-term effects of a digital behavioural modification intervention on physical activity outcomes in lung transplant recipients** Emily Hume (Newcastle Upon Tyne, United Kingdom), Hazel Muse, Kirstie Wallace, Mick Wilkinson, Karen Heslop Marshall, Arun Nair, Stephen Clark, Ioannis Vogiatzis
PA4982	**Predictors of success of pulmonary rehabilitation** Tomaz Hafner (Kranj, Slovenia), Anja Grošelj, Mitja Košnik, Julij Šelb, Anja Simonič, Tatjana Kosten, Tinkara Pirc Marolt, Peter Korošec
PA4983	**Experiences of individuals with Idiopathic Pulmonary Fibrosis (IPF) participating in Home-Based Pulmonary Rehabilitation (HBPR) in India: A Qualitative study** Humaira Hanif (Noida, India), Obaidullah Ahmed, James Manifield, Mohd Shibli, Zahira Ahmed, Dominic Malcolm, Andy Barton, Deepak Talwar, Sally J Singh, Mark Orme
PA4984	**Pulmonary rehabilitation is effective on exercise tolerance and mobility in frail ILD patients.** Didier Saey (Québec (QC), Canada), Pierre-François Tremblay-Labrecque, Geneviève Dion
PA4985	**Interventions to promote conventional pulmonary rehabilitation uptake post-acute exacerbation of chronic obstructive pulmonary disease: A systematic review** Bedor Alkhathlan (Leicester, United Kingdom), Munyra Alhotye, Neil Greening, Theresa Harvey-Dunstan, Sally Singh
PA4986	**The Effects of Neurophysiological Facilitation Techniques on Respiration in Stroke Patients** Çiçek Gunday (Istanbul, Turkey), Ali Enes Yasar, Gul Deniz Yilmaz Yelvar, Yasemin Buran Cirak, Nurgul Durustkan Elbasi, Habibe Serap Inal
PA4987	**Is Pulmonary Rehabilitation equitable across different populations?** Enya Daynes (Leicester, United Kingdom), Sarah Ward, Jakub Zakloutal, Linzy Houchen-Wolloff, Nikki Gardiner, Sally Singh
PA4988	**Applying human factors to understand the needs of people living with COPD** Marta Lombardini (Parma, Italy), Nicola Scichilone, Ilaria Milesi, Francesco Bianchi, Giulia Marenghi, Chris White, Andrew Whittamore
PA4989	**Pulmonary rehabilitation in Systemic sclerosis.** Sara Ramponi (Cingia de' Botti (CR), Italy), Maurizio Marvisi, Alberto Baiguera, Andrea Romani, Silvia Faverzani, Chiara Mancini, Laura Bazlarini
PA4990	**Characteristics of pulmonary rehabilitation programmes and their effects on exercise capacity and quality of life in patients with interstitial lung diseases: a systematic review and meta-analysis** Jaime Ricardo Jimenez Salazar (Edinburgh, United Kingdom), Fatim Tahirah, Nazim Uzzaman, Ranita Hisham, Nik Zawani, Hilary Pinnock, Nikhil Hirani, Roberto Rabinovich
PA4991	**Challenges in screening for COPD and recruiting to community-based pulmonary rehabilitation (PR) in an economically deprived area of Jodhpur, India.** Mahendra Thakor (Jodhpur, India), Vishal Singh, Pankaj Bhardwaj, Nishant Kumar Chauhan, Mark Orme, James Manifield, Amy Barradell, Zahira Ahmed, Andy Barton, Arun Kumar Sharma, Sally Singh
PA4992	**Needs assessment for introducing Pulmonary Rehabilitation for Chronic Obstructive Pulmonary Disease management in a rural Indian setting: a qualitative study** Dhiraj Agarwal (Pune (Maharashtra), India), Diksha Singh, Harshpreet Kaur, Sudipto Roy, Sanjay Juvekar, Hilary Pinnock

PS-10 in poster area Session 490 16:00 - 17:30

Poster session: Cystic fibrosis: disease monitoring, biomarkers, and psychosocial issues

Disease(s) : Airway diseases Interstitial lung diseases

Method(s) : Imaging Pulmonary function testing Epidemiology Cell and molecular biology Pulmonary rehabilitation Public health General respiratory patient care Physiology

Tag(s) : Clinical

Chairs : Mirjam Stahl (Berlin, Germany)

PA4993	**Lateral decubitus CT: an alternative technique to monitor structural lung disease in preschool children with cystic fibrosis** Yuxin Chen (Rotterdam, Netherlands), Rikke Mulvad Sandvik, Lotte Borgwardt, Pierluigi Ciet, Kim Gjerum Nielsen, Harm A. W. M. Tiddens
PA4994	**Correlation of lung function using forced oscillation technique with spirometry in children with cystic fibrosis (CF)** Sachin Singh (Rajkot, Gujarat, India), Meenu Singh, Joseph Mathew
PA4995	**Role of nursing in the detection of allelic variants of the gene alpha-1-antitrypsin in patients with cystic fibrosis.** Rocio Reinoso Arija (Sevilla, Spain), Pedro Francisco Garcia Tamayo, Maria Rosario Ruiz-Serrano De La Espada, Maria Dolores Nuñez Ollero, David Chacon Cadiz, Maria Dolores Ucero Leon, Jorge Cabrera Guerrero, Candido Fernandez Garcia, Carmen Sanchez De La Puerta Laguna, Isabel Delgado Pecellin, Maria Esther Quintana Gallego, Laura Carrasco Hernandez, Jose Luis Lopez-Campos Bodineau
PA4996	**SPLUNC1 in sputum of children with cystic fibrosis pulmonary exacerbations** Elad Ben-Meir (Shoham, Israel), Lucy Perrem, Felix Ratjen, Hartmut Grasemann
PA4997	**Physical activity, six-minute-walking test, and quality of life in people with cystic fibrosis** Elpis Hatziagorou (Panorama, Thessaloniki, Greece), John Kouslis, Elisavet-Anna Chrysochoou, Evangelia Kouidi, John Tsanakas
PA4998	**Project Fizzyo: Identification of optimal pressure-length breath profiles for airway clearance techniques in children with cystic fibrosis** Nicole Filipow (London, United Kingdom), Emma Raywood, Sanja Stanojevic, Gwyneth Davies, Helen Douglas, Harriet Shannon, Nicky Murray, Rachel O'Connor, Eleanor Main
PA4999	**Parental socioeconomic status and lung function in offspring with cystic fibrosis in Sweden- a register-based cohort study** Emma Caffrey Osvald (Stockholm, Sweden), Cecilia Lundholm, Samuel Arthur Rhedin, Awad I Smew, Bronwyn K Brew, Isabelle De Monestrol, Catarina Almqvist
PA5000	**Assessment of knowledge of general practitioners about Cystic fibrosis in Multan, Pakistan** Abdul Mannan Mustafa (Multan, Pakistan), Ghulam Mustafa
PA5001	**Respiratory microbiota profiles are associated with respiratory health in infants with cystic fibrosis** Ruth Steinberg (Bern, Switzerland), Philipp Latzin, Markus Hilty, Kathryn Ramsey, Marc Alexander Oestreich, Bettina Frauchiger, Elisabeth Kieninger, Insa Korten, Bild Bild Study Group, Scild Scild Study Group
PA5002	**Microbiological status predicts lung function decline in cystic fibrosis** Elpis Hatziagorou (Panorama, Thessaloniki, Greece), Marina Kotzamani, Persefoni Talimtzi, Maria Tsolia, Elissavet-Anna Chrysochoou
PA5003	**Exploring the attitudes and knowledge of the caregivers of children with cystic fibrosis and primary ciliary dyskinesia regarding COVID-19 vaccination** Pinar Ergenekon (Istanbul, Turkey), Cansu Yilmaz Yegit, Muruvvet Yanaz, Aynur Gulieva, Mine Kalyoncu, Merve Selcuk, Seyda Karabulut, Neval Metin Cakar, Ela Erdem Eralp, Yasemin Gokdemir, Bulent Karadag
PA5004	**Airway colonisation with Aspergillus fumigatus and its impact on the CF microbiota** Deepa Patel (Leicester, United Kingdom), Paul Seear, Catherine Pashley, Erol Gaillard
PA5005	**Comparison of the corrected N2-lung clearance index with SF6-lung clearance index and magnetic resonance imaging** Eva Steinke (Berlin, Germany), Mark O. Wielpütz, Cornelia Joachim, Marcus A. Mall, Mirjam Stahl
PA5006	**Airway infections as risk factors for Pseudomonas aeruginosa acquisition and chronic colonisation in children with cystic fibrosis** Harriet Corvol (Paris, France), Julie Mesinele, Manon Ruffin, Loic Guillot, Pierre-Yves Boelle
PA5007	**Identifying Knowledge Gaps by Using Adapted CF R.I.S.E in a Low Resource Setting** Merve Selçuk (Istanbul, Turkey), Yasemin Gokdemir, Ela Erdem Eralp, Almala Pinar Ergenekon, Cansu Yilmaz Yeğit, Muruvvet Cenk Yanaz, Aynur Gulieva, Mine Kalyoncu, Seyda Karabulut, Burcu Uzunoglu, Gamze Tastan, Damla Kocamaz, Ozge Kenis Coskun, Ilknur Gorgun, Randy Messier, Pamela Mertz, Fazilet Karakoc, Bulent Karadag
PA5008	**Transition Program as a Quality Improvement Project: Adaptation of the CF R.I.S.E. in a center with Limited Resources** Yasemin Gökdemir (Istanbul, Turkey), Merve Selcuk, Ela Erdem Eralp, Almala Pinar Ergenekon, Cansu Yilmaz Yegit, Muruvvet Yanaz, Aynur Gulieva, Mine Kalyoncu, Seyda Karabulut, Burcu Uzunoglu, Gamze Tastan, Damla Kocamaz, Ozge Kenis Coskun, Ilknur Gorgun, Randy Messier, Pamela Mertz, Fazilet Karakoc, Bülent Karadag

PA5009 **Classification of cystic fibrosis (CF) lung disease patterns based on CT texture analysis and machine learning**
Francesca Pennati (Milano (MI), Italy), Pietro Quadri, Irene Borzani, Maria Chiara Russo, Valeria Daccò, Gianpaolo Carrafiello, Carla Colombo, Andrea Aliverti

PA5010 **Respiratory rate from pulse oximetry during cystic fibrosis exacerbations**
David Wertheim (Kingston-upon-Thames, United Kingdom), Catherine Olden, Claire Edmondson, Jane C Davies, Paul Seddon

PA5011 **Evaluatıon of Alexıtımıa Level in Cystıc Fıbrosıs Patıents**
Aslı Imran Yılmaz (konya, Turkey), FATİH ERCAN, Semih Erden, Nail Bilgitay, Sevgi Pekcan, Gökçen Ünal, Hanife Tuğçe Çağlar

PA5012 **Evaluation of respiratory function at 6 years of age in patients with cystic fibrosis with frequent pulmonary exacerbations in the first 2 years of life**
sati ozkan tabakci (Ankara, Turkey), Güzin Cinel, Salih Uytun, Sanem Eryılmaz Polat, Ebru Yalçın, Nural Kiper, Meltem Akgül Erdal, Velat Şen, Suat Savaş, Özcan Çelebi, Derya Ufuk Altıntaş, Mahir Serbes, Ayşe Ayzıt Kılınç, Haluk Çokuğraş, Hüseyin Arslan, Hakan Yazan, Hale Molla Kafi, Abdülhamit Çollak, Gökçen Ünal, Aslı Imran Yılmaz, Hanife Tuğçe Çağlar, Ilim Irmak, Ebru Damadoğlu, Gökçen Kartal Öztürk, Esen Demir, Erdem Başaran, Ayşen Bingöl, Yakup Canıtez, Şükrü Çekiç, Pelin Asfuroğlu, Ayşe Tana Aslan, Koray Harmancı, Gonca Kılıç, Mehmet Köse, Ali Ersoy, Melih Hangül, Ali Özdemir, Gizem Özcan, Nazan Çobanoğlu, Zeynep Gökçe Gayretli Aydın, Özlem Keskin, Hasan Yüksel, Şebnem Özdoğan, Erdem Topal, Gönül Çaltepe, Demet Can, Pervin Korkmaz Ekren, Mehmet Kılıç, Tuğba Şişmanlar Eyüboğlu, Sevgi Pecan, Erkan Çakır, Nagehan Emiralioğlu, Uğur Özçelik, Deniz Doğru Ersöz

PS-11 in poster area Session 491 16:00 - 17:30

Poster session: Asthma, atopy, and respiratory outcomes from infancy to young adulthood

Disease(s) : Airway diseases

Method(s) : Epidemiology Public health General respiratory patient care Physiology Pulmonary function testing Imaging

Tag(s) : Clinical

Chairs : Franca Rusconi (Pisa, Italy), Eva Sophie Lunde Pedersen (Bern, Switzerland)

PA5013 **Endotyping and risk-assessing childhood asthma using national registries**
Kjell Erik Julius Håkansson (København N, Denmark), Silvia Cabrera Guerrero, Vibeke Backer, Charlotte Suppli Ulrik, Deepa Rastogi

PA5014 **Association of multiple factors with childhood asthma and allergic diseases: a latent class analysis**
Teresa To (Toronto (ON), Canada), Cornelia M. Borkhoff, Laura N. Anderson, Catherine Birken, Sharon D. Dell, Magdalena Janus, Jonathon L. Maguire, Theo J. Moraes, Patricia C. Parkin, Padmaja Subbarao, Anne Van Dam, Beverly Guttman, Emilie Terebessy, Kimball Zhang, Jinqin Zhu

PA5015 **Maternal dietary inflammatory potential and allergic and respiratory multimorbidity in children**
Rosalie Delvert (Villejuif, France), Manel Ghozal, Marie-Aline Charles, Isabella Annesi-Maesano, Chantal Raherison-Semjen, Raphaëlle Varraso, Blandine De Lauzon-Guillain, Annabelle Bédard

PA5016 **Persistence of wheeze in a clinical cohort depends on trigger factors**
Tayisiya Krasnova (Kyiv, Ukraine), Amanda Gisler, Sylvain Blanchon, Nicolas Regamey, Eva S L Pedersen, Claudia E Kuehni

PA5017 **Dust microbiota profiles in daycare and risk of wheezing in early childhood**
Annabelle Bédard (Paris, France), Isabelle Lacaze, Flore Amat, Pierre Bonnet, Anastasie Eworo Nchama, Carlos A Camargo Jr, Kohei Hasegawa, Rachel Nadif, Valérie Siroux, Raphaëlle Varraso, Corinne Mandin, Nicole Le Moual, Orianne Dumas

PA5018 **Impact of exposure reduction recommendations on health outcomes in children with asthma during high desert dust season in Greece and Cyprus: Results of the MEDEA randomised trial**
Panayiotis Kouis (Nicosia, Cyprus), Emmanouil Galanakis, Paraskevi Kinni, Eleni Michaelidou, Antonis Michanikou, Helen Demetriou, Maria G. Kakkoura, Pinelopi Anagnostopoulou, Konstantinos Pitsios, Stafania I. Papatheodorou, Petros Koutrakis, Panayiotis K. Yiallouros

PA5019 **The impact of COVID-19 lockdown measures on asthma symptom control in children: a systematic review and meta-analysis of observational cohort studies.**
Panayiotis Kouis (Nicosia, Cyprus), Marios Lemonaris, Eleana Xenophontos, Andrie G. Panayiotou, Panayiotis K. Yiallouros

PA5020 **Impact of COVID-19 on Childhood Asthma and Wheezing Disorders: Rebound Risk for Rhinovirus Infections**
Yuhan Xing (Hong Kong, Hong Kong), Ka-Sheung Yip, Edmund Chung-Ming Yung, Agnes Sze-Yin Leung, Ting-Fan Leung, Gary Wing-Kin Wong

PA5021 **COVID-19 vaccinations and adverse outcomes among youth and young adults with asthma and allergic diseases**
Kimball Zhang (Toronto, Canada), Emilie Terebessy, Jingqin Zhu, Catherine Birken, Cornelia Borkhoff, Andrea Gershon, Theo Moraes, Tetyana Kendzerska, Smita Pakhale, Teresa To

PA5022 **A revolving door?: continuity of care among children with asthma after discharge from a children's hospital in Ontario, Canada**
Kimball Zhang (Toronto, Canada), Emilie Terebessy, Jingqin Zhu, Teresa To

PA5023 **Association of infant tidal breathing with later lung function in preterm individuals**
Yasmin Salem (Bern, Switzerland), C. Corin Willers, Anne-Christianne Kentgens, Julian Jakob, Florian Wyler, Urs Frey, Philipp Latzin, Sophie Yammine

PA5024 **Diagnosis in children with prolonged or recurrent cough**
Maria Christina Mallet (Rose-Hill, Mauritius), Annina Elmiger, Tayisiya Krasnova, Carmen De Jong, Barbara Kern, Alexander Moeller, Nicolas Regamey, Oliver Sutter, Jakob Usemann, Eva S L Pedersen, Claudia E Kuehni

PA5025 **Lung function in young adulthood in relation to moderate-to-late preterm birth**
Björn Lundberg (Stockholm, Sweden), Simon Kebede Merid, Petra Um-Bergström, Gang Wang, Anna Bergström, Sandra Ekström, Inger Kull, Erik Melén, Jenny Hallberg

PA5026 **Antibiotics in pregnancy influence nasal microbiome and respiratory morbidity in infancy**
Céline Rüttimann (Basel, Switzerland), Annika Nissen-Kratzert, Nadja Mostacci, Noëmi Künstle, Andrea Marten, Amanda Gisler, Katharina Bracher, Insa Korten, Sophie Yammine, Ruth Steinberg, Sven Schulzke, Philipp Latzin, Markus Hilty, Urs Frey, Olga Gorlanova

PA5027 **Clinical implications of dysanaptic obstruction during childhood and adolescence**
Hans Jacob Koefoed (Groningen, Netherlands), Gang Wang, Ulrike Gehring, Sandra Ekström, Inger Kull, Anna Bergström, Gerard H. Koppelman, Erik Melén, Judith M. Vonk, Jenny Hallberg

PA5028 **Exploratory analyses of inflammatory plasma proteins and post-exercise airway responses in randomly selected adolescents**
Karin Ersson (Uppsala, Sweden), Kjell Alving, Christer Janson, Henrik Johansson, Andrei Malinovschi

PA5029 **A retrospective study of perinatal respiratory outcomes in pregnancy with Diabetes Mellitus**
Then Moli Othayamoorthy (Segambut, Wilayah Persekutuan Kuala Lumpur, Malaysia), Asiah Kassim, 3. Nur Izyani Abdul Halim, 4. Fatimah Az Zaharah Sulaiman, 5. Ching Hai Lee, 6. Ker Yang Chua, 7. Udhaya Moorthy, 8. Karuthan Chinna

PA5030 **Comorbidity of allergic diseases and type 1 diabetes – using genetically informative methods**
Awad I. Smew (Stockholm, Sweden), Tong Gong, Ralf Kuja-Halkola, Lars Sävendahl, Paul Lichtenstein, Bronwyn K. Brew, Catarina Almqvist

PA5031 **Pulmonary evaluation of children with respiratory symptoms and post-COVID-19 condition**
Einat Shmueli (Hod Hasharon, Israel), Ophir Bar-On, Meir Mei-Zahav, Patrick Stafler, Hagit Levine, Guy Steuer, Ben Amir, Gabriel Chodick, Dario Prais, Liat Ashkenazi-Hoffnung

PA5032 **Frequency of common respiratory infections in children before and during the COVID-19 pandemic**
Ronny Makhoul (Bern, Switzerland), Cristina Ardura, Eva S L Pedersen, Nicolas Regamey, Claudia E Kuehni

PS-12 in poster area Session 492 16:00 - 17:30

Poster session: Airway clearance, physical activity and exercise in children and adults with respiratory disorders

Disease(s) : Pulmonary vascular diseases | Respiratory critical care | Airway diseases | Interstitial lung diseases | Sleep and breathing disorders

Method(s) : General respiratory patient care | Physiology | Pulmonary rehabilitation | Imaging | Public health | Pulmonary function testing | Epidemiology | Respiratory intensive care

Tag(s) : Clinical

Chairs : Rainer Gloeckl (Schoenau am Koenigssee, Germany), Naciye Vardar Yağlı (Ankara, Turkey)

PA5033 **Is it possible to evaluate the relationship between strength and respiratory muscle performance with motor performance in premature newborns in the neonatal period?**
Evelim Gomes (São Paulo (SP), Brazil), Debora Anjos, Carolina Camargo, Etiene Carvalho, Dirceu Costa, Eneida Suda

PA5034 **Evaluating physiotherapy interventions for infants with bronchiolitis – a survey study**
Sonja Andersson Marforio (Hjärup, Sweden), Annika Lundkvist Josenby

PA5036	**Peripheral muscle mass and motor performance is there a relationship in the neonatal period in premature newborns?** Camargo Carolina (São Paulo, Brazil), Debora Anjos, Etiene Carvalho, Eneida Suda, Dirceu Costa, Evelim Gomes
PA5037	**Respiratory symptoms and access to physiotherapy in children with cerebral palsy in Albania** Malvina Hoxha (Tirana, Albania), Visar Malaj, Emanuela Prendi, Bruno Zappacosta
PA5038	**The effect of a mechanical insufflation exsufflation titration protocol on delivered settings in patients with neuromuscular disease.** Sophie Madden-Scott (London, United Kingdom), Neeraj Shah, Karthhika Jeyakumar, Laura Weatherley, Lauren Joyce, Georgios Kaltsakas, Nicholas Hart, Patrick Murphy, Leyla Osman
PA5039	**Assessing personalised airway clearance techniques in Primary Ciliary Dyskinesia with 129Xe ventilation MRI** Lynne Schofield (Leeds, United Kingdom), Laurie Smith, Alberto Biancadi, Evie Robson, Helen Marshall, David Capener, Jody Bray, Leanne Armstrong, Jen Rodgers, Ryan Munro, Graham Norquay, Oliver Rodgers, Shagufta Fazal, Anna Zalewska, Susanne Shanks, David Hughes, Daniel Hind, Sally Singh, Eduardo Moya, Noreen West, Jim Wild
PA5040	**Evaluating the effects of MetaNeb® compared to usual airway clearance techniques during exacerbations of cystic fibrosis: A randomised controlled trial** Naomi Chapman (Kewdale, Australia), Vinicius Cavalheri, Elizabeth Smith, Jamie Wood, Angela Jacques, Anna Tai, Siobhain Mulrennan, Kylie Hill
PA5041	**Feasibility and safety evaluation of a novel airway clearance system in patients with bronchiectasis** Moshe Ashkenazi (ramat gan, Israel), Nir Hel[er, Gil Sokol, Adi Dagan, Ori Efrati
PA5042	**Clinical application of intrapulmonary percussive ventilation: a systematic scoping review** Anwar Hassan (Glenmore Park, Australia), Sidney Takacs, Sam Orde, Stephen Huang, Jennifer Alison, Maree Milross
PA5043	**What Are The Factors Affecting Respiratory Muscle Functions in Idiopathic Pulmonary Fibrosis?:A Preliminary Study** Özge Ertan Harputlu (İstanbul, Turkey), Zeynal Yasacı, Tugce Tahmaz, Goksen Kuran Aslan, Esen Kıyan, Gulfer Okumus
PA5044	**Relationship between anaerobic power and exercise capacity in cystic fibrosis with impaired glucose tolerance** Deniz Inal-Ince (Ankara, Turkey), Elif Kocaaga, Dilber Ademhan-Tural, Cemile Bozdemir-Ozel, Ebru Calik-Kutukcu, Naciye Vardar-Yagli, Melda Saglam, Deniz Dogru, Ayfer Alikasifoglu, Nagehan Emiralioglu
PA5045	**Exercise capacity, inflammation, hemodynamic and macrovascular function in children with CF in different genders** Senem Simsek (Ankara, Turkey), Aslıhan Cakmak, Meltem Akgul-Erdal, Yasemin Kartal, Murat Timur Budak, Suna Sabuncuoglu, Nagehan Emiralioglu, Elmas Ebru Gunes-Yalcin, Deniz Inal-Ince
PA5046	**Impaired muscle oxygenation, exercise capacity, and activities of daily living in primary ciliary dyskinesia with inspiratory muscle weakness** Hazal Sonbahar Ulu (Ankara, Turkey), Deniz Inal Ince, Aslihan Cakmak, Naciye Vardar Yagli, Melda Saglam, Ebru Calik Kutukcu, Ugur Ozcelik
PA5047	**Inspiratory muscle strength is an independent predictor for six-minute walk distance in primary ciliary dyskinesia** Hazal Sonbahar Ulu (Ankara, Turkey), Deniz Inal Ince, Aslihan Cakmak, Melda Saglam, Naciye Vardar Yagli, Ebru Calik Kutukcu, Ugur Ozcelik
PA5048	**Determinants of daily steps in people with interstitial lung disease** Ana Sofia Brites Grave (Alcobaça, Portugal), Cátia Paixão, Joana Antão, Francisca Teixeira Lopes, Vânia Fernandes, Maria Aurora Mendes, António Mesquita Montes, Alda Marques
PA5049	**Daily activities prioritised by people with interstitial lung disease** Alda Sofia Pires De Dias Marques (Aveiro, Portugal), Raquel Marinho, Cátia Paixão, Luís Lázaro, M Aurora Mendes, Sérgio Campainha, J. Joaquim Alvarelhão
PA5050	**Efficacy of respiratory physiotherapy in the management of infectious pleural effusion (IPE): a randomized clinical trial** Julia Tarrega Camarasa (Granollers, Spain), Inmaculada Castillo, Enric Barbeta
PA5051	**Physiotherapy management of adults with bronchiectasis. Service evaluation from a UK tertiary hospital.** Gemma Louise Korff (London, United Kingdom), Massimiliano Puddu, Yvonne Rumble, Arietta Spinou
PA5052	**Late Breaking Abstract - Effects of a symptom-based rehabilitation on cardiopulmonary exercise capacity in post COVID-19: A preliminary subgroup analysis of the ReLoAd cohort** Daniela Leitl (Schönau a. Königssee, Germany), Tessa Schneeberger, Inga Jarosch, Rainer Gloeckl, Sandra Winterkamp, Andreas Rembert Koczulla

PS-13 in poster area Session 493 16:00 - 17:30

Poster session: Cardiopulmonary exercise testing and pulmonary function assessment in pathology and COVID-19

Disease(s) : Airway diseases | Sleep and breathing disorders | Pulmonary vascular diseases | Interstitial lung diseases

Method(s) : Physiology | Pulmonary function testing | Imaging | Pulmonary rehabilitation | Surgery | Endoscopy and interventional pulmonology | Epidemiology | General respiratory patient care | Public health

Tag(s) : Clinical

Chairs : Justine Van den Hengel (Leusden, Netherlands), Bryn Williams (Bedfordshire, United Kingdom)

PA5053	**Evaluation of pulmonary function impairment in post-COVID patients: a single-center experience follow-up** Noemi Suppini (Timisoara (Timis), Romania), Cristian Oancea, Daniel Traila, Diana Luminita Manolescu, Alexandru Catalin Motofelea, Alina Maran, Corina Maria Mocan, Ovidiu Fira-Mladinescu
PA5055	**Is there correlation of the Distance Saturation Product with spirometric and Diffusion Capacity for Carbon Monoxide data in COVID-19 survivors?** Khouloud Kchaou (Sfax, Tunisia), Soumaya Khaldi, Balsam Barkous, Chaima Briki, Sirine Jamli, Saloua Ben Khamsa Jameleddine
PA5056	**Does diffusion ability of lungs return to normal after COVID-19?** Nataliia Habshydze (Dnipro, Ukraine), Mariia Krykhtina, Liudmyla Konopkina, Tetyana Pertseva, Larysa Botvinikova
PA5057	**Comparison of severity of Covid infection in staff before and after vaccination.** Bhumika Madhav (Navi Mumbai (Maharashtra), India), Jayalakshmi T.Kutty, Prakash Cherath, Narendra Patil, Prashant Khemani, Vibhasree A V, Gokul Bhate
PA5058	**Increased impairment of cardiopulmonary exercise by bilateral diaphragm dysfunction as compared to unilateral diaphragm dysfunction.** Patrick Jak (Diemen, Netherlands), Bart Boerrigter
PA5059	**Predictive value of CPET in identifying patients with chronic thromboembolic pulmonary hypertension (CTEPH).** Vicky moore (Coventry, United Kingdom), Joanna Shakespeare, Jason Burge, Sarah Shuker, David G Parr
PA5060	**Determination of the anaerobic threshold** Esther de Geus (Den Haag, Netherlands), Mart Van Der Plas
PA5061	**Comparative retrospective data research from normalvalues of VO2max in CPET with patient data in Meander Medisch Centrum, The Netherlands.** Justine Van den Hengel (Leusden, Netherlands), Anne Van As - Janssen
PA5062	**Can iso-time heart rate (ITHR) be used as an objective marker for demonstrating a positive improvement with ambulatory oxygen, using a pre-established blinded treadmill protocol?** Sara McArthur (Edinburgh (Edinburgh), United Kingdom), Shaun Baxter, Kristofor Cuthbert, Jill Macleod
PA5063	**The association of isolated small airways obstruction with cardiorespiratory fitness: A hospital-based study** Ben Knox-Brown (NEWMARKET, United Kingdom), Karl Sylvester, Andre Amaral
PA5064	**Validation of a treadmill protocol for cardiopulmonary exercise testing (CPET) in patients with COPD** Ann-Iren Holstad (Jessheim, Norway), Anita Grongstad, Christine Gudim Karlsen, Trine Stensrud, Anne Helene Edvardsen
PA5065	**Utility of CPET for the investigation of persistent breathlessness in post PE patients** Vicky moore (Coventry, United Kingdom), Joanna Shakespeare, Sarah Shuker, Jason Burge, David G. Parr
PA5066	**Does pectus excavatum repair improve exercise responses? A comparison of cardiopulmonary exercise testing variables following surgical intervention.** Ian Cliff (Stoke-on-Trent, United Kingdom), Helen Stone, Naveed Mustfa, Christopher Satur
PA5067	**Biologic or mechanic quality control for cardiopulmonary exercise testing (CPET).** Manon Broekhuijsen - Godding (Lanaken, Belgium), Sami Simons
PA5068	**Determinants of respiratory function during inpatient rehabilitation after spinal cord injury** David Berlowitz (Melbourne (VIC), Australia), Gabi Mueller, David Gobets, Burkhart Huber, Xavier Jordan, Karin Postma, Anja Raab, Martin Schubert, Martin Brinkhof
PA5069	**Impact of mechanical ventilation on body composition in post-COVID: a cross-sectional study** Alvaro Montañez (Mexico City, Mexico), Mildred Corina de la Concha Duarte, Dulce González Islas, Arturo Orea Tejeda, Luz Jiménez Gallardo, Arturo Rodríguez Medina, Priscila Dibnora De La Concha Duarte, Juan Antonio Ramírez Maldonado, Guiedani Galván Bautista, Nadia Hernández López, Rocío Sánchez Santillán, Ilse Pérez García, Angelia Jiménez Valentín

PA5070 **Utility of neurophysiological studies in the diagnosis of diaphragmatic paralysis as a cause of dyspnea. Experience in a Spanish hospital.**
Ignacio Garrapiz (Huesca, Spain), María Jesús Pablo, Isabel Benavente, Jorge Hurtado, Javier Garrapiz, Joaquín Cegoñino, Sandra García, Elena Briz, Luis Borderias Clau

PA5071 **Cardiopulmonary exercise testing (CPET) in post COVID-19 exercise intolerance evaluation**
Rita Enriquez (Montijo, Portugal), Susana Clemente, Sílvia Rodrigues, Liliana Gomes, Jorge Rosa, Inês Claro, Filipa Todo Bom

PA5072 **Late Breaking Abstract - Replication and validation of a rebreathing experiment to investigate post-COVID symptoms**
Daniel Schaefer (Geretsried, Germany), Rudolf Jörres, Dennis Nowak, Omer Van Den Bergh, Katleen Bogaerts, Stefan Glasauer, Nadine Lehnen, Dina Von Werden

PS-14 in poster area Session 494 16:00 - 17:30

Poster session: Clinical features and advances in the management of tuberculosis

Disease(s) : Airway diseases Pulmonary vascular diseases

Method(s) : General respiratory patient care Epidemiology Public health Imaging Cell and molecular biology Endoscopy and interventional pulmonology Pulmonary function testing

Tag(s) : Clinical

Chairs : Inês Tavares Ladeira (Vila Nova de Gaia, Portugal), Chair to be confirmed

PA5092 **Late Breaking Abstract - Drug-resistant tuberculosis: pilot whole genome sequencing of clinical isolates M.tuberculosis from TB patients in Kazakhstan**
Ulan Kozhamkulov (Astana, Kazakhstan), Asset Daniyarov, Ainur Akhmetova, Saule Rakhimova, Zhannur Abilova, Ainur Akilzhanova

PA5073 **Renal amyloidosis in a patient with pulmonary tuberculosis**
Sabarinath Ravichandar (Chennai , India)

PA5074 **Clinico-microbiological profile and treatment outcomes in patients with isoniazid monoresistant tuberculosis in South India**
Venkata Prasanna M (puducherry, India), Muthuraj M, Vimal Raj R, Govindarajan S, Pajanivel R

PA5075 **The modifying effect of comorbidity on the detection and treatment outcomes of tuberculosis**
Iryna Makoida (Ivano-Frankivsk, Ukraine), Mykola Ostrovskyy, Iryna Kostitska, Olha Molodovets, Olha Melnuk-Sheremeta, Oleksandr Varunkiv, Iryna Savelikhina, Alla Zuban, Nadiia Korzh, Uliana Shevchuk-Budz

PA5076 **Association of systemic inflammatory markers with anti-tuberculous drug-induced liver injury**
quanxian Liu (Chengdu, China), Jianqing He

PA5077 **Clinical and prognostic characterisation of Mycobacterium avium infection - a retrospective analysis**
Diogo Miguel Monteiro Canhoto (Coimbra, Portugal), Ferreira António Jorge

PA5078 **Rasmussen Aneurysm: a rare fearful complication of pulmonary tuberculosis**
mohamed karim darragi (Ariana, Tunisia), Sarra Maazaoui, Chirine Moussa, Amany Touil, Sonia Hbibech, Soumaya Ben Saad, Hajer Racil, Fatma Tritar, Sonia Maalej, Nawel Chaouech

PA5079 **Atypical presentations and challenges in the upper respiratory tract tuberculosis**
Najla Bahloul (Sfax, Tunisia), Kallel Souha, kharrat rania, Hammami Rim, Selem Noura, Chaabouni Mohamed Amine, Kammoun Sami, Charfeddine Ilhem

PA5080 **Clinical characteristics of different subspecies in patients with Mycobacterium intracellulare pulmonary disease**
CHIE MORITA (Tokyo, Japan), Eriko Morino, Yusaku Kusaba, Ayako Shiozawa, Jin Takasaki, Masayuki Hojo, Haruhito Sugiyama, Mitsunori Yoshida, Hanako Fukano, Yoshihiko Hoshino

PA5081 **Spinal tuberculosis treated at an East London Hospital**
Akhilesh Sharma (Chelmsford, United Kingdom), Erik Skyllberg, Rebekah Young, Sinead Foley, Mollie Ward, Laura Gill, Simon Tiberi, Veronica White, Heinke Kunst

PA5082 **Endobronchial tuberculosis : a rare presentation**
Salma Msika (casablanca, Morocco), Wiam El Khattabi, Meriem Zadi, Hajar Arfaoui, Hasna Jabri, Hicham Afif

PA5083 **The effect of Covid-19 pandemic on childhood tuberculosis:A Retrospective sectional study**
Özge Ülgen (İstanbul, Turkey), Gülay Bilgin, Zeynep Reyhan Onay, Sinem Can Oksay, Deniz Mavi, Yasemin Mocan Çağlar, Begüm Yörük, Saniye Girit

PA5084 **Tuberculous meningoencephalitis complicate with mielitis**
Olga Adriana Caliman-Sturdza (Suceava, Romania)

PA5085 **Peripheral blood monocyte and pleural effusion aetiology**
Maged Hassan (Alexandria, Egypt), ABDALLAH DABBAS, Mohammad Yosri, Alaa Amin, Nada Abdelsalam, Aya Ayman, Marina Ibrahim, Nada Nawar

PA5086 **Etiology of exudative pleural effusion among adults: differentiating between tuberculous and other causes, a multicenter prospective cohort study**
Mansoor Hameed (Doha, Qatar), Mousa Hussein, Merlin Thomas, Mustafa Al-Tikrity, Tasleem Raza, Esraa Alkhateeb, Aisha Aladab, Wanis Ibrahim, Prem Chandra

PA5087 **Lung function impairment after completing tuberculosis therapy - preliminary findings of StatinTB/ExtendTB**
Sandra Mukasa (Cape Town, South Africa), Karen Wolmarans, Antoneta Mashinyira, Patrick Katoto, Fareda Jakoet-Bassier, Christian Buess, Reto Guler, Gunar Gunther, Friedrich Thienemann

PA5088 **Predictive factors for unfavourable outcome of Tubercular(T.B) cervical lymphadenitis**
Darshan Kumar Bajaj (Lucknow (Uttar Pradesh), India), Surya Kant, Nagendra Kumar, Jyoti Bajpai, Richa Tyagi, R A S Kushwaha, Ajay Kumar Verma, Rajiv Garg, Chanchal Rana, Sapna Dixit

PA5089 **Utility of CT scan in pulmonary tuberculosis disease**
mohamed karim darragi (Ariana, Tunisia), Sarra Maazaoui, Yassine Foudhaili, Olfa Ben Moussa, Amany Touil, Sonia Habibech, Hajer Racil, Nawel Chaouch

PA5090 **Ocular Tuberculosis: a challenging condition**
Joana Marques Diogo (Sesimbra, Portugal), Carlos Figueiredo, Helena Pires, Júlia Silva, Carlos Monteverde, Dalila Ferreira, Joana Carvalho, Susana Carreira, Teresa Mourato, Luís Coelho

PA5091 **The impact of video-supported treatment in the case-management and outcome of tuberculosis**
Tatiana Osipov (Chisinau, Republic of Moldova), Alina Malic, Evelina Lesnic, Adriana Niguleanu

PS-15 in poster area Session 495 16:00 - 17:30

Poster session: COVID-19 in specific populations

Disease(s) : Airway diseases | Respiratory critical care | Interstitial lung diseases

Method(s) : Epidemiology | General respiratory patient care | Physiology | Public health | Respiratory intensive care | Imaging | Pulmonary function testing | Pulmonary rehabilitation

Tag(s) : Clinical

Chairs : Aikaterini Dimakou (Agia Paraskeyi, Greece), Charlotte Summers (Cambridge (Cambridgeshire), United Kingdom)

PA5093 **Immunosuppressed patients with severe COVID-19 pneumonia: clinical characteristics and outcomes**
Edoardo Forin (Barcelona, Spain), Flavia Galli, Francisco Jose Molina Saldarriaga, Anna Motos, Sofia Misuraca, Enric Barbeta, Joan Canseco, Laia Fernandez-Barat, Andrea Catalina Palomeque, Jesus Francisco Bermejo Martin, Ferran Barbé Illa, Antoni Torres

PA5094 **Characteristics and outcomes of pregnant women with severe pneumonia related to SARS-CoV-2 admitted to intensive care unit: a retrospective study.**
Naim Dhifaoui (Kairouan, Tunisia), Azza Yedes, Sawsen Bourommena, Becem Trabelsi, Chawki Mrazguia, Mechaal Ben Ali

PA5095 **The Accuracy of CARB (COVID ASSESSMENT AND REVIEW BOARD) Screening Tool in diagnosing patients with COVID 19 from March 2020 to March 2022 in Silliman Medical Center Foundation Incorporated; A retrospective descriptive cross sectional study**
L. Angelique Gene Duran (Dumaguete, Philippines), Dehuel Cuyacot, Brian Joseph Calinawagan, Gamaliel Garcia, John Anthony Tindoc, Hannah Candace Catacutan

PA5096 **Clinical profile of COVID patients and predictors of long COVID - South Asian data**
Rekha Parameswari (Kottayam (Kerala), India), Kummannoor Parameswaran Venugopal, Sukumaran Parackal, Athulya Kumar, Beena Thomas

PA5097 **SMOKING AND COVID-19: A COMPLEX INTERACTION**
Mariem Chaabane (Tunis, Tunisia), Hajer Racil, Mariem Friha, Sarra Maazaoui, Sonia Habibech, Ameny Touil, Nawel Chaouch

PA5098 **Risk of SARS-CoV-2 infection and disease severity among people with bronchiectasis: analysis of three population registries**
Michal Shteinberg (Haifa, Israel), Oriol Sibila, Nili Stein, Rosa Faner, Alexander Jordan, Nuria Olvera, Pradeesh Sivapalan, Jens Ulrik Jensen, Megan Crichton, James Chalmers, Christian Meyer, Walid Saliba

PA5099	**Residence density and outcome of COVID infection among bronchiectasis patients** Christian Niels Meyer (Roskilde, Denmark), Alexander S Jordan, Pradeesh Sivapalan, Christian Niels Meyer, Michal Shteinberg, Jens Ulrik S Jensen
PA5100	**The Relation between ACE Gene Polymorphism and the Severity of COVID-19 Infection** Ahmed Abdallah Bayoumy (Ismailia, Egypt), Yara El-Sayed Marei, Hassnaa Mohamed Abulazm Nassar, Bassam Mansour, Asmaa Bakeir Hamady
PA5101	**Characteristics of frailty in perimenopausal women with Long COVID-19 syndrome** Laura Lopez Lopez (Granada, Spain), Alba Navas Otero, Araceli Ortiz Rubio, Andrés Calvache Mateo, Irene Cabrera Martos, Irene Torres Sánchez, Marie Carmen Valenza
PA5102	**Comparison of patients hospitalized for COVID-19 in the periods of Delta and Omicron variants dominance in Greece** Vagia Karageorgou (Athens, Greece), Andriana I Papaioanou, Maria Kallieri, Myrto Blizou, Stefanos Lampadakis, Maria Sfika, Antonios Krouskos, Vasileios Papavasileiou, Franceska Strakosha, Kalliopi Theoni Vandorou, Pavlos Siozos, Marina Moustaka Christodoulou, Georgia Kontonasiou, Vasiliki Apollonatou, Elvira Markella Antonogiannaki, Christos Kyriakopoulos, Christina Aggelopoulou, Christos Chronis, Konstantinos Kostikas, Evangelia Koukaki, Zoi Sotiropoulou, Athanasia Athanasopoulou, Petros Bakakos, Pinelopi Sxini, Emmanouil Alevrakis, Sotirios Poupos, Evangelia Chondrou, Dionisis Tsoukalas, Alexia Chronaiou, George Tsoukalas, Sofia Koukidou, Georgios Hillas, Katerina Dimakou, Konstantinos Roukas, Ifigenia Nakou, Diamantis Chloros, Evangelia Fouka, Spyros A Papiris, Stelios Loukides
PA5103	**Influence of comorbid pathology on the formation of the post-Covid syndrome** Olena Pidverbetska (Chernivtsi, Ukraine), Liliia Todoriko
PA5104	**COVID 19 in Indian healthcare workers- a case series** Devasahayam Jesudas Christopher (Vellore (Tamil Nadu), India), Sekar Rajasekar, Deepa Shankar, Barney Isaac, Balamugesh Thangakunam
PA5105	**Shunt fraction and radiological involvement in Covid-19 related Acute Respiratory Failure** Luca Novelli (Bergamo, Italy), Luca Malandrino, Maurizio Balbi, Federico Raimondi, Simone Pappacena, Chiara Allegri, Marisa Anelli, Roberta Trapasso, Roberta Biza, Gianmariano Marchesi, Fabiano Di Marco
PA5106	**Body mass index and COVID-19 disease; patient characteristics, complications and outcome.** Ahmed Kabil (Cairo, Egypt), Moaaz Atef, Hossam Abdelmoez
PA5107	**Impact of COVID-19 on patients with PiZZ alpha1-antitrypsin deficiency: the IMCA1 study revisited.** David G. Parr (Coventry (West Midlands), United Kingdom), Joanna Chorostowska-Wynimko, Angelo Corsico, Cristina Esquinas, Gerard Mcelvaney, Annelot Sark, Maria Sucena, Hanan Tanash, Alice Turner, Marc Miravitlles
PA5108	**Impact age-adjusted Charlson comorbidity index on hospital and one year mortality in chilean patients with COVID-19** Felipe Cayupi (Santiago, Chile), Miljenko Lolas, Francisco Arancibia, María José Corrales, Juan Pablo Cuevas, Daniel Ramos, Constanza Tamblay, Karina Ramirez, Janielee Venegas, Jorge Cheg, Roberto Gonzalez, Elias Chahuan, Carolina Camp
PA5109	**Clinical impact of COVID-19 in patients with chronic obstructive pulmonary disease** Carlos Manzano Senra (Lleida, Spain), Ivan D Benítez, Anna Moncusí-Moix, Clara Gort-Paniello, Sally Santisteve, Jordi De Batlle, Jessica González, Ferran Barbé
PA5110	**Effects of submaximal exercise on respiratory mechanics in subjects after COVID-19: a descriptive observational study** Lucas Botelho Azevedo (Ribeirão Preto, Brazil), Daniele Oliveira Dos Santos, Jéssica Perossi Nascimento, Thales Henrique Carmo Furquim, Ana Catarine Veiga, Naiara Teixeira Chinellato, Viviane Nunes Ferreira Csizmar, Lívia Pimenta Bonifácio, Fernando Bellissimo Rodrigues, Hugo Celso Dutra Souza, Ada Clarice Gastaldi
PA5111	**Critical course of COVID-19 risk assessing. Ambulatory stage of treatment analysis.** Nataliia Kravchenko (Dnipro, Ukraine), Olha Cherkasova, Lyubov Korsun, Anastasiia Fominykh, Bohdan Chernolevsky
PA5112	**DIABETES AND SARS COV-2 INFECTION: PREVALENCE AND IMPACT ON SEVERITY** Slim Ghedira (TUNIS, Tunisia), Sarra Maazaoui, Amany Touil, Sonia Habibech, Hajer Racil, Nawel Chaouch

PS-16 in poster area Session 496 16:00 - 17:30

Poster session: Pneumonia

Disease(s) : Airway diseases

Method(s) : Epidemiology General respiratory patient care Imaging Endoscopy and interventional pulmonology Public health Respiratory intensive care Cell and molecular biology

Tag(s) : Clinical

Chairs : Eva Van Braeckel (Ghent, Belgium), Chair to be confirmed

PA5113	**Impact of pneumococcal vaccination in treating elderly patients with hospitalized community-acquired pneumonia** Moonjin Kim (Seoul, Republic of Korea), Seohyun Kim, Tai Joon An, Jeong Uk Lim, Chan Kwon Park, Hyoung Kyu Yoon
PA5114	**Rapid PCR (BIOFIRE)- A paradigm shift in management of pneumonia** Beauty Biswas (West Bengal, India), Amrita Bhattacharyya, Raja Dhar, Somnath Bhattacharya, Saikat Pal, Deep Narayan Mukherjee
PA5115	**Early appropriate antimicrobial treatment guided by BioFire FilmArray may attenuate systemic inflammatory response in VA-LTRI patients** Andrea Palomeque Flores (BARCELONA, Spain), Nona Rovira-Ribalta, Alba Soler, Leticia Bueno Freire, Anna Motos, Rubén López-Aladid, Enric Barbeta, Joan Canseco, Miriam Villanueva, Nil Vázquez, Antoni Torres*, Laia Fernández-Barat
PA5116	**Poor prognostic factors in acute community-acquired pneumonia** Houda Rouis (Ariana, Tunisia), Alaeddine Radhouani, Chirine Moussa, Mehdi Abdenadher, Faten Mhiri, Amel Khattab, Ibtihel Khouaja, Ines Zendah, Sonia Maalej
PA5117	**Association between HRCT image findings of aspiration pneumonia and elevated bronchoalveolar lavage amylase and pepsin** Tomoko Suzuki (Iruma-gun, Japan), Miwako Saitou, Yuka Utano, Kenichi Utano, Katsunao Niitsuma
PA5118	**Value of soluble urokinase plasminogen activator receptor (sUPAR) for predicting severity of community-acquired pneumonia (CAP)** Lisa Hessels (Alkmaar, Netherlands), Ruud Duijkers, Marianne Schoorl, Lotte Terpstra, Willemien Thijs, Wim Boersma
PA5119	**Development of a new prognostic score to predict pneumonia outcomes using artificial intelligence-based chest radiograph results** Eun Hye Lee (Seoul, Republic of Korea), Ji Soo Choi, Hyun Joo Shin, Kyunghwa Han, Eun Kyung Kim
PA5120	**Exposure to antimicrobials and microbiological yields from bronchoscopy in immunocompromised patients, a single-centre two-year experience.** Albert Teng (Singapore, Singapore), Deshawn Tan, Kundan Reddy Saripalli, Timothy Toh, Youxin Puan, Brian Chua, Isaac Fong, Yi Hern Tan
PA5121	**COMMUNITY-ACQUIRED PNEUMONIA: RISK AND PROGNOSIS** Rano Nalibaeva (Tashkent, Uzbekistan), Irina Liverko
PA5122	**Clinical utility of routine bronchoscopic secretion sampling for microbiological and multiplex PCR during bronchoscopy** Christopher Milacek (Wien, 05. Bezirk, Margareten, Austria), Marco Idzko, Daniela Gompelmann
PA5123	**Results of microbiome analyses on bronchoalveolar lavage (BAL) sample** Katarina Pontoppidan (Southampton, United Kingdom), Christian Niels Meyer, Xiaohui C Nielsen, Jens J Christensen, Henrik Vedel Nielsen, Kurt Fuursted, Christian S Jensen
PA5124	**BACTEREMIA PREDICTION IN PNEUMOCOCCAL PNEUMONIA: A COMPARATIVE STUDY OF 2 SCORES** Leyre Serrano Fernandez, Luis Alberto Ruiz Iturriaga, Silvia Perez-Fernandez, Pedro Pablo España Yandiola, Catia Cilloniz, Ainhoa Gomez Bonilla, Edurne Echeverria Guerrero, Beatriz Gonzalez Quero, Ane Uranga Echeverria, Antoni Torres Martí, Rafael Zalacain Jorge
PA5125	**Impact of absence of an early circulating neutrophil count expansion on outcome of patients with community-acquired pneumococcal pneumonia** Luis Alberto Ruiz Iturriaga (Barakaldo (Vizcaya), Spain), Leyre Serrano Fernandez, Silvia Perez-Fernandez, Sonia Castro Quintas, Amaia Urrutia Gajate, Edurne Echevarria Guerrero, Beatriz Gomez Crespo, Ainhoa Gomez Bonilla, Pedro Pablo España Yandiola, Rafael Zalacain Jorge
PA5126	**Microbiology, appropriateness of empiric antibiotics and clinical outcome of hospital-acquired pneumonia in the era of multidrug-resistant Acinetobacter baumannii** Myung Goo Lee (Chuncheon, Republic of Korea)
PA5127	**Comorbidity-based distribution of pneumococcal serotypes in Greek adults hospitalized with community-acquired pneumonia (CAP)** Adamadia Liapikou (Athens, Greece), Vasiliki Kossyvaki, John Skiadas, Eleftherios Markatis, Damianos Menegas, Cristina Méndez, Claudia Schwarz, Maria Lahuerta, Elizabeth Begier, Bradford D. Gessner, Haralampos Milionis, Vasilios Tsimihodimos, Konstantinos Kostikas, Athanasios Konstantinidis, Gerasimos Baxevanos, Charalampos Triantafyllidis, Theodora Argiriadou, Chrysavgi Terrovitou, Daniil Daniilidis, Paraskevi Katsaounou, Michael Toumbis, T. Egnatia Study Group

PA5128 **Association of C-reactive protein with glycaemia and insulin resistance in patients with community-acquired pneumonia – a prospective, observational cohort study**
Arnold Dungu (København, Denmark), Camilla Koch Ryrsø, Maria Hein Hegelund, Adin Sejdic, Andreas Vestergaard Jensen, Peter Lommer Kristensen, Rikke Krogh-Madsen, Christian Ritz, Daniel Faurholt-Jepsen, Birgitte Lindegaard

PA5129 **Phenotypes of Hospitalized Patients with Pneumonia**
Daniel Knox (Murray, United States), Jason Carr, Simon Brewer, Samuel Brown, Nathan Dean, Ithan Peltan

PA5130 **Altered sphingolipid metabolism in community acquired pneumonia**
Kurt Gerhard Stollberg (Jena, Germany), Ha-Yeun Chung, Dirk K. Wissenbach, Marc-Thilo Figge, Frank T. Peters, Martin Witzenrath, Markus H. Gräler, Mathias W. Pletz, Ralf Alexander Claus, . Capnetz-Study Group

PA5131 **CLINICAL MANAGEMENT OF PNEUMONIA VERSUS RECOMMENDATIONS OF THE SEPAR GUIDELINES.**
Javier Sánchez Masa (Palencia, Spain), María Inés Salazar Lozano, Ana Pérez Dublang, María Ángeles Escobar Valero, Sara Barakat Fernández, María Beatriz Cartón Sánchez, Andrea Crespo Sedano, Esther Alonso Sastre, Enrique Alonso Mallo, Alba Daniela García Molina, María Irene Alaejos Pascua, Ana María Andrés Porras, Francisco Javier Pagán Buzo, Ana Villacorta Soto, María Gloria Galindo Laso

PA5132 **The clinical significance of anaerobic coverage in the antibiotic treatment of aspiration pneumonia: a systematic review and meta-analysis**
Yuki Yoshimatsu (London, United Kingdom), Masaharu Aga, Kosaku Komiya, Shusaku Haranaga, Yuka Numata, Makoto Miki, Futoshi Higa, Kazuyoshi Senda, Shinji Teramoto

PS-17 in poster area Session 497 16:00 - 17:30

Poster session: Unravelling diagnostic and treatment modalities in lung cancer

Disease(s) : Thoracic oncology Airway diseases

Method(s) : Endoscopy and interventional pulmonology General respiratory patient care Imaging Surgery Public health

Tag(s) : Clinical

Chairs : Angshu Bhowmik (Barnet (Hertfordshire), United Kingdom), Andrew Creamer (Bristol (Avon), United Kingdom)

PA5133 **Assessing the ability of MRI in lung cancer mediastinal staging: rationale and preliminary results**
Francesco Bertuccio (Pavia, Italy), Paolo Cossetta Reposi, Alice Lionetti, Laura Saracino, Stefano Tomaselli, Chandra Bortolotto, Angelo Guido Corsico, Giulia Maria Stella

PA5134 **Slow-pull versus suction technique: comparison of diagnostic yield (DY) and sample adequacy (SA) between two different EBUS-TBNA sampling methods.**
Filippo Lanfranchi (Venice, Italy), Gioele Castelli, Laura Mancino, Gabriele Foltran, Licia Laurino, Lorenzo Nicolè, Lucio Michieletto

PA5135 **Rapid on-site evaluation (ROSE) by a trained pulmonologist, is it possible?**
Juan Francisco De Mesa Alvarez (Madrid, Spain), Carlos Disdier Vicente, Blanca De Vega Sanchez, Álvaro Pérez Rodriguez, Soraya Fernandez Gay, Esperanza Guzman Ansado, Norman Andres Villamagua Arias

PA5136 **Sarcoid-like granulomatous inflammation in the setting of underlying malignancy: endobronchial ultrasound registry-based report and a call for caution**
Grgur Salai (Zagreb, Croatia), Robert Gecevic, Tajana Stoos Veic, Divo Ljubicic

PA5137 **Feasibility using bronchoscopic specimens for next-generation sequencing in resectable non-small lung cancer**
Kaito Yano (Tokyo, Japan), Yuji Matsumoto, Hideaki Furuse, Keigo Uchimura, Tatsuyuya Imabayashi, Takaaki Tsuchida

PA5138 **Role and performance of bronchoscopy with cytologic samplings in lung cancer**
Laetitia Amar (Montreal, Canada), Ping Shi Zhu

PA5139 **Is the slim bronchoscope the right compromise between ultra thin and conventional bronchoscopy for peripheral pulmonary lesions (PPLs)?**
Filippo Lanfranchi (Venice, Italy), Laura Mancino, Lorenzo Nicolè, Licia Laurino, Lucio Michieletto

PA5140 **Pleural complications of ablation for lung tumours: a single-centre experience**
Poppy Denniston (London, United Kingdom), Kate Brackenborough, Alex Brodey, Beenish Iqbal, Dinesh Addala, Suzy Guo, Paul Lyons, John Wrightson, Mark Anderson, Najib Rahman

PA5141 **The clinical feature and optimal treatment strategy of bone metastasis in EGFR mutated NSCLC patients**
Wen-Chien Cheng (Taichung, Taiwan), Wei-Chun Chen, Chieh-Lung Chen, Wei-Chih Liao, Chih-Yen Tu, Te-Chun Hsia, Hung-Jen Chen, Chia-Hung Chen

PA5142 **Pulmonary inflammatory myofibroblastic (IMT) of 5 cases: CT and FDG-PET findings and review of the literature**
Joosung Sun (Suwon, Republic of Korea)

PA5143	**The Effects of Geographical Variation on Radical Treatment Rates in Lung Cancer** Richard Cooper (Malpas, United Kingdom), Buddug Eckley, Jack Barrington, Daniel Menzies
PA5144	**Resection rates in early-stage lung cancer in an Australian regional centre** Manoj Thogesan (Newcastle, Australia), Krishobhan Baskaran, Christian Stolz, Vineeth George
PA5145	**Pancoast tumor: surgical management** selma madhi (Ariana, Tunisia), Imen Bouassida, Mahdi Abdennadher, Hazem Zribi, Amina Abdelkebir, Ines Moussa, Adel Margheli
PA5146	**Mortality and recurrence following surgically treated primary lung malignancy** Yvette Farrugia (Zurrieq, Malta), Darlene Mercieca, Peter Fsadni
PA5147	**Multidisciplinary enhanced recovery protocol pathway (ERPP) in lung cancer surgical resections; a tertiary centre experience** Ioannis Karampinis (Athens, Greece), Georgia Hardavella, Ioannis Kyritsis, Nikolaos Anastasiou
PA5148	**Prognostic factors for patients operated on for a IIIAN2 non-small cell lung cancer: A retrospective study** AHMED BAKHTI (Nabeul, Tunisia), Mahdi Abdennadher, Hazem Zribi, Amina Abdlekbir, Sonia Ouerghi, Mouna Mlika, Sarra Zairi, Adel Marghli
PA5149	**Treatment outcome and safety of concurrent chemoradiation in elderly patients with unresectable Stage III non-small cell lung cancer** So Jeong Kim (Hwaseong, Republic of Korea), Na Young Kim, Soojie Chung, Jeong-Hee Choi, In Gyu Hyun, Junghyun Kim
PA5150	**Endobronchial brachytherapy (EBBT) as palliative treatment in metastatic endobronchial disease from distant organs. Experience of an Oncological Hospital during the last decade.** Danai Bisirtzoglou (Athens, Greece), Thaleia Gioxari, Konstantina Papalla, Athanasios Zetos, Ira Michailidou, Vasiliki Petta, Georgios Politis
PA5151	**Clinical study of AERO stent placement for malignant airway stenosis in Okayama Medical Center** Kenichiro Kudo (Okayama, Japan), Ken Sato
PA5152	**Diagnostic and therapeutic approach of rare thoracic tumors** Hanene Smadhi (Manouba, Tunisia), Sabrine Elfidha, Hadhemi Rejeb, Hela Kamoun, Bochra Karaborni, Chaima Djenayah, Ines Akrout, Dorra Greb, Hajer Benabdelghaffar, Hela Hassen, Leila Fekih, Mohamed Lamine Megdiche

PS-18 in poster area — Session 498 — 16:00 - 17:30

Poster session: Pulmonary fibrosis: miscellaneous

Disease(s) : Interstitial lung diseases | Airway diseases | Respiratory critical care

Method(s) : Epidemiology | Pulmonary function testing | General respiratory patient care | Cell and molecular biology | Palliative care | Imaging | Physiology | Pulmonary rehabilitation | Surgery | Public health

Tag(s) : Translational

Chairs : Esther Jeritza Nossent (Amsterdam, Netherlands), Laura Fabbri (London, United Kingdom)

PA5153	**Virtual pulmonary rehabilitation for people with idiopathic pulmonary fibrosis: a mixed methods feasibility study** Orlagh O'Shea (Belfast (Belfast), United Kingdom), Grainne Murphy, Luke Forde, Katherine O'Reilly
PA5154	**Physical activity measurement with questionnaire in idiopathic pulmonary fibrosis** Patrick Hurley (Barcelona, Spain), Diana Badenes Bonet, Anna Rodó-Pin, Diego Castillo-Villegas, Vanesa Vicens-Zygmunt, Guadalupe Bermudo, Fernanda Hernández-González, Karina Portillo, Juana Martínez-Llorens, Anna Herranz, Roberto Chalela, Jacobo Sellarés, Maria Molina-Molina, Xavier Duran, Joaquim Gea, Diego Rodríguez-Chiaradia, Eva Balcells
PA5155	**IS THE PORTABLE CONCENTRATOR THE BEST SOLUTION TO CORRECT EXERCISE OXYGEN DESATURATION?** Ariadna Farre Maduell (barcelona, Spain), Ana Alonso, Patricia Peñacoba, Fatima Morante, Maria Rosa Güell
PA5156	**Association between smoking and prognosis in patients with idiopathic pulmonary fibrosis** Min Jee Kim (seoul, Republic of Korea), Hee-Young Yoon, Hoseob Kim, Yoonjong Bae, Jin Woo Song
PA5157	**Interstitial lung disease increases the risk of severe COVID-19 infection; a retrospective registry-based epidemiological study of the entire adult Swedish population** Emil Ekbom (Uppsala, Sweden), Christer Jansson, Andrei Malinovschi, Össur Emilsson, Magnus Sköld, Lisa Carlsson, Fredrik Nyberg

PA5158	**A Retrospective Observational Study of post-COVID-19 patients - clinical outcome, follow-up and patient characteristics in Post-COVID Pulmonary Fibrosis (PC-PF)** Catherine Salisbury (Bromsgrove, United Kingdom), Poh Chai Tan, Hannah Badawy, Abhimanyu Lal, See Ling Tan
PA5159	**FVC and DLCO evolution after initiation of antifibrotics as prognostic factors in IPF** Marie Vermant (Elsene, Belgium), Tinne Goos, Nathalie Veyt, Stefan Gogaert, Marianne S Carlon, Nico De Crem, Laurens J De Sadeleer, Ellen De Langhe, Adriana Dubbeldam, Bart Vanaudenaerde, Erik K Verbeken, Johny Verschakelen, Birgit Weynand, Jonas Yserbyt, Patrick Verschueren, Joseph Jacob, Wim A Wuyts
PA5160	**Second-line antifibrotics in patients with idiopathic pulmonary fibrosis: a real-life experience** Stefano Levra (Moncalieri, Italy), Giuseppe Guida, Vitina Carriero, Francesca Bertolini, Elisa Arrigo, Elisa Riccardi, Flavio Crosa, Paolo Carlo Ghio, Carlo Albera, Fabio Luigi Massimo Ricciardolo
PA5161	**Evaluation of a German R-Scale questionnaire in various ILD diagnoses** Sina Stoltefuß (Munich, Germany), Gabriela Leuschner, Sabine Zimmermann, Katrin Milger-Kneidinger, Teresa Kauke, Jürgen Behr
PA5162	**Correlation of traction bronchiectasis with lung function decline in patients with interstitial lung diseases** TOMONORI MAKIGUCHI (Hirosaki, Japan), Kei Chubachi, Yusuke Tanaka, Haruka Odagiri, Chiori Tabe, Yoshiko Ishioka, Hisashi Tanaka, Kageaki Taima, Sadatomo Tasaka
PA5163	**The prognostic value of blood eosinophilsmonocyte count and Neutrophils/Lymphocyte ratio (NLR) in patients with IPF, CPFE and COPDA retrospective multicenter cohort study** Yen-Fu Chen (Yun-Lin County, Taiwan), Pei-Fen Wu, Hsin-Yi Wang, Chung-Yu Chen, You-Yi Chen, Chia-Ling Chang, Jerry Shu-Hung Kuo, Kuan-Ming Su, Ning Chien, Ping-Hung Kuo, Hao-Chien Wang, Chong-Jen Yu
PA5164	**Leveraging disease progression modeling to aid clinical decision and optimize drug development for Idiopathic Pulmonary Fibrosis (IPF)** Tu Mai (South San Francisco, United States), Justin Wilkins, Shweta Vadhavkar, Katerina Samara, Nikhil Kamath, Lin Pan, Joy Hsu
PA5165	**Sulforaphane (SFN) derivatives attenuate at pulmonary fibrosis both in vivo bleomycin (BLM)-induced model and in vitro TGF-β1-induced model** Sung Hwan Jeong (Incheon, Republic of Korea), Eun Suk Son, Sun Young Kyung, Jeong-Woong Park, So Young Park, Young Eun Lee, Se-Hee Kim
PA5166	**Association between parenchymal B-cell follicles and CT-proven enlarged mediastinal lymph nodes in patients with pulmonary fibrosis** Sissel Kronborg-White (Lystrup, Denmark), Elisabeth Bendstrup, Line Bille Madsen, Finn Rasmussen, Venerino Poletti
PA5167	**Importance of continuous TGFβ presence for fibrosis induction in different in vitro assays** Matea Cedilak (Zagreb, Croatia), Daniela Belamaric, Doris Filipovic, Mihailo Banjanac, Martina Bosnar, Vesna Erakovic Haber
PA5168	**Survival in interstitial lung diseases – 11 years observation of 2497 patients.** Magdalena Martusewicz-Boros (Warszawa, Poland), Piotr Boros
PA5169	**Idiopathic pulmonary fibrosis mortality among ever-employed persons aged ≥15 years, by industry and occupation—United States, 2021** Jacek Mazurek (Morgantown, United States), Girija Syamlal, David Weissman
PA5170	**Surgical pulmonary biopsy in ILD: analysis of complications and survival** Sonia Pascual García (Leganés, Spain), Cristina Matesanz López, Beatriz De Olaiz Navarro, Jose Antonio Aramburu González, Eva Aguilar Rivilla, Beatriz Raboso Moreno, Adriana Rodriguez Perojo, Araceli Abad Fernández, Maria Teresa Río Ramirez
PA5171	**Multidisciplinary management of interstitial lung disease in NHS Scotland** Emily Turner (Glasgow, United Kingdom), Linda Sparks, Phil Korsah, Tom Fardon
PA5172	**Occurrence of Pneumothorax in patients with pulmonary idiopathic fibrosis and acute respiratory failure treated with High-Flow Nasal Cannula: A Case Series** Chiara Di Maria (S. Gregorio, Italy), Simone Prestifilippo, Claudia Crimi, Carlo Vancheri

PS-19 in poster area — Session 499 — 16:00 - 17:30

Poster session: Chronic thromboembolic pulmonary hypertension and other aspects in the pulmonary vasculature

Disease(s) : Pulmonary vascular diseases Airway diseases

Method(s) : Pulmonary function testing Cell and molecular biology Physiology Surgery General respiratory patient care Respiratory intensive care Epidemiology Endoscopy and interventional pulmonology Transplantation Imaging

Tag(s) : Clinical

Chairs : Frédéric Lador (Genève 14, Switzerland), Mitja Jevnikar (Paris, France)

PA5173	**Long-term effects of pulmonary endarterectomy on cardiopulmonary hemodynamics and exercise capacity in chronic thromboembolic pulmonary hypertension: London and Amsterdam experience** Andrea Baccelli (Milano, Italy), Azar Kianzad, Natalia J. Braams, Stine Andersen, Jessie Van Wezenbeek, Jeroen N. Wessels, Lucas R. Celant, Anna E. Vos, Rachel Davies, Francesco Lo Giudice, Gulammehdi Haji, Rocco F. Rinaldo, Beatrice Vigo, Petr Symersky, Toon A. Winkelman, Anco Boonstra, Esther J. Nossent, J. Tim Marcus, Anton Vonk Noordegraaf, Lilian J. Meijboom, Frances S. De Man, Asger Andersen, Luke S. Howard, Harm Jan Bogaard
PA5174	**A screening program for chronic thromboembolic pulmonary hypertension (CTEPH) after pulmonary embolism in SARS-CoV-2.** Lucilla Piccari (Barcelona, Spain), Oswaldo Antonio Caguana Vélez, Karys Helena Khilzi Alvarez, Diana Badenes bonet, Roberto Jose Chalela Rengifo, Jose gregorio Gonzalez garcia, Mariela Lizzeth Arita Guevara, Ricardo alberto Reyes jimenez, Anna Herranz blasco, Mireia Admetllo papiol, Anna Rodo Pin, Juanjo Rodriguez sevilla, Flavio Zuccarino, Judith Villar Garcia, Lluis Molina Ferragut, Eva Balcells Vilarnau, Diego Rodriguez Chiaradia
PA5175	**Long-term safety and survival time under subcutaneous treprostinil treatment in patients with severe chronic thromboembolic pulmonary hypertension (CTEPH)** Pavel Jansa (Jirny, Czech Republic), Roela Sadushi-Kolici, Grzegorz Kopec, Nika Skoro-Sajer, Michael Halank, Iveta Simkova, Regina Steringer-Mascherbauer, Barbara Salobir, Walter Klepetko, Jaroslav Lindner, Irene M. Lang
PA5176	**The relationship between the preoperative pulmonary function test and DLCO values and the anatomical classification of thrombus in patients who underwent pulmonary endarterectomy with the diagnosis of chronic thromboembolic pulmonary hypertension.** Burcu Turan (Istanbul, Turkey), Derya Kocakaya, Sehnaz Olgun Yildizeli, Bedrettin Yildizeli
PA5177	**Left ventricular diastolic dysfunction attenuates outcomes in CTEPH** Katherine Bunclark (Cambridge (Cambridgeshire), United Kingdom), Andrew Fletcher, Alessandro Ruggiero, John Cannon, Gerry Coghlan, James Lordan, Luke Howard, David Jenkins, Martin Johnson, David Kiely, Choo Ng, Nicholas Screaton, Karen Sheares, Dolores Taboada, Steven Tsui, John Wort, Joanna Pepke-Zaba, Mark Toshner
PA5178	**Calibrated automated thrombography demonstrates a hypocoagulable profile in subjects with pulmonary arterial hypertension** Sarah Cullivan (Dublin, Ireland), Ciara Mccormack, Brian Mccullagh, Barry Kevane, Patricia Maguire, Fionnuala Niainle, Sean Gaine
PA5179	**Nocturnal desaturation in patients with chronic thromboembolic pulmonary hypertension.** Yu Taniguchi (Kobe, Japan), Hiroyuki Fujii, Kenichi Yanaka, Noriaki Emoto, Kenichi Hirata
PA5180	**Characteristics in patients with inoperable CTEPH and a good hemodynamic outcome post-BPA** Mitja Jevnikar (Paris, France), Mithum Kularatne, Philippe Brenot, David Montani, Laurent Savale, Antoine Beurnier, Thomas Lacoste-Palasset, Sabina Solinas, Athénaïs Boucly, Karen Bitton, Anne Roche, Olivier Sitbon, Elie Fadel, Marc Humbert, Xavier Jais
PA5181	**Extracellular microvesicles in animal model of postembolic pulmonary hypertension and in patients with pulmonary embolism and chronic thromboembolic pulmonary hypertension** Elva Maria Mendoza Zambrano (Sevilla, Spain), Verónica Sánchez López, Inés García Lunar, Daniel Pereda Arnau, Samira Marín Romero1, Luis Jara-Palomares, Teresa Elías Hernández, Ana García Alvarez, Remedios Otero Candelera
PA5182	**Bleeding under anticoagulant therapy in patients with pulmonary arterial hypertension or chronic thromboembolic pulmonary hypertension: preliminary results from the HEMA-HTP study.** Souad Bezzeghoud (St Etienne, France), Hélène Bouvaist, Kais Ahmad, Romain Trésorier, Sandrine Accassat, Claire Dauphin, Cécile Duvillard, Jean-Baptiste Gaultier, Valentine Mismetti, Elodie De Magalhaes, Audrey Thalamy, Vincent Cottin, Géraldine Poenou, Laurent Bertoletti
PA5183	**CTEPH patients with mild hemodynamic severity of disease improve to a similar level of exercise capacity after pulmonary endarterectomy compared to patients with severe hemodynamic disease.** Coen van Kan (Amsterdam, Netherlands), Jelco Tramper, Paul Bresser, Lilian Meijboom, Petr Symersky, Toon Winkelman, Esther Nossent, Jurjan Aman, Harm Jan Bogaard, Anton Vonk Noordegraaf, Josien Van Es
PA5184	**Pattern of lung function impairment in patients suffer from chronic thromboembolic pulmonary hypertension** Aleksandar Bokan (Loewenstein, Germany), Anna Volk, Axel Tobias Kempa, Ana Bokan, Stephan Beckmann, Gerd Staehler

PA5185 **The impact of the Covid-19 pandemic on the lives of patients with pulmonary hypertension**
Iain Armstrong (sheffield, United Kingdom), Catherine Billings, J Paul Sephton, Shaun Clayton, Mary Ferguson, John Smith

PA5186 **COVID-19 and pulmonary vasculature; the impact of pulmonary artery dilation in clinical outcome**
Angelos Zouglos (Halandri, Greece), Kyriaki Tavernaraki, Styliani Arapostathi, Konstantinos Tsiakos, Asimina Nikolakopoulou, Athanasios Andrianopoulos, Alexandros Patsouras, Christina Potari, Dimitrios Arvanitis, Loukas Thanos, Angeliki Rapti

PA5187 **Chest computed tomography demonstrates transient enlargement of the pulmonary artery in COVID-19 pneumonia that regresses after remission of the disease**
Nikoleta Bizymi (Heraklion Crete, Greece), Andreas M. Matthaiou, Konstantinos Pagonidis, Eirini Manousaki, Michail Fragkoulakis, Irini Lambiri, Ioanna Mitrouska, Katerina M. Antoniou, Nikolaos Tzanakis

PA5188 **Renal outcomes after lung and combined heart-lung transplantation in pulmonary hypertension**
Laura Hardy (Leuven, Belgium), Alexander D'Haenens, Rozenn Quarck, Gitte Aerts, Catharina Belge, Guido Claessen, Dirk Kuypers, Greet De Vlieger, Tom Verbelen, Laurens Ceulemans, Dirk Van Raemdonck, Geert Verleden, Robin Vos, Arne Neyrinck, Marion Delcroix, Laurent Godinas

PA5189 **The effect of mechanical stimulation on cardiac fibroblasts in pulmonary arterial hypertension**
Fjodor Bekedam (Amsterdam, Netherlands), Marisa Smit, Anton Vonk Noordegraaf, Harm Jan Bogaard, Marie Jose Goumans, Frances De Man, Aida Llucià-Valldeperas

PA5190 **Assessment of usability and flow profiles of patients with pulmonary hypertension inhaling with a high-resistance Soft Mist Inhaler (SMI)**
Bernhard Müllinger (München, Germany), Nicolas Buchmann, Robin Huedepohl, Gerian Prins

PA5191 **An open-source tool for risk prediction in operable CTEPH**
Katherine Bunclark (Cambridge (Cambridgeshire), United Kingdom), James Liley, Alessandro Ruggiero, John Cannon, Gerry Coghan, James Lordan, Luke Howard, David Jenkins, Martin Johnson, David Kiely, Choo Ng, Nicholas Screaton, Karen Sheares, Dolores Taboada, Steven Tsui, John Wort, Joanna Pepke-Zaba, Mark Toshner

PA5192 **Late Breaking Abstract - Metabolic phenotype determines outcome of pulmonary arterial hypertension**
Andrea Olschewski (Graz, Austria), Natalie Bordag, Bence Miklos Nagy, Elmar Zügner, Helga Ludwig, Vasile Foris, Chandran Nagaraj, Valentina Biasin, Ulrich Bodenhofer, Christoph Magnes, Bradley A. Maron, Silvia Ulrich, Tobias J. Lange, Konrad Hötzenecker, Thomas Pieber, Horst Olschewski

PS-2 in poster area — Session 500 — 16:00 - 17:30

Poster session: Translational research in chronic obstructive pulmonary disease

Disease(s) : Airway diseases Interstitial lung diseases

Method(s) : Cell and molecular biology Pulmonary function testing Endoscopy and interventional pulmonology Epidemiology Imaging

Tag(s) : Translational

Chairs : Audrey Joannes (RENNES, France), Slaven Crnkovic (Graz, Austria)

PA5193 **Testing the novel Q0genova deletion in patient with Alpha1-antitrypsin Deficiency**
Valentina Barzon (Casanova Lonati (PV), Italy), Stefania Ottaviani, Alice Maria Balderacchi, Alessandra Corino, Sara Magni, Davide Piloni, Angelo Guido Corsico, Ilaria Ferrarotti

PA5194 **Is the association between the severity of airflow limitation and DNA Methylation similar in blood and lung tissue in patients with COPD?**
Sandra Casas Recasens (Barcelona, Spain), Nuria Mendoza, Nuria Olvera, Lidia Perea, Tamara Garcia, Oriol Sibila, Àlvar Agustí, Rosa Faner

PA5195 **AIF1 may stimulate the M1 polarization of alveolar macrophages and further promote the development of inflammatory response in COPD**
Lian Liu (Chengdu (Sichuan), China)

PA5196 **Polymorphisms in the Sulfatase Modifying Factor 1 (SUMF1) gene are associated with lung function parameters in patients with COPD**
Charikleia Ntenti (Thessaloniki, Greece), Antonis Goulas, Leticia Grize, Eleni Papakonstantinou, Michael Tamm, Daiana Stolz

PA5197 **Clinical profile in patients with severe alpha-1 antitrypsin deficiency due to rare genotypes**
Stefania Ottaviani (Pavia (PV), Italy), Davide Piloni, Asia Filosa, Valentina Barzon, Alice Maria Balderacchi, Luciano Corda, Christine Seebacher, Alessandra Corino, Sara Magni, Francesca Mariani, Paolo Baderna, Marco Confalonieri, Leonardo Iannacci, Silvia Mancinelli, Paola Putignano, Giulia Maria Stella, Maria Cristina Monti, Angelo Guido Corsico, Ilaria Ferrarotti

PA5198	**Genetic variants in the Iron responsive element binding protein 2 (IREB2) are associated with spirometry parameters and cough prevalence** Charikleia Ntenti (Thessaloniki, Greece), Antonis Goulas, Leticia Grize, Eleni Papakonstantinou, Michael Tamm, Daiana Stolz
PA5199	**MicroRNA-149-3p regulates cigarette smoke extract-induced autophagy and cellular senescence in human small airway epithelial cells (NHBE) cultured under the air-liquid interface (ALI)** Jeong-Woong Park (Incheon, Republic of Korea), Eun Suk Son, Sung Hwan Jeong
PA5200	**FKBP5 rs4713916: A potential genetic predictor of differential response to triple therapy among COPD patients** Charikleia Ntenti (Thessaloniki, Greece), Antonis Goulas, Eleni Papakonstantinou, Leticia Grize, Michael Tamm, Daiana Stolz
PA5201	**Lung fibroblasts from COPD patients show deficient gene expression in response to cigarette smoke extract** Martin Garcia-Ryde (Lund, Sweden), Nicole Van Der Burg, Anna-Karin Larsson Callerfelt, Gunilla Westergren-Thorsson, Leif Bjermer, Ellen Tufvesson
PA5202	**Profile of myostatin regulation and downstream mechanisms in the sarcopenia of severe COPD patients** Adriana Núñez Robainas (Barcelona, Spain), María Guitart, Antonio Sancho Muñoz, Esther Barreiro
PA5203	**Exome seq of patients with severe COPD and advanced emphysema** Alen Faiz (Ultimo (NSW), Australia), Simon D. Pouwels, Victor Guryev, Fia S. Boedijono, Huib Kerstjens, Karin Klooster, Jorine E. Hartman, Wim Timens, Corry-Anke Brandsma, Dirk-Jan Slebos, Maarten Van Den Berge
PA5204	**Is the lower airways microbiome associated with coronary calcification?** Christina Due Svendsen (Bergen, Norway), Rune Nielsen, Solveig Tangedal, Kris Ostridge, Eli Nordeide, Terje Hjalmar Larsen, Karel Kuiper, Tomas Mikal Eagan
PA5205	**Identification of negative regulators of Wnt/β-catenin signaling in lung epithelial cells through whole genome CRISPR screen** Markus Tammia (Mölndal, Sweden), Anna Dickson, Niamh Mullooly, Adam Corrigan, Alessia Serrano, Yaxin Xue, Chang Kim, Ewa Kolosionek, Stefan Vollmer, Bairu Zhang, Leire Escudero-Ibarz, Valentina Quarantotti, Gabriella Leung, Daniela Cornacchia, Sandeep Botla, Linn Kullberg, Louise Stjernborg, Olivia Pembridge, Mahya Dezfouli, Naomi Lyons, Joseph Collin, Leif Wigge, Anna Forslöw, Mirko Messa, Roxane Paulin, Ceri Wiggins, Bilada Bilican, Henric Olsson, Davide Gianni
PA5206	**Early COPD and Hedgehog interacting protein (HHIP) polymorphisms** Mohamed Zakaria LAHMAR (Montpellier, France), Engi Ahmed, Isabelle Vachier, Aurelie Fort, Nicolas Molinari, Anne Bergougnoux, Arnaud Bourdin
PA5207	**Cigarette smoking, COPD and the sex chromosomes** Karosham (Diren) Reddy (Glebe, Australia), Dikaia Xenaki, Senani Rathnayake, Razia Zakarya, Sobia Idrees, Fia Boedijono, Matthew Padula, Maarten Van Den Berge, Alen Faiz, Brian Oliver
PA5208	**Identification of disease modifier genetic variants in PiZZ patients with alpha-1 antitrypsin deficiency** Beatriz Martinez Delgado (Madrid, Spain), Janam Lalchandani, Sara Gil-Martin, Sara Perez-Luz, Nerea Matamala, Guillermo Pita, Santiago Jacob, Javier Martin, Myriam Calle, Juan Luis Rodriguez Hermosa, Francisco Casas, Lourdes Lázaro, Jose María Hernandez, Jose Luis Lopez-Campos, Ana Bustamante, Francisco Javier Callejas, Silvia Castillo, Marc Miravitlles, María Torres Durán, Gema Gomez-Mariano
PA5209	**Differential DNA Methylation Associated with COPD and COPD Severity** Jos van Nijnatten (Groningen, Netherlands), Alen Faiz, Cornelis Joseph Vermeulen, Wim Timens, Maaike De Vries, Rosa Faner, Pieter Hiemstra Hiemstra, Corry-Anke Brandsma, Maarten Van Den Berge
PA5210	**Polymorphism endothelin-1 gene (Lys198Asn) in airway remodeling and increased endothelial dysfunction in COPD** Elnorahon Abduganieva (Tashkent, Uzbekistan)
PA5211	**Late Breaking Abstract - Characterization of goblet cell metaplasia according to small airway generation and emphysema progression in human lungs** Charlotte de Fays (Loverval, Belgium), Vincent Geudens, Yousry Mohamady, Lucia Aversa, Gitte Aerts, Charlotte Hooft, Bruno Detry, Marylene Lecocq, Caroline Bouzin, Sophie Gohy, Ghislaine Gayan-Ramirez, Robin Vos, Bart Vanaudenaerde, Charles Pilette
PA5212	**Development of a next generation sequencing assay for detection of A1AT deficiency** Susana Catarino (Derio, Spain), Lorena Alonso, Monika Landeta, Ana Vivanco, Marta Artieda, Amaia Larruskain, Monica Lopez

PS-20 in poster area Session 501 16:00 - 17:30

Poster session: The many faces of interventional bronchoscopy

Disease(s) : Thoracic oncology | Airway diseases | Interstitial lung diseases | Respiratory critical care | Sleep and breathing disorders

Method(s) : Endoscopy and interventional pulmonology | General respiratory patient care | Respiratory intensive care | Physiology | Pulmonary function testing

Tag(s) : Clinical

Chairs : Chair to be confirmed

PA5213	**Navigated transbronchial needle biopsy of mediastinal lymph nodes (Navi-TBNA)– a feasibility trial** Felix J.F. Herth (Heidelberg, Germany), Konstantina Kontogianni, Li Xu, Yu Li, Nansheng Wan, Xiaoping Wang, Guangnan Liu, Jing Feng, Ralf Eberhardt, Judith Brock, Frederik Trinkmann
PA5214	**Fiducial marker placement for stereotactic body radiotherapy via convex probe endobronchial ultrasound: a case series and preliminary results** Valentina Luzzi (Firenze (FI), Italy), Bianca Peixoto, Marco Trigiani, Luca Ciani, Leonardo Giuntoli, Mauro Loi, Sara Tomassetti
PA5215	**Evaluating the Accessibility and Puncturing Ability of the Thin Convex Probe Endobronchial Ultrasound Bronchoscope in Cadaver Models** Yuta Takashima (Sapporo, Japan), Naofumi Shinagawa, Masahiro Kashima, Hitoki Arisato, Daisuke Morinaga, Tomoo Ikari, Shotaro Ito, Kosuke Tsuji, Hirofumi Takahashi, Tetsuaki Shoji, Toshiaki Shichinohe, Satoshi Konno
PA5216	**Finding effective combination of advanced bronchoscopic techniques in diagnosing peripheral lung nodules** Bora Lee (Seoul, Republic of Korea), Hee Sang Hwang, Se Jin Jang, Sang Young Oh, Mi Young Kim, Chang-Min Choi, Young Ju Jung, Wonjun Ji
PA5217	**The beginnings of Radial Probe Endobronchial Ultrasound without a Guide-Sheath and fluoroscopy.** Yanira Chuquimia Mendoza (Leon, Spain), Javier Juan García, Carmen Lopez Garay, Elena Martin Gallego, Cristina Menendez Sanchez, Pablo Franco Suarez, Yolanda Ramos Alonso, Almudena Regidor Delgado, Patricia Giganto Alfageme, Milagros Blanco Fernandez, Lorena Rodríguez Casado, Luis Carazo Fernandez
PA5218	**Comparing the Diagnostic Yield of using Rapid On-Site Cytology Evaluation (ROSE) and without using ROSE in RP-EBUS Guided Sheath Transbronchial Lung Biopsy with Bronchial Brushing in Peripheral Pulmonary Lesions.** Kulchamai Silathapanasakul (Bangkok, Thailand), Thitiwat Sriprasart, Virissorn Wongsrichanalai
PA5219	**Electromagnetic navigation bronchoscopy for peripheral pulmonary lesions: An observational study.First experience.** Ana Reyes Pardessus Otero (Barcelona, Spain), Inés Podzamczer Valls, Albert Rafecas Codern, Ana Parera Ruiz, Marta Navarro Colom, Virginia Pajares Ruiz, Alfons Torrego Fernández
PA5220	**The role of Rapid On-Site Evaluation (ROSE) in diagnostic EBUS-TBNA procedures for stage IV lung cancer.** Marwah Almadhi (Manchester, United Kingdom), Haval Balata, Matthew Evison, Azita Rajai, Haider Al-Najjar
PA5221	**Nebulized Dexmedetomidine Prior to Flexible Bronchoscopy in Reducing Procedural Cough Episodes: A Randomized, Clinical Trial.** Lokesh Kumar Lalwani (Alwar, India), Pawan Kumar Singh, Dhruva Chaudhry
PA5222	**A randomised controlled trial of narrow-band imaging vs. white light bronchoscopy-guided endobronchial biopsy in suspected sarcoidosis (NABS)** Sahajal Dhooria (Chandigarh, India), Kritarth Rathi, Ritesh Agarwal, Nalini Gupta, Amanjit Bal, Ashutosh Nath Aggarwal
PA5223	**Pre-bronchoscopy screening for obstructive sleep apnea. The role of non-invasive mechanical ventilation** Katerina Bakiri (Cholargos, Attiki, Greece), Nektarios Anagnostopoulos, Kyriaki Cholidou, Evangelia Koukaki, Emmanuel Theodorakis, Sophia Schiza, Antonia Koutsoukou, Grigorios Stratakos
PA5224	**A retrospective analysis assessing prevalence of microbes in patients undergoing endobronchial valve (EBV) insertion for chronic obstructive pulmonary disease (COPD)** Francesca Conway (London, United Kingdom), Sara Buttery, Justin Garner, Marta Lenczewska, James Tonkin, Christopher Orton, Nicholas Hopkinson, Samuel Kemp, Pallav Shah
PA5225	**Physiological evidence of airway smooth muscle ablation by bronchial thermoplasty** Ynuk Bossé (Québec (QC), Canada), Cyndi Henry, Sabrina Biardel, Magali Boucher, Krystelle Godbout, Jamila Chakir, Andréanne Côté, Michel Laviolette
PA5226	**Interobserver agreement in the diagnosis of lower airway malacia by dynamic flexible bronchoscopy in children** Fazilcan Zirek (Ankara, Turkey), Gizem Özcan, Merve Nur Tekin, Beste Özsezen, Birce Sunman, Secahattin Bayav, Mukaddes Ağırtıcı, Batuhan Bakırarar, Ebru Yalçın, Nazan Çobanoğlu
PA5227	**High flow oxygen vs standard management during bronchoscopy in COPD patients – a randomised controlled trial** Andrei Darie (Basel, Switzerland), Leticia Grize, Kathleen Jahn, Anna Salina, Jonathan Röcken, Matthias Herrmann, Maria Pascarella, Vivian Suarez, Werner Strobel, Michael Tamm, Daiana Stolz

PA5228 **Development of New Lateral Forceps for Bronchoscopic Guide-sheath**
Naofumi Shinagawa (Sapporo, Japan), Yuta Takashima, Koichiro Ito, Takayuki Tsukagoshi, Ryosuke Ito, Takeshi Suga, Hidenori Yoshida, Ryuji Nagamatsu, Tetsuhide Takeyama, Toshiaki Shichinohe, Satoshi Konno

PA5229 **The distance by virtual bronchoscopic navigation and lesion diameter were predictive of the diagnostic rates of primary lung cancer and Endobronchial ultrasonography with guide sheath (EBUS-GS) findings by bronchoscopy**
Atsushi Kitamura (Tokyo, Japan), Yutaka Tomishima, Ryosuke Imai, Naoki Nishimura, Kohei Okafuji, Shosei Ro, Clara So, Tomoaki Nakamura, Torahiko Jinta

PA5230 **Bronchoscopic transparenchymal MP290F nodule access (BTPMNA): first in human case series of a novel procedure for sampling solitary pulmonary nodules**
Hai Feng Ou Yang

PA5231 **Ultra-thin bronchoscopy with cone beam CT for small peripheral pulmonary lesions**
Fumihiro Asano (Gifu, Japan), Tomoya Kato, Akifumi Tsuzuku, Atsunori Masuda, Anri Murakami, Akimasa Tsuchida, Yasutomo Baba, Yutaro Kuzunishi, Mayuka Miyoshi, Yuya Muto, Yui Sasaki, Rina Ota, Genta Otani

PA5232 **Ultra-thin cryoprobe: diagnostic and safety profile in peripheral pulmonary lesions**
Sameer Arbat (Nagpur (Maharashtra), India), Bharat Agrawal

PS-3 in poster area Session 502 16:00 - 17:30

Poster session: What's new in stem cell therapies and mechanisms underlying acute lung injury-acute respiratory distress syndrome

Disease(s) : Airway diseases | Respiratory critical care | Interstitial lung diseases | Pulmonary vascular diseases

Method(s) : Cell and molecular biology | Respiratory intensive care | Physiology | Imaging | Pulmonary function testing

Tag(s) : Basic science, Translational

Chairs : Anna Krasnodembskaya (Belfast (Belfast), United Kingdom), Chair to be confirmed

PA5233 **Late Breaking Abstract - Liraglutide attenuates sepsis-induced endothelial dysfunction and Acute Lung Injury**
Julie Bastarache (Nashville, United States), Brandon Baer, Nathan Putz, Kyle Riedmann, Samantha Gonski, Jason Lin, Lorraine Ware, Shinji Toki, Stokes Peebles, Katherine Cahill

PA5234 **Age related changes of the lung extracellular matrix stiffness and stem cell viability**
Isaac Almendros (Barcelona, Spain), Maria Narciso, Anna Ulldemolins, Alicia Jurado, Daniel Navajas, Ramon Farré, Nuria Gavara

PA5235 **Lung Extracellular Matrix Hydrogels-Derived Vesicles Contribute to Epithelial Lung Repair**
Isaac Almendros (Barcelona, Spain), Anna Ulldemolins, Alicia Jurado, Carolina Herranz-Diez, Nuria Gavara, Jorge Otero, Ramon Farré

PA5236 **ARDS disease-relevant cytokines alter human mesenchymal stromal cell (MSC) function**
Sara Rolandsson Enes (Lund, Sweden)

PA5237 **MSCs are protective against 'second hit' injury during pulmonary sepsis in mechanically ventilated rodents.**
Claire Masterson (Galway (Co Galway), Ireland), Ignacio Sallent, Lanzhi Liu, Hector Gonzalez, Sean Mc Carthy, Declan Byrnes, Senthil Alagesan, Juan Fandiño, Abigail Warren, Daniel O'Toole, John Laffey

PA5238 **Lipofibroblast derived-extracellular vesicles attenuate cigarette smoke-induced lung injury**
Shota Fujimoto (Tokyo, Japan), Yu Fujita, Naoaki Watanabe, Sachi Matsubayashi, Hironori Kawamoto, Daisuke Takekoshi, Saburo Ito, Shunsuke Minagawa, Hiromichi Hara, Jun Araya, Kazuyoshi Kuwano

PA5239 **MSC Extracellular Vesicles ameliorate pre-mature epithelial senescence in ARDS through mitochondrial transfer**
Johnatas Silva (Belfast (Northern Ireland), United Kingdom), Danny F Mcauley, Cecilia O'Kane, Anna D Krasnodembskaya

PA5240 **Benefits of bronchial epithelial repair by iPSC in COPD**
Marion Nadaud (Montpellier, France), Carine Bourdais, Aurélie Fort-Petit, John De Vos, Kheira Hireche, Isabelle Vachier, Engi Ahmed, Arnaud Bourdin

PA5241 **Adipose mesenchymal stem cells from COPD patients are capable of restoring elastase-induced emphysema in a murine experimental model**
Aina Martín Medina (Palma, Spain), Carlos Río, Andreas K. Jahn, Alba Martina Calvo Bota, Ma Teresa De Francisco Casado, Pere Joan Pont Antona, Orlando Gigirey Castro, Ángel Francisco Carvajal, Cristina Villena Portella, Cristina Gómez Bellvert, Amanda Iglesias, Javier Calvo Benito, Antoni Gayà Puig, Luis A. Ortiz, Ernest Sala-Llinás

PA5242 **The sodium-coupled neutral amino acid transporter SNAT2 regulates alveolar epithelial cell homeostasis in acute lung injury/ARDS**
Juliana Falivene (Berlin, Germany), Sarah Weidenfel, Wolfgang M. Kuebler

PA5243	**Dynamic doublecortin-like kinase 1 (DCLK1) expression on alveolar epithelial type II cells (AT2) in acute respiratory distress syndrome (ARDS) mouse model** Xiao-Yue Chen (New Taipei City, Taiwan), Ching Kao, Hsiao-Chi Chuang
PA5244	**Persistence of lung dysfunction in post-acute COVID-19: a microRNA approach** María C García-Hidalgo (Lleida, Spain), Jessica González, Manel Perez-Pons, Iván D Benítez, Marta Molinero, Thalía Belmonte, Carlos Rodríguez-Muñoz, Gerard Torres, Anna Moncusí-Moix, Clara Gort-Paniello, Jesús Caballero, Carme Barberà, Adrián Ceccato, Laia Fernández-Barat, Ricard Ferrer, Dario Garcia-Gasulla, José Ángel Lorente-Balanza, Rosario Menéndez, Ana Motos, Oscar Peñuelas, Jordi Riera, Jesús F Bermejo-Martín, Antoni Torres, Ferrán Barbé, David De Gonzalo-Calvo
PA5245	**Plasma NET markers kinetics in COVID-19 patients receiving immunomodulatory treatments: a cohort study** Renaud Prével (Bordeaux, France), Geoffrey Garcia, Antoine Dewitte, Sylvie Labrouche-Colomer, Chrstine Mouton, Céline Delassasseigne, Fanny Ménard, Camille Vinclair, Erwan Begot, Laurent Petit, Cédric Carrié, Didier Brönnimann, Denis Malvy, Alexandre Duvignaud, Chloé James
PA5246	**Lung lipid profile upon COVID-19-related Acute Respiratory Distress Syndrome** Paula Losada-Oliva (Madrid, Spain), Chiara Autilio, David Sanchez-Ortiz, Alvaro Mingote, Raquel Castejón Diaz, Gonzalo Hernandez, Gema Díaz Nuevo, Mercedes Echaide, Bárbara Olmeda Lozano, Clara Salas, Juan Antonio Vargas, Jesús Pérez-Gil
PA5247	**Late Breaking Abstract - Macrophage metabolic reprogramming mediated by carnitine palmitoyltransferase 1A in acute lung injury in an IL10-dependent manner** Muyun Wang (Shanghai, China), Kun Wang, Wei Gao, Qiang Li
PA5248	**A blood-based microRNA signature for the early prediction of the respiratory sequelae in critical COVID-19** Marta Molinero García (Lleida, Spain), Ivan D Benítez, Manel Perez-Pons, Nadia García-Mateo, Alicia Ortega, Tamara Postigo, María C García-Hidalgo, Thalía Belmonte, Carlos Rodríguez-Muñoz, Jessica González, Gerard Torres, Clara Gort-Paniello, Anna Moncusí-Moix, Ángel Estella, Luis Tamayo Lomas, Amalia Martínez De La Gándara, Lorenzo Socias, Yhivian Peñasco, Maria Del Carmen De La Torre, Elena Bustamante-Munguira, Elena Gallego Curto, Ignacio Martínez Varela, María Cruz Martín Delgado, Pablo Vidal-Cortés, Juan López Messa, Felipe Pérez-García, Jesús Caballero, Jose M Añón, Ana Loza-Vázquez, Nieves Carbonell, Judith Marín-Corral, Ruth Noemí Jorge García, Carme Barberà, Adrián Ceccato, Laia Fernández-Barat, Ricardo Ferrer Roca, Darío García-Gasulla, Jose Ángel Lorente-Balanza, Rosario Menéndez, Ana Motos, Óscar Peñuelas, Jordi Riera, Jesús F Bermejo-Martin, Antoni Torres, Ferran-Eduard Barbe Illa
PA5249	**Serum collagen biomarkers are related to fatal outcome in patients with severe COVID-19 in a Phase II clinical trial** Helene Wallem Breisnes (Herlev, Denmark), Signe Holm Nielsen, Cecilie Bager, Diana Julie Leeming, Tony Cahn, Ciara O'Shea, Jack Siderfin, Kai Hove, Mark Layton, Anne-Christine Bay-Jensen, Jannie Marie Bülow Sand, Sumanta Mukherjee
PA5250	**Lung ECM composition, its influence factors and transcriptomics in the lungs of severe COVID-19.** Natália de Souza Xavier Costa (São Paulo, Brazil), Gabriel Ribeiro Júnior, Ellen Toledo Do Nascimento, Jôse Mara De Brito, Jhonatas Sirino Monteiro, João Carlos Setubal, João Renato Rebello Pinho, Roberta Verciano Pereira, Renata Aparecida De Almeida Monteiro, Amaro Nunes Duarte Neto, Paulo Hilário Nascimento Saldiva, Luiz Fernando Ferraz Da Silva, Marisa Dolhnikoff, Thaís Mauad
PA5251	**Long-term follow-up of neutrophil activation after severe-to-critical SARS-CoV-2 infection: a longitudinal study** Simon Valentin (Nancy, France), Véronique Regnault, Jean-Louis Guéant, Thery Abel, Patrick Lacolley, Frederic Schlemmer, Ari Chaouat, Francois Chabot, Rosa-Maria Gueant-Rodriguez
PA5252	**Histopathology of the lungs in the acute and post-acute period of severe COVID-19** Oleh Yakovenko (Lutsk, Ukraine), Sergej Griff, Stephanie Hoffmann, Alexandr Khanin, Tetiana Yakovenko, Eduard Khodosh, Yaroslav Dziublyk

PS-4 in poster area — Session 503 — 16:00 - 17:30

Poster session: Evaluation of sleep and sleep-disordered breathing in different population and patient groups

Disease(s) : Sleep and breathing disorders, Airway diseases

Method(s) : Epidemiology, Public health, Surgery, General respiratory patient care, Imaging, Physiology

Tag(s) : Clinical

Chairs : Marta Susana Monteiro Drummond Freitas (Maia, Portugal)

PA5253	**Sleep efficiency and sleep onset latency in a First Nation community in Saskatchewan, Canada** Chandima Karunanayake (Saskatoon, Canada), James A. Dosman, Mark Fenton, Jeremy Seeseequasis, Marie Neubuhr, Warren Seesequasis, Delano Mike, Kathleen Mcmullin, Malcolm King, Sylvia Abonyi, Vivian R. Ramsden, Donna C. Rennie, Shelley Kirychuk, Niels Koehncke, Robert Skomro, Brooke Russell, Punam Pahwa

PA5254	**Sleep quality of physicians at a University Hospital - cross-sectional observational study** Eduardo Garcia (Porto Alegre (RS), Brazil), Fernanda Altmann Oliveira, Aline Tiemi Hirose Ventura, Carlos Javier Mendoza Bravo
PA5255	**Perception of Sleep Quality in Health Professionals at a University Hospital - an observational study** Eduardo Garcia (Porto Alegre (RS), Brazil), Carlos Javier Mendoza Bravo, Aline Tiemi Hirose Ventura, Fernanda Altmann De Oliveira
PA5256	**Sleep habits and sleep quality among Tunisians students** Rim Khemakhem (Sfax, Tunisia), Israa Wadhane, Sabrine Fidha, Rahma Gargouri, Sameh Msaaed, Nadia Moussa, Najla Bahloul, Samy Kammoun
PA5257	**Sex-related sleeping differences in non-Obstructive Sleep Apnea patients** Pedro Magalhães Ferreira (Vila Nova de Gaia (District de Porto), Portugal), Filipa Carriço, Daniela Rodrigues, Margarida Redondo, Mafalda Van Zeller, Marta Drummond
PA5258	**Association of Vitamin B12 levels with Sleep Quality, Insomnia and Sleepiness in Adult Primary Health Care Users in Greece** Izolde Bouloukaki (Heraklion (Crete), Greece), Maria Lampou, Konstantina Maria Raouzaiou, Eirini Lambraki, Ioanna Tsiligianni, Sophia Schiza
PA5259	**Risk of cancer and cancer mortality in obstructive sleep apnoea** Jenny Theorell-Haglöw (Uppsala, Sweden), Xingwu Zhou, Gary Wittert, Robert Adams, Sarah Appleton, Amy Reynolds, Mirjam Ljunggren, Nathaniel Marshall
PA5260	**Obstructive Sleep Apnea Hypopnea Syndrome & Glaucoma** Feryel Chaouki (Batna, Algeria), Tarek Djenfi, Mohamed Fateh Roughi
PA5261	**Sleep related breathing disorders in Chiari malformation type 1 patients** Laura Cortezon (Bilbao, Spain), Edurne Echevarría, Teresa Bretos, Yolanda Rey, Maria Luz Zaldibar, Estefanía Perez, Cristina Valverde, Cristina Mosquera, Beatriz González, Amaia Urrutia, Sonia Castro, Valentín Cabriada
PA5262	**Eat, breathe, sleep with Osteogenesis Imperfecta** Antonella LoMauro (Milano (MI), Italy), Vittorio Landoni, Paolo Fraschini, Franco Molteni, Andrea Aliverti, Simona Bertoli, Ramona De Amicis
PA5263	**Sickle cell disease phenotypes and obstructive sleep apnea; are they related?** Suhail Alsaleh (Riyadh, Saudi Arabia), Norah Alshehri, Sara Alsiddiqi, Mohmmed Rayis, Safa Eltahir, Mohammed Alzaid, Wadha Alotaibi
PA5264	**The prevalence of sleep apnoea before colorectal cancer surgery** Karl Franklin (Umeå, Sweden), Martin Claesson, Eva Lindberg, Carin Sahlin, Anders Blomberg, Markku Haapamäki, Malin Sund, Johan Svensson, Malin Jonsson Fagerlund
PA5265	**Considering obstructive sleep apnoea syndrome as a differential diagnosis in Long COVID patients** Katie Bottomley (Nottingham, United Kingdom), Rashad Salman, Rachel Tarrant, Stephen Halpin, Manoj Sivan
PA5266	**Comparison of Objective and Subjective Sleep Assessment in a Post-Covid Population as Assessed by WatchPAT.** Christina D. Campbell (Dublin 6, Ireland), Imran Sulaiman
PA5267	**Kleine–Levin and post covid 19 syndromes, a possible relationship?** Analúcia Maranhão (Rio De Janeiro (RJ), Brazil), Cinthya Saad
PA5268	**Risk factors for OSA in a population of Italian telecommunication workers** Giuseppe Verlato (Verona (VR), Italy), Giuseppe Insalaco, Pierpaolo Marchetti, Roberta Vesentini, Luciano Romeo
PA5269	**Simplified questionnaire for detecting patients with severe OSA** Cuizhen Huang (GuangzhouChina, China), Yuan Feng, Lu Wang, Xiuxuan Xiang, Joerg Steier, Yuanming Luo
PA5270	**Evaluation of a modified Epworth Sleepiness Scale to reliably assess excessive daytime sleepiness in low-income countries: results from the Benin Society and Sleep study (BeSAS)** Ablo Prudence Wachinou (Cotonou, Benin), Arnauld Fiogbe, Terence Totah, Gildas Agodokpessi, Raphael Heinzer
PA5271	**The usefulness of observed apnea item in obstructive sleep apnea diagnosis: results from the 2019-2020 Korean National Health and Nutrition Examination Survey** EUN BYEOL KO (Seoul, Republic of Korea), Kang-Mo Gu, Hae In Jung, So Young Park, Moon Seong Baek, Won Young Kim, Jae-Chol Choi, Jong-Wook Shin, Jae-Yeol Kim, Jae-Woo Jung

PA5272	**Screening for obstructive sleep apnea in patients with Down Syndrome** Ana Maria Fortuna Gutierrez (Barcelona, Spain), Ines Podzamczer Valls, Mercè Mayos Pérez, Susana Clos Batet, Laura Videla Toro, Maria Carmona-Iragui, Isabel Barroeta Espar, Javier José Arranz Martinez, Bessy Benejam Paul, Alberto Lleó Bisa, Juan Fortea Ormaechea, Sandra Giménez Badia

PS-5 in poster area Session 504 16:00 - 17:30

Poster session: Advancements in asthma management: holistic and personalised insights

Disease(s) : Airway diseases

Method(s) : Cell and molecular biology General respiratory patient care Physiology Epidemiology Pulmonary function testing Public health

Tag(s) : Clinical

Chairs : Job F.M. van Boven (Groningen, Netherlands), Zuzana Diamant (Lund, Sweden)

PA5273	**Induced sputum is a simple examination in relation to the diagnosis of eosinophilic asthma.** Lene Mølgaard Pedersen (Skanderborg, Denmark), Helle Haagensen Andersen, Torben Smidt-Hansen, Johannes Martin Schmid
PA5274	**Therapeutic drug monitoring of inhaled drugs in hair of patients with asthma: a proof-of-concept study** Stanislas Grassin Delyle (Montigny le Bretonneux, France), Hélène Salvator, Stanislas Delyle, Camille Roquencourt, Françoise Lambinet, Emmanuelle Bardin, Philippe Devillier
PA5275	**Serum inhaled corticosteroid levels in patients with severe asthma.** Yik Lam Pang (Nottingham, United Kingdom), Mohammad Ali, Stephen J Fowler, Brian Keevil, Tricia Mckeever, Ian Sayers, Dominick E Shaw
PA5276	**Effects of hormonal fluctuations during the menstrual cycle on asthma** Samia Aissani (Algiers, Algeria), Houria Haouichat, Ali Zitouni
PA5277	**Interpretation and clinical significance of multiple-flows exhaled nitric oxide in severe asthma framework** Simona Luzzi (Siena, Italy), Lorenzo Alderighi, Tommaso Pianigiani, Beatrice Perea, Maddalena Messina, Martina Meocci, Laura Bergantini, Miriana D'Alessandro, Elena Bargagli, Paolo Cameli
PA5278	**Lung function response to inhaled glucocorticoids in smoking patients with adult-onset asthma** Karoliina Lehtola (TAMPERE, Finland), Minna Tommola, Iida Vähätalo, Leena Tuomisto, Onni Niemelä, Pinja Ilmarinen, Hannu Kankaanranta
PA5279	**Steroid weaning service evaluation for patients with severe eosinophilic asthma** Natalie Farmer (Leeds, United Kingdom), Rashad Salman, Ian Clifton, Jampa Choedon, Jane Slough
PA5280	**An online survey on Italian patients' and physicians' perspectives on the management of asthma** Deborah Vannucci (Verona, Italy), Maria Sandra Magnoni, Fabio Arpinelli, Giorgio Walter Canonica
PA5281	**Our experience of Dupilumab and maintenance oral corticosteroid use in severe adult atopic dermatitis associated to severe asthma.** Bashir Omarjee (Saint-Denis (La Réunion), Reunion), Bernard Gregoire Krikorian, Patrick Gros
PA5282	**Change in FEV1 as early predictor of response to biological therapy in patients with severe uncontrolled asthma.** Sabina Perello Rosello (Palma De Mallorca, Spain), Mireia Vicens Antón, Nuria Toledo Pons, Jose Luis Valera Felices, Rocío Martínez Martínez, Meritxell López Zamora, Amanda Iglesias Comas, Aina Rosa Millan Pons, Francisco De Borja García-Cosío Piqueras
PA5283	**Under-treated asthma in adults – a common problem** Caroline Stridsman (Luleå, Sweden), Jon R Konradsen, Stina Selberg, Maria Ödling, Apostolos Bossios
PA5284	**Switching patients to maintenance and reliever therapy in the Emergency Department? - A qualitative study exploring the attitudes and beliefs of patients and healthcare professionals** Imogen Skene (London, United Kingdom), Katy Pike, Chris Griffiths, Liz Steed, Paul Pfeffer
PA5285	**ORBE II study: Is rapid response to benralizumab associated with positive long term clinical outcomes?** Pilar Ausin Herrero (Barcelona, Spain), Eugenia Navarrete, Jose Luis Velasco, Álvaro Martinez, Carmen Cañete, Fernando Sánchez Toril, Mónica Santin, Marta Gonzalez, Javier Nuevo, Elisa Luzón, Alicia Padillo
PA5286	**Dupilumab in Asia-Pacific patients with persistent asthma** QingLing Zhang (Guangzhou, China), Zhong Nanshan, Sahajal Dhooria, Xiuhua Fu, Jie Lin, Wen Li, Elizabeth Laws, Leda P. Mannent, Yi Wang, Vivian Li, Anderson Li, Chih-Chi Hu, David J. Lederer, Raolat M. Abdulai, Lacey B. Robinson

PA5287	**The impact of baseline Asthma Control Test score on severe asthma Super-Responders assessment.** Ernesto Lulaj (Bari, Italy), Leonardo Maselli, Ilaria Iorillo, Andrea Portacci, Alessio Marinelli, Francesca Montagnolo, Giuseppe Di Gioia, Maria Rosaria Vulpi, Agnese Caringella, Silvano Dragonieri, Giovanna Elisiana Carpagnano
PA5288	**Patients-Healthcare providers agreement on Super-Response to biologic treatments in Th2-high severe asthma** Leonardo Maselli (Acquaviva delle Fonti, Italy), Ilaria Iorillo, Ernesto Lulaj, Andrea Portacci, Alessio Marinelli, Francesca Montagnolo, Flogerta Sana, Giovanni Dalena, Laura Cuccaro, Maria Anna Ardito, Silvano Dragonieri, Giovanna Elisiana Carpagnano
PA5289	**Reducing short-acting beta-agonist (SABA) use in asthma: findings from SENTINEL Plus early adopter sites** Michael Crooks (East Riding of Yorkshire, United Kingdom), Dominic Sykes, Helena Cummings, Alyn Morice, Samantha Brooks, Arthur Jackson, Yang Xu
PA5290	**Baseline characteristics of patients with asthma and prior systemic corticosteroid use in the RAPID (dupilumab) registry** Enrico Marco Heffler (Milano, Italy), Njira L. Lugogo, Vicente Plaza, Ole Hilberg, Changming Xia, Scott Nash, Nami Pandit-Abid, Juby A. Jacob-Nara, Harry Sacks, Paul J. Rowe, Yamo Deniz, Megan Hardin, Xavier Soler
PA5291	**Clinical characteristics of responders and non-responders: experience following four years of Benralizumab therapy** Amy Nuttall (Liverpool, United Kingdom), Fred Fyles, Hannah Joplin, Hassan Burhan, Laura Watkins
PA5292	**Albuterol–budesonide asthma rescue inhaler: patterns of as-needed use** Alberto Papi (Cona, Ferrara, Italy), Bradley Chipps, Frank Albers, Lynn Dunsire, Ileen Gilbert, Tim Harrison, Frank Trudo, Mark Weinberg, Christy Cappelletti

PS-6 in poster area Session 505 16:00 - 17:30

Poster session: "Inflammometry" in asthma and chronic obstructive pulmonary disease

Disease(s) : Airway diseases

Method(s) : Pulmonary function testing Epidemiology Physiology Public health Pulmonary rehabilitation Cell and molecular biology Imaging General respiratory patient care

Tag(s) : Clinical, Translational

Chairs : Giuseppe Guida (ORBASSANO (TO), Italy), Tania Maes (Ghent, Belgium)

PA5293	**Validation of exhaled-breath data for the differentiation between COPD and Asthma** Jonathan Röcken (Basel, Switzerland), Andrei Darie, Aline Stalder Siebeneichler, Maria Pascarella, Leticia Grize, Michael Tamm, Daiana Stolz
PA5294	**Assessment of eosinophilic airway inflammation using formalin-fixed, paraffin-embedded sputum plugs** Zil Patel (Ottawa, Canada), Nadia Suray Tan, Alex Huynh, Nicola Calma, Katherine Radford, Snehal Somalwar, Chynna Huang, Melanie Kjarsgaard, Anmar Ayoub, Parameswaran Nair, Manali Mukherjee
PA5295	**Small airway obstruction according to emphysema severity in human lungs** Vincent Geudens (Leuven, Belgium), Charlotte De Fays, Astrid Vermaut, Lynn Willems, Janne Kaes, Tinne Goos, Marie Vermant, Iwein Gyselinck, Lucia Aversa, Hanne Beeckmans, Xin Jin, Charlotte Hooft, Janne Verhaegen, Gitte Aerts, Pieterjan Kerckhof, John E. Mcdonough, Rozenn Quarck, Stephanie Everaerts, Birgit Weynand, Charles Pilette, Dirk E. Van Raemdonck, Laurens J. Ceulemans, Wim A. Wuyts, Robin Vos, Wim Janssens, Bart M. Vanaudenaerde, Ghislaine Gayan-Ramirez
PA5296	**Sputum viscosity is correlated with Computed Tomography (CT) mucus score in muco-obstructive lung diseases** Jérémy Charriot (Montpellier Cedex 5, France), Aurélie Petit, Carey Suehs, Jérémy Patarin, Eric Matzner-Lober, Isabelle Vachier, Nicolas Molinari, Arnaud Bourdin
PA5297	**CORRELATION BETWEEN SYSTEMIC INFLAMMATION AND CARDIOVASCULAR RISK IN COPD PATIENTS. DEVELOPMENT OF AN INFLAMMATORY SCORE** Ana Muñoz Montiel (Malaga, Spain), Pedro Ruiz Esteban, Natalia García Florido, Esperanza Doña Díaz, Adolfo Domenech Del Río, Casilda Olveira Fuster
PA5298	**The pH of the human airway: A novel technique to measure distal airway pH.** Olivia Giddings (Cleveland, United States), Homer Twigg, Nadzeya Marozkina, Kristie Ross, Laura Smith, Benjamin Gaston, Michael Davis
PA5299	**Assessing airway inflammation in chronic lung disease – Neutrophil protease activity and sputum macrorheology as potential inflammatory biomarkers.** Hannah Nussstein (Berlin, Germany), Laura Schaupp, Mirjam Völler, Urbantat Ruth Maria, Tattersall-Wong Janette, Röhmel Jobst, Mall Marcus

PA5300	**Sputum rheology measurements in chronic respiratory diseases are similar across specialist centres** Gaël Tavernier (Manchester (Greater Manchester), United Kingdom), Taqdees Qureshi, Mathilde Volpato, Isabelle Vachier, Marion Wood, Furkan Zurel, David Thornton, Matthieu Robert De Saint Vincent, Jeremy Patarin, Robert Lord, Stephen Fowler, Jeremy Charriot
PA5301	**Air pollution and influence of deleterious levels of atmospheric nitrogen dioxide in the development of asthma** India Premjithlal Bhaskaran (London, United Kingdom), Arya Premjithlal Bhaskaran, Anusuya Premjithlal Bhaskarn, Premjithlal Bhaskaran
PA5302	**Abnormalities of sputum rheological characteristics in patients with chronic cough and bronchial asthma** Kazuhiro Ito (London, United Kingdom), Haruhiko Ogawa, Yuka Uchida
PA5303	**The role of vitamin D in COPD.** Gulchekhra Tashmetova (Tashkent, Uzbekistan), Irina Liverko
PA5304	**Sputum rheology is associated with asthma control** Gaël Tavernier (Manchester (Greater Manchester), United Kingdom), Taqdees Qureshi, Furkan Zurel, Leanne Holmes, Lynn Elsey, David Thornton, Stephen Fowler, Thomas Pantin
PA5305	**The prevalence of and risk factors for non-smoking chronic obstructive pulmonary disease in China: A systematic review and meta-analysis** Yue Zhang (Beijing, China), Xiaoyan Gai, Hongling Chu, Jingge Qu, Liang Li, Yongchang Sun
PA5306	**Serum vitamin D binding protein in Japanese patients with COPD, asthma and ACO.** Kenya Koyama (Koshigaya, Japan), Akemi Koyama, Masahiro Irokawa, Ryo Kitajima, Hisanori Hirokawa, Kentaro Nakano, Hiroyoshi Watanabe, Mayuko Ohashi, Tomoshige Wakayama, Shingo Tokita, Ryosuke Souma, Hideyuki Satoh, Yasutsugu Fukushima
PA5307	**EFFECT OF FOOD INTAKE ON EXHALED VOLATILE ORGANIC COMPOUNDS ANALYZED BY AN E-NOSE.** Silvano Dragonieri (Bari (BA), Italy), Marcin Di Marco, Madiha Ahroud, Vitaliano Nicola Quaranta, Andrea Portacci, Enrico Buonamico, Fabrizio Diaferia, Marco Antonio Patruno, Giovanna Elisiana Carpagnano
PA5308	**Characterization of eosinophilic inflammation in a Portuguese bronchiectasis cohort** Mariana Maia e Silva (Lisboa, Portugal), Margarida Pereira, Carlos Lopes
PA5309	**Exhaled nitric oxide in patients with severe alpha-1-antitrypsin deficiency** Edurne Echevarría Guerrero (Barakaldo, Spain), Laura Cortezón Garces, Jone Solorzano Egurbide, Imanol González Muñoz, Elena Garay Llorente, Patricia Sobradillo Ecenarro, Maria Del Mar Mayor Álvarez, Borja Santos Zorrozua, Eva Tabernero Huguet
PA5310	**Could we predict chronic obstructive pulmonary disease (COPD) exacerbation based on neutrophil to lymphocyte count ratio (NLR)?** Radmila Dmitrovic (Belgrade, Republic of Serbia), Biljana Lazovic, Isidora Simonovic, Ivan Zivotic
PA5311	**Effect of acute changes in ambient air pollutants on lung volumes, capacities and respiratory impedance in healthy individuals** Geetanjali Bade (New Delhi (Delhi), India), Amulya Gupta, K Shanmugasundaram, Anjana Talwar, Kumar Nischay Jaiswal
PA5312	**Late Breaking Abstract - A point of care (POC) exhaled breath to diagnose asthma** Victor Higgs (London, United Kingdom), Hanya Ahmed, Jona Angelica Flavier

PS-7 in poster area Session 506 16:00 - 17:30

Poster session: Epidemiology of tobacco and electronic nicotine delivery systems use

Disease(s) : Airway diseases | Respiratory critical care | Interstitial lung diseases | Thoracic oncology

Method(s) : Epidemiology | General respiratory patient care | Public health | Pulmonary rehabilitation | Physiology | Cell and molecular biology | Pulmonary function testing

Tag(s) : Clinical

Chairs : Florin Dumitru Mihaltan (Bucuresti, Romania)

PA5313	**Vaping: A new trend of consumption among young people.** Daniel Enrique Vega Lizarazo (Malaga, Spain), Sara Sánchez Martin, María Mercedes Segura Romero, Eva Belén Cabrera César
PA5314	**The role of calcium dysregulation in e-liquids or vaping associated alveolar type II epithelial cell injury** RUI ZHANG (Yinchuan, China), Lili Miao, Rob Onywnwoke

PA5315	**Tobacco heaters, electronic cigarettes, hookahs, cannabis: really a safer alternative to cigarettes?** Iris Hohenadel (Sandhausen, Germany)
PA5316	**Impact of heated tobacco products, e-cigarettes, and combustible cigarettes on small airways and arterial stiffness** Klaas F. Franzen (Luebeck, Germany), Isabel Buchwald, Annabelle Hauck, Paul Niklas Axt, Theresa Mohr, Henrik Watz, Frederik Trinkmann, Daniel Drömann
PA5317	**Perception of electronic cigarette among young adolescents** Soukaina Hallouli (CASABLANCA, Morocco), Wiam El Khattabi, Hajar Arfaoui, Hasna Jabri, Hicham Afif
PA5318	**A comprehensive list of flavorings used in cigarettes** Efthimios Zervas (Patra, Greece), Manos Konstantinidis, Niki Matsouki, Chara Tsipa, Zoe Gareiou
PA5319	**MOTIVATION FOR USING HEAT-NOT-BURN TOBACCO DEVICES AND E-CIGARETTES IN UKRAINE** Vitalina Harkusha (Vinnytsia, Ukraine), Vitalii Poberezhets, Anna Demchuk, Yuriy Mostovoy
PA5320	**TOBACCO PRODUCT USE AMONG YOUTH IN UKRAINE** Vitalina Harkusha (Vinnytsia, Ukraine), Vitalii Poberezhets, Anna Demchuk, Yuriy Mostovoy
PA5321	**A qualitative study of Australian general practitioners on e-cigarettes as a smoking cessation aid** Melis Selamoglu (Melbourne, Australia), Bircan Erbas, Chris Barton
PA5322	**Tobacco, alcohol and other drugs use among children in middle and high school** Hamida Kwas (Gabes, Tunisia), Sabrine Majdoub Fehri
PA5323	**Teenage problem gambling in Ireland – shared risk factors with tobacco, e-cigarette and cannabis use** Salome Sunday (Blackpool, Ireland), Luke Clancy, Joan Hanafin
PA5324	**Knowledge, practices, and attitudes of general practitioners in the southern region of Morocco towards smoking** Aboubekr Imzil (Agadir, Morocco), Oussama Halloumi, Abdelkrim Khannous, Abdelmajid Oulahbib, Youness Essaid, Nada Boutbagha, Soufia Farhat, Houssame Ennaciri, Hanane Ikrou, Fatiha Bounoua, Khadija Ait Nasser, Houda Moubachir, Hind Serhane
PA5325	**Tunisian physicians' knowledge of passive smoking** Sarra Ben Sassi (ariana, Tunisia), Ines Moussa, Hana Mrassi, Mariem Friha, Sara Trimech, Imen Sahnoun, Leila Douik El Gharbi
PA5326	**Increasing knowledge and awareness of respiratory diseases through an educational programme for nursing students in rural Ghana.** Yazid Imoru (Accra, Ghana), Johannes Martin Schmid
PA5327	**Gender differences in smoking-attributable mortality (SAM) by region in Portugal** Sofia Belo Ravara (Covilhã, Portugal), Julia Rey-Brandariz, Esther López-Vizcaíno, María Isolina Santiago-Pérez, Alberto Ruano-Ravino, Cristina Candal-Pedreira, Leonor Lema-Varela, Nerea Mourino, Pedro Aguiar, Mónica Pérez-Ríos
PA5328	**Environmental Awareness and Behavior of Smokers and Non-Smokers** Efthimios Zervas (Patra, Greece), Zoe Gareiou, Niki Matsouki, Chara Tsipa, Manos Konstantinidis
PA5329	**The impact of tax increases on tobacco use among medical faculty students** Elif Dagli (Istanbul, Turkey), Murat Tuğberk Bakar, Buğra Arslan, Melike Duymaz, Ibrahim Serhat Karakuş, Zilan Polat, Tanzer Gezer, Pınar Ay
PA5330	**Knowledge, attitude and practice of smoking vape among medical students in Karachi, Pakistan.** Eman Sheikh (Karachi, Pakistan), Ashok Kumar
PA5331	**Smoking cessation counselling: what do Tunisian medical trainees think?** Hana Blibech (Ariana, Tunisia), Mohamed Aymen Jebali, Houda Snene, Nozha Ben Salah, Sameh Belhaj, Nadia Mehiri, Bechir Louzir
PA5332	**Smoking Cessation Practices in a Level 3 Irish Hospital** Niamh Boyle (Celbridge, Ireland), Caitlyn Paclibar, Eric Sheeran Purcell, Mary Mcnamee, Colm Quigley

PS-8 in poster area — Session 507 — 16:00 - 17:30

Poster session: SARS-CoV-2, tuberculosis, and breathlessness

Disease(s) : Airway diseases | Sleep and breathing disorders | Thoracic oncology

Method(s) : Epidemiology | General respiratory patient care | Imaging | Public health | Pulmonary function testing

Tag(s) : Clinical

Chairs : Chair to be confirmed

PA5333	**Impact of Bronchial Asthma on COVID-19 Sequelae** Yu Nakatani (Kochi, Japan), Soko Numata, Kazuhumi Takamatsu, Akihito Yokoyama
PA5334	**Pulmonary phenotypes and COVID-19 evolution patterns during the first year of the pandemic** DAVIDE CHIMERA (Pisa, Italy), Francesco Pistelli, Sara Maio, Giovanna Manfredini, Elisa Iacopini, Salvatore Claudio Fanni, Leonardo Colligiani, Chiara Romei, Annalisa De Liperi, Sandra Baldacci, Antonio Fideli, Chiara Cappiello, Luca Visconti, Claudia Meschi, Laura Tavanti, Roberta Pancani, Guido Marchi, Massimiliano Desideri, Nicoletta Carpenè, Luciano Gabbrielli, Alessandro Celi, Laura Carrozzi
PA5335	**Associations between socioeconomic parameters and outcomes related to hospitalization with COVID-19.** Søren Sperling (Aarhus N, Denmark), Andreas Fløe, Steffen Leth, Charlotte Hyldgaard, Tina Gissel, Ayfer Topcu, Lars Kristensen, Lene Sønderskov Dahl, Søren Jensen-Fangel, Johannes Martin Schmid, Elisabeth Bendstrup
PA5336	**Altitude effect on COVID-19 mortality rate and case incidence in Peru, the country with the highest accumulated mortality rate worldwide** Valeria A. Castillo Uribe (Leipzig, Germany), Zoë L. Contreras Leon, Betsabe M. Cucho Vásquez, Roberto Alfonso Accinelli, Leandro Huayanay, Fernando R. Chu Rivera
PA5337	**Latitude impact on COVID-19 mortality rate and case incidence in Peru, the Andean country with the highest accumulated mortality rate worldwide** Betsabe Cucho (Lima, Peru), Valeria A. Castillo Uribe, Zoë L. Contreras Leon, Roberto Alfonso Accinelli, Leandro Huayanay, Fernando R. Chu Rivera
PA5338	**Shifting COVID-19 case incidence and mortality rate trends during the pandemic in Peru, the country with the highest mortality rate worldwide** Zoë Lucia Contreras Leon (Lima, Peru), Valeria A. Castillo Uribe, Betsabe M. Cucho Vásquez, Roberto Alfonso Accinelli, Leandro Huayanay, Fernando R. Chu Rivera
PA5339	**Long-term sequelae of post-COVID-19 subjects from 19 centres across India** Swapnil Gadhave (Pune, India), Mohankumar Thekkinkattil, Abhinav Chaudhary, Saili Bendre, Parthasarathi Bhattacharyya, Archana B, Malay Sarkar, Girija Nair, Deependra Kumar Rai, Abhay Uppe, Sonali Trivedi, Surya Kant Tripathi, Jitendra Ingole, Sachin D, Nitesh Gupta, Babaji Ghewade, Amit Tade, Mahavir Modi, Loveleen Sharma, Yuvraj Badhe, Pooja Bhalekar, Sundeep Salvi
PA5340	**The cost of primary care consultations associated with long COVID in non-hospitalised adults: a retrospective cohort study using UK primary care data** Jake Tufts, Dawit Zemedikun, Anuradhaa Subramanian, Naijie Guan, Krishna Gokhale, Puja Myles, Tim Williams, Tom Marshall, Melanie Calvert, Karen Matthews, Krishnarajah Nirantharakumar, Louise Jackson, Shamil Haroon
PA5341	**SARS-CoV-2 and risk of psychiatric hospital admission and use of psychopharmaceuticals: A nationwide registry study of 4,585,083 adult Danish citizens** Valdemar Rømer (Copenhagen, Denmark), Pradeesh Sivapalan, Josefin Eklöf, Susanne Dam Nielsen, Zitta Barrella Harboe, Tor Biering-Sørensen, Theis Itenov, Jens-Ulrik Stæhr Jensen
PA5342	**The role of booster vaccination in decreasing COVID-19 age-adjusted case fatality rate: evidence from 32 countries** Jing Gao (Helsinki, Finland), Cui Zhou, Åsa Wheelock, Chutian Zhang, Jian Ma, Kaixing Dong, Zhichao Li, Wannian Liang, Lei Xu
PA5343	**Blood biomarkers and biological age among patients with long COVID** Shamil Haroon (Birmingham (West Midlands), United Kingdom), Anuradhaa Subramanian, Krishnarajah Nirantharakumar, Janet Lord, David C. Wraith
PA5344	**The effects Covid-19 had on the children of health care professionals** Ege Havlucu (Manisa, Turkey), Atalay Özkul, Deniz Kızılırmak
PA5345	**IMPACT OF THE COVID19 PANDEMIC ON SURVIVAL OF PATIENTS WITH HOME MECHANICAL VENTILATION(HMV)** Alfredo Marín Muñiz (Castelldefels, Spain), Ana Córdoba Izquierdo, Mikel Sarasate Azkona, Eva Farrero Muñoz, Zara Vidales Sepúlveda, Lluis Mateu Gómez, Salud Santos Pérez, Enric Prats Soro
PA5346	**Epidemiology of Respiratory Syncytial Virus in Germany before and during covid-19 pandemic** Svenja Loerch (Hamm, Germany), Frank Erdnuess, Thorsten Reineke, Beate Frerich, Wolfgang Kamin
PA5347	**Post-pandemic seasonal dynamics in the frequency of hospitalized exacerbations and triggers in COPD** Hnin Wint Aung (Market Harborough, United Kingdom), Aye Aung, Hamish Mcauley, Omer Elneima, Cara Flynn, Tracy Thornton, Helen Evans, Christopher Brightling, Neil Greening
PA5348	**The role of Low-Dose CT scan in the early diagnosis of malignant neoplasms of different localization.** Anna Kovchun (Sumy, Ukraine), Victor Kovchun, Vladyslava Kachkovska, Liudmyla Prystupa

PA5349 **Sense of control association to breathlessness: an analysis of 30,000 men and women in the general population.**
Max Olsson (Helsingborg, Sweden), Magnus Ekström

PA5350 **Can machine learning improve predictive performance of long-term outcomes for adults with breathlessness?**
Urvee Karsanji (London, United Kingdom), Michael C Steiner, Claire A Lawson, Emily Petherick, Rachael A Evans, Matthew Richardson

PA5351 **Identifying the factors most strongly associated to breathlessness in the general population: an evaluation of 465 different factors using machine learning.**
Max Olsson (Helsingborg, Sweden), Magnus Ekström

PA5352 **Increasing Medical Research Council breathlessness scores are associated with longer hospital stays**
Urvee Karsanji (London, United Kingdom), Vanessa N Brunelli, Slavica Kochovska, Diana Ferreira, Irina Kinchin, Magnus Ekström, Jennifer K Quint, Michael C Steiner, Rachael A Evans, David C Currow

PS-9 in poster area Session 508 16:00 - 17:30

Poster session: Nutrition, lifestyle and obesity in paediatric asthma and allergic rhinitis

Disease(s) : Airway diseases Respiratory critical care

Method(s) : Cell and molecular biology Epidemiology Pulmonary function testing Public health General respiratory patient care Respiratory intensive care

Tag(s) : Clinical

Chairs : Erick Forno (Indianapolis, United States)

PA5353 **Asthma and atopy in overweight children**
Valentina Cvejoska-Cholakovska (Skopje, North Macedonia), Emilija Vlashki, Vesna Velikj-Stefanovska

PA5354 **Data-driven model links BMIz to gene expression in pediatric asthma**
Vincent Dandenault (Montreal, Canada), Nehme Hachem, Ian M Adcock, Lars I. Andersson, Charles Auffray, Fan K Chung, Sven-Erik Dahlén, Bertrand De Meulder, Ratko Djukanovic, Peter Howarth, Richard G Knowles, Norbert Krug, Amanda Roberts, Ana R Sousa, Peter J. Sterk, David Supple, Navin Rao, Graham Roberts, Mohib Uddin, Scott Wagers, Anke-Hilse Maitland-Van Der Zee, Cristina Longo

PA5355 **Late Breaking Abstract - High flow humidified oxygen as an early intervention in children with acute severe asthma - a feasibility randomised controlled trial**
Paul Seddon (West Sussex, United Kingdom), Hector Rojas-Anaya, Akshat Kapur, Graham Roberts, Damian Roland, Atul Gupta, Michaela Lazner, David James, Shane Fitzgerald, Fleur Cantle, Stephen Bremner

PA5356 **Altered sphingolipid metabolism in childhood asthma and obesity**
Antonisamy Belavendra (Doha, Qatar), Harshita Shailesh, Yahya Hani, Safa Noor, Lena Hasabelgavi, Mohammed Alfaki, Shana S Jacob, Saroja Kotegar Balayya, Stefan Worgall, Ibrahim Ahmed Janahi

PA5357 **Examining the Longitudinal Association between Smoking Exposure, Atopic Indices, and Allergies during Early Childhood**
Chih-Yung Chiu (Taoyuan, Taiwan), Ming-Han Tsai, Kuan-Wen Su, Kuo-Wei Yeh, Jing-Long Huang

PA5358 **Clinical usefulness of Electrical Impedance Tomography (EIT) in the evaluation of obese asthmatic children' ventilation: a pilot case-control study**
Youssra Belhaj (Milano, Italy), Simone Gambazza, Mara Lelii, Barbara Madini, Alessia Rocchi, Lucia Cerrato, Antonella Gambadauro, Marta Piotto, Maria Francesca Patria

PA5359 **Maternal BMI and smoking as mediators in the maternal education – offspring asthma association in a register-based cohort**
Cecilia Lundholm (Stockholm, Sweden), Emma Caffrey Osvald, Samuel Arthur Rhedin, Catarina Almqvist

PA5360 **Regular physical activity in children: Does it improve pediatric asthma?**
senda derouiche (Tunisia, Tunisia), Sabrine Louhaichi, Siwar Rejeb, Aymen Jebali, Farah Garci, Jamel Ammar, Besma Hamdi, Agnès Hamzaoui

PA5361 **Prevalence of allergy and asthma in school children and their families in South Punjab, Pakistan**
Abdul Mannan Mustafa (Multan, Pakistan), Ghulam Mustafa

PA5362 **The impact of the paracetamol use on rhinitis prevalence**
Francisco-Javier Gonzalez Barcala (Santiago de Compostela, Spain), Antonio Acevedo, Angel Lopez-Silvarrey, Maria-Teresa Seoane-Pillado, Francisco-Javier Salgado, Juan-Jose Nieto-Fontarigo, Sonia Pertega, Juan-Manuel Sanchez-Lastres, Miguel-Angel San-Jose, Luis Bamonde, Luciano Garnelo, Teresa Perez-Castro, Manuel Sampedro

PA5363	**Neuropsychiatric adverse side-effects of montelukast in children – a Danish nationwide register study.** Louise Toennesen (København K, Denmark), Alexander Jordan, Josefin Eklof, Pradeesh Sivapalan, Astrid Sevelsted, Klaus Bønnelykke, Charlotte Suppli Ulrik, Jens-Ulrik Stæhr Jensen
PA5364	**“Multi-omics" approach reveals new potential biomarkers in tears of asthmatic children** Marina Attanasi (Chieti (CH), Italy), Maria Concetta Cufaro, Laura Sgrazzutti, Beatrice Dufrusine, Ilaria Cicalini, Paola Di Filippo, Giulia Dodi, Sabrina Di Pillo, Francesco Chiarelli, Damiana Pieragostino
PA5365	**Polysensitization in children: Clinical and allergenic characteristics** Hela Cherif (Tunis, Tunisia), Chaima Baya, Salma Mokaddem, Oumaima Belakhel, Mariem Triki, Ferdaous Yangui, Mohamed Ridha Charfi
PA5366	**Difference in clinical characteristics between children and adults with allergen immunotherapy in Korea** Hyemi Jee (Seongnam, Republic of Korea), Ju Hee Kim, Young Hyo Kim, Jung-Won Park, Youngmin Ahn, Jeong-Hee Choi, Hye-Sung Baek, Mi-Ae Kim, Hwa Young Lee, Seon Tae Kim, Kyung Hee Park, Man Yong Han
PA5367	**Asthmatic children with an early wheezing: A distinct phenotype?** Mohamed aymen Jebali (tunis, Tunisia), Sabrine Louhaichi, Siwar Rejeb, Synda Derouiche, Farah Garci, Houneida Ben Zekri, Jamel Ammar, Besma Hamdi, Agnes Hamzaoui
PA5368	**Aerosol performance and sealing evaluation of new valved holding chamber face masks for babies and children** Yvonne Burmeister (Starnberg, Germany), Andrea Winzen, Karin Steinführer, Rosina Ledermüller
PA5369	**Asthma in children and dust mite sensitization: what characteristics?** Siwar Rejeb (tunis, Tunisia), Hamdi Besma, Jebali Aymen, Derouiche Senda, Garci Farah, Ammar Jamel, Louhaichi Sabrine, Agnés Hamzaoui
PA5370	**Use of air purifiers in homes to improve asthma outcomes for children: a pilot study protocol** Karl Holden (Liverpool, United Kingdom), Alice Lee, Daniel Hawcutt, Ian Sinha
PA5371	**Late Breaking Abstract - Title: Association between Apgar-scores within normal range and development of asthma, allergy, and eczema in childhood: a Danish nationwide register study** Erik Sören Halvard Hansen (Lejre, Denmark), Hannah Kaiser, Kristine Tronier Hansen, Klaus Bønnelykke, Bo Chawes, Vibeke Backer, Charlotte Suppli Ulrik, Christian Torp-Pedersen, Nicklas Brustad
PA5372	**Late Breaking Abstract - Clinical efficacy and satisfaction with a digital wheeze detector supporting the self -management of childhood wheeze** Yen Hoang Do (Berlin, Germany), Wim Van Aalderen, Ellen Dellbrügger, Claude Grenzbach, Jonathan Grigg, Eric Haarman, Bulent Karadag, Siri Roßberg, Tina-Maria Weichert, Abigail Whitehouse, Paolo Maria Matricardi, Stephanie Dramburg

Gold — Session 509 — 17:15 - 18:45

Assembly members' meeting: Assembly 1: Respiratory clinical care and physiology

Chairs : Ioannis Vogiatzis (Blyth, United Kingdom), Frits M.E. Franssen (Horn, Netherlands)

17:15	**Assembly members meeting: presentation, discussion and Q&A** Ioannis Vogiatzis (Blyth, United Kingdom)	**5373**

Silver — Session 510 — 17:15 - 18:45

Assembly members' meeting: Assembly 2: Respiratory intensive care

Chairs : Christian Karagiannidis (Cologne, Germany), João Carlos Winck (Vila Nova de Gaia, Portugal)

17:15	**Assembly members meeting: presentation, discussion and Q&A** Christian Karagiannidis (Cologne, Germany)	**5374**

Coral 4+5 — Session 511 — 17:15 - 18:45

Assembly members' meeting: Assembly 4: Sleep disordered breathing

Chairs : Winfried J. Randerath (Solingen, Germany), Sophia E. Schiza (Heraklion, Greece), Esther Irene Schwarz (Zürich, Switzerland)

17:15	**Assembly members meeting: presentation, discussion and Q&A** Winfried J. Randerath (Solingen, Germany)	**5375**

Red 1+2 — Session 512 — 17:15 - 18:45

Assembly members' meeting: Assembly 10: Respiratory infections

Chairs : Eva Polverino (Barcelona, Spain), Raquel Duarte (Porto, Portugal), Onno Akkerman (Groningen, Netherlands)

17:15 **Assembly members meeting: presentation, discussion and Q&A** **5376**
Eva Polverino (Barcelona, Spain)

Coral 3 Session 513 17:15 - 18:45

Assembly members' meeting: Assembly 5: Airway diseases, asthma, COPD and chronic cough

Chairs : Omar S. Usmani (London, United Kingdom), Apostolos Bossios (Stockholm, Sweden), Florence Schleich (Liège, Belgium)

17:15 **Assembly members meeting: presentation, discussion and Q&A** **5377**
Omar S. Usmani (London, United Kingdom)

Brown 3 Session 514 17:15 - 18:45

Assembly members' meeting: Assembly 11: Thoracic oncology

Chairs : Torsten Gerriet Blum (Berlin, Germany), Najib M. Rahman (ABINGDON, United Kingdom)

17:15 **Assembly members meeting: presentation, discussion and Q&A** **5378**
Torsten Gerriet Blum (Berlin, Germany)

Brown 1+2 Session 515 17:15 - 18:45

Assembly members' meeting: Assembly 12: Interstitial lung diseases

Chairs : Katerina Antoniou (Heraklion, Greece), Michael Kreuter (Heidelberg, Germany)

17:15 **Assembly members meeting: presentation, discussion and Q&A** **5379**
Katerina Antoniou (Heraklion, Greece)

Blue 1+2 Session 516 17:15 - 18:45

Assembly members' meeting: Assembly 13: Pulmonary vascular diseases

Chairs : Anton Vonk Noordegraaf (Amsterdam, Netherlands), Olivier Sitbon (Le Kremlin-Bicêtre, France)

17:15 **Assembly members meeting: presentation, discussion and Q&A** **5380**
Anton Vonk Noordegraaf (Amsterdam, Netherlands)

Yellow 1+2+3 Session 517 17:15 - 18:45

Assembly members' meeting: Assembly 14: Clinical techniques, imaging and endoscopy

Chairs : Walter De Wever (Leuven, Belgium), Elżbieta Magdalena Grabczak (Warszawa, Poland)

17:15 **Assembly members meeting: presentation, discussion and Q&A** **5381**
Walter De Wever (Leuven, Belgium)

Coral 1 Session 518 17:15 - 18:45

Assembly members' meeting: Assembly 7: Paediatrics

Chairs : Marielle W.H. Pijnenburg (Rotterdam, Netherlands), Alexander Möller (Zürich, Switzerland), Refika Hamutcu Ersu (Ottawa, Canada)

17:15 **Assembly members meeting: presentation, discussion and Q&A** **5382**
Marielle W.H. Pijnenburg (Rotterdam, Netherlands)

Coral 2 Session 519 17:15 - 18:45

Assembly members' meeting: Assembly 6: Epidemiology and environment

Chairs : Charlotte Suppli Ulrik (Virum, Denmark), Ane Johannessen (Bergen, Norway), Rafael E. de la Hoz (New York, United States)

17:15 **Assembly members meeting: presentation, discussion and Q&A** **5383**
Charlotte Suppli Ulrik (Virum, Denmark)

Purple Session 520 17:15 - 18:45

Assembly members' meeting: Assembly 9: Allied respiratory professionals

Chairs : Daniel Langer (Leuven, Belgium), Jellien Makonga-Braaksma (Woudenberg, Netherlands)

17:15 **Assembly members meeting: presentation, discussion and Q&A** **5384**
Daniel Langer (Leuven, Belgium)

Amber 5+6 Session 521 17:15 - 18:45

Assembly members' meeting: Assembly 3: Basic and translational sciences

Chairs : H. Irene Heijink (Groningen, Netherlands), Niki L. Reynaert (Maastricht, Netherlands)

17:15 **Assembly members meeting: presentation, discussion and Q&A** **5385**
H. Irene Heijink (Groningen, Netherlands)

Amber 7+8 Session 522 17:15 - 18:45

Assembly members' meeting: Assembly 8: Thoracic surgery and transplantation

Chairs : Federica Meloni (Pavia (PV), Italy), Marcello Migliore (Riyadh, Saudi Arabia)

17:15 **Assembly members meeting: presentation, discussion and Q&A** **5386**
Federica Meloni (Pavia (PV), Italy)

Studio (White) Session 523 08:30 - 09:20

Experts interview: Tobacco, e-cigarette and cannabis epidemic in youth / Indoor air pollution

Tag(s) : Clinical

Chairs : Hilary Pinnock (Edinburgh (Edinburgh), United Kingdom), Nicolas Roche (Paris, France)

08:30	**Tobacco, e-cigarette and cannabis epidemic in youth** Elif Dagli (Istanbul, Turkey)	**5387**
08:45	**Discussion and Q&A** All Speakers	**5388**
08:55	**Indoor air pollution** Speaker to be confirmed	**5389**
09:10	**Discussion and Q&A** All Speakers	**5390**

09:00-10:15
INDUSTRY WEDNESDAY SPECIAL SESSION SEE PAGE 1

Brown 1+2 Session 525 09:00 - 10:45

Wednesday special session: How to reduce the tobacco and e-cigarette epidemic in youth

Aims : To provide insights into rapidly increasing prevalence of e-cigarettes, novel nicotine and tobacco products use among adolescents and youth in Italy, Europe and globally. To present the two latest 2023 ERS statements on Tobacco 21 and on Novel nicotine and tobacco products and harm reduction and brainstorm together with the session participants on their implications for both tobacco control and clinical field. To identify, using the example of Italy, existing regulation gaps and discuss how they should be tackled in the tobacco and nicotine endgame strategies to achieve tobacco-free generation goal.

Tag(s) : Clinical

Chairs : Jonathan Grigg (London, United Kingdom), Silvano Gallus (Milano, Italy), Elif Dagli (Istanbul, Turkey)

09:00	**Tobacco 21 policies: addressing smoking and ENDS use in young people** Des Cox (Dublin, Ireland)	**5397**
09:10	**Brainstorming session: how to make 21+ tobacco approach a reality in Europe? Influencing national and EU agenda** Jonathan Grigg (London, United Kingdom)	**5398**
09:40	**Video testimonial on vaping prevalence in schools and among youth**	**5399**
09:45	**ERS position on harm reduction and novel products** Filippos T. Filippidis (Rickmansworth, United Kingdom)	**5400**
09:55	**Trends in the use of electronic cigarettes, heated and smokeless tobacco in Italian youth** Silvano Gallus (Milano, Italy)	**5401**
10:05	**Tobacco-free generation and endgame in Europe** Florin Dumitru Mihaltan (Bucuresti, Romania)	**5402**
10:15	**Round table: regulation gaps and how to apply Italian experience across Europe?** Maria Sofia Cattaruzza (Roma (RM), Italy), Speaker to be confirmed	**5403**

Brown 3 Session 526 09:45 - 12:45

Wednesday special session: How to build a successful, sustainable, international research network?

Collaboration, Impact, Empowerment

Aims : This session, led by ERS Clinical Research Collaborations (CRC), and EU projects, draws upon the extensive experience of ERS membership and involvement of ERS and European Lung Foundation (ELF) in consortia. This session aims to explore the journey of building remarkable international research networks through key principles, effective strategies, and best practices, fostering cutting edge research with worldwide impact.

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Paediatrician, Patient, Physician in Pulmonary Training, Physiologist, Scientist (basic, translational), Radiologist, Respiratory physiotherapist

Chairs : Salman Siddiqui (London, United Kingdom), David Drummond (Paris, France), Florence Schleich (Liège, Belgium)

09:45	**Introduction and welcome** All Speakers	**5404**
09:50	**How to build a great consortium: consortium building, stakeholder engagement** James D. Chalmers (Dundee (Angus), United Kingdom), Raquel Duarte (Porto, Portugal)	**5405**
10:10	**Finding the right fit: defining your topic to fit with the hot topic of the time, addressing co-morbidities, working across disease areas** Christopher E. Brightling (Leicester (Leicestershire), United Kingdom), Torsten Gerriet Blum (Berlin, Germany)	**5406**
10:30	**How to ensure your project has impact: awareness wider than the respiratory field, policy influence, public awareness** Herman Goossens (Edegem (Antwerp), Belgium), Rosa Faner Canet (Barcelona, Spain)	**5407**
10:50	**Getting involved in international research networks – patient and caregiver perspectives** Lucy Dixon (Buckingham, United Kingdom), Zena Powell (Aylesbury, United Kingdom), Theo Schilpzand (Marijenkampen, Netherlands), Stefano Pavanello (Rovigo (RO), Italy)	**5408**
11:10	**How to gain the most value from data: how to collect, store and share** Celeste Michala Porsbjerg (Copenhagen, Denmark), Job F.M. van Boven (Groningen, Netherlands)	**5409**
11:30	**Key success factors for sustainability: long-term interest, funding and enthusiasm** Nadia Nathan (Paris, France), Ludger Grote (Göteborg, Sweden)	**5410**
11:50	**Lungs Europe – how we will support the respiratory community in the future** Pippa Powell (Sheffield (South Yorkshire), United Kingdom), Salman Siddiqui (London, United Kingdom)	**5411**
12:05	**Networking – discussion on different tables on the different topics with the different speakers** James D. Chalmers (Dundee (Angus), United Kingdom), Raquel Duarte (Porto, Portugal), Christopher E. Brightling (Leicester (Leicestershire), United Kingdom), Torsten Gerriet Blum (Berlin, Germany), Herman Goossens (Edegem (Antwerp), Belgium), Rosa Faner Canet (Barcelona, Spain), Nadia Nathan (Paris, France), Pippa Powell (Sheffield (South Yorkshire), United Kingdom), Salman Siddiqui (London, United Kingdom), Celeste Michala Porsbjerg (Copenhagen, Denmark), Job F.M. van Boven (Groningen, Netherlands), Lucy Dixon (Buckingham, United Kingdom), Zena Powell (Aylesbury, United Kingdom), Theo Schilpzand (Marijenkampen, Netherlands), Stefano Pavanello (Rovigo (RO), Italy), Ludger Grote (Göteborg, Sweden)	**5412**

Overflow area Session 527 09:45 - 12:15

Wednesday special session: Women's networking event

Connect, collaborate, empower

Aims : This event aims to create a platform for respiratory professionals to connect, build relationships, and exchange knowledge and experiences. To encourage collaboration among women in the respiratory profession, fostering partnerships, teamwork, and the sharing of ideas and best practices. To empower women in the respiratory profession by offering career development resources, mentorship programs, and discussions on leadership and advancement opportunities. To highlight the importance of diversity and inclusion in the field of respiratory care, and encourage women from diverse backgrounds to participate and contribute to the event. To collaborate with relevant organisations, national societies, and industry partners.

Chairs : Monika Gappa (Düsseldorf, Germany)

09:45	**Overflow 1: Welcome** Monika Gappa (Düsseldorf, Germany), Judith Garcia-Aymerich (Barcelona, Spain)	**5413**
10:20	**Overflow 2: Academia - Women in Science** Sara Cuevas Ocaña (Nottingham, United Kingdom), Niki Ubags (Epalinges, Switzerland), Silke Meiners (Sülfeld, Germany), Zorana Andersen (Frederiksberg, Denmark)	**5414**
10:20	**Overflow 3: Academia - Women in Patient care/Healthcare** Monika Gappa (Düsseldorf, Germany), Arzu Yorgancıoğlu (Konak, Turkey), Ildikó Horváth (Budakeszi, Hungary), Snezhina Lazova (Sofia, Bulgaria)	**5415**
10:20	**Overflow 4: Women in Industry** Maria Gabriela Belvisi (Mölndal, Sweden), Juby Anne Jacob-Nara (Hillsborough, United States), Sabine Bartel (Groningen, Netherlands), Sara Jane Bonvini (London, United Kingdom), Tricia Finney-Hayward (London, United Kingdom)	**5416**
12:00	**Overflow 1: Conclusions and take home messages** All Speakers	**5417**

Studio (White) Session 528 09:45 - 10:30

Pro-Con debate: Is it clinically helpful to say someone has ‘mild’ asthma?

Aims : to discuss and consider what mild asthma represents and how to address it; to discuss how international guidelines, the Global Initiative for Asthma (GINA) and the National Asthma Education and Prevention Program (NAEPP) address the definitions of asthma control, asthma severity and future risks; to discuss the reality and perspective of mild asthma; to answer the question of whether the term ‘mild’ asthma has clinical utility or whether alternative terms are needed.

Disease(s) : Airway diseases Paediatric respiratory diseases

Method(s) : Epidemiology General respiratory patient care Physiology

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Paediatrician, Patient, Physician in Pulmonary Training, Physiologist, Radiologist, Respiratory physiotherapist

Chairs : Hilary Pinnock (Edinburgh (Edinburgh), United Kingdom), Nicolas Roche (Paris, France)

09:45	**Yes, there is clinical utility in saying someone has ‘mild’ asthma** Florence Schleich (Liège, Belgium)	**5418**
10:00	**No, there is no clinical utility in saying someone has ‘mild’ asthma** Johann Christian Virchow (Rostock, Germany)	**5419**
10:15	**Discussion and Q&A** All Speakers	**5420**

Yellow 1+2+3 Session 529 10:00 - 11:20

Wednesday special session: Excellence in rare diseases care and research: the ERN-Lung initiative the ERN-Lung go East

Aims : to present the ERN-LUNG Network and highlight some of its assets achieved during the past years through funding and support by the European Commission and the ERS; to learn from participants about their expectations and needs to better tailor initiative offerings and to offer a better support; to present the following take home messages: 1) There is always someone who knows more about this rare disease than myself; 2) ERN-LUNG is the place where to find and get in contact with this Expert across all of Europe.

Chairs : Marc Humbert (Le Kremlin-Bicêtre, France), Marlies S. Wijsenbeek (Rotterdam, Netherlands)

10:00	**What is ERN-LUNG?** Marc Humbert (Le Kremlin-Bicêtre, France), Marlies S. Wijsenbeek (Rotterdam, Netherlands)	**5421**
10:15	**How to get involved?** Gergely Meszaros (Vac, Hungary)	**5422**
10:25	**What can networking do for my patients?** Adam Torbicki (Otwock, Poland)	**5423**
10:40	**What can ERN-LUNG do for me?** Helge Hebestreit (Wuerzburg, Germany)	**5424**
10:55	**ERN-LUNG Academy?** Elisabeth Humbert-Dorfmüller (Frankfurt am Main, Germany)	**5425**
11:05	**ERN-LUNG Patients** Speaker to be confirmed	**5426**

Red 1+2 Session 530 10:30 - 12:45

Wednesday special session: How can the International Respiratory Coalition help tackle pressures on respiratory healthcare systems?

Aims : This session looks at the increased pressure on health systems in specific areas – such as the impact of seasonal burdens and dealing with the respiratory consequences of wildfires, and considers what role the International Respiratory Coalition can have in tackling these pressures.
The International Respiratory Coalition (IRC) is a movement to transform respiratory outcomes in a post pandemic world. Led by the European Respiratory Society, the IRC is a multisectoral partnership bringing together the professional respiratory community, patients and industry. The IRC is currently supporting national-level coalitions, who have joined the movement, as they work towards developing/improving/implementing respiratory strategies based on best practice in their own countries.

Chairs : Guy F. Joos (Ghent, Belgium), Anita Simonds (London, United Kingdom)

10:30	**Introduction** All Speakers	**5427**

10:35	**Anticipating and coping with seasonal respiratory burdens** Tobias Welte (Hannover, Germany)	**5428**
10:55	**Seasonal burdens: a global patient advocacy perspective** Tonya Winders (Hendersonville, United States)	**5429**
11:15	**The way forward in preventing and managing COPD exacerbations** Marc Miravitlles (Barcelona (CT), Spain)	**5430**
11:35	**Assessing and caring for the respiratory consequences of wildfires** Christine Jenkins (McMahons Point (NSW), Australia)	**5431**
11:55	**Role of the International Respiratory Coalition** Carlos Robalo Cordeiro (Coimbra, Portugal)	**5432**
12:10	**Panel discussion: identifying needs and creating a strategy for national IRC coalitions** Judith Garcia-Aymerich (Barcelona, Spain), Kjeld Hansen (Oslo, Norway), Chantal Raherison-Semjen (Pointe-à-Pitre (Guadeloupe), France), Ellen Ricke (Hillegom, Netherlands), Chris Compton (Brentford, Middlesex, United Kingdom), Christine Harrison (Vernier, Switzerland)	**5433**

Blue 1+2 — Session 531 — 10:55 - 12:55

Wednesday special session: Building support for clean air policies: empowering the respiratory community to advocate for clean air locally, nationally and internationally

Aims : To engage healthcare professionals and local NGOs with the Healthy Lungs for Life Clean Air campaign. To empower them in community and public engagement, helping them to communicate the necessity of clean air for good lung health in their own communities and to policy makers. To create a network of clean air advocates who can share best practice in engagement and support each other to present evidence from patients and healthcare professionals.

Chairs : Sergio Alfonso Harari (Milano (MI), Italy), Michael Len (Brussels, Belgium)

10:55	**Why clean air and why now? What is the latest evidence on clean air and lung health?** Barbara Hoffmann (Düsseldorf, Germany)	**5434**
11:10	**Why clean air and why now? Why it matters to respiratory patients?** Kjeld Hansen (Oslo, Norway)	**5435**
11:25	**Why is it important for Milan and Lombardy?** Francesco Forastiere (Roma (RM), Italy)	**5436**
11:40	**How can we achieve change: working in partnership - C40**	**5437**
11:55	**How can we achieve change: From science to policy, how we can make an impact** Anne Stauffer (Brussels, Belgium)	**5438**
12:10	**How can we achieve change: communication and events** Pippa Powell (Sheffield (South Yorkshire), United Kingdom)	**5439**
12:25	**How can we achieve change: creating your legacy** Anna Gerometta (Milano, Italy)	**5440**
12:40	**Call to action for clean air to Milan and Europe in light of the Ambient Air Quality Directive**	**5441**

Studio (White) — Session 532 — 11:00 - 11:15

News from the studio: Congress wrap-up

Chairs : Hilary Pinnock (Edinburgh (Edinburgh), United Kingdom), Nicolas Roche (Paris, France)

11:00	**Discussion and Q&A** All Speakers	**5442**

ERS Stand/World Village | Session 153 | 13:00 - 14:00

Session world village: Meet with the ECMC representatives: ERS opportunities for ECMs/Basic and translational sciences (Assembly 3) within the ERS

Chairs : Sara Cuevas Ocaña (Nottingham, United Kingdom), Matteo Bradicich (Zollikerberg, Switzerland)

13:00 **1370**

ERS Stand/World Village — Session 273 — 12:00 - 13:00

Session world village: Meet with the ECMC representatives

Chairs : Maria Joana Pereira Catarata (Porto, Portugal), Dorina Rama Esendagli (Ankara, Turkey), Karen Moor (Rotterdam, Netherlands)

12:00 **2638**

ERS Stand/World Village — Session 306 — 13:00 - 14:00

Session world village: Meet with the ECMC representatives: How to increase your visibility and network as ECM

Chairs : Susanne Vijverberg (Amsterdam, Netherlands), Joana Cruz (Leiria, Portugal), Matteo Bradicich (Zollikerberg, Switzerland)

13:00 **3094**

ERS Stand/World Village | Session 430 | 12:00 - 13:00

Session world village: Meet with the ECMC representatives: How to get involved in ERS activities as an Early Career Member

Chairs : Joana Cruz (Leiria, Portugal), Matteo Bradicich (Zollikerberg, Switzerland), Maria Joana Pereira Catarata (Porto, Portugal), Dorina Rama Esendagli (Ankara, Turkey)

12:00 **4362**

INDUSTRY SESSIONS

No Room | Session | 18:00 - 19:00

Rehearsal: Opening Session rehearsal

Coral 1 — Session 45 — 07:15 - 08:15

Industry early morning symposium: On-Therapy Remission in Pediatric Asthma: Where Are We Today?

Organised by Sanofi Regeneron

07:15	**Welcome** Giorgio Piacentini (Verona (VR), Italy)	**259**
07:20	**Progression of Underlying Disease in Pediatric Severe Asthma** Giorgio Piacentini (Verona (VR), Italy)	**260**
07:35	**Panel Discussion - All faculty** All Speakers	**261**
07:45	**Assessing Disease Activity to Better Define On-Treatment Clinical Remission in Pediatric Severe Asthma** Sharon Dell (Vancouver, British Columbia, Canada)	**262**
08:05	**Question and Answer - All faculty** All Speakers	**263**

Purple — Session 46 — 07:15 - 08:15

Industry early morning symposium: Practical Advances in Front-Line Strategies for Optimizing Clinical Outcomes in MAC Lung Disease

Organised by Insmed

Chairs : Christoph Lange (Borstel, Germany)

07:15	**Chair's Introduction and Program Overview** Christoph Lange (Borstel, Germany)	**264**
07:30	**The Critical Role of Longitudinal Microbiologic Monitoring in MAC Lung Disease: Guiding Antibiotic Selection, Route and Intensity of Intensity Based on Systematic Microbiological Testing, Radiologic Findings, and Severity Score Indexes: The Potential Pitfalls of a "Watch and Wait" Approach in High-Risk Patients** Stefano Aliberti (Milano (MI), Italy)	**265**
07:45	**Translating ATS/IDSA/ERS/ESCMID Guideline-Directed Management Pathways and Clinical Trial Results in NTM-PD to the Front Lines of Patient Care: Focus on High-Risk Patients and Clinical Findings Predictive of Refractory MAC Pulmonary Disease** David E. Griffith (Denver, United States)	**266**
08:00	**Completing the Journey from Diagnosis to Cure in MAC Lung Disease: Practical Approaches to Ensure Drug Toleration, Minimize Side Effects, and Optimize Regimen Adherence with Inhaled Antimicrobial Formulations—Translating Trial-Based Results to Real World, Side Effect-Mitigating Patient Care** Francesco Blasi (Milan, Italy)	**267**

Amber 5+6 — Session 48 — 08:00 - 08:45

Industry Skills Lab Workshop: Thoracic Ultrasound – pleural and emergency care. Practical expertise on how to carry out this everyday practice.

Organised by FUJIFILM

Chairs : Maarten Criel (Leuven, Belgium)

08:00	**Hands On**	**269**

Amber 7+8 — Session 49 — 08:00 - 08:45

Industry Skills Lab Workshop: Clinical decisions for better Mask Management

Organised by Philips

Chairs : Teofilo Lee-Chiong (Denver, United States)

08:00	**Impact of Mask Choice on CPAP therapy outcomes** Pedro Rodrigues Genta (São Paulo (SP), Brazil)	**270**

08:20	**Clinical Cases** Mikel Azpiazu Blocona (Vitoria-Gasteiz, Spain)	**271**
08:35	**Hands on** Faycal Abdenbi (Goussainville, France)	**272**

Amber 5+6 Session 108 10:30 - 11:15

Industry Skills Lab Workshop: Improving NIV management with deep dive into high resolution data

Organised by ResMed

Chairs : Daniela Ehrsam-Tosi (Uster, Switzerland)

10:30	**The curves of AirView for ventilation and ResScan and how to interpret information** Claudia Crimi (Catania (CT), Italy)	**830**
10:48	**How to discover any issues and when to consult ResScan** OLIVIER SAGNARD (Saint Priest, France)	**831**
11:00	**Hands On**	**832**

Amber 7+8 Session 109 10:30 - 11:45

Industry Skills Lab Workshop: Improving workflow using automated ventilation technologies in the hospital and home

Organised by Philips

Chairs : Teofilo Lee-Chiong (Denver, United States)

10:30	**Hospital perspective: Improving workflow using automated ventilation technologies** Maxime Patout (Paris, France)	**833**
10:45	**Home perspective: Improving workflow using automated ventilation technologies** Swapna Mandal (London, United Kingdom)	**834**
11:00	**Hands On** Julie Yarascavitch (Encinitas, United States)	**835**

Gold Session 121 12:15 - 13:15

Industry Lunchtime Symposium: Improving respiratory care by listening to patients needs

Organised by Chiesi Farmaceutici S.p.A.

Chairs : Monica Kraft (New York, United States), Anne Greenough (London, United Kingdom)

12:15	**Welcome and Introduction** Mario Tozzi (, Italy)	**909**
12:25	**From BPD to COPD: early origins of chronic lung diseases** Anne Greenough (London, United Kingdom)	**910**
12:35	**Different approach in listening to people with respiratory diseases. The Human Factor Study** Nicola Scichilone (Palermo (PA), Italy)	**911**
12:55	**How small airway diseases are relevant for the patients? Asthma and COPD insights** Monica Kraft (New York, United States)	**912**
13:05	**Summary and close** Mario Tozzi (, Italy)	**913**

Silver Session 122 12:15 - 13:15

Industry Lunchtime Symposium: Cardiopulmonary risk: a new perspective in COPD management

Organised by AstraZeneca

Chairs : Mona Bafadhel (London, United Kingdom)

12:15	**Welcome, introduction and opening remarks** Mona Bafadhel (London, United Kingdom)	**914**

12:17	**COPD through a different lens: the implications of COPD-driven cardiopulmonary risk** Paola Rogliani (Roma (RM), Italy)	**915**
12:32	**Panel discussion | Expanding our view of COPD: looking at the lungs and beyond** Daiana Stolz (Freiburg, Germany)	**916**
12:42	**Focusing on proactive management: preventing exacerbations and reducing mortality with triple therapy** Mona Bafadhel (London, United Kingdom)	**917**
12:58	**Reflections from a cardiologist: the importance of mortality reduction** Chris Gale (Leeds, United Kingdom)	**918**
13:03	**Panel discussion | Visualising the future: driving a proactive and multidisciplinary approach** Daiana Stolz (Freiburg, Germany)	**919**
13:13	**Summary and close** Mona Bafadhel (London, United Kingdom)	**920**

Coral 4+5 Session 123 12:15 - 13:15

Industry Lunchtime Symposium: Clinical Remission: Reimagine the outcomes for Severe Asthma patients

Organised by GSK

Chairs : Ian Douglas Pavord (Oxford (Oxfordshire), United Kingdom)

12:15	**Welcome and introductions** Ian Douglas Pavord (Oxford (Oxfordshire), United Kingdom)	**921**
12:20	**Realising Clinical Remission: the true impact of delayed intervention** Tonya Winders (Hendersonville, United States), Ian Douglas Pavord (Oxford (Oxfordshire), United Kingdom)	**922**
12:25	**Challenging the consensus: implementing a predict and prevent approach to care** Ian Douglas Pavord (Oxford (Oxfordshire), United Kingdom), Tonya Winders (Hendersonville, United States), Peter Gibson (Newcastle, Australia)	**923**
12:40	**Panel discussion: Clinical Remission: how do we make it happen in practice? - All faculty** All Speakers	**924**
12:55	**Anti-IL-5 in an evolving treatment paradigm** Enrico Marco Heffler (Milano, Italy)	**925**
13:10	**Summary and close** Ian Douglas Pavord (Oxford (Oxfordshire), United Kingdom)	**926**

Coral 3 Session 124 12:15 - 13:15

Industry Lunchtime Symposium: The Importance of Pneumococcal Vaccination in Adult Patients with Pulmonary Disease

Organised by Pfizer

Chairs : Francesco Blasi (Milan, Italy)

12:15	**Welcome and Opening Remarks** Francesco Blasi (Milan, Italy)	**927**
12:20	**The Public Health Impact of Pneumococcal Vaccination in Adults with Pulmonary Diseases** Eva Polverino (Barcelona, Spain)	**928**
12:40	**Making a Strong Recommendation for Pneumococcal Vaccination** Gernot G.U. Rohde (Frankfurt am Main, Germany)	**929**
13:00	**Faculty Discussion and Q&A Session - All faculty** All Speakers	**930**
13:14	**Closing Remarks** Francesco Blasi (Milan, Italy)	**931**

Coral 1 — Session 125 — 12:15 - 13:15

Industry Lunchtime Symposium: From Theory to Practice: Improving COPD and Asthma Patients Care

Organised by Menarini group

Chairs : Fabiano Di Marco (Milan, Italy)

12:15	**Introduction** Fabiano Di Marco (Milan, Italy)	**932**
12:20	**The Gold Standard for starting treatment in COPD** Claus Vogelmeier (Marburg, Germany)	**933**
12:35	**Inhaled corticosteroids in COPD: who and when?** Dave Singh (Manchester, United Kingdom)	**934**
12:50	**Optimal Strategies in Asthma Management** Kenneth R. Chapman (Toronto (ON), Canada)	**935**
13:05	**Q&A - All faculty** All Speakers	**936**

Coral 2 — Session 126 — 12:15 - 13:15

Industry Lunchtime Symposium: The airway epithelium as an immune-functioning organ: A key driver in the pathogenesis of upper and lower respiratory disease

Organised by AstraZeneca

Chairs : Celeste Michala Porsbjerg (Copenhagen, Denmark)

12:15	**Welcome & Introduction** Celeste Michala Porsbjerg (Copenhagen, Denmark)	**937**
12:18	**The role of the airway epithelium as a critical immune-functioning organ** Celeste Michala Porsbjerg (Copenhagen, Denmark)	**938**
12:28	**Bronchial and nasal epithelium: are they the same?** Marco Caminati (Verona (VR), Italy)	**939**
12:38	**The epithelium: from pathogenesis to the clinic, and the use of biomarkers** Delbert Dorscheid (Vancouver (BC), Canada)	**940**
12:48	**The role of epithelial cytokines in asthma control and remission** Pascal Chanez (Marseille, France)	**941**
12:58	**Learnings from the epithelium: implications for patient care and future opportunities** Celeste Michala Porsbjerg (Copenhagen, Denmark)	**942**
13:14	**Symposium close** Celeste Michala Porsbjerg (Copenhagen, Denmark)	**943**

Purple — Session 127 — 12:15 - 13:15

Industry Lunchtime Symposium: Mastering Integrated Respiratory Care: An expert-led interactive case study series, with a focus on vaccination

Organised by GSK

Chairs : Claudio Micheletto (S.Giovanni Lupatoto, Italy)

12:15	**Welcome and introduction: importance of holistic approach to patient care** Claudio Micheletto (S.Giovanni Lupatoto, Italy)	**944**
12:25	**Case study 1: Your COPD patient** Barbara Yawn (Blaine, United States)	**945**
12:37	**Case study 2: Your Asthma patient** Tobias Welte (Hannover, Germany)	**946**

12:49	**Role of pulmonologists in the prevention of vaccine-preventable diseases** Rosario Menendez Villanueva (Valencia, Spain)	**947**
13:01	**Panel discussion and Q&A session - All faculty** All Speakers	**948**
13:11	**Summary and close** Claudio Micheletto (S.Giovanni Lupatoto, Italy)	**949**

Industry Virtual Channel — Session 149 — 12:45 - 13:45

Industry Virtual Symposium: Improving outcomes in hospitalised patients with COVID-19: Perspectives from across the disciplines

Organised by Gilead Sciences Europe Ltd

Chairs : Tobias Welte (Hannover, Germany)

12:45	**Welcome and introduction** Tobias Welte (Hannover, Germany)	**1349**
12:50	**Navigating the COVID-19 disease landscape** Eva Polverino (Barcelona, Spain)	**1350**
13:00	**How are data guiding the management of COVID-19?** Robert Gottlieb (Dallas, United States), Tobias Welte (Hannover, Germany)	**1351**
13:25	**Finding our way with individualised treatment - All faculty** All Speakers	**1352**
13:40	**Summary and meeting close** Tobias Welte (Hannover, Germany)	**1353**

Brown 3 — Session 150 — 12:45 - 13:45

Industry Lunchtime Symposium: Beyond Asthma Control in Severe Type 2 Asthma Management

Organised by Sanofi Regeneron

Chairs : Klaus F. Rabe (Kiel, Germany)

12:45	**Opening Remarks - All faculty** All Speakers	**1354**
12:50	**Understanding the Patient Phenotypes of Type 2 Asthma** Guy Brusselle (Ghent, Belgium)	**1355**
13:00	**Beyond Control With Dupilumab in Type 2 Asthma** Arnaud Bourdin (Montpellier Cedex 5, France)	**1356**
13:10	**Is Freedom From OCS-Dependence Possible? Review of the Evidence for Dupilumab** Klaus F. Rabe (Kiel, Germany)	**1357**
13:20	**Panel DiscussionReconsidering Long-Term Goals Beyond Control for Severe Asthma Management - All faculty** All Speakers	**1358**
13:30	**Audience Q&A - All faculty** All Speakers	**1359**
13:40	**Closing Remarks - All faculty** All Speakers	**1360**

Yellow 1+2+3 — Session 152 — 12:45 - 13:45

Industry Lunchtime Symposium: Can the immune system be primed to prevent recurrent respiratory tract infections in children?

Organised by OM Pharma SA

Chairs : Susanna Esposito (Milano (MI), Italy)

12:45	**Welcome & introduction** Susanna Esposito (Milano (MI), Italy)	**1365**
12:50	**Understanding the potential of bacterial lysates exposure for the prevention of childhood recurrent respiratory tract infections** Erika von Mutius (München, Germany)	**1366**
13:10	**Role of immunomodulation in children with recurrent respiratory tract infections and wheezing** Manuel Soto Martínez (San José, Costa Rica)	**1367**
13:30	**Summary & concluding remarks** Susanna Esposito (Milano (MI), Italy)	**1368**
13:35	**Q&A - All faculty** All Speakers	**1369**

Amber 5+6 Session 161 14:00 - 14:45

Industry Skills Lab Workshop: The role of Eucapnic Voluntary Hyperpnea challenges in the diagnosis and management of lower airway dysfunction in physically active patients and athletes.

The role of Eucapnic Voluntary Hyperpnea challenges in the diagnosis and management of lower airway dysfunction in physically active patients and athletes.

Organised by GANSHORN Medizin Electronic GmbH

Aims : to inform people, to present studies

Chairs : John Dickinson (Canterbury, United Kingdom), James H. Hull (London, United Kingdom)

14:00	**Introduction of the Eucapnic Voluntary Hyperpnea (EVH) Test: How is the test done and what are the indications. Presentation of current scientific findings.** James H. Hull (London, United Kingdom)	**1407**
14:20	**Comparison of spirometry and oscillometry as a tool for grading the bronchoconstriction** John Dickinson (Canterbury, United Kingdom)	**1408**
14:30	**A Live-demonstration of the EucapSys EVH device, use of oscillometry as a diagnostic tool and the possibility for hands-on usage.** James H. Hull (London, United Kingdom)	**1409**

Amber 7+8 Session 162 14:00 - 14:45

Industry Skills Lab Workshop: CPAP therapy and cardiovascular outcomes - what have we learned from real-life cohorts?

Organised by ResMed

Chairs : Sophia E. Schiza (Heraklion, Greece), Andreas Palm (Uppsala, Sweden)

14:00	**CPAP therapy and cardiovascular outcomes.** Frédéric Gagnadoux (Orvault, France)	**1410**
14:18	**Phenotype and patient centric approaches with CPAP therapy** Raphael Heinzer (Lausanne, Switzerland)	**1411**

Amber 5+6 Session 177 15:30 - 16:15

Industry Skills Lab Workshop: Make a Lung-Term Impact: Strengthen Your Procedure Skills in Interventional Pulmonology

Organised by OLYMPUS EUROPA SE & CO. KG

Chairs :

15:30	**EBUS-TBNA: Handling all procedure steps safely and efficiently** Antonio Bughalo	**1515**
15:30	**Peripheral bronchoscopy: Plan, access and identify peripheral lesions for successful sampling** Ales Rozman	**1516**
15:30	**Emphysema and air leak treatment with EVIS X1: Elevating the standard of therapeutic interventions**	**1517**

15:30	**Medical Thoracoscopy: A semi-rigid approach to see and treat diseases in the thoracic cavity** Mohammed Munavvar	**1518**

Amber 7+8 Session 178 15:30 - 16:15

Industry Skills Lab Workshop: Innovative clinical practice in home HFT. Titration, follow up and best practice

Organised by ResMed

Chairs : Patrick B. Murphy (Oxted (Surrey), United Kingdom)

15:30	**Evidence to practice** Claudia Crimi (Catania (CT), Italy)	**1519**
15:48	**Clinical practice through case studies** Line Storgaard (Aabybro, Denmark)	**1520**
16:06		**1521**
16:24		**1522**

Coral 3 Session 205 17:30 - 19:00

Industry evening symposium: A Journey Through the Spectrum of Pulmonary Fibrosis

Organised by Boehringer Ingelheim International GmbH

Chairs : Luca Richeldi (Roma, Italy)

17:30	**Welcome and introduction** Luca Richeldi (Roma, Italy)	**1969**
17:40	**Diagnosis and treatment of pulmonary fibrosis: where are we now?** Vincent Cottin (Lyon, France)	**1970**
17:55	**Interstitial lung abnormalities: a call to action?** Sara Tomassetti (Florence, Italy)	**1971**
18:10	**Progressive pulmonary fibrosis: the end of the spectrum?** Elisabetta Renzoni (London, United Kingdom)	**1972**
18:25	**Research in pulmonary fibrosis: where are we going?** Fernando J. Martinez (New York, United States)	**1973**
18:40	**Q&A - All faculty** All Speakers	**1974**

Brown 1+2 Session 206 17:30 - 19:00

Industry evening symposium: Advancing the Understanding of COPD: A Pathophysiological Perspective of Disease

Organised by Sanofi Regeneron

Chairs : MeiLan K. Han (Ann Arbor, United States)

17:30	**Opening Remarks - All faculty** All Speakers	**1975**
17:35	**COPD a Progressive Airway Disease Shaped by Exacerbations** Frank Sciurba (Pittsburgh, United States)	**1976**
17:50	**Characterization of COPD: Emerging Phenotypes and Endotypes** MeiLan K. Han (Ann Arbor, United States)	**1977**
18:05	**Panel DiscussionExtending Beyond the Pink Puffer and Blue Bloater: What Role Do Novel Phenotypes Play in the Clinic? - All faculty** All Speakers	**1978**
18:15	**Understanding Inflammatory Pathways Driving the Pathophysiology of COPD** Kenneth R. Chapman (Toronto (ON), Canada)	**1979**

18:30	**Panel DiscussionKnowledge to Practice: Type 2 Inflammation in COPD - All faculty** All Speakers	**1980**
18:40	**Closing Remarks - All faculty** All Speakers	**1981**
18:45	**Audience Q&A - All faculty** All Speakers	**1982**

Blue 1+2 Session 207 17:30 - 19:00

Industry evening symposium: Respiratory care: How to optimize patient outcomes with environmental responsibility

Organised by Orion Pharma

Chairs : Ashley Woodcock (Manchester (Greater Manchester), United Kingdom)

17:30	**Welcome and introduction: The virtuous cycle of patient partnerships, improved outcomes, and sustainable respiratory care** Ashley Woodcock (Manchester (Greater Manchester), United Kingdom)	**1983**
17:40	**Why climate change and environmental sustainability is everybody's problem** Rachel Huxley (Melbourne, Australia)	**1984**
17:50	**Q&A discussion** Ashley Woodcock (Manchester (Greater Manchester), United Kingdom)	**1985**
18:00	**How sustainable global pharmaceutical regulations are impacting supply chains: What this could mean for your patients** John Pritchard (Newtown Linford, United Kingdom)	**1986**
18:10	**Q&A discussion** Ashley Woodcock (Manchester (Greater Manchester), United Kingdom)	**1987**
18:15	**Combining sustainable interventions with optimal patient outcomes: Lessons learned from adult-onset asthma phenotypes** Hannu Kankaanranta (Seinäjoki, Finland)	**1988**
18:25	**The UK view on sustainable clinical decision-making in respiratory care** Alexander Wilkinson (Hertfordshire, United Kingdom)	**1989**
18:35	**The Nordic view on sustainable clinical decision-making in respiratory care** Christer Janson (Uppsala, Sweden)	**1990**
18:45	**Q&A discussion** Ashley Woodcock (Manchester (Greater Manchester), United Kingdom)	**1991**
18:55	**Summary and close** Ashley Woodcock (Manchester (Greater Manchester), United Kingdom)	**1992**

Yellow 1+2+3 Session 208 17:30 - 19:00

Industry evening symposium: Hidden. Progressive. Deadly. PAH in patients with unexplained dyspnoea

Organised by Janssen Pharmaceutica NV

Chairs : Sean Gaine (Dublin, Ireland), Silvia Ulrich (Zurich, Switzerland)

17:30	**Welcome and introductions** Sean Gaine (Dublin, Ireland), Silvia Ulrich (Zurich, Switzerland)	**1993**
17:35	**Unravelling unexplained dyspnoea** Athénaïs Boucly (Le Kremlin Bicètre, France)	**1994**
18:05	**Initial management and follow-up of PAH** Vasile Foris (Graz, Austria)	**1995**
18:25	**Individualising treatment in patients with PAH and comorbidities** David Kiely (Sheffield (South Yorkshire), United Kingdom)	**1996**

18:50	**Q&A and close** Sean Gaine (Dublin, Ireland), Silvia Ulrich (Zurich, Switzerland)	**1997**

Coral 1 — Session 209 — 17:30 - 19:00

Industry evening symposium: What do the GOLD 2023 updated recommendations mean for your patients living with COPD?

Organised by GSK

Chairs : Alberto Papi (Cona, Ferrara, Italy), Jadwiga Wedzicha (London, United Kingdom)

17:30	**Opening and introduction** Alberto Papi (Cona, Ferrara, Italy), Jadwiga Wedzicha (London, United Kingdom)	**1998**
17:35	**GOLD 2023 update: Implications for pharmacological COPD management** Alberto Papi (Cona, Ferrara, Italy)	**1999**
17:50	**Patient burden of living with COPD: Putting timely treatment optimisation into practice** Jadwiga Wedzicha (London, United Kingdom)	**2000**
18:00	**Evolutions in molecular pharmacology to maximise patient benefits** Claus Vogelmeier (Marburg, Germany)	**2001**
18:15	**Device selection principles in COPD management to optimise patient outcomes** David M. G. Halpin (Exeter, United Kingdom)	**2002**
18:25	**From theory to practice: Real-world evidence of triple therapy in COPD management** David M. G. Halpin (Exeter, United Kingdom)	**2003**
18:40	**Q&A - All faculty** All Speakers	**2004**

Coral 2 — Session 210 — 17:30 - 19:00

Industry evening symposium: Severe asthma treatment paradigm change: how much further can we go after reducing OCS treatment?

Organised by AstraZeneca

Chairs : Matteo Bonini (Rome, Italy)

17:30	**Chair's welcome** Matteo Bonini (Rome, Italy)	**2005**
17:35	**Managing severe asthma: treatment guidelines and clinical perspectives** Renaud Louis (Liège, Belgium)	**2006**
17:45	**RWE for severe asthma: background therapy patterns before and after biologic use** Cláudia Catarina Ferreira Chaves Loureiro (Coimbra, Portugal)	**2007**
18:05	**Interactive discussion: how should the reduction of background treatment be approached in patients with well-controlled asthma? - All faculty** All Speakers	**2008**
18:35	**Background treatment reduction: how far can we go in severe asthma?** Stephanie Korn (Mainz, Germany)	**2009**
18:50	**Q&A and close** All Speakers	**2010**

Purple — Session 211 — 17:30 - 19:00

Industry evening symposium: Dr Jekyll and Mr Hyde: the two faces of bronchiectasis

Organised by Insmed Netherlands BV

Chairs : Tobias Welte (Hannover, Germany)

17:30	**Introduction and patient case study overview** Tobias Welte (Hannover, Germany)	**2011**

17:45	**Delving deeper into this patient's pathophysiology** Anne O'Donnell (Washington, United States)	**2012**
17:55	**Management of infection: the key driver of bronchiectasis** Charles Haworth (Cambridge, United Kingdom)	**2013**
18:10	**Bronchiectasis is an inflammatory condition** Eva Polverino (Barcelona, Spain)	**2014**
18:20	**Management of inflammation: the key driver of bronchiectasis** Pieter Goeminne (Bornem, Belgium)	**2015**
18:40	**Panel discussion & summary - All faculty** All Speakers	**2016**

Amber 5+6 Session 212 17:30 - 19:00

Industry evening mini symposium: Opening our Minds and Airways in Severe Lung Disease

Organised by Grifols

Chairs : Francesco Blasi (Milan, Italy)

17:30	**Welcome and introduction** Francesco Blasi (Milan, Italy)	**2017**
17:35	**NCFBE- What to do when things get tricky?** Francesco Blasi (Milan, Italy)	**2018**
17:53	**Severe asthma and AATD– Cause or comorbiditiy?** Laura Pini (Brescia (BS), Italy)	**2019**
18:11	**Alpha-1 Antitrypsin deficiency- What's around the bend?** Jose Luis López-Campos Bodineau (Sevilla, Spain)	**2020**
18:29	**Pulmonary rehabilitation: Old questions- new answers!?** Andreas Rembert Koczulla (Schönau am Königssee, Germany)	**2021**
18:47	**Final discussion** Francesco Blasi (Milan, Italy)	**2022**
18:55	**ALTA-award ceremony** Marion Trautmann (Frankfurt am Main, Germany)	**2023**
18:58	**Summary and Close** Francesco Blasi (Milan, Italy)	**2024**

Amber 7+8 Session 213 17:30 - 19:00

Industry evening mini symposium: Timing is key: Unlocking the tools to identify progression and improve outcomes in cystic fibrosis

Organised by Vertex Pharmaceuticals (Europe) Ltd

Chairs : Stefano Aliberti (Milano (MI), Italy)

17:30	**Chair's welcome and introduction** Stefano Aliberti (Milano (MI), Italy)	**2025**
17:40	**From the beginning: Early manifestations of CF** Maria del Carmen Luna (Madrid, Spain)	**2026**
17:55	**Through the ages: Tracking lung disease** Mirjam Stahl (Berlin, Germany)	**2027**
18:15	**Futureproofing CF care in the pulmonology department: A view from Italy** Andrea Gramegna (Milano (MI), Italy)	**2028**
18:35	**Panel discussion and Q&A Looking to the future: The evolving needs of CF - All faculty** All Speakers	**2029**

18:55	**Summary and close** Stefano Aliberti (Milano (MI), Italy)	**2030**

Amber 7+8 — Session 216 — 08:00 - 08:45

Industry Skills Lab Workshop: East meets West - global best practices

Organised by Erbe Elektromedizin GmbH

Chairs : Pallav L. Shah (London, United Kingdom), Jürgen Hetzel (, Switzerland)

08:00	**Hands on** **2 x transbronchial cryobiopsy, 2 x central airway obstruction** Jürgen Hetzel (, Switzerland), Pallav L. Shah (London, United Kingdom)	**2032**

Amber 5+6 — Session 262 — 10:30 - 11:15

Industry Skills Lab Workshop: The indication of use of ASV therapy, from evidence to clinical practice

Organised by ResMed

Chairs : Anita Simonds (London, United Kingdom), Holger Woehrle (Ulm, Germany)

10:30	**What evidence-based medicine says about ASV therapy** Michael Arzt (Regensburg, Germany)	**2564**
10:48	**The indication of use of ASV therapy** Jean-Louis Pépin (Grenoble, France)	**2565**

Amber 7+8 — Session 263 — 10:30 - 11:15

Industry Skills Lab Workshop: A virtual based approach to improve CPAP Therapy

Organised by Philips

Chairs : Stefania Redolfi (Cagliari, Italy)

10:30	**Introduction to CPAP Therapy and Telemedicine** Stefania Redolfi (Cagliari, Italy)	**2566**
10:35	**Improving sleep apnea management using technological advancements** Mikel Azpiazu Blocona (Vitoria-Gasteiz, Spain)	**2567**
11:00	**Hands On** Faycal Abdenbi (Goussainville, France), Mikel Azpiazu Blocona (Vitoria-Gasteiz, Spain)	**2568**

Gold — Session 274 — 12:15 - 13:15

Industry Lunchtime Symposium: Transforming asthma care for a broad population of severe asthma patients

Organised by AstraZeneca

Chairs : Enrico Marco Heffler (Milano, Italy)

12:15	**The next era in severe asthma management** Enrico Marco Heffler (Milano, Italy)	**2639**
12:20	**The role of TSLP in driving severe asthma** Celeste Michala Porsbjerg (Copenhagen, Denmark)	**2640**
12:35	**Targeting TSLP in severe asthma** Michael E. Wechsler (Denver, United States)	**2641**
12:50	**Clinical experience with targeting TSLP - All faculty** All Speakers	**2642**
13:05	**Audience Q&A and close** Enrico Marco Heffler (Milano, Italy)	**2643**

Silver — Session 275 — 12:15 - 13:15

Industry Lunchtime Symposium: Targeting COPD With Type 2 Inflammation: Emerging Biologic Landscape

Organised by Sanofi Regeneron

Chairs : Klaus F. Rabe (Kiel, Germany)

12:15	**Welcome and Objectives** Klaus F. Rabe (Kiel, Germany)	**2644**
12:20	**Contextualizing Clinical Consequences of COPD Through Disease Pathology** Klaus F. Rabe (Kiel, Germany)	**2645**
12:30	**Heterogeneity of Inflammatory Pathways in COPD** Stephanie Christenson (San Francisco, United States)	**2646**
12:40	**The Evolving Clinical Landscape in COPD and Implications for Disease Management** Dave Singh (Manchester, United Kingdom)	**2647**
13:00	**Panel Discussion and Q&A - All faculty** All Speakers	**2648**

Coral 4+5 Session 276 12:15 - 13:15

Industry Lunchtime Symposium: The next phase in proactive asthma management? Steps towards patient-focused personalised care

Organised by GSK

Chairs : Anurita Majumdar (, Singapore)

12:15	**Introduction and welcome** Anurita Majumdar (, Singapore)	**2649**
12:20	**Unmet needs in asthma management: APPaRENT calls for progress** Kenneth R. Chapman (Toronto (ON), Canada)	**2650**
12:35	**Clinical views on asthma control: Patient traits that affect treatment fates** Gabriel Garcia (Ciudad Autónoma Buenos Aires, Argentina)	**2651**
12:50	**Exploring patient factors: Personalising asthma care through shared decision-making** Kim Lavoie (Montréal (QC), Canada)	**2652**
13:00	**Q&A - All faculty** All Speakers	**2653**
13:10	**Summay and close** Anurita Majumdar (, Singapore)	**2654**

Coral 3 Session 277 12:15 - 13:15

Industry Lunchtime Symposium: Pulmonary Arterial Hypertension in the Patient with Comorbidities

Organised by MSD

Chairs : Stephan Rosenkranz (Köln, Germany)

12:15	**Outcomes in PAH patients with comorbidities** Marius M. Hoeper (Hannover, Germany)	**2655**
12:25	**Characteristics and treatment of the PAH patient with comorbidities- US perspective** Mardi Gomberg-Maitland (Chicago, United States)	**2656**
12:35	**Relevance of comorbidities on initial combination therapy in pulmonary arterial hypertension** Roberto Badagliacca (Rome, Italy)	**2657**
12:45	**Challenges faced in clinical decision making when PAH patients present with cardiopulmonary comorbidities** Jean-Luc Vachiery (Bruxelles, Belgium)	**2658**
12:55	**ESC/ERS perspective on the treatment algorithm of the PAH patient with comorbidities** Stephan Rosenkranz (Köln, Germany)	**2659**
13:00	**Round Table Q&A/discussion** Stephan Rosenkranz (Köln, Germany)	**2660**

Coral 1 — Session 278 — 12:15 - 13:15

Industry Lunchtime Symposium: IL-5 inhibition: An airways disease-modifying strategy?

Organised by GSK

Chairs : Giorgio Walter Canonica (Milano (MI), Italy), Hitasha Rupani (Southampton, United Kingdom)

12:15	**Welcome** Giorgio Walter Canonica (Milano (MI), Italy), Hitasha Rupani (Southampton, United Kingdom)	**2661**
12:20	**IL-5 and eosinophil interactions in asthma disease progression** Kathleen Buchheit (Boston, United States)	**2662**
12:30	**The impact of IL-5 on structural airway remodelling in asthma** Konstantinos Porpodis (Thessaloniki, Greece)	**2663**
12:40	**The impact of IL-5 on mucus plugging in asthma** Jens Vogel-Claussen (Hannover, Germany)	**2664**
12:50	**The impact of IL-5 on lung function in asthma** Salman Siddiqui (London, United Kingdom)	**2665**
13:00	**Q&A and concluding comments** Giorgio Walter Canonica (Milano (MI), Italy), Hitasha Rupani (Southampton, United Kingdom)	**2666**

Coral 2 — Session 279 — 12:15 - 13:15

Industry Lunchtime Symposium: Early-stage NSCLC: ensuring effective, personalised treatment through accurate diagnoses

Organised by AstraZeneca

Chairs : Kostas Syrigos (Athens, Greece)

12:15	**Welcome and introduction** Kostas Syrigos (Athens, Greece)	**2667**
12:20	**Case study 1: Maximising early detection of lung cancer: enhancing screening approaches** Neal Navani (London, United Kingdom)	**2668**
12:30	**Case study 2: Optimising diagnostic workup of early-stage NSCLC** Stefan Barath (Staffanstorp, Sweden)	**2669**
12:40	**Case study 3: The importance and impact of accurate clinical staging of lung cancer** Lina Zuccatosta (Torrette (AN), Italy)	**2670**
12:50	**Panel discussion and Q&A - All faculty** All Speakers	**2671**

Purple — Session 280 — 12:15 - 13:15

Industry Lunchtime Symposium: The future is now: Envisioning the implementation of digital healthcare into the clinical management of asthma and COPD

Organised by Teva

Chairs : Stephen Holmes (Somerset, United Kingdom)

12:15	**Welcome address, housekeeping, opening with interactivity** Stephen Holmes (Somerset, United Kingdom)	**2672**
12:20	**Digital technologies and health economics – what is there to gain?** Job F.M. van Boven (Groningen, Netherlands)	**2673**
12:30	**Discussion - All faculty** All Speakers	**2674**
12:35	**Unpacking the theory – what does the data tell us?** Nawar Diar Bakerly (Salford (Lancashire), United Kingdom)	**2675**
12:45	**Discussion - All faculty** All Speakers	**2676**

12:50	**Clinical experience – what have we seen so far?** Njira Lugogo (Durham, United States), Giselle Mosnaim (Chicago, United States)	**2677**
13:00	**Audience Q&A - All faculty** All Speakers	**2678**
13:10	**Closing address, closing interactivity** Stephen Holmes (Somerset, United Kingdom)	**2679**

Brown 3 Session 302 12:45 - 13:45

Industry Lunchtime Symposium: Anti-Inflammatory Reliever (AIR): it's time to take action

Organised by AstraZeneca

Chairs : Christine Jenkins (McMahons Point (NSW), Australia)

12:45	**Welcome and introduction** Christine Jenkins (McMahons Point (NSW), Australia)	**3073**
12:55	**Global strategy for the prevention and management of asthma** Eric D. Bateman (Cape Town, South Africa)	**3074**
13:05	**Keynote session: ICS-formoterol Anti-Inflammatory Reliever (AIR)** Richard Beasley (Wellington, New Zealand)	**3075**
13:15	**Improving asthma care through implementation of the SENTINEL program: findings from the pilot site** Michael Crooks (East Riding of Yorkshire, United Kingdom)	**3076**
13:25	**A call to action: time to change the SABA culture** Alberto Papi (Cona, Ferrara, Italy)	**3077**
13:35	**Q&A session and close - All faculty** All Speakers	**3078**

Brown 1+2 Session 303 12:45 - 13:45

Industry Lunchtime Symposium: Adapting to the new normal: COVID-19 strategies to help transform patient care

Organised by Pfizer

Chairs : Francesco Blasi (Milan, Italy)

12:45	**Welcome and introduction** Francesco Blasi (Milan, Italy)	**3079**
12:50	**The risk is still there: The ongoing burden of COVID-19** Francesco Blasi (Milan, Italy)	**3080**
13:00	**Helping to protect against the risk: The role of adapted COVID-19 vaccines** Gili Regev-Yochay (Boston, United States)	**3081**
13:15	**Strategies for populations at increased risk: The role of COVID-19 treatment** Rosario Menendez Villanueva (Valencia, Spain)	**3082**
13:30	**Panel Q&A session: COVID-19: What role can respiratory experts play? - All faculty** All Speakers	**3083**
13:40	**Closing remarks** Francesco Blasi (Milan, Italy)	**3084**

Blue 1+2 Session 304 12:45 - 13:45

Industry Lunchtime Symposium: Pulmonary Hypertension associated with Interstitial Lung Disease: Are we ready for the challenge?

Organised by Ferrer

Chairs : David Kiely (Sheffield (South Yorkshire), United Kingdom)

12:45	**Introduction** David Kiely (Sheffield (South Yorkshire), United Kingdom)	**3085**
12:50	**When the ILD patient gets more symptomatic - consider PH!** Michael Kreuter (Heidelberg, Germany)	**3086**
13:10	**PH-ILD treatment: why, who and how?** David Montani (Le Kremlin-Bicêtre, France)	**3087**
13:30	**Discussion - All faculty** All Speakers	**3088**

Yellow 1+2+3 — Session 305 — 12:45 - 13:45

Industry Lunchtime Symposium: Rethinking MAC lung disease treatment and care

Organised by Insmed

Chairs : Michael Loebinger (London, United Kingdom)

12:45	**Meet our expert faculty** Michael Loebinger (London, United Kingdom)	**3089**
12:50	**Why should we test our patients for MAC lung disease? - All faculty** All Speakers	**3090**
13:05	**Why you shouldn't wait longer than six months for culture conversion - All faculty** All Speakers	**3091**
13:20	**How should you treat your patients with limited treatment options? - All faculty** All Speakers	**3092**
13:35	**Looking to the future - All faculty** All Speakers	**3093**

Amber 5+6 — Session 316 — 14:00 - 14:45

Industry Skills Lab Workshop: Peripheral lung biopsy – how radial EBUS and navigation help obtain a diagnosis

Organised by FUJIFILM

Chairs : Lucio Michieletto (venice, Italy), Filippo Lanfranchi (Venice, Italy)

14:00	**Peripheral lung biopsy – how radial EBUS and navigation help obtain a diagnosis** Laura Mancino (Spinea (VE), Italy), Giuseppe Paciocco (Monza (MI), Italy)	**3138**

Amber 7+8 — Session 317 — 14:00 - 14:45

Industry Skills Lab Workshop: Mucus Management with Simeox therapy in non-CF Bronchiectasis: from hospital to home

Organised by PhysioAssist

Chairs : Wojciech Piotrowski (Łódź, Poland), Stefano Aliberti (Milano (MI), Italy)

14:05	**Simeox therapy in non-CF Bronchiectasis: Indications and Recommendations** Joanna Miłkowska-Dymanowska (Łódź, Poland)	**3139**
14:15	**Non-CF Bronchiectasis patients treated with Simeox therapy at Hospital and Home: Results of Multicentric Study** Aleksander Kania (Kraków, Poland)	**3140**
14:25	**Importance of Mucus Clearance in Non-CF Bronchiectasis: Clinical Cases** Vittoria Comellini (Bologna (BO), Italy)	**3141**
14:35	**Simeox Hands-on / Live Demonstration**	**3142**

Amber 5+6 Session 332 15:30 - 16:15

Industry Skills Lab Workshop: Healthcare Freudenfreude: How Data from Clinically-Proven Digital Health Tools Put Patients, Providers, and Pharma on the Same Team

Organised by Propeller Health

Aims : A harmonious, resilient healthcare ecosystem relies on a few critical pieces to function: the patient must be central, benefits must be mutual, and data must be collected and shared with care and intention. Digital health tools, specifically those that are connected to pharmaceutical products, are uniquely positioned to be a force to make this ecosystem work as intended.

Critical to such a symbiotic relationship is reliable, secure data flow. When a digital health tool collects patient data – demographic and relevant social or cultural information, behavior patterns, adherence trends, digital biomarkers, and quality of life indicators – and then aggregates, analyzes, and shares insights relevant to healthcare professionals (HCPs), insurers, and other stakeholders, the entire ecosystem is empowered to make informed decisions that maintain patient-centricity.

Propeller's platform has mastered this delicate balance, drawing from 10+ years of learnings in research and commercial settings:

A connected drug delivery experience (sensors or devices and patient engagement software) passively captures patient behavior data and provides actionable insights
With access to patient behavior and health data, HCPs can solve for care gaps, make more informed treatment decisions including readiness for step-up-therapy, intervene before exacerbations send their patients to the ER, and improve quality metrics
Pharmaceutical companies generate data for real-world evidence, strengthen their value to all patients, HCPs, and insurers), and create market differentiation
And all the while, patients are surrounded with the insights, motivation, and support they need to create healthy habits, better understand their condition and treatment options, and improve their quality of life

Designing for the ecosystem – with patients at the center – enables Propeller's digital therapeutic platform to create quantifiable impact, evidenced by patient adoption, engagement, and clinical outcomes, while providing healthcare professionals and pharmaceutical companies with advanced insights and levers to improve health outcomes.

Chairs : Yury Rozenman (Moraga, United States)

15:30	**Real evidence, real impact: Boosting commercial value with digital programs that accelerate patient and physician outcomes** Yury Rozenman (Moraga, United States), Susa Monacelli (San Diego, United States), James Hadwin (Southport (Merseyside), United Kingdom)	**3244**

Amber 7+8 Session 333 15:30 - 16:15

Industry Skills Lab Workshop: How to implement patient feedback in CPAP therapy

Organised by ResMed

Chairs : Tarja Saaresranta (Littoinen, Finland), Kimberly L. Sterling (Indianapolis, United States)

15:30	**The importance of patient feedback and Patient-Reported Outcome Measures in patient care management** Erna Sif Arnardóttir (Reykjavik, Iceland)	**3245**
15:48	**Early experiences of Care Check-In as a patient feedback tool in CPAP therapy** Sandrine Launois Rollinat (Paris, France)	**3246**

Gold Session 360 17:30 - 19:00

Industry evening symposium: The Active Airway and the Cough Reflex in Chronic Cough

Organised by MSD

Chairs : Federico Lavorini (Firenze (FI), Italy)

17:30	**Opening and Introduction to Chronic Cough** Federico Lavorini (Firenze (FI), Italy)	**3681**
17:40	**How the Airway Acts to Protect Itself: Cough is Fundamental** Jacky Smith (Manchester (Greater Manchester), United Kingdom)	**3682**
17:55	**Extracellular ATP as an Alarmin: Mechanisms and Actions** Pablo Pelegrin (Murcia, Spain)	**3683**
18:05	**Chronic Cough and Refractory Chronic Cough: Extracellular-ATP Cough Signal** Lorcan McGarvey (Belfast, United Kingdom)	**3684**

18:20	**Q&A and panel discussion** Federico Lavorini (Firenze (FI), Italy)	**3685**

Coral 3 Session 361 17:30 - 19:00

Industry evening symposium: Understanding and managing RSV's impact on older adults with respiratory conditions – clinician and patient perspectives

Organised by GSK

Chairs : Alberto Papi (Cona, Ferrara, Italy)

17:30	**Welcome and introduction** Alberto Papi (Cona, Ferrara, Italy)	**3686**
17:35	**"Who's at risk?"** Janwillem W. H. Kocks (Groningen, Netherlands)	**3687**
17:50	**Patient perspectives** Ruth Tal-Singer (Media, United States)	**3688**
18:05	**Prevention of RSV-LTRD** Alberto Papi (Cona, Ferrara, Italy)	**3689**
18:35	**Q&A panel discussion - All faculty** All Speakers	**3690**

Yellow 1+2+3 Session 362 17:30 - 19:00

Industry evening symposium: COPD and quality of life, beyond symptoms and exacerbations

Organised by Menarini Group

Chairs : Marc Miravitlles (Barcelona (CT), Spain)

17:30	**Chairman's introduction** Marc Miravitlles (Barcelona (CT), Spain)	**3691**
17:40	**LABA/LAMA combination: not just a simple bronchodilation** Claudio Micheletto (S.Giovanni Lupatoto, Italy)	**3692**
18:05	**Is it time for a more holistic approach in COPD?** Jutta Beier (Wiesbaden, Germany)	**3693**
18:30	**Chairman's take home messages and conclusions** Marc Miravitlles (Barcelona (CT), Spain)	**3694**
18:50	**Q&A** Marc Miravitlles (Barcelona (CT), Spain), Jutta Beier (Wiesbaden, Germany), Claudio Micheletto (S.Giovanni Lupatoto, Italy)	**3695**

Coral 1 Session 363 17:30 - 19:00

Industry evening symposium: Treatable Traits: Realising personalised care in airways diseases

Organised by GSK

Chairs : Vanessa M. McDonald (Newcastle (NSW), Australia)

17:30	**Welcome and introduction** Vanessa M. McDonald (Newcastle (NSW), Australia)	**3696**
17:35	**Winds of change in airways diseases** Fernando J. Martinez (New York, United States)	**3697**
17:55	**Treatable Traits in practice: Exploring the role of the multidisciplinary team** Vanessa M. McDonald (Newcastle (NSW), Australia), Job F.M. van Boven (Groningen, Netherlands), Fernando J. Martinez (New York, United States)	**3698**
18:25	**Treatable Traits in action: What does success look like from a patient's perspective?** Samantha Walker (London, United Kingdom)	**3699**

18:45	**Q&A - All faculty** All Speakers	**3700**
18:55	**Summary and close** Vanessa M. McDonald (Newcastle (NSW), Australia)	**3701**

Coral 2 — Session 364 — 17:30 - 19:00

Industry evening symposium: Climate change, infection and the airways in a post-pandemic world

Organised by Haleon

Chairs : Christopher Carlsten (Vancouver (BC), Canada)

17:30	**Toxic partnership of air pollution and climate change on respiratory health** Kian Fan Chung (London, United Kingdom)	**3702**
17:50	**Climate Change: Changing Respiratory Health** Sundeep Santosh Salvi (Pune (Maharashtra), India)	**3703**
18:10	**Respiratory infections in post pandemic era** Gary Wong (Shatin, Hong Kong)	**3704**
18:30	**Key lessons, outstanding questions, and future directions regarding climate change, infections and respiratory health in a post-pandemic world** Christopher Carlsten (Vancouver (BC), Canada)	**3705**
18:50	**Q&A - All faculty** All Speakers	**3706**

Purple — Session 365 — 17:30 - 19:00

Industry evening symposium: Evolving Patient Care: From Symptom Control to On-Treatment Clinical Remission

Organised by Sanofi Regeneron

Chairs : Ian Douglas Pavord (Oxford (Oxfordshire), United Kingdom)

17:30	**Welcome** Ian Douglas Pavord (Oxford (Oxfordshire), United Kingdom)	**3707**
17:35	**Presentation of Patient Cases** Vibeke Backer (Copenhagen, Denmark)	**3708**
17:40	**Advancing Asthma Management Beyond Symptom Control** Ian Douglas Pavord (Oxford (Oxfordshire), United Kingdom)	**3709**
17:55	**Panel Discussion - All faculty** All Speakers	**3710**
18:05	**How Achievable is Clinical Remission on Biologic Therapy?** Francesca Antonietta Puggioni (Rozzano (MI), Italy)	**3711**
18:25	**Panel Discussion and Mini-debate - All faculty** All Speakers	**3712**
18:40	**Type 2 Biomarkers as Predictive and Prognostic Tools to Guide Management** Vibeke Backer (Copenhagen, Denmark)	**3713**
18:48	**Panel Discussion and Q&A - All faculty** All Speakers	**3714**

Amber 5+6 — Session 366 — 17:30 - 19:00

Industry evening mini symposium: Shaping the future in rare lung diseases: From imaging to patient management

Organised by CSL Behring GmbH

Chairs : Marlies S. Wijsenbeek (Rotterdam, Netherlands), Simon Walsh (London, United Kingdom)

17:30	**Welcome and introduction to the faculty and symposium topics** Marlies S. Wijsenbeek (Rotterdam, Netherlands), Simon Walsh (London, United Kingdom)	**3715**
17:32	**Identifying unmet needs in rare lung diseases** Luca Richeldi (Roma, Italy)	**3716**
17:40	**Challenges and progress in predicting disease trajectories. Part I: AATD** Noel Gerard McElvaney (Dublin, Ireland)	**3717**
17:50	**Challenges and progress in predicting disease trajectories. Part II: IPF** Marlies S. Wijsenbeek (Rotterdam, Netherlands)	**3718**
18:00	**Camouflage: How asthma obscures the diagnosis of AATD** Filipa Costa (Coimbra, Portugal)	**3719**
18:10	**Discussion Part I** Marlies S. Wijsenbeek (Rotterdam, Netherlands), Simon Walsh (London, United Kingdom)	**3720**
18:20	**Imaging challenges in lung fibrosis** Simon Walsh (London, United Kingdom)	**3721**
18:30	**New tools to advance imaging in rare lung diseases** Elizabeth Estes (Saugatuck, United States)	**3722**
18:40	**Implications for management of rare lung diseases** Luca Richeldi (Roma, Italy)	**3723**
18:50	**Discussion Part II** Marlies S. Wijsenbeek (Rotterdam, Netherlands), Simon Walsh (London, United Kingdom)	**3724**
18:59	**Summary and closing remarks** Marlies S. Wijsenbeek (Rotterdam, Netherlands), Simon Walsh (London, United Kingdom)	**3725**

Amber 7+8 Session 367 17:30 - 19:00

Industry evening mini symposium: Unexplained ILDs and Rare Disease ASMD: Differential Diagnosis to Treatment

Organised by Sanofi

Chairs : Vincent Cottin (Lyon, France)

17:30	**Welcome and introduction** Vincent Cottin (Lyon, France)	**3726**
17:35	**Challenges and opportunities in recognising and managing patients with ILD** Vincent Cottin (Lyon, France)	**3727**
17:50	**ILDs: diagnostic pathways and differential diagnosis** Wim A. Wuyts (Leuven, Belgium)	**3728**
18:05	**Clinical evidence for the management of the rare disease ASMD** Maurizio Scarpa (Udine, Italy)	**3729**
18:20	**Pulmonologists perspective: management of pulmonary manifestations of the rare disease ASMD** Francesco Bonella (Düsseldorf, Germany)	**3730**
18:35	**Panel discussion, Q&A - All faculty** All Speakers	**3731**

Coral 1 — Session 370 — 07:15 - 08:15

Industry early morning symposium: Pertussis Exposed: the challenges and conundrums of pertussis in adults

Organised by Sanofi

Chairs : Alberto Papi (Cona, Ferrara, Italy)

07:15	**Welcome and introduction** Alberto Papi (Cona, Ferrara, Italy)	**3732**
07:20	**Panel DiscussionPertussis in adults: should we be concerned? - All faculty** All Speakers	**3733**
07:30	**Panel DiscussionThe coughing adult: is pertussis a consideration? - All faculty** All Speakers	**3734**
07:40	**Panel DiscussionEpidemiological data on pertussis in adults: a chicken and egg conundrum? - All faculty** All Speakers	**3735**
07:50	**Panel DiscussionAdult immunisation for pertussis control: what are the challenges? - All faculty** All Speakers	**3736**
08:00	**Audience Q&A - All faculty** All Speakers	**3737**

Coral 2 — Session 371 — 07:15 - 08:15

Industry early morning symposium: Quelling the Vicious Vortex: Targeting Neutrophil Serine Proteases in Non-Cystic Fibrosis Bronchiectasis

Organised by Insmed

Chairs : Doreen Addrizzo-Harris (New York, United States)

07:15	**Welcome and Introductions** Doreen Addrizzo-Harris (New York, United States)	**3738**
07:20	**Taking Stock of the Burden of NCFBE** Doreen Addrizzo-Harris (New York, United States)	**3739**
07:30	**On the Path to Early NCFBE Diagnosis: Identifying Risk Factors and Employing Current Guidelines** Pieter Goeminne (Bornem, Belgium)	**3740**
07:45	**Improving Upon the Current NCFBE Standard of Care: The Role of Emerging Therapies Aimed at Inhibiting NSP Activation** Stefano Aliberti (Milano (MI), Italy)	**3741**
08:05	**Panel Discussion, Audience Q&A, and Closing Remarks - All faculty** All Speakers	**3742**

Amber 7+8 — Session 373 — 08:00 - 08:45

Industry Skills Lab Workshop: HUMIDIFIED HIGH FLOW - CLINICAL INNOVATIONS

Organised by FISHER&PAYKEL SAS - FRANCE

Chairs : Stefano Nava (Bologna (BO), Italy)

08:00	**Effect of Asymmetric Cannula on PaCO2 for stable COPD Patients** Lara Pisani (Bologna (BO), Italy)	**3744**
08:15	**Danish Respiratory Guidelines for long-term Humidified High Flow Treatment** Ulla Møller Weinreich (Ålborg, Denmark)	**5443**
08:35	**The role of HHF on secretion management** Claudia Crimi (Catania (CT), Italy)	

Amber 5+6 Session 418 10:30 - 11:15

Industry Skills Lab Workshop: Interpretation of the Cardiopulmonary Exercise Test

Organised by Vyaire Medical GmbH

Chairs : Herman Groepenhoff (Lijnden, Netherlands)

10:30	**Interpretation of the Cardiopulmonary Exercise Test** Piergiuseppe Agostoni (Milan, Italy)	**4286**

Amber 7+8 Session 419 10:30 - 11:15

Industry Skills Lab Workshop: Peripheral lung biopsy – how radial EBUS and navigation help obtain a diagnosis"

Organised by FUJIFILM

Chairs : Andrea Claudio Comel (Peschiera del Garda (VR), Italy)

10:30	**Peripheral lung biopsy – how radial EBUS and navigation help obtain a diagnosis** Filippo Lanfranchi (Venice, Italy), Laura Mancino (Spinea (VE), Italy), Giuseppe Paciocco (Monza (MI), Italy)	**4287**

Coral 3 Session 431 12:15 - 13:15

Industry Lunchtime Symposium: Prioritising patient outcomes and reducing environmental burden: how both are achievable in respiratory care

Organised by AstraZeneca

Chairs : John R Hurst (London, United Kingdom), Helen Reddel (Sydney, Australia)

12:15	**Co-chairs' welcome and introduction** John R Hurst (London, United Kingdom)	**4363**
12:20	**Facing the challenges for healthcare in the 21st century: health equity, system resilience and the environment** Christine Jenkins (McMahons Point (NSW), Australia)	**4364**
12:35	**Paving the way for environmentally sustainable respiratory care** Alberto Papi (Cona, Ferrara, Italy)	**4365**
12:50	**Ensuring access to essential medicines: why partnership with governments and authorities is the only way to achieve patient-centric environmentally sustainable respiratory care** Omar S. Usmani (London, United Kingdom)	**4366**
13:05	**Audience Q&A / summary and close - All faculty** All Speakers	**4367**

Coral 1 Session 432 12:15 - 13:15

Industry Lunchtime Symposium: Making the right choice for your moderate asthma patients: What does the recent evidence say?

Organised by GSK

Chairs : Giorgio Walter Canonica (Milano (MI), Italy)

12:15	**Introduction and welcome** Giorgio Walter Canonica (Milano (MI), Italy)	**4368**
12:20	**First ICS/LABA regimen for your moderate asthma patients – is it an obvious choice?** Dave Singh (Manchester, United Kingdom)	**4369**
12:35	**What predicts exacerbation risk in real life? FF/VI vs other ICS-containing regimens** Pierluigi L. Paggiaro (Pisa (PI), Italy)	**4370**
12:50	**Putting evidence into practice – a discussion and summary** Giorgio Walter Canonica (Milano (MI), Italy)	**4371**
13:00	**Q&A - All faculty** All Speakers	**4372**

Coral 2 — Session 433 — 12:15 - 13:15

Industry Lunchtime Symposium: Pneumococcal vaccination: Does one size fit all?

Organised by MSD

Chairs : Susanna Esposito (Milano (MI), Italy)

12:15	**Welcome and introduction** Susanna Esposito (Milano (MI), Italy)	**4373**
12:20	**Pneumococcal disease in children in the post-pandemic era** Susanna Esposito (Milano (MI), Italy)	**4374**
12:35	**Unique challenges of pneumococcal disease prevention in adults** Francesco Blasi (Milan, Italy)	**4375**
12:50	**Understanding population-specific needs in pneumococcal vaccination** Mark van der Linden (Aachen, Germany)	**4376**
13:05	**Discussion and closing remarks - All faculty** All Speakers	**4377**

Brown 3 — Session 456 — 12:45 - 13:45

Industry Lunchtime Symposium: What´s new on ILD diagnosis. Are we ready for incorporating biology in the MDT discussion ?

Organised by Veracyte, Inc.

Chairs : Athol Wells (London, United Kingdom)

13:30	**Debate - All faculty** All Speakers	**4770**

Brown 1+2 — Session 457 — 12:45 - 13:45

Industry Lunchtime Symposium: Pandemic preparedness and the potential role of mRNA technology

Organised by Pfizer

12:45	**Welcome and Introductions** Florian Krammer (New York, United States)	**4771**
12:48	**Recent history and future of viral pandemics** Gavin Smith (Singapore, Singapore)	**4772**
13:03	**Lessons learned: COVID-19 case study** Eva Polverino (Barcelona, Spain)	**4773**
13:18	**mRNA technology and preparing for the future** Nicholas Kitchin (Hurley, United Kingdom)	**4774**
13:33	**Q&A session - All faculty** All Speakers	**4775**
13:43	**Conclusions and close** Florian Krammer (New York, United States)	**4776**

Yellow 1+2+3 — Session 459 — 12:45 - 13:45

Industry Lunchtime Symposium: Breathing new life into acute respiratory care: proactively improving long-term outcomes

Organised by AstraZeneca

Chairs : David Price (Singapore, Singapore)

12:45	**Welcome and introduction** David Price (Singapore, Singapore)	**4780**
12:55	**Panel discussion: How can we address the burden of unplanned hospitalisations?** Mona Al-Ahmad (Kuwait, Kuwait)	**4781**

13:10	**Panel discussion: How can we integrate learnings from cardiology to improve hospital discharge and prevent readmission?** Mohit Bhutani (Edmonton (AB), Canada)	**4782**
13:25	**Panel discussion: Beyond acute care: how can we optimise transition of care?** David Price (Singapore, Singapore)	**4783**
13:40	**Summary and close** David Price (Singapore, Singapore)	**4784**

Amber 7+8 Session 467 14:00 - 14:45

Industry Skills Lab Workshop: East meets West - global best practices

Organised by Erbe Elektromedizin GmbH

Chairs : Jürgen Hetzel (Tuebingen, Germany), António Alexandre Pinto Bugalho De Almeida (Lisboa, Portugal)

14:00	**Hands on** **2 x transbronchial cryobiopsy, 2 x central airway obstruction** Jürgen Hetzel (Tuebingen, Germany), António Alexandre Pinto Bugalho De Almeida (Lisboa, Portugal)	**4825**

Amber 7+8 Session 482 15:30 - 16:15

Industry Skills Lab Workshop: HUMIDIFIED HIGH FLOW (HHF) - EXPANDING KNOWLEDGE

Organised by FISHER&PAYKEL SAS - FRANCE

Chairs : Nicholas Hart (London, United Kingdom), Capucine Morelot-Panzini (Paris, France)

15:30	**HHF improves breathing efficiency in COPD patient recovering from exacerbation.** Lise Piquilloud (Lausanne, Switzerland)	**4924**
15:45	**Benefit of long-term therapy with HHF in Bronchiectasis patients at home.** Giuseppe Fiorentino (Napoli (NA), Italy)	**5445**
16:00	**Go with the flow - Recent developments?** Jens Bräunlich (Leipzig, Germany)	**5446**

Red 1+2 Session 524 09:00 - 10:15

Industry Wednesday Special Session: Healthy lungs means healthy people? – we must do more!

Organised by AstraZeneca

Aims : to explore the concept of good lung health and discuss the importance of advancing this in clinical practice: to highlight the importance of identifying cardiopulmonary risk in patients with COPD and discuss ways to holistically manage these patients; to discuss opportunities to demonstrate improvements in the future of respiratory care.

Chairs : Alberto Papi (Cambridge (Cambridgeshire), United Kingdom), Christine Jenkins (McMahons Point (NSW), Australia)

09:00	**Co-Chairs' welcome** Alberto Papi (Cona, Ferrara, Italy), Christine Jenkins (McMahons Point (NSW), Australia)	**5391**
09:05	**Defining trajectories of good lung health – how do we get everyone on track?** James Allinson (London, United Kingdom)	**5392**
09:20	**Panel discussion and Q&A | Towards good lung health – what do we do now?** Alberto Papi (Cona, Ferrara, Italy), Christine Jenkins (McMahons Point (NSW), Australia), James Allinson (London, United Kingdom), Mona Bafadhel (London, United Kingdom), Janwillem W. H. Kocks (Groningen, Netherlands), Tonya Winders (Hendersonville, United States)	**5393**
09:35	**COPD: it's not just about the lungs!** Mona Bafadhel (London, United Kingdom)	**5394**
09:50	**Panel discussion and Q&A | How can we improve the management of COPD to reduce cardiopulmonary risk?** Alberto Papi (Cona, Ferrara, Italy), Christine Jenkins (McMahons Point (NSW), Australia), James Allinson (London, United Kingdom), Mona Bafadhel (London, United Kingdom), Janwillem W. H. Kocks (Groningen, Netherlands), Tonya Winders (Hendersonville, United States)	**5395**
10:05	**Summary and closing remarks** Alberto Papi (Cambridge (Cambridgeshire), United Kingdom), Christine Jenkins (McMahons Point (NSW), Australia)	**5396**

CHAIR AND COORDINATOR INDEX

Name, Session number

A

AARDENBURG - VAN HUISSTEDE A., 251
ABASCAL BOLADO B., 489
ADCOCK I., 68, 318
ADDRIZZO-HARRIS D., 371
ADIR Y., 398, 413
AFONSO M., 435
AKKERMAN O., 309, 325, 400, 415, 512
ALIBERTI S., 213, 317
ALISON J., 129
ALMENDROS I., 355
ALQAHTANI J., 198, 376
ANANTH S., 299
ANDIAPPAN A., 203
ANGELIDIS I., 204
ANNEMA J., 4, 31, 268
ANNESI MAESANO I., 186
ANTONIOU K., 240, 256, 402, 417, 515
ARANCIBIA HERNANDEZ F., 43
ARIMURA F., 349
ATHANASSIADI K., 54
AXELSSON M., 189, 220
AZEVEDO DE ALMEIDA CARDIM M., 180, 224

B

B. M. MARSÅ K., 407
BACHASSON D., 140
BACKER V., 394
BAFADHEL M., 122, 395
BAKER J., 66
BAL C., 70
BANKA R., 24
BARGAGLI E., 114, 460, 475
BARNIG C., 454
BASTARACHE J., 315
BAYAT S., 486
BEECH A., 14, 147
BEGHÈ B., 148
BELTRAMO G., 143
BERTOLETTI L., 468
BEYDON N., 222, 313, 329, 466, 481
BEZZI M., 268
BHATNAGAR R., 4, 7, 473
BHOWMIK A., 497
BIANCO A., 52
BIELOSLUDTSEVA K., 114
BIONDINI D., 294
BLASI F., 124, 157, 173, 212, 303
BLUM T., 76, 105, 514
BLYTH K., 182
BONELLA F., 59
BONINI M., 14, 210
BONSIGNORE M., 30, 44, 160, 176
BONTA P., 61
BOOTS A., 144
BORGHI SILVA A., 63
BOS L., 100, 142
BOSNIC-ANTICEVICH S., 466, 481
BOSSIOS A., 35, 72, 101, 163, 311, 327, 513
BOTHAMLEY G., 309, 325
BOUCLY A., 386
BRADICICH M., 67, 153, 241, 257, 306, 399, 414, 430
BRANDSMA C., 16
BRAT K., 359
BRAUNSTAHL G., 251
BREZEANU L., 284
BRIANÇON-MARJOLLET A., 145
BRIGHTLING C., 243, 259, 403, 404, 421
BRIGHTON L., 472
BUGALHO DE ALMEIDA A., 467
BURGEL P., 445
BURGY O., 409
BUSH A., 75, 104

C

CABALLERO ERASO C., 145
CAMELI P., 139
CANONICA G., 278, 432
CANTERO C., 295
CARAMORI G., 300
CARLSTEN C., 160, 176, 364
CARONE M., 30
CASTILLO VILLEGAS D., 349
CECCATO A., 445
CHALMERS J., 136, 310, 461, 476
CHARPIDOU A., 227, 312, 328, 464, 479
CHAUDHARY N., 132
CHESOV D., 346
CHOROSTOWSKA-WYNIMKO J., 312, 328
CILLONIZ CAMPOS C., 226
CLOONAN S., 99
COMEL A., 419
CONDLIFFE R., 374, 474
CONDUTO DIAS MAIA A., 450
CONTOLI M., 359
COSTELLO R., 6, 79, 95, 111
COTTIN V., 367
CRAVEN R., 104
CREAMER A., 497
CRICHTON M., 190
CRIEL M., 48
CRIMI C., 34, 322, 465, 480
CRISAFULLI E., 63
CRNKOVIC S., 500
CROMBAG L., 4
CRUZ J., 245, 261, 306, 430
CUEVAS OCAÑA S., 5, 118, 153, 243, 259, 334, 429, 483
CYSNEIROS A., 100, 232

D

DAGLI E., 408, 525
DAI S., 131
DANDANELL JUUL A., 239, 255, 396, 411
DE BRANDT J., 399, 414
DE JONG C., 221
DE JONGH F., 151, 272
DE KEYSER H., 21
DE LA HOZ R., 253, 401, 416, 519
DE MAN F., 60
DE MATTEIS S., 253, 342
DE SOYZA T., 250, 444
DE WEVER W., 78, 107, 239, 255, 517
DELLACA R., 353
DEMEYER H., 242, 258, 282
DI MARCO F., 125, 357
DI VINCENZO S., 390
DIAMANT Z., 393, 504
DICKINSON J., 161
DIELTJENS M., 298
DILEKTAŞLI A., 341
DIMAKOU A., 495
DOMAGAŁA-KULAWIK J., 137
DONNELLY L., 69
DOST A., 99
DREWS A., 204
DRUMMOND D., 321, 526
DUARTE R., 75, 104, 512
DUIVERMAN M., 158, 174, 322
DUMAS O., 74, 103, 342
DUPIN C., 59

E

EBER E., 9, 20, 23, 28, 33, 41
EHRSAM-TOSI D., 108
EICHSTAEDT C., 319
ESCRIBANO- SUBIAS P., 398, 413
ESPOSITO S., 152, 433
EVANS R., 335

F

FABBRI L., 498
FABBRI L., 148
FALSTER C., 197
FERNANDES DE CARVALHO C., 442
FERNANDEZ I., 235
FISSER C., 354
FORIS V., 386
FORNO E., 508
FRANCZUK M., 116
FRANSSEN F., 15, 266, 509
FREITAG N., 252
FRILLE A., 382
FROIDURE A., 460, 475
FUNKE-CHAMBOUR M., 138
FUSTIK S., 344

G

GAGA M., 237
GAILLARD E., 165, 285, 397, 412
GAINE S., 208
GALLO G., 344
GALLUS S., 525
GALVIN L., 21
GAPPA M., 119, 527
GARCIA RIO F., 43
GARCIA-BASTEIRO A., 115
GARCIA-LARSEN V., 437
GERCKENS M., 405
GEROVASILI V., 343
GILLE T., 5, 26, 159, 175, 334, 483
GIMENO-SANTOS E., 133
GIRARDI E., 288
GLOECKL R., 50, 140, 168, 492
GOEMINNE P., 167, 290
GOLETTI D., 134, 400, 415
GONUGUNTLA H., 501
GONZALEZ BARCALA F., 53
GONZALEZ BERMEJO J., 26
GÓRSKA K., 353
GOSENS R., 283, 390
GOTERA C., 451
GOTE-SCHNIERING J., 234
GOUTAKI M., 286
GRABCZAK E., 78, 107, 463, 478, 517
GRAMEGNA A., 180, 224
GREENOUGH A., 121, 485
GRIGG J., 220, 525
GROEPENHOFF H., 418
GROTE L., 392
GUIDA G., 377, 505
GUIGNABERT C., 319
GUILLAMAT PRATS R., 271, 384
GUIOT J., 267

H

HAMELMANN E., 221
HAMUTCU ERSU R., 397, 412, 438, 518
HAN M., 206
HANSBRO P., 283
HANSEN K., 21
HARARI S., 30, 44, 160, 176, 531
HARDAVELLA G., 13
HART N., 482
HARTL S., 64
HASSAN M., 197
HASSOUN P., 113
HAWORTH C., 226
HEFFLER E., 274
HEIJINK H., 144, 429, 521
HELBO SKAARUP S., 24
HELLEMONS M., 440
HERRERO CORTINA B., 57
HETZEL J., 216, 467
HEYCKENDORF J., 443
HLAPČIĆ I., 132
HÖGMAN M., 238, 377
HOLMES S., 280
HOPPENOT D., 350
HORVÁTH I., 237
HOUBEN-WILKE S., 112, 310, 326
HUI I., 185
HULL J., 161
HUMBERT M., 96, 240, 256, 398, 413, 529
HUNTLEY C., 378
HURST J., 431
HVIDTFELDT M., 356
HYNES G., 250, 381, 451

I

INAL-INCE D., 424
ISRAEL-BIET D., 193

J

JACOBS-PETERS J., 379
JAKSCH P., 343, 440
JARA-PALOMARES L., 17, 229
JENKINS C., 302, 524
JEVNIKAR M., 499
JOANNES A., 409, 500
JOHANNESSEN A., 401, 416, 519
JOOS G., 530
JOUNEAU S., 138
JUTANT E., 141

K

KALTSAKAS G., 425
KANELLAKIS N., 296
KARAGIANNIDIS C., 245, 261, 510
KATSAOUNOU P., 131
KEIR H., 290
KELLY E., 311, 327
KEMPENEERS C., 286
KENNY C., 507
KERPEL-FRONIUS A., 352, 388
KHOR Y., 293
KIELY D., 304
KNAPP S., 296
KNUDSEN K., 487
KOLEKAR S., 340
KONGE L., 4
KONTOGIANNI K., 61
KONTSEVAYA I., 288
KOSTIKAS K., 293
KOUDSTAAL T., 240, 256
KOULOPOULOU M., 442
KOZIAR VASAKOVA M., 348
KRAFT M., 121
KRASNODEMBSKAYA A., 502
KRAUSS-ETSCHMANN S., 436
KREUTER M., 39, 73, 102, 515
KUKSA L., 443
KURMI O., 117
KVAMME J., 200

L

LADOR F., 499
LAHOUSSE L., 269
LAMIA B., 51, 169
LANFRANCHI F., 316
LANGE C., 46
LANGER D., 424, 520
LARICI A., 78, 107
LAURSEN C., 4, 42, 375
LAVENEZIANA P., 38, 217, 323
LAVIZZARI A., 223
LAVORINI F., 202, 360
LEA S., 452
LEE R., 191
LEE-CHIONG T., 49, 109
LEHMANN M., 16, 199
LEN M., 531
LEWANDOWSKA K., 292
LEWKO A., 345
LEX C., 187
LICHTBLAU M., 154, 170
LIVESEY A., 142
LOEBINGER M., 135, 167, 244, 260, 305
LÖFFLER-RAGG J., 154, 170
LOMBARDI C., 338
LOUIS R., 130
LOUKIDES S., 156, 172, 453

M

MACHAHUA HUAMANI C., 235
MAES T., 146, 505
MAILLEUX A., 118, 143
MAJUMDAR A., 276
MAKONGA-BRAAKSMA J., 15, 245, 261, 307, 520
MALINOVSCHI A., 130, 238
MANSOURI N., 271
MARGARITOPOULOS G., 58
MARILLIER M., 196
MARQUES DA SILVA R., 287, 320
MARTÍNEZ VÁZQUEZ M., 98, 446
MARTIN-LOECHES I., 380, 465, 480
MASKELL N., 4, 347
MATHIOUDAKIS A., 35, 147, 269
MCCARTHY C., 337, 385
MCDONALD V., 35, 72, 101, 363
MEINERS S., 315, 331
MELONI F., 76, 105, 246, 247, 402, 417, 522
MENON M., 406
MESHRAM P., 219
MEYER C., 219
MICHELETTO C., 127
MICHIELETTO L., 316
MIDULLA F., 9, 20, 23, 28, 33, 41
MIGLIORE M., 54, 312, 328, 464, 479, 522
MIHALTAN F., 341, 506
MIRAVITLLES M., 362
MOLINA MOLINA M., 337
MÖLLER A., 397, 412, 518
MOLYNEAUX P., 405
MONTEIRO DRUMMOND FREITAS M., 503
MOOR K., 273, 314, 330
MORELOT-PANZINI C., 482
MORICE A., 202
MORTENSEN E., 381
MORTY R., 485
MUKHERJEE M., 394, 423
MÜLLER V., 384
MUNAVVAR M., 396, 411, 447
MURPHY P., 178
MURRAY L., 56

N

NADIF R., 203
NAVA S., 354, 373
NAVANI N., 336
NEDER J., 448
NEMERY B., 378
NENNA R., 252
NIELSEN A., 340, 425
NIETO-FONTARIGO J., 146
NIGRO M., 346
NOLAN C., 489
NOSSENT E., 96, 498
NTONTSI P., 71
NYBERG A., 55

O

O'BRIEN K., 458
ODEMYR M., 21
OFENHEIMER A., 64
OLEJNICKA B., 300
OLIVEIRA A., 407
OLIVEIRA JÁCOME C., 270
OLIVER A., 297
OLSCHEWSKI A., 60
OLSCHEWSKI H., 141
ÖNER EYÜBOĞLU A., 115
ONG-SALVADOR R., 272, 441
OSADNIK C., 345
OSTERHAUS A., 244, 260

P

PADILHA J., 189, 320
PALM A., 162
PAPI A., 209, 361, 370, 524
PARK D., 350
PATAKA A., 469
PATOUT M., 449
PAVORD I., 123, 301, 365
PEDERSEN E., 491
PENNATI F., 486
PERCH M., 427
PEREIRA CATARATA M., 166, 273, 430, 463, 478
PETRARCA L., 188
PICCARI L., 468
PIETERSEN P., 4
PIJNENBURG M., 28, 33, 41, 313, 329, 518
PINELLI V., 182
PINNOCK H., 12, 25, 159, 175, 321, 455, 523, 528, 532
PIOTROWSKI W., 317
PIRES DE DIAS MARQUES A., 133
PLANAS CEREZALES L., 192
POBEHA P., 358, 395
POLVERINO E., 36, 309, 325, 512
PORSBJERG C., 126, 201
PORTACCI A., 201
POTTER J., 494
PRETTI DALCOLMO M., 43, 134
PRICE D., 459
PRIOR T., 348
PROESMANS M., 284

Q

QU J., 11

R

RABE K., 150, 275
RADEMACHER J., 380
RAHMAN N., 4, 42, 514
RAMA ESENDAGLI D., 273, 430
RAMOS-RAMÍREZ P., 436
RANDERATH W., 241, 257, 511
RAVAGLIA C., 294
RAVELING T., 449
RAVI A., 233
REDDEL H., 431
REDOLFI S., 263, 355
RELLO CONDOMINES J., 496
RENZONI E., 267, 385
REYNAERT N., 243, 259, 391, 521
RICCIARDOLO F., 179, 453
RICHELDI L., 205
RINGSHAUSEN F., 57
RIVERA N., 228
ROBALO CORDEIRO C., 43, 314, 330
ROCHE N., 6, 452, 523, 528, 532
ROLANDSSON ENES S., 183, 450
ROLLAND-DEBORD C., 230
ROMÁN RODRIGUEZ M., 12, 25, 98, 446
ROSENKRANZ S., 277
ROZENMAN Y., 332
ROZMAN A., 13
RUPANI H., 278
RUSCONI F., 491
RUTTER M., 116, 441
RYAN S., 399, 414

S

SAARESRANTA T., 200, 333
SAEZ GIMENEZ B., 427
SAGLAM M., 55
SAGLANI S., 254
SAJNIC A., 56
SALVI S., 71
SANGUINETTI M., 36
SATIA I., 437
SAXER S., 194
SCHIZA S., 162, 241, 257, 511
SCHLEICH F., 156, 172, 462, 477, 513, 526
SCHRAMM D., 37, 188, 313, 329
SCHWARZ E., 18, 511
SELLARES TORRES J., 232
SFERRAZZA PAPA G., 282
SHAH P., 216
SHTEINBERG M., 190, 471
SIBILA VIDAL O., 135, 471
SIDDIQUI S., 315, 331, 526
SILBERBRANDT A., 435
SILVA L., 287
SIMONDS A., 11, 79, 95, 111, 262, 530
SITBON O., 154, 170, 516
SMALLWOOD N., 376
SMESSEIM I., 4, 7
SMITH E., 97
SNELGROVE R., 406
SOMBORAC BAČURA A., 198
SOTGIU G., 400, 415
SPAGNOLO P., 193, 460, 475
SPANEVELLO A., 151, 358
SPENGLER C., 196, 448
SPINOU A., 444
SPRUIT M., 270
SRETER K., 291
STAATS R., 298
STAHL M., 490
STERLING K., 333
STOLZ D., 157, 173, 239, 255
STRINGER W., 38, 265
SUCCONY L., 191
SUMMERS C., 495
SUNDARALINGAM A., 31, 195
SUPPLI ULRIK C., 299, 462, 477, 519
SVERRILD A., 393
SYLVESTER K., 97, 159, 175, 218, 324
SYRIGOS K., 279

T

TAICHMAN D., 310, 326
TAMISIER R., 469
TÁRNOKI Á., 352, 470
TAUBE C., 70
TAVARES LADEIRA I., 494
TAYTARD J., 181
TERPSTRA L., 289
TESTELMANS D., 18, 338, 465, 480
THÉBAUD B., 502
TIETZOVA I., 291
TOMASSETTI S., 192, 244, 260, 447
TOUMPANAKIS D., 236
TRACHALAKI A., 164
TROMEUR C., 229
TSIKRIKA S., 408
TSIM S., 347
TSIOUDA T., 382
TUFVESSON E., 356
TZOUVELEKIS A., 383

U

UBAGS N., 183, 426
ULLER L., 68, 163, 423
ULRICH S., 74, 103, 208
UNGER S., 439
USMANI O., 14, 72, 101, 236, 272, 311, 327, 513

V

VAES A., 129
VAGHEGGINI G., 335
VALENZUELA C., 292
VAN BOVEN J., 504
VAN BRAECKEL E., 496
VAN DEN BERGE M., 484
VAN DEN HENGEL J., 493
VAN DER BURG N., 233
VAN DER DOES A., 136, 487
VAN DER KAMP M., 222
VAN GEFFEN W., 137
VAN INGEN J., 225
VAN ZELLER M., 392
VANCHERI C., 30
VARDAR YAĞLI N., 492
VEITH C., 234
VELTKAMP M., 228
VERBRAECKEN J., 77, 106
VERHULST S., 181
VERKLEIJ M., 379
VESTBO J., 455
VEZIRIS N., 289
VICENCIO A., 37
VICENS ZYGMUNT V., 383
VIEGI G., 74, 103, 186
VIJVERBERG S., 119, 306
VOGIATZIS I., 254, 307, 509
VON LEUPOLDT A., 472
VONK NOORDEGRAAF A., 194, 422, 516

W

WAGNER D., 225
WALSH S., 231, 366, 470
WALTER K., 155, 171
WEDZICHA J., 209
WELLS A., 456
WELTE T., 149, 211, 246, 247, 458
WÉMEAU L., 139
WHITEHOUSE A., 53, 187
WIEWRODT R., 166
WIJKSTRA P., 242, 258, 295
WIJSENBEEK M., 39, 73, 102, 366, 529
WILKINSON T., 199
WILLIAMS B., 493
WINCK J., 34, 158, 174, 510
WOEHRLE H., 185, 262
WOODCOCK A., 207
WRIGHTSON J., 428
WUYTS W., 164

X

XHEMALAJ D., 227

Y

YILDIRIM A., 156, 172
YILMAZ O., 285
YORGANCIOĞLU A., 403, 404, 421, 461, 476

Z

ZACHARASIEWICZ A., 77, 106, 165
ZANNIN E., 223
ZDRAVESKA M., 17

DISCUSSANT INDEX

Name, Session number

A
ANTONIOU K., 102
B
BLUM T., 328
C
CHALMERS J., 325
D
DAGLI E., 462
DRUMMOND D., 412
DUIVERMAN M., 480
F
FISSER C., 480
FRANSSEN F., 326
G
GRIGG J., 462
H
HARDAVELLA G., 328
J
JIMÉNEZ CASTRO D., 170
K
KELLY E., 101
KREUTER M., 475
M
MIRAVITLLES M., 101
P
PIJNENBURG M., 412
S
SIMONDS A., 326
SINGH D., 102
STOLZ D., 325
U
ULRICH S., 170
W
WIJSENBEEK M., 475

SPEAKER INDEX

Name, Presentation number

A

ABDENBI F., 272, 2568
ABRAMOVICH A., 4154
ABRAMS E., 3231
ABUBAKAR I., 4178
ADCOCK I., 2457
ADDALA D., 1, 2, 3, 4, 249, 4354
ADDRIZZO-HARRIS D., 3738, 3739
ADNOT S., 81, 92
AERTS J., 1376
AGACHE I., 4904
AGOSTONI P., 4286
AKBAR A., 88, 92
AL-AHMAD M., 64, 69, 3115, 4781
ALEJANDRE ALCÁZAR M., 697
ALIBERTI S., 265, 2025, 2030, 3741
ALIVERTI A., 3096
ALLINSON J., 5392, 5393, 5395
AMAN J., 1371
ANDERSEN Z., 1511, 5414
ANDREJAK C., 160
ANNEMA J., 1, 2, 3, 4, 5, 51
ANNESI MAESANO I., 2461, 4894
ANTONIOU K., RCT803, 4788, 5379
ANZUETO A., 3114
ARMANIOS M., 85, 92
ARMATO III S., 4906
ARNARDÓTTIR E., 3245
ARONSON K., 4785
ARZT M., 2564
AZPIAZU BLOCONA M., 271, 2567, 2568

B

BACKER V., 3708, 3713
BADAGLIACCA R., 2657
BAFADHEL M., 914, 917, 920, 4289, 4895, 5393, 5394, 5395
BAKER J., 85, 92
BALDWIN D., 2463
BANKA R., 1, 2, 7, 8, 9, 10, 4353
BARATH S., 2669
BARDIN P., 3241
BARGAGLI E., 169
BARTEL S., 5416
BASIL M., 4356
BATEMAN E., 3074
BAUSEWEIN C., 1400
BEASLEY R., 3075, 4903
BEAUCHAMP M., 276, 842
BEDAWI E., 3, 4, 8, 174, 1497
BEECH A., 69
BEER M., 38, 119, 143
BEIER J., 3693, 3695
BEIGELMAN-AUBRY C., 2533
BEISSWENGER C., 1492
BELCHER E., 56
BELVISI M., 5416
BENDIXEN M., 4351, 4881
BENDSTRUP E., 677
BERG J., 4186
BERGHMANS T., 58
BERICAL A., 4823
BERTOLETTI L., 99, 102
BESENYI Z., 3130
BEZZI M., 4252
BHATNAGAR R., 6, 7, 8, 9, 10, 3754, 4880
BHATT S., 3108
BHUTANI M., 4782
BILLATOS E., 4810
BLANCO VICH I., 4260
BLASI F., 267, 927, 931, 2017, 2018, 2022, 2024, 3079, 3080, 3084, 4375
BLUM T., 40, 54, 55, 3119, 3226, 3228, 5378, 5406, 5412
BLYTH K., 692, 4909
BOEREE M., 4272
BOGAARD H., 2536
BONELLA F., 3730
BONINI M., 2005
BONSIGNORE M., 2542
BONVINI S., 5416
BOS L., 20
BOUCLY A., 1994
BOUDEWYNS A., 4161
BOURBEAU J., 2466
BOURDIN A., 1356
BRADICICH M., 14
BRADLEY D., 2446
BRANDENBERGER C., 88, 92
BRÄUNLICH J., 5446
BRIGHTLING C., 5406, 5412
BRINKMAN P., 70, 71
BROCHARD L., 185, 194
BRUSSELLE G., 1355
BUCHHEIT K., 2662
BUGALHO DE ALMEIDA A., 4825
BURGE A., 1398
BURGY O., 20, 2550
BUTLER C., 210, 215

C

CADRANEL J., 58
ÇAKMAKCI KARAKAYA S., 680
CALFEE C., 1391
CALS J., 152
CAMINATI M., 939
CAMPISI J., 1505
CANONICA G., 2661, 2666, 4368, 4371, 4920
CARDILLO G., 2435
CARLSTEN C., 3705
CARLUCCI A., 191, 194
CARNOY C., 3105
CARTER B., 4906
CASABURI R., 2570
CASINI C., 38, 119, 143
CASIRAGHI M., 690
CATTARUZZA M., 5403
CHALMERS J., 18, 1388, 3208, 3210, 5405, 5412
CHANEZ P., 941
CHANTAL D., 1499
CHAPMAN H., 4356
CHAPMAN K., 935, 1979, 2650
CHARIF F., 93, 102
CHATWIN M., 189, 194
CHOTIRMALL S., 3104, 3220
CHOW C., 2637, 4791
CHRISTENSON S., 2646
CHUNG F., 3105
CHUNG J., 2530, 3129
CHUNG K., 668, 3702
CIET P., 903
CILLONIZ CAMPOS C., 1494
CIRILLO D., 4271
CLEVERS H., 20
CLOONAN S., 1383
COBELENS F., 4179
COMELLINI V., 3141
COMPTON C., 5433
CONDLIFFE R., 3749, 4889
CORDOVILLA PEREZ M., 4253
COSTA F., 3719
COSTELLO R., 3222
COTTIN V., 239, 241, 242, 1970, 3726, 3727
COX D., 5397
COX N., 2464
CRAIG S., 103, 112, 2542
CRIMI C., 830, 1519, 2451
CROMBAG L., 6, 7, 8, 9, 10, 252, 3751, 4351, 4354
CROOKS M., 3076
CRUZ J., 14, 20, 3121
CUEVAS OCAÑA S., 11, 19, 20, 23, 5414

D

DĄBROWSKA M., 3116
DAGLI E., 682, RCT4798, 5387
DANDANELL JUUL A., 250, 252
DAS N., 77, 78
D'CRUZ R., 2452
DE ALMEIDA VICENTE FERREIRA C., 150
DE BRUIJNE M., 700
DE JONGH F., 2040, 2634, 2635, 2636, 2637, 3204
DE KEYSER H., 120, 122, 128
DE MAN F., 4262
DE MATTEIS S., 4276
DE PINHO DIAS M., 255
DE WEVER W., 5381
DECRAMER M., 4768
DEL CARMEN LUNA M., 2026
DELCROIX M., 1372
DELL S., 262
DEMEYER H., 274, 1467
DEMOULE A., 185, 194
DEN BAKKER M., 49, 50
DENNISTON P., 4883
DEQUIN P., 3110
DERDE L., 206, 215
DEVILLERS A., 4900
DHARMAGE S., 3123, 3221
DI LUCA M., 816
DI MARCO F., 932
DIAR BAKERLY N., 2675
DICKINSON J., 1408
DISLER R., 42
DIXON A., 822
DIXON L., 5408, 5412
DONNELLY L., 2551
DORFMULLER P., 3747, 4887
DORSCHEID D., 940
DOWNEY D., 810
DRES M., 187, 194
DRUMM M., 20
DRUMMOND D., 4257, 4259
DUARTE R., 4176, 4274, 5405, 5412
DUBBELDAM A., 4912
DUIVERMAN M., 2562, 4916, 4918
DUMAS O., 14, 19
DUPIN I., 3242

E

EBER E., 36, 117, 141, 167, 183, 247
ECKERT D., 4266
EGGMANN S., 2544
EKSTRÖM M., 1377
ELIA S., 56
ELOY C., 3118
EMANUELA D., 696
ESPOSITO S., 1365, 1368, 4373, 4374
ESTES E., 3722
EVANS R., 1397
EVANS S., 1495

F

FAIVRE FINN C., 57
FALANGA A., 97, 102
FALSTER C., 6, 7, 8, 26, 27, 3751
FALZON D., 687
FANER CANET R., 2458, 3126, 4355, 5407, 5412
FARRÉ VENTURA R., 20
FARVER-VESTERGAARD I., 277, 1470
FELLER S., 5416
FERREIRA CHAVES LOUREIRO C., 2007
FILIPPIDIS F., 5400
FINNEY-HAYWARD T., 5416
FIORENTINO G., 5445
FISSER C., 4917, 4919
FLEMING L., 166, 182, 246
FORASTIERE F., 1512, 5436
FORIS V., 1995
FORNO E., 696
FORSTER M., 689
FOURRIER J., 4172
FRANÇOIS B., 208, 215
FRANKE-BAX C., 1499
FRANQUET T., 2533
FRANSSEN F., 1503, RCT3218
FUNKE F., 219, 221

G

GABRYSCH S., 3247
GAGA M., 22
GAGNADOUX F., 1410
GAINE S., 1993, 1997
GALE C., 918
GALLUS S., 5401
GALVIN L., 130, 136, 5426
GAPPA M., 121, 5413, 5415
GARCIA G., 2651
GARCÍA ORTEGA A., 4166
GARCIA-AYMERICH J., 5413, 5433
GARCIA-COSIO PIQUERAS F., 256
GARCIA-MARCOS ALVAREZ L., 3229
GASPARINI A., 1403
GERGES M., 281, 847, 1474
GEROMETTA A., 5440
GIBSON P., 697, 923
GILLE T., 11, 19, 20, 23
GIN-SING W., 2537
GIRARD N., 689
GOEMINNE P., 2015, 3740
GOMBERG-MAITLAND M., 2656
GOOSSENS H., 212, 215, 5407, 5412
GOPALAN D., 3746, 4292, 4886
GORINI G., 5403
GORSKI A., 816
GOTERA C., 19
GOTTLIEB R., 1351
GRAMEGNA A., 2028
GRANELL R., 3124
GREENOUGH A., 910
GRIFF S., 49, 50
GRIFFITH D., 266
GRIGG J., 1404, RCT4802, 5398
GROTE L., 5410, 5412
GRYSON I., 2546
GUEDES BALDI B., 257
GUIGNABERT C., 20

H

HADWIN J., 3244
HAJEK P., 46
HALPIN D., 2002, 2003
HALVORSEN T., 1399
HAMADA Y., 4177
HAMEED A., 3748, 4294, 4888
HAMID Q., 1491
HAMUTCU ERSU R., 168, 184, 248
HAN M., 197, 669, 1977
HANNAN A., 4183
HANSEN K., 120, 127, 128, 137, 5409, 5412, 5433, 5435
HARARI S., 2462
HARDAVELLA G., 51, 52, 2463, 3225, 3227
HARRISON C., 5433
HARRISON P., 20
HARRISON S., 1469
HART N., 837, 1500
HARTMANN I., 4912
HARTMANN-BOYCE J., 46
HASSOUN P., 280, 846, 1473
HATHERILL M., 4179
HAWKINS F., 4823
HAWORTH C., 2013
HAYES K., 2544
HEBESTREIT H., 5424
HEDNER J., 5410, 5412
HEFFLER E., 925, 2639, 2643
HEIJINK H., 5385
HEILI FRADES ZIMMERMANN S., 3752, 4352
HEINZER R., 1411, 4267

HELBO SKAARUP S., 9, 10, 29, 3754, 4884
HELLEMONS M., 1376
HERNANDEZ PADILLA A., 208, 215
HERRIDGE M., 2547
HERTH F., 4156
HETZEL J., 2032, 4825
HEUNKS L., 836, 1394, 4818, 4917, 4919
HEUVELMANS M., 4808
HISERT K., 811
HODGSON C., 2544
HOEPER M., 807, 2655, 3111
HOETZENECKER K., 2469
HOFFMANN B., 5414, 5434
HOLLOWAY J., 3124
HOLM A., 2470
HOLMES S., 2672, 2679
HORSNELL W., 4182
HORVÁTH I., 5415
HUAUX F., 4193
HULL J., 1407, 1409
HULZEBOS E., 230, 232
HUMBERT M., 156, 5421
HUMBERT-DORFMÜLLER E., 5425
HURST J., 4363, 5430
HUXLEY R., 1984
HYSINGER E., 218, 221
I
IDES K., 2528
IEPSEN U., 4173
IQBAL B., 5
J
JACOB J., 234, 242
JACOB-NARA J., 5416
JACOBS C., 4805
JAIS X., 1374
JANSON C., 1990
JANSSEN D., 1400, 4899
JANSSENS W., 77, 78
JARA-PALOMARES L., 4165
JAROSCH I., 4170
JENKINS C., 3073, 4364, 5391, 5393, 5395, 5396, 5431
JENKINS D., 1373
JIMÉNEZ CASTRO D., 95, 102, 1477, 1479
JORDT S., 679
JOVANOVIĆ D., 691
K
KADITIS A., 168, 184, 248
KALTSAKAS G., 1506
KANIA A., 3140
KANKAANRANTA H., 1988
KAPLAN A., 4289
KARAGIANNIDIS C., 737, 1392, 4817, 5374
KAWANO-DOURADO L., 3248
KEIR H., 14
KELLY E., 792, 794
KERPEL-FRONIUS A., 2531
KHOR Y., 4282
KIELY D., 1996, 3085
KING G., 2578, 3206
KITCHIN N., 4774
KLARLUND PEDERSEN B., 4169
KOCKS J., 1362, 3687, 5393, 5395
KOCZULLA A., 2021
KOHLER M., 2540
KOLB M., 4897
KOLLS J., 1489
KONGE L., 1, 2, 6, 7, 9, 10
KONIGSHOFF M., 1505, 4359
KONTOGIANNI K., 1502, 4251, 4882
KONTOPIDIS D., 137
KOOPMANS M., 2526
KORN S., 2009
KOSTIKAS K., 199
KOTECHA S., 907
KOTTON D., 4356
KOULOPOULOU M., 3121
KOZIAR VASAKOVA M., 4279, 4787
KRAFT M., 670, 912, 4792
KRAMMER F., 4771, 4776
KRASNODEMBSKAYA A., 2553
KREUTER M., 237, 242, 3086, 4891, 4893
KÜBLER W., 3133, 4360
KURMI O., 681
L
LAFFEY J., 3134
LAHOUSSE L., 1508
LAMIA B., 282, 848, 1475
LANFRANCHI F., 4287
LANGE C., 264, 4273
LANGER D., 2545, 5384
LANTUEJOUL S., 3118
LARICI A., 2533
LATIMER L., 275, 1468, 4170
LAU K., 4157
LAUK O., 4913
LAUNOIS ROLLINAT S., 3246
LAURSEN C., 175, 3750
LAVENEZIANA P., 226, 232, 2573
LAVOIE K., 2652
LAVORINI F., 1363, 3681, 3685
LAZOVA S., 5415
LEGENDRE M., 4821
LEH S., 3118
LEHMANN M., 1382, 3250
LERM M., 4184
LEVINE M., 83, 92
LEY S., 3129
LICHTBLAU M., 14
LIM E., 56
LINDSTRÖM I., 4278
LLOR VILA C., 152
LOEBINGER M., 3089
LÓPEZ-CAMPOS BODINEAU J., 2020
LOUIS R., 60, 69, 2006
LOUKIDES S., 62, 69
LOWE A., 1402
LUGOGO N., 2677
M
MAEVA N., 132
MAGIS-ESCURRA C., 4176
MAJUMDAR A., 2649, 2654
MALL M., 812
MALPASS A., 843
MAN W., 1398
MANCINO L., 3138, 4287
MANDAL S., 834
MANGIAPAN G., 3752, 4354
MANTOVANI A., 1388
MARA A., 4767
MARILLIER M., 4171
MARTIN C., 3223
MARTINEZ F., 1973, 3697, 3698
MARTINEZ L., 4178
MARTÍNEZ GARCÍA M., 4166
MARTIN-LOECHES I., 2437, 4917, 4919
MASA JIMÉNEZ J., 824
MASEKELA R., 902, 3230
MASKELL N., 3, 4, 5, 6
MASSARD G., 692
MATHIOUDAKIS A., 204
MAYER-HAMBLETT N., 813
MAZULOV O., 3232
MCAULEY D., 1393
MCCORMACK M., 3234
MCDILL H., 3751, 4884
MCDONALD V., 3696, 3698, 3701
MCELVANEY N., 3717
MCGARVEY L., 3684, 4191
MCGOWAN A., 2039
MCSHANE H., 4179
MEINERS S., 79, 92, 5414
MELÉN E., 1513, 3125
MELONI F., 5386
MENENDEZ VILLANUEVA R., 947, 3082
MERCURIO V., 279, 845, 1472
MESZAROS G., 5422
MEYER K., 4356
MEYS R., 841
MICHELETTO C., 171, 944, 949, 3692, 3695
MICHELOZZI P., 47
MIDULLA F., 36, 117, 141, 167, 183, 247
MIGLIORI G., 684
MIHALTAN F., 5402
MILIAUSKAS S., 97, 102
MIŁKOWSKA-DYMANOWSKA J., 3139
MIRAVITLLES M., 201, 793, 795, 3691, 3694, 3695, 5430
MOLINA MOLINA M., 153, 4890, 4892
MOLINS LOPEZ-RODO L., 692
MØLLER WEINREICH U., 5443
MOLYNEAUX P., 674
MONACELLI S., 3244
MONGODI S., 144, 3751, 4351
MONTANI D., 3087, 4261
MOOR K., 19, 70, 71, 4284, 5415
MORRISEY E., 4356
MORTY R., 4160
MOSNAIM G., 2677
MUÑOZ GALL X., 4279
MURPHY P., 2561
N
NARANG I., 695
NARDINI M., 4186
NATHAN N., 5410, 5412
NAVANI N., 2668
NAWIJN M., 2455
NEDER J., 2036, 3200
NEIRA M., 1510
NESLIHAN Ö., 3235
NETEA M., 88, 92
NIELSEN A., 5, 6
NIEUWENHUIJSEN M., 1513
NOGEE L., 4822
NOHYNEK H., 2557
NOSOTTI M., 4188
NOVOA VALENTIN N., 4907
O
O'CONNOR K., 823
ODEMYR M., 135, 136
O'DONNELL A., 2012
O'DONNELL D., 2037, 3201
OLLAND A., 692
OLSSON K., 2535
ONG-SALVADOR R., 2577, 2635, 2636, 2637, 3205
ONORATI P., 2570
OOSTVEEN E., 2041, 3205
OPENSHAW P., 1389, 2556, 3239
OPITZ I., 56, 4907
OSTROWSKI L., 4823
P
PACIOCCO G., 3138, 4287
PAGGIARO P., 4370
PAGNINI F., 133
PALANGE P., 222, 226, 2034, 3198
PAPADAKIS S., 47
PAPI A., 671, 1998, 1999, 3077, 3686, 3689, 3732, 4365, 5391, 5393, 5395, 5396
PARK H., 3234
PARKAR A., 2533
PARKS H., 5399
PASTORINO U., 4914
PATOUT M., 20, 833, 2558, 4917, 4919
PAVANELLO S., 5408, 5412
PAVORD I., 921, 922, 923, 926, 3707, 3709
PELEGRIN P., 3683
PÉPIN J., 821, 2565, 4268
PEREIRA CATARATA M., 14, 19
PERGER E., 2448
PETERSEN R., 56
PETRACHE I., 1384
PHIPATANAKUL W., 3231
PIACENTINI G., 259, 260
PICCARI L., 2441, 3247
PICCIONE J., 218, 221
PIETERSEN P., 1, 2, 9, 10, 147, 3752, 4352
PIJNENBURG M., 166, 182, 246, 4159, 4256, 4258, 5382, 5415
PINELLI V., 4882
PINI L., 2019
PINNOCK H., 4921, 5409, 5412
PINTO DOS SANTOS D., 701
PIQUILLOUD L., 4816, 4924
PIRES DE DIAS MARQUES A., 4901
PISANI L., 1501, 2450, 3744
POBEREZHETS V., 3237
PODOLANCZUK A., 675
POLVERINO E., 928, 1350, 2014, 2533, 4773, 5376
POLVERINO F., 1381, 2456, 3135, 4790
PORPODIS K., 2663
PORSBJERG C., 937, 938, 942, 943, 2640, 5409, 5412, 5419
POSTH S., 6, 27, 4351, 4881
POWELL P., 5411, 5412, 5439
POWELL Z., 5408, 5412
PRICE D., 4780, 4783, 4784, 4922
PRICE L., 2535
PRITCHARD J., 1986
PROESMANS M., 686
PROSCH H., 234, 242, 2530
PUENTE MAESTU L., 2571
PUGGIONI F., 3711
PURWAR P., 4913
Q
QU J., 39
QUINT J., 75, 76
R
RABE K., 1357, 2644, 2645
RABINOVITCH M., 808
RADONIC T., 4293
RAHERISON-SEMJEN C., 155, 5433
RAHMAN N., 1, 2, 3, 4, 5, 3120, 3753, 4908
RAJ K., 83, 92
RAMA ESENDAGLI D., 14
RAMELLA S., 57
RAMNARAYAN P., 4162
RAMSOOK A., 2572
RANDERATH W., 735, 2541, 5375
RASTOGI D., 694
REBULI M., 1405
REDOLFI S., 821, 2566, 4265
REGAMEY N., 37, 118, 142
REGEV-YOCHAY G., 3081
RENZONI E., 1972
RESTRICK L., 4768
REVEL M., 4813
REYNAERT N., 90, 92
RICHELDI L., 170, 1969, 3716, 3723
RICKE E., 5433
RIEMEKASTEN G., 3136
RIHA R., 2539

ROBALO CORDEIRO C., 11, 121, 685, 5432
ROBERTI L., 125
ROBERTSON E., 673
ROCHESTER C., 2548
RODRIGUES GENTA P., 270
RODRIGUEZ RODRIGUEZ L., 3240
ROGLIANI P., 915, 3114
ROHDE G., 929
RØMHILD DAVIDSEN J., 7, 8, 145
ROSENKRANZ S., 2659, 2660
ROSSITER H., 2572
ROZENMAN Y., 3244
RUHWALD M., 4272
RUPANI H., 2661, 2666
RUSSELL C., 2555
RUSU P., 4270
RUTTER M., 2575, 3203
RYAN S., 2445, 5414
S
SAGLANI S., 20
SAGNARD O., 831
SAHAY S., 805
SALUZZO F., 4177
SALVE G., 3751
SALVI S., 45, 3703
SAMSON M., 1490
SANCHEZ D., 4187
SANCHEZ O., 158, 4167
SANCHEZ DE LA TORRE M., 107, 112, 2447
SANCHO CHINESTA J., 189, 194
SANDER L., 4777
SAPEY E., 201
SATIA I., 151
SAULER M., 4356
SAVAI PULLAMSETTI S., 808, 2440
SAVALE L., 2534
SAVELKOUL P., 2526
SCARPA M., 3729
SCHAEFFER M., 224, 226, 2037, 2571, 3201
SCHILPZAND T., 5408, 5412
SCHIZA S., 105, 112, 3095
SCHLEICH F., 66, 69, 3099, 5418
SCHOETERS G., 1405
SCHWARZ E., 103, 112
SCICHILONE N., 911
SCIURBA F., 1976
SCOGNAMIGLIO R., 4175
SEGAL L., 823
SELMAN LAMA M., 676
SERRANO A., 1490
SESE L., 161
SHAH P., 2032, 4155, 4812
SHAH R., 217, 221
SHAHID H., 817
SHAKESPEARE J., 2572
SHEN H., 1492
SHLOBIN O., 2442
SHOEMARK A., 906
SHOJAEE S., 828
SHTEINBERG M., 123
SIDDIQUI S., 2665, 5411, 5412
SIMONDS A., RCT3214, 5415
SIMONS S., 75
SINGH D., RCT799, 934, 2647, 4369
SINGH S., 228, 232, 2572
SITBON O., 806
SKOCZYŃSKI S., 826
SLOAN D., 4272
SMESSEIM I., 6, 10, 252, 4354
SMITH G., 4772
SMITH J., 3682
SNOECKX A., 701
SOCCI L., 4913
SOLE JOVER A., 817
SOLHEIM J., 4281
SORIANO J., 44, 4896
SOTO MARTÍNEZ M., 1367
SPAGNOLO P., 3131
SPENCER GRANT C., 217, 221
SPIELMANNS M., 2465
STAHL M., 2027
STAUFFER A., 5438
STEPHAN-FALKENAU S., 49, 50
STOLZ D., 195, 916, 919, 3109, 3207, 3209, 4288, 5415
STORGAARD L., 1520
STRAUS S., 4778
STRINGER W., 2035, 3199
SUMMERS R., 700
SUNDARALINGAM A., 250
SUPPLI ULRIK C., 5383
SVANES C., 4181
SVERZELLATI N., 234, 242, 702
SYRIGOS K., 2667
T
TAHURA S., 219, 221
TAKAHASHI Y., 1490
TAKKEN T., 230, 232
TAL-SINGER R., 3688
TÁRNOKI Á., 3128
TAYLOR-COUSAR J., 810
THOMAS M., 2042
THOMAS P., 3103
TOMASSETTI S., 1971, 4254
TORBICKI A., 5423
TORRES MARTI A., 2438
TOZZI M., 909, 913
TRAUTMANN M., 2023
TRAVIS W., 4911
TROMEUR C., 157, 4164
TROOSTERS T., 3100
TROY L., 235, 240, 242
TUFMAN A., 4913
TZANAKIS N., 2526
U
UBAGS N., 823, 3124, 3249, 5414
ULLAH A., 3124
ULRICH S., 1476, 1478, 1993, 1997, 2535
USMANI O., 1361, 2634, 3099, 4366, 4793, 5377
V
VACHIERY J., 2658, 4263
VAN BOVEN J., 2673, 3698, 4768, 5409, 5412
VAN BRAECKEL E., 2460
VAN DE VEERDONK M., 3748, 4294, 4888
VAN DEN AARDWEG J., 2576
VAN DEN DUNGEN C., 4900
VAN DER LINDEN M., 4376
VAN DER PLAS M., 2041, 2577, 3205
VAN DER WERF M., 687
VAN GEFFEN W., 4811
VAN HECKE O., 152
VAN PRAAG H., 4169
VANFLETEREN L., 1507
VARRASO R., 4277
VERBRAECKEN J., 109, 112
VERONESI G., 4186
VERSCHAKELEN J., 2532
VICENCIO A., 216, 221
VIJVERBERG S., 14
VILAR J., 2530
VILLENA GARRIDO M., 4354
VINKER S., 4807
VIRCHOW J., 3113, 5419
VITACCA M., 2547
VLIEGENTHART R., 699
VOGEL-CLAUSSEN J., 2664, 4804
VOGELMEIER C., 933, 2001
VOGIATZIS I., 5373
VOLPICELLI G., 4352, 4881
VON LEUPOLDT A., 131
VON MUTIUS E., 1366, 1387
VONK NOORDEGRAAF A., 4295, 5380
VOS R., 818
VYAKARNAM A., 1492
W
WALKER S., 3699
WALKER S., 3, 4, 253, 2434
WÄLSCHER J., 233, 242
WALSH S., 234, 242, 3715, 3720, 3721, 3724, 3725
WAPENAAR - DE KORVER M., 2576
WARE L., 1391
WATZ H., 840
WECHSLER M., 2641
WEDZICHA J., 1998, 2000
WEISS D., 20
WELLS A., 4786
WELTE T., 946, 1349, 1351, 1353, 1386, 1496, 2011, 3106, 5428
WEN F., 41
WESTERGREN-THORSSON G., 20
WIDENMANN A., 124
WIJSENBEEK M., 236, 242, 1378, 3715, 3718, 3720, 3724, 3725, 4890, 4892, 5421
WILKINSON A., 1989
WINDERS T., 922, 923, 5393, 5395, 5429
WINDISCH W., 2453, 2560
WITWER K., 2552
WITZENRATH M., 4815
WOITEK R., 701
WOLFF D., 819
WONG G., 3704
WOODCOCK A., 1983, 1985, 1987, 1991, 1992
WOOLLEY K., 5389
WORT S., 2443
WRIGHTSON J., 4350
WU Z., 4283
WUYTS W., 3728
Y
YARASCAVITCH J., 835
YAWN B., 945
YILDIRIM A., 1380
YORGANCIOĞLU A., 5415
Z
ZABERT I., 254
ZACHARASIEWICZ A., 37, 118, 142
ZANABONI P., 3236
ZANOWSKA K., 4912
ZAR H., 5389
ZIMMERMANN S., 72, 73
ZUCCATOSTA L., 172, 827, 2670

AUTHOR INDEX

Name, Abstract number

A

A CAMARGO JR C., PA5017

A CARDOSO R., PA2302

A CRESPO P., PA316

A INGRAM K., PA505, PA508

A PAYNE G., PA456

A V V., PA5057

A. ABISHEGANADEN J., PA1106

A. BENSON K., PA3954

A. ELBADAWY M., PA398

A. ELNAGAR M., PA398

A. FONSECA J., PA4499

A. G. SPRANGERS M., OA2612

A. HAGENS L., PA1211

A. HUSSEIN R., PA556

A. KRICKER J., PA599, PA4680

A. MARQUES G., PA1015

A. RASMUSSEN M., OA4330

A. SPRUIT M., OA2612

A. WUYTS W., PA5295

A.J. DE RIDDER M., PA666

AAARLI B., PA4524

AAES B., PA2785

AAGAARD H., OA3166

AAGREN M., PA1655

AALBERG VIKJORD S., PA1951

AALDERS B., PA1609

AALØKKEN T., PA3476

AALTONEN V., PA971

AAMARA B., PA2079

AARON B., PA2815

AARON S., PA2341, PA3651

AARTS M., PA1705, PA3884

AASE S. AABERGE I., PA3414

ABAD J., PA1041, PA1064, PA1274, PA1898, OA4841

ABAD CAPA J., PA526, PA1221, PA4076

ABAD CHAMORRO L., PA1816, PA2426, PA3057, PA3595

ABAD FERNANDEZ A., PA3445, PA5170

ABAGNALE L., PA503

ABARA S., PA1633

ABASCAL-BOLADO B., PA2321

ABBADI R., PA2391

ABBAGNALE L., PA1750

ABBAH A., PA1611

ABBAH A., PA1602

ABBAS A., PA2413

ABBAS A., PA4713

ABBAS H., PA3756

ABBASI A., PA1187, PA2273

ABBOTT L., PA3517

ABBRITTI M., PA2219, PA2221, PA2225

ABD EL-TAWAB A., PA3852

ABD HAMID M., PA3438

ABDALA J., PA3479

ABDALLA A., PA550

ABDALLA N., PA4595, PA4598

ABDALLAH S., PA1688

ABD-ELAZIZ K., OA2494

ABDEL-AZIZ M., PA2748, PA4571

ABDEL-AZIZ M., PA2745

ABDELBASSAT K., PA432

ABDELFATAH T., PA341

ABDELGADIR R., PA3025

ABDELGAWAD H., PA2921

ABDELGHAFFAR H., PA2197, PA3017, PA4740

ABDELGHANI A., PA3640

ABDELGHANY M., PA2834

ABDELHAFEEZ M., PA4567

ABDELHEDI Y., PA3992, PA4455

ABDELKABIR A., PA342

ABDELKADER N., PA3416

ABDELKEBIR A., PA323, PA329, PA331, PA340, PA5145

ABDELLATIF S., PA2993, PA2994, PA2995

ABDELMOEZ H., PA5106

ABDELOUAHAB F., PA1883

ABDELSALAM N., PA5085

ABDELSHAFI A., PA1688

ABDELWAHAB H., PA570

ABDELWAHAB N., PA2921

ABDELWAHAB S., PA2762

ABDEL-WAHAB N., PA4013

ABDENADHER M., PA5116

ABDENNADHER M., PA323, PA329, PA331, PA335, PA340, PA341, PA342, PA1082, PA1776, PA2865, PA5145, PA5148

ABDENNADHER M., PA338, PA3538

ABDENNEJI S., PA4384

ABDERRAHMANE S., PA4061

ABDESSLEM M., PA3992, PA4455

ABDLEKBIR A., PA5148

ABDO M., OA875, PA1593, PA2290

ABDOLRAHIMZADEH S., PA2109

ABDSHILL H., PA4416, PA4417

ABDUGANIEVA E., PA2715, PA5210

ABDUL HALIM 3., PA5029

ABDUL RODA M., PA456

ABDULAI R., PA1308, PA5286

ABDULAZIZ B., PA2942

ABDULNOUR J., PA3981

ABDULQAWI R., PA3921

ABDULRAZAK GORANI J., PA3762

ABE S., PA2705, PA2706

ABE T., PA1729

ABEL F., PA1889

ABEL L., PA4471

ABEL T., PA5251

ABELLA SANCHÍS V., PA4728

ABÉLY M., PA1262

ABEND B., OA4329

ABERBACHE S., PA426

ABERMAN I., PA3578

ABI RACHED R., PA602

ABIA-TRUJILLO D., OA2599, PA4629

ABID H., PA3877

ABILOVA Z., PA5092

ABISHEGANADEN J., PA3572

ABISHEGANADEN J., PA2196

ABISHEGANADEN J., PA2188

ABISHEGANADEN J., OA868

ABOHALAKA R., OA900, OA4243

ABO-LEYAH H., PA3842

ABONYI S., PA5253

ABOUSELHAM L L., PA2873

ABOUSSELHAM L., PA525

ABOZID H., PA308, PA1910, PA4422

ABRAHAM I., PA1901

ABRAHAMSSON T., PA2130

ABRAMSON M., OA881, OA890, PA3810

ABRAMSON M., PA2078

ABRANTES A., PA2954

ABRAR M., PA1950

ABREU G., PA1907

ABRIL RÓDENAS E., PA4728

ABTIN F., PA1130

ABU EID G., PA1180

ABU HUSSEIN N., PA547

ABUBAKAR I., PA1063

ABUBAKAR-WAZIRI H., PA1912

ABUEID G., OA4957

ABUHELAL S., PA2956

ACCASSAT S., OA4828, PA5182

ACCINELLI R., PA5336, PA5337, PA5338

ACCORDINI S., PA311, PA663, PA3335

ACET ÖZTÜRK N., OA4343

ACEVEDO A., PA5362

ACHAIAH A., PA1133

ACHARYA A., PA1620, PA2057, PA2327, PA2333

ACHARYA S., PA497

ACHECHE A., PA955

ACHILLE A., PA1019

ACHTERBOSCH M., OA3181

ACHTERBOSCHM M., PA3816

ACIK C., PA284

ACOCELLA F., PA3548

ACOSTA FERNÁNDEZ O., PA411, PA1823

ÁCS B., OA4854

ACUÑA S., PA2916

ACUÑA CORDERO R., PA981, PA2755

ACUÑA-CORDERO R., PA2777

ADACHI J., PA3900

ADAM D., PA1262, OA2631

ADAMALI H., PA3976

ADAMI A., PA1795, PA1802, PA2267

ADAMIDI T., PA3385

ADAMO G., PA1783

ADAMS A., PA3824

ADAMS J., PA603

ADAMS N., PA1123

ADAMS R., OA3292, PA5259

ADAMS T., OA894, OA4198

ADAMS W., OA2588

ADAN A., PA2071

ADÃO R., PA440, PA444

ADAR A., PA2729

ADBENNADHER M., PA330

ADCOCK I., PA452, PA2316, PA2328, PA3668, OA4210

ADCOCK I., PA5354

ADCOCK J., PA3045

ADCOCK J., PA3042

ADCOOK I., OA2499

ADDALA D., PA4437

ADDALA D., OA1561, PA1827, PA3441, PA5140

ADDERLEY N., PA1623, PA3569, OA4335, PA4600

ADDIS J., OA4229

ADEFISOYE J., PA313

ADEL M., PA323

ADELINE J., PA393

ADEMHAN D., PA1878

ADEMHAN TURAL D., PA1642, PA2771, PA3322

ADEMHAN-TURAL D., PA5044

ÅDÉN U., PA2130

ADER F., PA288

ADHIKARI R., PA4584

ADHIKARLA A., PA3315

ADIB KAIRALLA R., PA413

ADILAA O., PA4550

ADIR Y., PA1730, PA2889, PA2928

ADLER J., PA2334

ADMETLLO PAPIOL M., PA5174

ADNER M., PA595, PA1303, OA4209, PA4404, PA4405

ADNET F., PA1739

ADONOGLOU A., PA499, PA3821

ADRIAENSSENS N., PA2170, PA2176

AEGERTER H., OA776

AELBRECHT C., OA4343, OA4346

AERTS G., OA1535, PA2710, OA3159, PA3775, OA4343, OA4346, PA5188, PA5211, PA5295

AERTS J., PA2837

AERTS J., PA1079

AESCHBACHER S., PA2432

AFFES M., PA338, PA342

AFIF H., PA1966, PA5082, PA5317

AFONSO D., PA521

AFONSO R., PA2810

AFRAZI M., PA1305, PA3909

AFREIXO V., PA1835

AFRICANO M., PA2776

AFZAL A., PA3039, PA3040, PA3041

AFZAL S., PA1013, PA1953, PA1956

AGA M., PA5132

AGAMI A., OA1569, OA2624, OA2626

AGAOGLU E., PA2156

AGAPITOU T., PA3330

AGARD C., PA402

AGARWAL D., PA2139, PA4579, PA4992

AGARWAL K., PA1044

AGARWAL R., PA2404, PA3536

AGARWAL R., PA2229, PA5222

AGGARWAL A., PA2229, PA5222

AGGARWAL B., PA497

AGGELOPOULOU A., PA4709

AGGELOPOULOU C., PA3311, PA4738, PA5102

AGGOUNI O., PA2048

AGGOUNI O., PA2407, PA3659

AGIRTICI M., PA1650, PA5226

AGNELLO D., PA2416

AGNEW S., PA404

AGODOKPESSI G., PA5270

AGONDI R., PA352

AGOSTI F., PA1748

AGOSTI M., PA4449

AGOSTONI P., PA2261, PA4505

AGRA G., PA1016, PA1342, PA3794

AGRAWAL A., OA4848

AGRAWAL B., PA5232

AGRAWAL C., PA2404, PA3927

AGRAWAL R., PA2404, PA3536, PA3927

AGRAWAL S., PA3564

AGUADO AGUDO M., PA572, PA4078

AGUDELO J., PA2819

AGUDELO GARCIA P., OA4203

AGUELO VELILLA A., PA3676

AGÜERO-CALVO J., PA618

AGUERRE V., PA2086, PA2744

AGUIAR A., PA529

AGUIAR F., PA410, PA1164

AGUIAR M., OA3281

AGUIAR P., PA5327
AGUILA E., PA291
AGUILÀ M., OA788, PA3409, PA4583
AGUILAR PEREZ M., PA433
AGUILAR RIVILLA E., PA5170
AGUILERA OTALVARO P., PA981, PA2755
AGUILÓ N., PA1713
AGUIRRE-FRANCO C., OA872
AGUSTÍ A., PA1075, PA1157, PA1323, PA2394, OA2487, PA3604, PA3668, PA3672, PA3674, PA3777, PA4146, OA4196, OA4936, PA5194
AGYEMAN P., PA2733
AHAOUARI T., OA4955
AHARONI S., PA4474
AHAS B., PA2959
AHIRE R., PA3975
AHITAN B., PA987
AHLGREN J., OA780, PA4417
AHMAD K., PA5182
AHMAD M., PA404, PA3473
AHMAD M., PA2208
AHMAD M., PA4567
AHMAD T., PA3873
AHMAD SWEED R., PA1826
AHMADI Z., PA1886, PA3762
AHMED A., PA2153
AHMED A., PA454
AHMED E., PA5206, PA5240
AHMED H., PA990, PA5312
AHMED H., PA3889
AHMED H., PA3071
AHMED M., OA1553, PA2104, PA2119, PA2752, PA3371
AHMED O., PA4983
AHMED S., PA1044
AHMED W., PA973, PA2962, PA2963
AHMED W., PA648, PA1895
AHMED Z., PA2907, PA4983, PA4991
AHMED Z., PA2396, PA3602
AHMED-CHOWDHURY S., PA1020
AHN R., OA899
AHN Y., PA5366
AHRENS M., PA2290, PA2989
AHROUD M., PA5307
AHUJA A., PA3028, PA3408
AICHAOUIA C., PA300, PA578, PA642, PA1285, PA1791, PA2043, PA4755, PA4760
AIELLO M., PA590, PA591, PA3610
AIGBIRIOR J., PA404
AIKWANICH A., PA4556
AINOLA M., OA2579
AIRES DA CÂMARA S., PA3506
AIRES DA CÂMARA S., PA3507
AIRÒ P., OA746
AISHAH A., PA3597
AISSANI S., PA1942, PA5276
AISSI W., PA294
AIT MAHMOUDE N., PA4132
AIT NACER K., PA489
AIT NASSER K., PA395, PA637, PA5324
AITHAL S., PA1613
AITKEN S., PA2821
AITKEN S., PA2816
AITNASSER K., PA287, PA2412, PA3329
AJAY A., PA4759
AK G., PA2870, PA3299
AKA M., PA1642
AKAMATSU T., PA3666, PA4727
AKANDE T., PA1603
AKANSOY M., PA3601
AKENROYE A., OA1532
AKERØ A., PA2159
AKGÜL ERDAL M., PA1644, PA4462, PA5012
AKGUL-ERDAL M., PA5045
AKGÜN M., PA2071, PA2395
AKHALKATSI A., PA1851
AKHMETOVA A., PA5092
AKILZHANOVA A., PA5092
AKINLABI K., PA4522
AKKERMAN O., PA4540
AKKERMAN O., PA4551
AKKUŞ A., PA501
AKOUMIANAKI E., PA2307
AKRAM J., PA4567
AKROUT I., PA2197, PA3017, PA3833, PA4569, PA4740, PA5152
AKSEL A., PA4525
AKSHIKAR R., PA1051
AKYILDIZ B., PA2374, PA2376, PA2377, PA2378, PA2379
AKYLBEKOV A., PA2698
AL HEIALY S., OA4336
AL HUSSEIN N., OA4198
AL JASSIM F., PA4595
AL MAASHARI R., PA4713
AL MARZOUQI F., PA4595
AL MELEH F., PA4595
AL REFAIE A., PA1747
ALA S., PA3451
ALABED S., PA2885, PA3490
ALADAB A., PA2161, PA4567, PA5086
ALADJIDI N., PA4471
ALAEJOS PASCUA M., PA4086, PA5131
ALAGARSAMY S., OA2601
ALAGESAN S., PA5237
AL-AHMAD M., PA1891, PA1892, PA1894, PA1897
ALAMER A., OA1431, PA3452
AL-AMERI M., OA4209
ALAMI S., OA3293
ALAMOUDI O., OA4848
ALAMRI A., PA4392
ALANAZI A., PA4392
ALANIS-PONCE J., PA301
ALAPI H., OA2490
ALARCON J., OA3282
ALARD S., PA286, PA2061
ALASTI F., PA4641
ALATAS F., PA4380
ALAWADHI H., PA414
ALAZAZZI H., PA414
ALBACAR N., PA1157, OA2487
ALBÆK JACOBSEN H., PA1027
ALBANESE P., OA772, OA2626
ALBANO G., PA2708, PA4038
ALBERA C., PA5160
ALBERCA K., PA1016
ALBERS F., PA5292
ALBERS M., PA3793
ALBERT M., PA4132
ALBERTI G., PA2998
ALBERTI L., OA4848
ALBERTI M., PA3479
ALBINO DA SILVA E., PA1241
ALBOGA D., PA1644, PA3322, PA4462
ALBOUZIDI C., PA342
ALBU G., PA3546
ALBUJA HIDALGO A., PA4026
ALBUQUERQUE A., PA1794
ALBUQUERQUE C., PA2211
ALBUQUERQUE RODRIGUES FILHO E., PA3061, PA4637
ALCAIDE A., PA1110
ALCARAZ BARCELONA M., PA4622
ALCARAZ SERRANO V., PA1662, PA2838
ALCARAZ-SERRANO V., PA1077, PA1084
ALCARRAZ VÁZQUEZ L., PA4583
ALCÁZAR NAVARRETE B., PA3805
ALCÁZAR-NAVARRETE B., OA761
ALCOCK L., PA1592, OA3185
ALDÀS I., PA1041
ALDÁS CRIADO I., PA526, PA1221
ALDECO M., PA3382
AL-DELAIMY W., PA1607
ALDERIGHI L., PA5277
ALEEM S., PA4092
ALEJANDRE ALCAZAR M., OA4329
ALEKSANDROVA E., PA1839
ALEMAYOHU M., PA1021
ALENCAR A., PA306
ALEVRAKIS E., PA5102
ALEXANDER C., PA1885
ALEXANDER L., PA3434
ALEXANDRE F., PA518, PA952
ALEXANDRE S., PA2999
ALEXANDRU M., PA2765
ALEXIEV V., PA2089
ALEXIS N., PA1600
ALEXOPOULOU E., PA3925, PA4460
ALFAKI M., PA5356
ALFANO F., PA1320
ALFARO E., PA2953
ALFARO T., PA495
ALFARO ALVAREZ J., PA1221
ALFARO GARCIA E., PA2329, OA4841
ALFAYA I., PA1169
ALFERES DE LIMA D., OA2604
ALFIERI P., PA1763, PA2250, PA3974
ALFONSO R., PA1895, PA1906
ALFONSO-CRISTANCHO R., PA648, PA1890, PA2062, PA4711, PA4712
ALFOUZAN R., PA4469
ALGHAMDI S., PA994
ALHADDAH L., PA613, OA3146, PA3310
ALHAMDAN F., OA4333
ALHARBI T., PA2857
ALHEJAZI T., PA2738
ALHOTYE M., PA4985
ALI A., PA3852
ALI A., PA1087
ALI C., OA1560
ALI G., OA890
ALI I., PA2180
ALI M., PA332
ALI M., PA1632, PA2721, OA4330
ALI M., PA5275
ALI M., OA896, PA1240
ALI P., PA4072
ALI R., PA3614
ALI T., PA2380
ALI Y., PA4557
ALI Z., PA3416
ALI MUNIVE A., PA4714
ALIA I., PA548
ALIAC N., PA2688
ALIANI M., PA4112
ALIBERT S., PA1074
ALIBERTI S., PA381, PA382, PA383, PA384, PA385, PA386, PA388, PA397, PA399, PA1071, PA1086, PA1106, OA1456, OA1457, OA1458, OA1464, PA2148, PA2168, PA2298, PA2340, PA2342, PA2769, PA2843, PA2849, PA3774, PA3864
ALICANDRO G., OA1464, OA1540, PA2148
ALIKASIFOGLU A., PA5044
ALISON J., OA2620, PA5042
ALISON J., PA965
ALISPAHIC I., PA1022
ALIVERTI A., PA324, PA1039, PA2128, PA2908, OA3189, PA3563, PA4505, OA4958, PA5009, PA5262
ALIZADEH BAHMANI A., PA2748
ALJAMA C., PA2371, PA3920
ALJAMA VIZCARRA C., PA1161, PA4398, PA4660
ALJEHANI M., OA754, PA4742
ALKASSAR Y., PA4713
AL-KHAIRALLA M., PA4011
ALKHATEEB E., PA5086
ALKHATHLAN B., PA3772, PA4985
ALKHATIB A., OA1461, OA1536, OA4320
ALKHOURI S., PA4469
ALLAN R., PA1862
ALLANGAWI M., PA2161
ALLEGORICO A., PA2761, PA3947
ALLEGRI C., PA2398, PA5105
AL-LEHEBI R., PA1891, PA1892, PA1894, PA1897
AL-LEHEBI R., PA1907
ALLEN A., OA4305
ALLEN A., PA1029, PA1030
ALLEN J., PA2401
ALLEN JR J., PA4438
ALLGAR V., OA2587
ALLGOOD S., PA3810
ALLIMONNIER L., PA3558
ALLIN E., PA2738
ALLINSON J., PA2815, PA3625, PA4144
ALLINSON J., PA1951, PA3049, PA4145, OA4931
ALLINSON J., PA2193
ALLISON B., PA3315
ALLOCA D., PA3801
ALLOMBA C., PA1073
ALLSWORTH M., OA893, PA1941
ALLWOOD B., PA3888
ALMADANA PACHECO V., PA2243
ALMADHI M., PA5220
ALMAGHRABI A., PA4004
ALMEIDA É., PA1058, PA1597, PA2716
ALMEIDA F., PA1304, PA4486
ALMEIDA F., PA306, PA2257, PA2431
ALMEIDA J., PA1102
ALMEIDA S., PA1037
ALMEIDA FONSECA J., PA488
ALMENDROS I., PA1269, PA5234, PA5235
ALMODOVAR T., PA2211
ALMOND M., PA1600

ALMONTE BATISTA W., PA4622
ALMQATI B., PA2857
ALMQVIST C., PA658, PA664, OA1437, PA2748, PA4426, PA4427, PA4999, PA5030, PA5359
ALMQVIST L., PA655
ALMSTRAND A., PA3350
ALMULHIM S., PA2691
ALMUNTASHIRI A., PA2857
ALMUTAIRI M., PA987, PA2421
AL-NAJJAR H., PA5220
ALOBAIDI A., PA1603
ALOE C., PA2233
ALONGI N., PA2708
ALONSO A., PA2252
ALONSO A., PA5155
ALONSO L., PA5212
ALONSO FERNÁNDEZ A., PA1270, PA2251
ALONSO MALLO E., PA4086, PA5131
ALONSO PAYO M., PA4086
ALONSO PÉREZ T., PA2400
ALONSO SASTRE E., PA4086, PA5131
ALONSO-LECUE P., PA2321
ALONZI V., PA2305
ALOSAIMI B., PA2724
ALOTAIBI W., PA5263
ALOUI A., PA2856
ALOULOU Y., PA980, PA3643
ALOWIWI H., PA1309
ALPI S., PA3675
ALQAHTANI A., PA4021
ALQAHTANI J., PA2857, PA4392
ALSALEH S., PA5263
ALSAYED M., PA4595
ALSHEHRI N., PA5263
AL-SHUWELI S., OA883
ALSIDDIQI S., PA5263
ALSINA X., PA1157
ALSINA RESTOY X., PA1740, PA1756
ALSINA-RESTOY X., PA347
ALSTED S., PA2399, PA3628
ALSUMALI A., OA740
ALTENBURG J., PA381, PA385, PA386, PA397, PA1070, PA1071, OA1456, PA2340, PA2342, PA2769
ALTENBURG J., OA1458
ALTER P., PA1318, OA2603, PA3668
ALTES T., PA2283
ALTHOBIANI M., PA1588
ALTIERI E., PA4112
AL-TIKRITY M., PA5086
ALTINCATAL A., PA2091, PA3607, PA3618
ALTINIŞIK G., PA353
ALTINTAŞ D., OA2505
ALTMANN DE OLIVEIRA F., PA5255
ALTMANN OLIVEIRA F., PA5254
ALTON E., PA2156
ALTRAJA A., PA2959
ALTUBE S., PA3479
ALTUWAYJIRI A., PA1612
ALVARADO MIRANDA M., PA1072, PA1078
ALVARELHÃO J., PA5049
ALVARENGA SANTOS M., PA3638
ALVARENGA SANTOS M., PA528
ALVAREZ A., PA390, PA2841
ALVAREZ G., PA3651
ÁLVAREZ ÁLVAREZ P., PA1816, PA2426, PA3057, PA3595
ÁLVAREZ BALADO L., PA3005, OA4841
ÁLVAREZ BRITO A., PA4728
ÁLVAREZ FERNÁNDEZ A., OA1543
ÁLVAREZ GONZALEZ D., PA4086
ÁLVAREZ GUTIÉRREZ F., PA4097
ALVAREZ MARTÍNEZ I., PA407
ÁLVAREZ RIVAS J., PA4518, PA4519
ÁLVAREZ RUIZ DE LARRINAGA A., PA1270
ÁLVAREZ-SALA R., PA3801
ÁLVAREZ-SÁNCHEZ V., PA4577
ÁLVARO A., PA3599
ALVES A., PA362, PA1031
ALVES C., PA371
ALVES M., PA2954
ALVES M., PA2878, PA3474
ALVES S., PA1057, PA2799, PA2810
ALVES DE ARAUJO K., PA953
ALVES KIYOTA T., PA1172
ALVES PEREIRA H., PA1039
ALVES RODRIGUES BRANDAO-RANGEL M., PA1261, PA4670
ALVES-MOREIRA L., OA2607, PA3625, PA4144, PA4145
ALVING K., OA758, PA1939, PA4499, PA5028
ALYAMANI M., PA4416, PA4417
ALYAMI R., PA4597
ALYSANDRATOS K., PA4034
ALZAHABI K., PA1603
ALZAID M., PA5263
AL-ZAYER S., PA2960, PA4639
AMADO I., PA1037
AMADO DIAGO C., PA1242
AMADO DIAGO C., PA618
AMADO-RODRÍGUEZ L., OA783
AMALRIC M., PA2299
AMAN J., PA451, PA2297, OA2488, PA5183
AMANDA G., PA3921
AMANDA H., OA1545
AMANI B., PA4544
AMANI K., PA2153
AMAR L., PA4630, PA5138
AMARA B., PA4147
AMARAL A., PA320, PA653, PA4422, PA5063
AMARAL A., PA308
AMARAL R., PA488, OA758, PA4499
AMARO R., PA1084, PA1662
AMAT F., PA5017
AMATA M., PA1783, PA4079
AMATI F., PA399, OA1464, PA2148
AMATO S., PA4684
AMATULLI A., OA3272
AMBROGI M., OA1564
AMBROGI V., PA4504
AMBROSE C., OA1417, PA3032
AMBROSINO P., PA503, PA4108
AMEL K., PA1314, PA1870
AMIALI R., PA4147
AMIGO E., PA1592
AMIN A., PA1825, PA5085
AMIN H., OA2517, PA3072, PA4424
AMINA A., PA335
AMINIAN K., PA1595
AMIR B., PA5031
AMIS T., PA3993
AMMAR J., PA2093, PA2758, PA4461, PA5360, PA5367
AMMAR R., PA285, PA3929
AMMOUS O., OA4223
AMORIM C., PA528
AMORIM C., PA1049
AMORIM D., PA2936, PA2938
AMORIM P., PA3979
AMORIM DE LACERDA J., PA4057
AMPELIOTI S., PA4717
AMPIKAIPAKAN S., OA3180
AMSELEM S., PA3938, PA3940, PA3943
AMSELLEM S., OA3280
AN J., PA3034
AN M., OA899
AN Q., PA2416
AN T., PA2055, PA5113
ANAGIOTOS A., PA2765
ANAGNOSTOPOULOS G., PA3429
ANAGNOSTOPOULOS N., PA462, PA5223
ANAGNOSTOPOULOU C., PA1188, PA4526
ANAGNOSTOPOULOU P., PA2769, PA3385, PA3561, PA3987, OA4948, PA5018
ANAND M., PA1021
ANANDA R., PA2738
ANANTH S., PA3675
ANANTRAJ S., PA2396, PA3602
ANAR C., PA3462
ANASTASIADOU P., OA3152
ANASTASIOU N., PA327, PA3879, PA5147
ANCEL J., PA611, PA1841
ANCKAERT J., OA777
ANCOCHEA J., PA2400, OA2484
ANDELID K., OA3179
ANDERSEN A., PA5173
ANDERSEN C., PA1017
ANDERSÉN H., PA2075
ANDERSEN H., PA631, PA636
ANDERSEN H., PA5273
ANDERSEN M., PA1143, PA4007
ANDERSEN S., PA5173
ANDERSEN T., OA2621
ANDERSEN Z., OA2521
ANDERSEN Z., PA305
ANDERSON A., PA2071
ANDERSON C., OA3292
ANDERSON D., PA546, PA4978
ANDERSON G., OA2497
ANDERSON G., PA2818
ANDERSON I., PA614
ANDERSON J., PA546
ANDERSON L., PA5014
ANDERSON M., PA5140
ANDERSON P., PA1044
ANDERSSON A., OA3179, PA3624
ANDERSSON C., PA1929
ANDERSSON C., OA780, OA2489
ANDERSSON H., PA3476
ANDERSSON L., OA2499
ANDERSSON L., PA634, OA2495, PA5354
ANDERSSON M., PA655, PA3328
ANDERSSON MARFORIO S., PA5034
ANDIA ITURRATE J., PA2868, PA3890
ANDO K., PA4391
ANDONOVA Y., PA3372
ANDRADE L., PA1031, PA1835
ANDRADE M., PA4082
ANDRADE ALMEIDA P., OA754
ANDRÉ B., OA853, PA2915
ANDRÉ E., PA2170, PA2176
ANDRE M., PA1890, PA4711, PA4712
ANDRÉ N., PA1057, PA2799, PA2810, PA4541
ANDRE S., PA286, PA2061
ANDRÉ DE MOURA SANTOS M., PA4637
ANDREANA I., OA4201
ANDREAS S., OA2595, PA3046
ANDREASEN F., PA1814
ANDREASSEN A., OA746
ANDREASSEN H., PA2947
ANDREIEVA I., PA3006
ANDRÉJAK C., PA2829
ANDREO F., PA479, PA1113
ANDREOLI M., PA1725
ANDREOTTI S., PA2334
ANDRÉS ARANGO FRANCO C., PA4471
ANDRES DE LLANO J., PA4086
ANDRES FRANCH F., PA407
ANDRÉS PORRAS A., PA4086, PA5131
ANDRESEN B., OA3166
ANDREU RODRÍGUEZ A., PA3916
ANDRIANOPOULOS A., PA5186
ANDRIANTSITOHAIN A R., PA1271
ANDRIJEVIC I., PA1330, PA1347
ANDRINOPOULOU E., PA3997
ANDRINOPOULOU E., PA1074, PA1086
ANDRINOPOULOU E., PA2280, PA2284
ANDRISANI D., PA1213
ANDRITSCHKY C., PA485
ANDUJAR R., PA3615
ANDÚJAR LLAMAZARES M., PA407
ANEES S., PA4105
ANEGONDI N., OA4851
ANELLI M., PA2398, PA5105
ANEVLAVIS S., PA4437
ANG S., PA2088
ANGARITA-FONSECA A., PA2683, PA2693
ANGELIDIS I., OA2624
ÂNGELO RIZZO J., PA3061, PA4637
ANGELONE D., PA4636, PA4645
ANGELUCCI A., PA2908, PA4505
ANGIARI S., PA2359
ANGINO A., PA312, PA1961, PA3803, PA3811
ANGSTMANN H., PA605
ANGYALOSI G., OA1461, OA4320
ANIL A., PA4649
ANIMI S., PA4085
ANIS M., OA4323
ANITA W., OA894
ANJOS D., PA5033, PA5036
ANKERST J., PA1948, PA2973
ANKJÆRGAARD K., PA2947
ANKUDAVICIUS V., PA2206
ANNANE D., OA786
ANNE-LISE P., PA393
ANNEMA J., PA482, PA4005, OA4850
ANNEMA J., OA3263
ANNEMA J., OA4855
ANNESI MAESANO I., PA1614, PA3465
ANNESI-MAESANO I., PA312, PA2066,

PA2067, PA5015
ANNUNZIATA A., PA2711, PA2850, PA2951, PA2952, PA4580
AÑÓN J., PA5248
AÑÓN J., PA2326
ANQUETIL V., OA1569, OA2623
ANSARI A., PA1087
ANSARI M., OA1569, OA2624, OA2626
ANSTROM K., OA1432
ANTALFFY T., PA3675
ANTÃO J., OA4312, OA4316, PA5048
ANTHRACOPOULOS M., OA1438
ANTIKAINEN H., PA1601, OA2520
ANTIN-OZERKIS D., PA2874
ANTIPKIN Y., PA2332
ANTIT S., PA2993, PA2994, PA2995
ANTOGNONI E., OA3272
ANTOINE J., PA2369
ANTOINE-PITTERSON P., PA4021
ANTONAKOS G., PA3573, PA3577
ANTONELLI-INCALZI R., OA4859
ANTONIADES I., PA1859
ANTONIADIS A., PA337, PA3429
ANTONIADOU A., PA1687
ANTONIEWICZ L., PA1258, OA4235
ANTONINO L., PA2092
ANTÓNIO JORGE F., PA5077
ANTONIOU K., PA417, PA3467, PA3468, PA3921, PA4709, PA4717
ANTONIOU K., PA2854, PA4037, PA5187
ANTONOGIANNAKI E., PA5102
ANTONOGIANNAKI E., OA3275
ANTONOGLOU A., PA3518
ANTONOV A., PA2313
ANTORANZ A., OA1572
ANTOUN E., PA3435
ANTUNES A., PA3866
ANTUNES G., PA3025
ANTUNES M., PA1129, PA2871
ANTUS B., PA3627, PA3809
ANWAR R., PA3071
AO M., PA2217
AOGÁIN M., PA2193
AOKI A., OA4207
AOUINA H., PA294, PA302, PA619, PA627, PA2248, PA2254
AOUINI M., PA1964
APANASIEWICZ W., PA3038
APARECIDA TEODORO ALCANTARA VERRI B., PA1284, PA2262
APARECIDO DA SILVA R., PA953, OA4219
APEN C., PA2927
APICELLA C., PA1753
APOLLONATOU V., OA3275, PA5102
APOSTOLAKOU E., PA2307
APPELMAN B., PA3426
APPENDINI L., PA2735
APPENZELLER P., OA741, OA747
APPLETON S., PA5259
APRILE V., OA1564
APTE K., PA1322
APTE S., PA2233
AQUARO G., OA4848
AQUILA G., OA4947
AQUINO G., PA2356
AR U., PA357
ARABKARI V., PA2324
ARAFAG A., PA2688
ARAI K., OA898
ARAKAKI W., PA2830
ARAMAKI E., PA3900
ARAMBURU GONZÁLEZ J., PA5170
ARANCIBIA F., PA3568, PA5108
ARANDA R., OA742
ARAPOSTATHI S., PA5186
ARASON A., PA2965
ARAÚJO A., PA4516
ARAÚJO D., PA2214
ARAÚJO M., PA1155
ARAÚJO MENDES P., PA1172
ARAYA J., OA4299, PA5238
ARBAT S., PA3602, PA5232
ARBERRY J., PA3889
ARBILLAGA ETXARRI A., PA349
ARBILLAGA-ETXARRI A., OA3183, PA4518, PA4519
ARCADU A., OA1464
ARCE G., PA3479
ARCE S., OA872
ARCHER G., PA1230
ARCHONTOGEORGIS K., PA1876
ARCOLEO G., PA1783
ARCOS MACHANCOSES J., PA3381
ARCOVIO S., PA4075
ARDESI F., PA2718, PA4741
ARDITO M., PA5288
ARDON T., PA435
ARDURA C., PA5032
AREAS G., PA4633
AREGGER C., OA3255
AREIA M., PA488
ARELLANO ORDEN E., OA4831
ARELLANO VENGOCHEA M., PA1710
ARENA G., PA4702
ARENA R., PA2261
ARENAS-JIMÉNEZ J., OA4848
ARENTS E., PA361, PA969, PA3395
ARENY A., OA782
ARENY BALAGUERÓ A., PA4672
ARENY-BALAGUERÓ A., PA4668
AREVALO-MONTENEGRO Y., PA4714
AREZ CONSTANT C., PA2113, PA2114, PA4460
ARFAOUI H., PA1966, PA5082, PA5317
ARFOOSH R., PA3677
ARGENTE DEL CASTILLO RODRIGUEZ P., PA2251
ARGHIR O., PA3926
ARGIRIADOU T., PA5127
ARGOUBI R., PA4706
ARGULA R., PA1203
ARIAS T., PA1166
ARIAS ARCOS B., PA4026
ARIAS-ARIAS Á., PA1693
ARIFUKU H., PA2705
ARINZE J., OA2605
ARINZE J., PA1916
ARISATO H., PA5215
ARISMENDI E., PA1924, PA3822
ARISTIZABAL DUQUE R., PA981, PA2755
ARITA M., PA1168
ARITA GUEVARA M., PA5174
ARIYARATNAM P., PA1787
ARIZA PROTA M., PA1816
ARIZONO S., PA3391, PA3402, PA3567
ARJOMANDI M., OA870
ARJONA M., PA3502
ARJONA PERIS M., OA4344
ARKOUMANI E., PA3925
ARLEN M., PA2970
ARLING C., OA761
ARMAGANIDIS A., PA3573, PA3577
ARMENGOT M., PA2765
ARMENTARO G., PA1310
ARMENTO A., PA2968
ARMÉSTAR F., PA4576
ARMIÑANZAS C., PA2321
ARMINDO R., PA2813
ARMITAGE M., PA3669
ARMONI DOMANY K., PA1654
ARMSTRONG A., OA3193
ARMSTRONG I., PA1206, PA1761
ARMSTRONG I., PA1199, PA5185
ARMSTRONG L., OA757, PA2260, PA4500, OA4954, PA5039
ARMSTRONG M., PA2780, OA4221
ARMSTRONG N., OA3281
ARMSTRONG-JAMES D., PA2181, PA2184, PA4731
ARNAO L., PA3615
ARNAUD C., OA753
ARNAUD C., OA4337
ARNAUD M., PA3866
ARNOLD D., PA3855
ARNOLD D., PA3298
ARNOLD L., PA3939
ARNOTT C., OA762, PA3522
ARNOUAT B., PA2149
ARNOUX A., OA4829
ARNULF I., PA571
AROGUNDADE F., PA3962
ARONICA T., PA4684
AROOJ P., PA1787
ARORA P., OA2581
ARORA S., PA3498
ARPICCO S., PA3910, OA4201
ARPINELLI F., PA5280
ARPINELLI M., PA2109, PA2110
ARRANTO C., PA2922
ARRANZ ALONSO S., OA3172
ARRANZ MARTINEZ J., PA5272
ARREBOLA MORENO A., PA3805
ARRIGO E., PA975, PA2224, PA4733, PA5160
ARRIGONI A., PA2398
ARRIGONI G., OA3270
ARRON J., OA1531, PA4675
ARROYO R., PA2138
ARROYO HERNANDEZ L., OA2590
ARROYO VARELA M., PA1238, PA1239
ARRUDA E., PA4977
ARRUDA MARTINS M., PA953
ARSHAD A., PA2161
ARSHAD H., PA313, OA1441, PA1950
ARSHAD S., PA3674
ARSLAN B., PA5329
ARSLAN H., PA1622, OA2505, PA2731, PA5012
ARSLAN Y., PA2931
ARTAUD MACARI E., PA1212, PA1214, PA1219, PA4980
ARTAUD-MACARI É., PA409, PA2149
ARTEAGA-MARRERO N., PA1823
ARTHUR K., OA893
ARTICO C., PA3678
ARTIEDA M., PA5212
ARTIGAS A., OA782, PA4668, PA4672
ARUJ P., PA3479
ARUMUGAM P., OA3276
ARVANITAKI A., PA3494
ARVANITIS D., PA5186
ARWAS N., PA2095, OA2512
ARYA N., PA4687
ARZT M., PA1279, PA1882, PA2996, PA2997, PA3001, OA3289, OA4845
ASADI GHARABAGHI M., PA1182
ASADO T., PA633
ASAI K., PA468
ASAI Y., PA1729
ASAMI M., PA1729
ASAMI-NOYAMA M., PA1331, PA2410, PA3447, PA4000
ASAMOAH K., PA2328
ASANO F., PA5231
ASANO K., PA2362
ASARNOJ A., PA1619
ASBJARNARSON A., PA2965
ASCANIUS JACOBSEN P., PA1010, PA1332
ASFAHAN S., PA1829
ASFUROĞLU P., PA1646, PA3374, PA5012
ASGARY E., OA4319
ASHKENAZI M., PA5041
ASHKENAZI-HOFFNUNG L., PA5031
ASHRAF A., PA3071
ASHRAF S., PA1344, PA3071
ASHWINI C., OA4935
ASIF H., PA3071
ASIMAKOS A., PA499
ASIMAKOS A., PA4602
ASK K., PA1232, PA4072
ASLAN A., PA1646, OA2505, OA2507
ASLANIS V., PA4059
ASLEBAGH S., PA1608
ASMA G., PA1314, PA1870
ASMA K., PA2153
ASMA Y., PA4384
ASMANIDOU M., PA3330
ASO J., PA626
ASO GONZALEZ S., PA1710
ASOH N., PA1059
ASRAT S., PA2983, PA4408
ASSAM N., PA1933
ASSASSI S., PA1132, PA2879
ASSENHÖJ M., PA3350
ASSIOURA A., PA3311
ASSOU S., OA892
ASTIN R., PA517
ASTLEY J., OA757, PA2260, PA4500, OA4954
ASTON P., PA3897
ÅSTRAND A., PA4130
ASTUDILLO M C., PA2136
ASWIN P., PA297
ATAC A., PA956
ATALLAH R., PA2359
ATANASOVSKA A., PA3353, PA3813
ATAR D., OA4833
ATAYA A., PA2292
ATEF M., PA5106
ATHANASIOU C., PA4623
ATHANASOPOULOU A., PA5102
ATHANASSIADI K., PA3773
ATHANAZIO R., PA2769
ATHIMNI Z., PA2856
ATICI E., PA511, PA3767
ATIEH A., PA332
ATIENZA-MATEO B., PA1237

ATMOWIHARDJO L., PA2297
ATOUI F., PA2408
ATRIPALDI L., PA2711
ATTALI V., PA571
ATTANASI M., PA2737, PA5364
ATTARD S., PA571
ATTAVAR S., PA3498
ATTAWAR S., PA4491
ATTIA K., PA1185
ATTILIA I., PA4025
ÅTTINGSBERG E., PA1143
ATTWOOD L., PA546
ATZENI M., PA2894
AU C., PA2112
AU R., OA4934
AUBERT J., OA747, PA3365
AUBERTIN G., OA1554, PA2105
AUDEBERT C., PA1099
AUFFRAY C., PA5354
AUFFRET Y., OA4827
AUGER D., PA4143
AUGER W., OA745
AUGERINOU I., PA4575
AUGUSTINE D., PA3504
AUGUSTO T., PA2256, PA4974
AUJAYEB A., PA4437
AUJAYEB A., PA3434
AUL R., PA3889
AULAKH G., PA2054
AULD S., PA2152
AUNG A., PA5347
AUNG H., PA4127, PA5347
AUQUIER M., OA3264
AURÉLIO DE VALOIS CORREIA JÚNIOR M., PA3061, PA4637
AURTENETXE A., PA3502
AUSIN HERRERO P., PA3617, PA5285
AUSTIN C., PA4675
AUTERI S., PA3479
AUTILIO C., PA2131, PA2138, PA5246
AUWERX J., PA3911, PA3912
AU-YONG I., OA4848
AVALIANI T., PA1053, PA4545
AVALIANI Z., OA865
AVALOS PEREZ-URRIA E., PA2400, PA4026
AVANZI L., PA4613
AVANZINI A., OA4342
AVARLIS P., PA4717
AVARLIS P., PA4709
AVCI B., PA3451
AVCI E., PA2282, PA3998
AVCI H., PA4462
AVDEEV S., OA4848
AVERSA L., PA2710, PA3775, OA4346, PA5211, PA5295
AVERSENQ E., PA3011
AVGERI V., PA1043
AVILA A., PA412
AVIRAM G., PA435
AVIRAM M., OA1542, OA2512
AVOSEH M., PA437, PA1728, PA2900
AVOUAC J., PA3468, PA3474
AVOUAC J., PA3467
AVRAM A., PA1738
AVRAMIDIS A., PA2812
AWAN M., PA1787
AWASTHI S., PA4434
AXELROD T., OA1534
AXELSSON M., OA3167, OA3173, OA3174
AXT P., PA5316
AY P., PA3333, OA4232, PA5329
AYACHI J., PA1124, PA1176, PA1185, PA1186, PA2308, PA2312, PA2862, PA4023, OA4960
AYADI H., PA1009
AYADI M., PA1009
AYADI- KADDOUR A., PA341
AYARI R., PA3768
AYATHAMATTAM J., PA481
AYAUB A., PA4072
AYAZSEVEN S., PA2212
AYDILEK O., PA2870
AYDIN Ö., PA1901
AYDINDAG D., PA402
AYEDI A., PA338
AYEDI S., PA3047, PA3059, PA3541
AYHAN Y., OA4327
AYMAN A., PA5085
AYMEN J., PA2096, PA5369
AYOUB A., PA5294
AYOUB E., OA4828
AYUELA LACABA C., PA433
AYUYAO F., PA3308
AYZIT KILINÇ A., PA2731, PA5012
AZARBARZIN A., PA1274, PA3594, PA3597
AZEM T., PA1171
AZEVEDO I., PA1665, OA3171
AZEVEDO L., PA5110
AZEVEDO P., PA2146, PA2157
AZIM A., PA2986
AZIZ F., PA1907
AZIZ I., PA2682
AZIZBEKOV S., PA2698
AZUMA A., PA2877, PA2878, PA3460, PA3921
AZUMA H., PA2706
AZZA S., PA4544
AZZI N., PA2052
AZZOLA A., PA1903

B

B A., PA2396, PA3602, PA5339
B CHANG A., PA4460
B DE PAULA P., PA316
B. LAURSEN C., OA4826
B. PETERS J., OA2612
BA I., PA1153
BAALBAKI N., PA4571, PA4574, PA4674
BAASTRUP SOENDERGAARD M., OA1574
BABA R., OA2501
BABA Y., PA5231
BABALIARI E., PA334
BABALIS G., PA545
BABAOĞLU ELKHATROUSHI B., PA4591
BABIK B., PA1173, PA3547, PA3555
BABLISHVILI N., PA1053, PA4545
BABU A., OA3279
BABY J., PA2271
BACCELLI A., PA1198, PA1767, PA3961, PA5173
BACCHIN D., OA1564
BACCHIN DE OLIVEIRA L., PA1172, PA2685, OA4226
BACCHINI JEANNERET G., PA317, PA1197, PA3963
BACCO B., PA586
BACCOLINI V., PA4025
BACH J., PA2951
BACHARIER L., PA2091
BACHERT C., PA1943
BACHOUCH I., PA3877
BÄCK E., PA1860
BACK G., PA1179
BACKER V., PA1298, OA2500, PA5013, PA5371
BACKMAN H., PA363, PA655, OA888, PA1958, PA2064, PA2072, PA2075, OA2515, OA3167, PA3328, PA3337, PA3668, PA4431
BACKMAN S., PA2159
BĄCZEK K., PA1743
BADAGNANI I., PA4485
BADAM A., PA2396
BADAWY H., PA3830, PA5158
BADDINI-MARTINEZ J., PA1152, PA3766
BADE G., PA615, PA4649, PA5311
BADEA C., PA2925
BADEN W., OA2507, PA4640
BADENES D., PA2201, OA3282
BADENES BONET D., PA5154
BADENES BONET D., PA5174
BADERNA P., PA5197
BADESCH D., OA739
BADHE Y., PA5339
BADORREK P., PA608
BADOVINAC S., PA475, PA3542
BADR ESLAM R., PA1758, OA4220, PA4979
BADR-ESLAM R., PA4641, PA4644
BADYDA A., PA2726, PA3814
BAE H., PA4481
BAE S., PA3913
BAE S., PA1128
BAE Y., PA5156
BAEK A., PA1246
BAEK H., PA5366
BAEK M., PA5271
BAEK S., PA1302, PA3911, PA3912
BAEL A., PA2092
BAENA C., PA3517
BAENA C., PA4012
BAER B., PA5233
BAEZA S., PA1113
BAEZA RUIZ A., PA2167
BAFADHEL M., PA1308, PA1323, PA4586, PA4687
BAGAN P., PA336
BAGER C., PA5249
BAGGOTT C., PA1580
BAGLIONI S., PA2219, PA2221
BAGLOLE C., OA1575, PA2970, PA4053
BAGNASCO D., PA630, PA4757
BAGNERA C., PA3907, PA3910, OA4201, OA4342, OA4345
BAHAR O., OA1534
BAHLOUL N., PA1009, PA2864, PA3047, PA3059, PA3541, PA5256
BAHMER T., PA496, OA875, PA1593, OA4333
BAHRA N., PA2079, PA4147
BAHRI G., PA638, PA3332, PA3336, PA3660
BAHRON A., PA3646, PA4004
BAI W., PA3556
BAI X., PA2363
BĂICUȘ C., PA2925
BAICUS C., PA2924
BAIGABYL B., PA4550
BAIGENZHIN A., PA3532
BAIGUERA A., PA4989
BAILEY A., PA1862
BAILEY E., PA1309
BAILEY H., PA1122
BAILEY K., OA4863
BAILIFF B., OA4830
BAILLIEUL S., PA2999, OA3288
BAILLY S., PA443
BAILLY S., PA580, PA581, PA2999, OA3285, OA3288, PA4088, OA4837, OA4843, OA4844
BAILY J., PA2361, PA3904
BAINS M., PA1722
BAIO N., PA1163, PA2162
BAIOCCHI P., PA4020, PA4025
BAIXERAS N., PA479
BAJAHLAN R., PA4392
BAJAJ D., PA3067, PA4547, PA5088
BAJIC M., PA656
BAJPAI J., PA537, PA1012, PA3067, PA4543, PA4547, PA5088
BAJPAI N., PA1829
BAJWA E., PA1208
BAJWAH S., PA403, PA3454
BAKAKOS A., PA1188
BAKAKOS P., PA623, OA3152, PA4709, PA4717, PA5102
BAKALI M., PA2691
BAKAR M., PA5329
BAKDACH D., PA2161
BAKELANTS E., PA4487
BAKER C., OA3170
BAKER J., PA3051, PA4065
BAKER J., PA562, PA1294, PA4046, PA4586, OA4963
BAKER J., OA779, PA4039
BAKER P., PA1915
BAKER T., PA1853
BAKERLY N., PA2697, OA4214
BAKHTADZE T., PA3387
BAKHTI A., PA5148
BAKIRARAR B., PA5226
BAKIRI K., PA5223
BAKKER E., PA4973
BAKKER J., PA3543
BAKKER M., PA2837
BAKKER S., PA3359
BAKSHI D., PA2913
BAL A., PA5222
BAL C., PA635, PA647, PA2212, PA4752
BALA S., PA3431
BALAKRISHNAN A., PA3846
BALAMURUGAN S., PA1322
BALASUBRAMANIAN V., PA4117
BALASUNDARAM K., PA4127
BALATA H., PA5220
BALAYEV A., OA894, OA4198
BALAYYA S., PA5356
BALÁZS A., PA1861
BALBI F., PA4497
BALBI M., OA4848, PA5105
BALBIR-GURMAN A., OA746
BALBO P., PA1779
BALCAN B., PA1880, OA3291
BALCAZAR J., PA2917
BALCELLS E., PA1749, OA3183, OA3282, PA5154
BALCELLS VILARNAU E., PA1242, PA5174
BALCI P., PA2282, PA3998
BALDACCI S., PA304, PA312, PA1961, PA3803, PA3811, PA5334
BALDERACCHI A., PA5193, PA5197
BALDI B., OA4848
BALDI M., PA3921
BALDI S., OA1529
BALDO F., PA4475
BALDWIN E., PA963
BALDWIN M., PA1181, PA1797
BALDWIN M., PA2687, PA2694
BALEA M., PA2924
BALEA M., PA2925
BALESTRO E., PA1149, PA1752, PA3847
BALINK S., PA2137

BALK MØLLER E., PA4746
BALL J., OA757, PA4500
BALL J., PA2260, OA4954
BALL L., PA1213
BALLESTER FERRIZ A., PA2950
BALLESTEROS A., PA2776
BALLESTEROS REVIRIEGO G., PA4482
BALLÓK B., PA556, PA3547, PA3549, PA3555
BALLOUHEY J., PA2149
BALLOUMI N., PA338, PA638, PA3332, PA3336, PA3660
BALOGH Á., PA1173
BALOGH D., PA2364
BALS R., PA1318, OA2603, PA3970
BALTE P., PA3319
BAMBIR I., PA2145, PA2158, PA3376
BAMONDE L., PA5362
BAN A., OA4848
BAN G., PA3034
BAÑAS CONEJERO D., PA646, PA1905, PA4104
BANCHERO M., PA1855, PA2360
BAND M., OA2604
BANDEIRA E., PA4533
BANDEIRA T., PA2113, PA2114
BANDO H., PA1300, PA3908
BANDO M., PA434, OA1424
BANDO T., PA401, PA1723
BANERJEE S., PA4077
BANFI C., PA1755
BANFI P., PA2951, PA3825, OA4874
BANIĆ M., PA314, PA416, PA2145
BANJAC M., PA2240
BANJANAC M., PA5167
BANJARA S., PA659
BANKA R., PA297
BANNARD-SMITH J., PA2962, PA2963
BANSAL A., PA1308
BANSAL S., PA4005
BANYA W., PA2156, OA4195
BAO H., PA405, OA2582
BAO W., PA4409, PA4425
BAPTISTA MENEZES A., PA316
BARAA B., PA2153
BARAA B., PA3640
BARAKAT M., PA3004
BARAKAT FERNÁNDEZ S., PA4086, PA5131
BARAKET M., OA4302
BARALDI F., PA1320
BARALDO S., PA1708, PA2894
BARALLE D., PA1845
BARANELLO G., PA2128
BARANOWSKA-KUCZKO M., PA447
BARANOWSKI L., PA3485
BARATA M., PA3638
BARATELLA E., PA2890
BARAZETTI-SCOTT J., PA1895
BARAZZONE C., PA3561
BARBANTE R., OA3272
BÁRBARA C., PA665, PA1591
BARBÉ F., PA372, OA782, OA788, PA1274, PA2326, OA3290, OA3292, PA3409, PA3850, PA4583, OA4841, PA5109, PA5244
BARBÉ ILLA F., PA5093
BARBE ILLA F., PA5248
BARBER C., PA3797
BARBER C., PA2986
BARBER D., PA2389
BARBERÀ C., OA788, PA5244, PA5248
BARBERÀ C., PA2326
BARBERÁ J., PA442, PA1205, PA1756, PA3491, PA3500, OA4831
BARBERÁ R., PA4089
BARBETA E., PA3850, PA5050, PA5093, PA5115
BARBETTA C., PA1917, PA1926
BARBI E., PA4475
BARBIELLINI AMIDEI C., PA1019
BARBIERI M., PA2890
BARBISAN F., PA1779, PA3436
BARBOSA G., PA2256, PA4974
BARBOSA J., PA1591
BARBOSA M., PA2340
BARBOSA P., OA2628
BARBOSA LORENZO R., PA2215
BARBOSA PEREIRA DOS SANTOS L., PA1117
BARCA HERNANDO M., OA4835
BARCA-HERNANDO M., OA4834
BARCELÓ BENNASAR A., PA1270
BARCOS V., PA2916
BARCZI E., PA296, PA3923
BARDEL C., PA2216
BARDIN E., OA2486, OA3145, PA3377, PA5274
BARDIN P., OA4302, OA4969
BARDSLEY H., PA2946
BAREL N., PA1730
BARFA A., PA4522
BARGAGLI E., PA1142, PA1747, PA2219, PA2221, PA2225, PA2232, PA2305, PA2375, PA3902, PA3949, OA4304, PA4704, PA5277
BARĞI G., PA345
BARGLAZAN D., PA2061
BARI E., PA4115
BARI G., PA1173
BARI R., PA2095
BARIČEVIĆ D., PA314, PA475
BARISONE E., PA1725
BARJAKTAREVIC I., OA870, PA4139
BAR-KATZ V., PA522
BARKER A., PA1732
BARKOUS B., OA877, PA1174, PA1175, PA3317, PA3980, PA3982, PA3991, PA4455, PA5055
BARLEBO FROESIG M., PA380
BAR-LEV T., OA895
BARLOW A., PA484, PA4143
BARMPARESSOU Z., PA4573
BARNE M., PA4434
BARNES C., OA1423
BARNES J., PA455
BARNES J., OA751, PA2888
BARNES P., PA562, PA566, PA4586, PA4683
BARNES P., OA779, PA4039
BARNES P., PA2331
BARNES T., PA3473
BARNEY A., PA1885
BARNEY I., PA3304
BARNTHALER T., OA894, PA2359
BARON A., PA443, PA1193, PA1766
BAR-ON O., PA4474, PA5031
BARONE I., OA1464
BARP M., PA1695
BARR R., PA4139
BARRADELL A., PA959, PA2698, PA4991
BARRAL FERNÁNDEZ M., PA4517, PA4518, PA4519
BARRAL-ARCA R., PA2728
BARRATT S., OA4200
BARRATT S., PA3976
BARRATT* S., PA404
BARRECHEGUREN M., PA2371, PA3920, PA4398, PA4660
BARREIRO E., PA1072, PA1078, PA1836, PA5202
BARRELLA HARBOE Z., PA1022, PA5341
BARRETO M., PA2100, PA2109
BARRETT E., PA973
BARRETT M., PA315, PA1029, PA1030, PA1578, PA1608, OA4876
BARRINGTON J., PA5143
BARRIO E., PA479
BARRIOS-RUIZ A., OA2599
BARROETA ESPAR I., PA5272
BARROS C., PA1657
BARROSO A., PA1129, PA2871, PA3883
BARROSO FERREIRA D., PA3883
BARROSO-GIL M., PA1846
BARROWMAN N., PA4442, PA4444
BARRY P., PA2964
BARRY S., PA2757
BAR-SHAI A., PA435, PA1137, PA1730, PA2889, PA2928, PA3014, PA4560, PA4588
BARTA I., PA3627, PA3809
BARTCZAK A., PA474
BARTELDS B., PA2137
BARTEN-NEINER G., OA4864
BARTENSTEIN A., PA3994
BARTH S., PA404
BARTHEL D., PA1098
BARTHES R., PA4612
BARTHSON J., PA1208
BARTLETT E., OA4229
BARTOLINI A., OA4321
BARTOLOMÉ B., PA2976
BARTOLOME K., PA3872
BARTOLONI A., OA4321, PA4590
BARTON A., PA2907, PA4983, PA4991
BARTON C., OA4233, PA5321
BARTON E., OA1563, PA3301
BARTOS V., PA4483
BARTOŠOVSKÁ E., PA4398
BARUA I., OA746, OA857, PA2914, PA3471
BAR-YOSEPH R., OA1542
BARZAGHI L., PA596
BARZON V., PA5193, PA5197
BAS S., OA4296
BAS BILGIN G., PA2753
BASA M., PA1638, PA1639
BASAGAÑA M., PA1898
BASAGAÑA X., OA882
BASARAN E., PA3374, PA5012
BASILE FILHO A., PA2304
BASILLE D., PA2149, PA2829, OA3264
BASINA B., PA625
BASINA B., PA593, OA4234, PA4382
BASIOLI KASAP E., PA1337
BASKARAN K., PA5144
BASLER S., PA1272
BASNA R., OA888
BASOGLU O., OA4837
BAŞOL GÖKSÜLÜK M., OA2616
BAŞPINAR A., PA1581
BASSAN M., OA1534
BASSANO M., PA4676
BASSET P., OA893
BASSETTI C., PA2999
BASSI M., PA1293
BASSINO C., PA1822
BASTARACHE J., PA5233
BASTARRIKA G., PA1110
BASTIDAS I., PA1851
BASU K., PA2722
BATAH S., OA851, PA1152, PA1154, OA1449, OA1451, PA3806
BATARILO HADAR M., PA416, PA2158
BATE S., OA2608
BATES A., PA2140
BATIČIĆ L., PA1701
BATISTA D., PA4593
BATISTA CANADAS J., PA2813
BATTA R., PA3484, PA3501
BATTAGLIA E., PA3808
BATTEN T., PA1691
BATTOCHIO A., PA4486
BATY F., PA968, PA4140, PA4638
BATYALA M., PA2414, PA3790
BAU D., PA2320
BAUÇA J., PA2252
BAUER A., PA532
BAUER D., PA1308
BAUER M., OA748, PA1773
BAUER M., OA786
BAUER T., PA3924
BAUGHMAN R., PA3488
BAUGHMAN R., PA1744
BAUMAN G., PA3994, PA3996
BAUMERT T., OA2623
BAUMGARTNER B., PA3483
BAUMGARTNER P., PA1272
BAUMLE M., PA4502
BAUMLE M., PA4512
BAUSEK N., PA500
BAUTIN N., PA4648
BAUTISTA MORENO R., PA1238, PA1239
BAUTISTA-BECERRIL B., PA3848
BAUTISTA-GALVÁN G., PA3312
BAVBEK S., PA1901, PA1907
BAVDEKAR A., PA2139, PA4579
BAXEVANOS G., PA5127
BAXTER B., PA3042
BAXTER S., PA5062
BAXTSEVANIDIS A., PA1887
BAYA C., PA5365
BAYAHI L., PA3930
BAYAT S., OA4955
BAYAV S., PA1650, PA5226
BAYCHEVA M., PA3372
BAYDILI K., PA956
BAYER L., PA2819
BAYES H., PA3529, PA3763
BAY-JENSEN A., PA5249
BAYLIS L., PA648
BAYOUMY A., PA3921
BAYOUMY A., PA5100
BAYRAM S., PA345
BAZDAR S., PA4571, PA4574
BAZLARINI L., PA4989
BAZZAN E., PA2338
BAZZANI A., OA4955
BEAR C., PA3375

BEARD C., OA3180
BEASLEY R., OA1524, PA1893, PA2386, OA3187, PA3604
BEASTALL A., PA1891, PA1892, PA1894
BEAUCHAMP M., PA4529
BEAUDET A., PA3965
BEAUDIN S., PA1925, PA1927, PA3036
BEAUDOIN A., OA790
BEAUDOIN C., PA1326
BEAUMONT M., PA2792
BEAUPERTHUY LEVY T., PA1881, PA3000
BEAUVAIS A., PA3957
BECERRA MUÑOZ V., PA1205
BECHOUCH I., PA3629, PA3633, PA3788
BECHTELLA L., PA1098
BECK A., PA487
BECKER C., OA3185
BECKER K., PA1147
BECKER M., OA857, PA2914, PA3471
BECKEROVA D., PA598
BECKMANN S., PA5184
BÉDARD A., PA5015, PA5017
BEDAWI E., OA1561
BEDI R., PA2291
BEDINI J., PA3839
BEDOYA J., PA4714
BEECH A., PA1311, OA2607
BEECH E., OA1563
BEECKMANS H., OA1535, PA2710, OA3159, PA3775, OA4343, OA4346, OA4348, PA4487, PA5295
BEEGAN A., PA4439
BEEH K., PA3792
BEEKERS I., PA4571, PA4574
BEENA T., PA1004, PA4695
BEEN-BUCK S., PA1579, OA3181
BEER M., PA1654
BEERS M., OA1567
BEESE C., PA2819
BEGHÉ B., OA1523
BEGIER E., PA2819, PA5127
BEGIER E., PA4436
BEGLEY N., OA4208
BEGLINGER A., PA4656
BEGOT E., PA5245
BÉGUERET H., OA4243, PA4471
BEGUM S., OA1440
BEHAN L., PA491
BEHBOUDI A., OA3286
BEHERA A., PA1785
BEHNDIG A., PA1604
BEHNDIG A., OA4240
BEHNDIG A., OA3149
BEHR J., PA1197, PA1851, PA4682
BEHR J., PA629, PA1235, OA1569, PA1947, OA2626, PA3358, PA3921, PA3937, PA4495, PA5161
BEHREND S., OA1445
BEHRENDT U., PA1098
BEIJERS R., PA4571, PA4574
BEIRNE P., PA404
BEITZKE D., PA1738
BEJAOUI T., PA1009
BEKEDAM F., PA5189
BÉKÉSI E., PA2831
BEKKER H., PA959
BEKKI A., PA1881, PA3000
BEKTAŞ KARAKUŞ M., PA4534
BEL E., PA976
BEL HAJ ALI K., PA2861
BEL HAJ YOUSSEF S., PA1185, PA1186, PA2312, PA4023
BEL KAHLA A., PA3336
BELACONI I., PA1156
BELACONI I., OA4848
BELAIDI E., OA4337
BELAKHEL O., OA4326, PA5365
BELAKHHEL L., PA2873
BELAKHHEL L., PA525
BELAMARIC D., PA5167
BELAROUSSI Y., PA4490
BELAVENDRA A., PA5356
BELDA RAMIREZ J., PA2244
BELEV G., PA2263
BELFIELD G., PA2345
BELGACEMI R., PA1841
BELGE C., OA3159, PA5188
BELHADJ S., PA980, PA3643
BELHAJ C., PA1966
BELHAJ S., PA1007, PA5331
BELHAJ Y., PA5358
BELHAJYOUSSEF S., PA1124, PA2862
BELIKOVA M., OA4209
BELJERA R., PA3523
BELKAHLA A., PA638
BELKHIR L., PA3412
BELKHIR S., PA1082, PA4758
BELKHIRIA H., PA1185, PA1186
BELL A., OA1529
BELL A., PA2876
BELL J., PA4607
BELL J., PA2382
BELL J., OA4197
BELL L., PA2283
BELL M., PA4127, PA4723
BELL T., PA579
BELLACHES M., PA4647
BELLANDER T., OA2518
BELLANGER A., PA606
BELLANI S., PA1149
BELLESTEROS VIZOSO A., PA2251
BELLIDO-MALDONADO A., PA1693
BELLINGERI A., PA1667
BELLINGHAUSEN C., PA1171
BELLINI A., OA3272
BELLINO F., OA1540
BELLIZZI C., PA3052
BELLO X., OA4246
BELLO RODRÍGUEZ I., PA4482
BELLOFIORE A., PA3007
BELLONI P., PA2283, OA4851
BELLOSILLO B., PA2201
BELLOU E., PA327, PA3879
BELLOU E., PA4592
BELLOU V., PA4126
BELLOUMI N., PA3629, PA3633, PA3788, PA3877
BELLVER ASPERILLA C., PA2314
BELMONTE T., PA2326, PA5244, PA5248
BELO L., OA3261
BELO RAVARA S., PA5327
BELPERIO J., PA1144
BELTON L., PA3630, PA3777, OA4936
BELTON M., PA2169
BELTRÃO M., OA854, PA1155, PA1164
BELVISI M., PA1301, PA2345, PA3037, PA3045
BELVISI M., PA3042, PA3044
BEN L., PA2983, PA4408
BEN AMARA K., PA340
BEN AFIA L., PA3332, PA3336
BEN ALI M., PA5094
BEN ALI Y., PA1176, PA1185, PA1186, PA2308, PA2312, PA4023, OA4960
BEN AMAR J., PA294, PA302, PA619, PA627, PA2248, PA2254
BEN AMARA K., PA331, PA3538
BEN BRAIEK D., PA1176, PA1185, PA1186, PA2308, PA2312, PA4023, OA4960
BEN HAMIDA L., PA3875
BEN HMIDA L., PA1791, PA3877
BEN JAZIA R., PA1176, PA1185, PA1186, PA2308, PA2312, PA2862, PA4023, OA4960
BEN JEMIA E., PA294, PA302, PA619, PA627, PA2248, PA2254
BEN KHAMSA S., PA3317
BEN KHAMSA JAMELEDDINE S., OA877, PA1174, PA1175, PA3982, PA5055
BEN KHAMSA JAMELLEDDINE S., PA3980
BEN LAKHAL O., PA3978
BEN LAZREG N., PA3317
BEN LIMEM I., PA4569
BEN MANSOUR A., PA341, PA1741, PA2191, PA3325, PA3513, PA4542, PA4758
BEN MANSOUR A., PA340
BEN MANSOUR S., PA1176, PA1185, PA1186, OA4960
BEN MECHLIA M., PA4090
BEN MOUSSA O., PA5089
BEN SAAD S., PA329, PA1741, PA2191, PA3325, PA3513, PA4542, PA4758, PA5078
BEN SAID H., PA638, PA3332, PA3336, PA3660
BEN SALAH I., PA4569
BEN SALAH N., PA980, PA1007, PA3643, PA5331
BEN SASSI S., PA2847, PA3874, PA5325
BEN SLIMA H., PA583, PA1283
BEN TAIEB A., PA4607
BEN ZEKRI H., PA2093, PA5367
BENABDELGHAFFAR H., PA4569
BENABDELGHAFFAR H., PA5152
BENAKIS G., PA337, PA3429
BENALI Y., PA1124, PA2862
BENAMMAR M., PA2052
BENAMORE R., PA1133
BENAVENTE I., PA5070
BENAVIDES CORDOBA V., PA2683, PA2693
BENAZZI E., PA4494
BENAZZOUZ R., PA2387
BENAZZOUZ S., PA2387
BENBETKA Y., PA533, PA2418
BENBRAIEK D., PA2862
BENCHEKROUN N., PA2873
BENCHETRIT S., PA4589
BENCHIMOL L., OA3151, PA4466
BENCINI S., PA3528, OA4959
BENDIXEN M., PA379
BENDRE S., PA5339
BENDSTRUP E., PA379, PA1838, PA2228, PA2788, PA3467, PA3468, PA3867, PA3921, PA4060, OA4848, PA5166, PA5335
BENEDETTI P., PA3679, PA4621
BENEDIKTSDOTTIR B., PA659, PA1281, PA1598
BENEGAS URTEAGA M., PA1734
BENEJAM PAUL B., PA5272
BENFANTE A., PA4098, PA4748, PA4753
BENFEITAS R., OA3158
BENFERHAT H., PA2387
BENGAARD ANDERSEN A., OA860
BENGTSSON S., PA1655
BENGTSSON T., PA1299, OA2602, PA3484, PA3501
BENHADDAD A., PA2047
BENHAMIDA M., PA420, PA423
BENHAMOU Y., OA4829
BENITEZ A., PA4558
BENÍTEZ I., PA2326, PA5109, PA5244, PA5248
BENÍTEZ I., OA788, OA3292, PA3409
BENÍTEZ PÉREZ R., PA4608
BENITO M., PA2762
BENITO PATÓN J., PA3381
BENJAFIELD A., PA1029, PA1030, PA1279, OA4876
BENJAMIN N., PA454
BENJAZIA R., PA1124
BENJELLOUN M., PA4085, PA4147
BENJELLOUN M., PA525, PA2079
BENLALA I., PA4616
BENMAAMAR S., PA525, PA2873
BEN-MEIR E., PA4996
BENN M., PA2069
BENNER A., PA1700
BENNETT D., OA4848
BENNETT M., PA2294, OA4856
BENNETT M., PA3642
BENNETT-STEELE N., OA3176
BENOIT A., PA346
BENSAAD H., PA2258
BENSAADI N., PA2070
BENSENOR I., PA306, PA2431
BENSON R., PA3473
BENSON V., PA2062
BENTLEY A., PA2427
BENTO D., PA1225
BENTO L., PA1210, PA1225
BENVENUTI G., OA850, OA855
BENYAGOUB M., PA2387
BENZ E., OA2605
BENZA R., PA1760, PA3960
BENZAIT S., PA2052
BENZO M., PA3817
BENZO R., PA3817
BENZOUID B., PA1883
BEQUIGNON E., PA588, PA589
BERARDI I., PA2338
BERASTEGUI C., PA3364, OA4344
BERASTEGUI GARCIA C., PA1161
BERDU N., PA1049
BERETTA M., PA1667
BERG M., OA774
BERG R., PA2947

BERG R., PA4478
BERG V., PA3946
BERGA M., PA3919
BERGANTINI L., PA1142, PA1747, PA2219, PA2221, PA2225, PA2232, PA3902, PA3949, OA4304, PA5277
BERGE M., PA1855
BERGE M., PA5203
BERGER K., OA3281
BERGER M., PA2909, PA4152, PA4655, PA4657
BERGER P., OA789, OA900, OA4243
BERGER R., PA445
BERGER S., PA3994
BERGEREAU H., PA2975
BERGERON A., OA2580
BERGERON C., PA1891, PA1892, PA1894, PA1897, PA3651
BERGGREN-NYLUND R., PA2955
BERGHOLD A., PA1755
BERGLER-KLEIN J., PA4644, PA4979
BERGMANN A., OA4942
BERGMANN K., PA4708
BERGMANN M., PA305, OA2521
BERGMANN U., PA971
BERGOUGNOUX A., PA5206
BERGQVIST J., PA3624
BERGSTRÖM A., PA664, OA2518, PA3674, PA5025, PA5027
BERGSTROM E., PA1301
BERIDZE V., PA3387
BERIS E., PA4738
BERJA A., PA618
BERKEMEIER C., PA4761, PA4764
BERLOWITZ D., PA5068
BERLOWITZ D., OA3191, PA4651
BERMEJO J., OA782
BERMEJO MARTIN J., PA5093
BERMEJO-MARTIN J., PA5244, PA5248
BERMEJO-MARTIN J., PA2326
BERMUDO G., PA5154
BERMUDO PELOCHE G., PA328, OA3282, PA3464, PA3922
BERMUDO-PELOCHE G., PA408, PA3461, PA3919
BERNACCHI G., PA4393
BERNADY A., PA531, PA4432
BERNARD A., PA1810, PA4631
BERNARDELLI R., PA3517
BERNARDINELLO N., PA1149, PA1752, PA3847
BERNARDO A., PA1049
BERNAREGGI M., PA3528, OA4959
BERNASCONI E., PA2186
BERNASCONI S., PA2908, PA4505
BERNHOFF C., PA4115
BERNSTEIN B., PA967
BERNSTEIN E., PA2893
BERRAHO M., PA2079
BERRAHO M., PA2873
BERRAR TORRE I., PA4731
BERRIET A., PA2792
BERRY A., PA368
BERRY C., PA3529
BERRY M., PA2834
BERTACCHINI L., PA507, PA510
BERTAGNA DE MARCHI L., PA1019
BERTANI A., PA4684
BERTEAUD E., PA531, PA4432
BERTELOOT L., PA423, PA426
BERTELS X., PA1955, PA3668
BERTELS X., PA3674
BERTELSEN R., PA311, PA3072
BERTELSEN R., PA659
BERTELSEN R., PA1598, PA4424
BERTHELOOT L., PA420
BERTHIER S., PA402
BERTO J., PA1110
BERTO HAYASHI M., PA3765
BERTOLACCINI L., OA3271
BERTOLETTI F., OA3144
BERTOLETTI L., OA3157, OA4827, OA4828, PA5182
BERTOLI M., PA4121, PA4123
BERTOLI S., OA4846, PA5262
BERTOLINI F., PA975, PA2224, PA4733, PA4736, PA4739, PA5160
BERTON D., PA2256
BERTON D., PA4650
BERTOZZI H., PA2913
BERTRAND Y., PA1857
BERTUCCIO F., PA1163, PA5133
BERTUCCIO F., PA2162
BERTULETTI S., OA3185
BERTUSSI M., PA1048
BERTZOUANIS A., OA1438
BESERRA J., OA2628
BESMA H., PA2096, PA5369
BESOZZI G., PA2798
BESSACI K., PA420
BESSROUR H., PA331, PA338
BESTEGA B., OA753
BESTRY I., PA421
BESWISK E., PA2779
BETTINI R., OA4321
BETTINSON H., PA4628
BEURNIER A., PA1766, PA4114, PA4648, PA5180
BEUTHER D., PA985
BEVERAGGI E., PA4480
BEYDON N., OA1545, PA2111, PA2760, PA2761, PA2769, PA4441
BEYER C., PA532
BEYER S., PA3515
BÉZIAT V., PA4471
BEZZEGHOUD S., OA3157, PA5182
BEZZIO M., PA2402, PA4696
BHAKARE M., PA2907
BHALEKAR P., PA5339
BHALLA A., OA1414, PA4125
BHAMANI A., PA1111, OA3266
BHARDWAJ P., PA4991
BHARGAVA A., PA4587
BHARTY S., PA622
BHARWANA F., PA1345
BHASKARAN A., PA5301
BHASKARAN I., PA5301
BHASKARAN P., PA5301
BHASKARN A., PA5301
BHAT R., PA2135
BHATE G., PA5057
BHATELE R., PA622
BHATI W., PA3756
BHATNAGAR R., PA4437
BHATNAGAR R., PA1814
BHATT J., PA2779
BHATT S., PA1308, OA4937
BHATT S., PA3319
BHATTA L., PA3674
BHATTA N., PA1789
BHATTACHARYA S., PA5114
BHATTACHARYYA A., PA1228, PA5114
BHATTACHARYYA P., PA2926, PA3070, PA5339
BHATTARAI P., PA2346, PA4066
BHATTARAI S., PA4690
BHAVSAR P., PA552, PA2328, PA4613
BHIKOO R., PA3888
BHIRI S., PA2856
BHUTANI M., PA4596
BIAGINI G., OA4962
BIAŁAS A., PA1167, PA3482
BIAŁEK-GOSK K., PA3038
BIAN T., OA4242
BIAN Y., OA1426, PA4627
BIANCADI A., PA5039
BIANCARDI A., OA757, PA2260, PA4500, OA4857, OA4954
BIANCHI F., PA4988
BIANCHI L., PA1048
BIANCHI S., PA404
BIANQUIS C., PA571, OA3190
BIARDEL S., PA5225
BIASIN M., PA1682, PA3854
BIASIN V., PA5192
BIASIOLI M., PA3795
BIBAKI E., PA417
BIBBY A., OA1556, PA3434
BIBER C., PA1832
BICKNELL S., PA4675
BIDIN M., PA3433
BIDOIA C., OA4310
BIEDERER J., OA2603
BIEHLER E., PA486, PA3581
BIELSA S., PA4437
BIENER L., PA639, PA3605
BIERI O., PA3994, PA3996
BIERING-SØRENSEN T., PA1295, PA1838, PA5341
BIGNAMINI E., PA2735, PA3380
BIGONI T., PA1320
BIJ DE VAATE E., OA3252, PA3657
BIJELIC V., PA4442, PA4444
BIJESH Y., PA3304
BIJLENGA P., PA3546
BIKMALLA S., PA404, PA4009
BIKOV A., PA1282, PA1684, PA2207, PA2427, OA2607, PA3002, PA3004, PA3315, PA3634, PA4092
BILANCIA R., OA1560, PA3434
BILBAO J., PA3674
BILD STUDY B., PA2733
BILD STUDY GROUP B., PA5001
BILENKO N., PA4560, PA4588
BILGIN G., PA2731, PA2732, OA4327, PA4446, PA5083
BILGITAY N., PA5011
BILHOUEE T., PA420
BILICAN B., PA5205
BILIR M., PA1754, PA2231
BILLE MADSEN L., PA5166
BILLER H., PA2290
BILLINGHAM P., OA2604
BILLINGS C., PA1199, PA5185
BILÒ M., PA3811
BIN ABDUL RAHAMAN J., PA3433
BIN MOHAMED NOOR I., PA3428
BIN SAFAR S., PA3021
BINCOLETTO V., OA4201
BINDER C., PA4644
BINDER-RODRIGUEZ C., PA4979
BINDO F., PA3850
BINGÖL A., OA2505, PA5012
BINI F., PA1725, PA2185, PA4718
BINTALIB H., PA436
BINTI UMAR S., PA3433
BIONDARO S., PA1293
BIONDINI D., PA1708
BIRCHARD D., PA2983
BIRKEN C., PA5014, PA5021
BÍRÓ M., PA1018
BIRONNEAU V., PA571, OA3280
BIRRELL M., PA1301, PA3045
BIRRELL M., PA3042, PA3044
BIRRING S., PA1108, PA1919, PA3494
BIRRING S., PA1912, PA1923
BIRRING S., PA1911, OA2609, OA2610, PA3035, PA3039, PA3040, PA3041
BIRTLES A., PA3764
BIRTS C., OA4239
BIRZA M., PA3002
BISANG M., PA2432
BISGAARD H., OA1440
BISHOP P., PA3313
BISIRTZOGLOU D., PA2859, PA5150
BISLIMOVSKA D., PA3353, PA3813
BISWAS B., PA1228, PA5114
BITAR L., PA3542
BITKER L., OA4955
BITTAR S., PA570
BITTEL P., PA2733
BITTENGLOVA R., PA4483
BITTER H., OA746
BITTON K., PA5180
BITTON L., PA426, PA2129
BIZA R., PA2398, PA5105
BIZIEUX-THAMINY A., PA581, OA3285
BIZYMI N., PA2854, PA4037, PA5187
BIZZOTTO D., PA2124, PA3545
BJARNSHOLT T., PA1092, PA2154
BJELLMO JOHNSEN I., PA3559
BJERMER L., PA1948, PA2973, PA5201
BJERRING B., PA3501
BJERRUM A., PA1909
BJERRUM A., PA4716
BJERRUM A., PA636
BJERSAND SUNDE R., PA1627
BJÖRK HANSEN H., OA4202
BJÖRKANDER S., OA2502
BJÖRKANDER S., PA4407
BJØRKEKJÆR H., OA857, PA2914, PA3471
BJØRKEKJÆR H., OA746
BJÖRKLUND F., PA3762
BJÖRKLUND L., PA2130
BJÖRN SCHWICK B., PA3046
BJÖRNSON M., PA2793
BLACK D., PA1218, PA4016, PA4493
BLACK L., PA1218, PA4016, PA4493
BLACK S., PA1218, PA4016, PA4493

BLACK S., PA4058
BLACKSTOCK F., PA1803, PA3985
BLAGOEVA V., PA3001
BLAIKLEY J., PA3004, PA4484, PA4492
BLAKE L., PA2775
BLALOCK J., PA456
BLANC F., PA1731
BLANC F., PA2975
BLANCH L., PA4668
BLANCHARD E., OA3280, PA4490
BLANCHARD M., PA3589
BLANCHART E., PA402
BLANCHON S., PA5016
BLANCHOT T., PA1099
BLANCO I., PA347, PA442, PA512, PA1205, PA1740, PA1756, PA3491, PA3500, PA3502, OA4831
BLANCO R., PA1237, PA2321
BLANCO APARICIO M., PA3617
BLANCO BEJAR M., PA3008
BLANCO FERNANDEZ M., PA5217
BLANCO-APARICIO M., PA4106, OA4301
BLANCO-CID N., PA4106
BLANCO-LIMPIN M., PA3872
BLANKESTIJN J., PA4571, PA4574
BLASI F., PA381, PA382, PA383, PA384, PA385, PA386, PA388, PA397, PA399, PA1069, PA1071, PA1074, PA1086, PA1106, OA1456, OA1457, OA1458, OA1461, OA1464, OA1540, PA1667, PA2148, PA2171, PA2340, PA2342, PA2807, PA2843, PA2849, PA3053, PA3357, PA3367, PA3774, OA4320, PA4496, OA4864, OA4867
BLASINSKA K., PA421
BLASKOVIC S., PA3561, OA4948
BLAVIA ALOY R., PA3464
BLÉ F., PA2286
BLEECKER E., OA870
BLEKIC N., PA4111
BLENCOWE A., PA4678
BLERVAQUE L., PA1804
BLIBECH H., PA980, PA1007, PA3643, PA5331
BLIDARU A., PA1684
BLINDER H., PA4442, PA4444
BLIZOU M., PA623, PA5102
BLOCH K., OA748, PA1773, PA1809, PA2432
BLOCH K., PA1615
BLOCH M., PA3800
BLOEM B., PA2696
BLOEMSMA L., PA2748, PA4571, PA4574
BLOISE S., PA2085, PA3984
BLOKLAND K., PA1309
BLOMBERG A., OA2515, PA2998, OA3149, OA4235, OA4240, OA4873, PA5264
BLONDEEL A., PA359, PA361, OA4308, OA4309, OA4314
BLOOM C., PA2063, PA3488, PA3625, PA4144, PA4145
BLOOM C., OA2519
BLUM H., OA4848
BLUM T., PA3924
BLÜME S., OA2623
BLUMER S., PA3936, OA4204
BLUMETHAL C., PA487
BLYTH K., OA1556, OA1560, PA3434
BLYTH N., OA1553, PA2104, PA2119, PA3371
BLYTHIN A., PA1594
BOADA M., PA4482
BOADA-PÉREZ M., PA3364
BOAG A., PA1150
BOARBI S., PA2176
BOARINO S., PA4109, PA4112, PA4131
BOBU E., PA1684
BOBYLEV D., OA2508
BOCCABELLA C., PA2422, PA4093, PA4730, PA4744
BOCCACCIO C., PA2246
BOCCHINO V., PA1220
BÖCK A., OA1443
BOCK G., PA1934
BOCK K., PA379
BODÁK B., PA4059
BODDULURI S., OA4937
BODDY C., PA4723
BODDY C., PA4127
BODENHOFER U., PA5192
BODINI B., PA1725, PA2185, PA4718
BODINIER B., PA2328
BODTGER U., PA4437
BOEDIJONO F., PA2318, PA3425, PA5207
BOEDIJONO F., PA5203
BOEHM A., PA532
BOEL J., PA1017
BOELLE P., PA5006
BOERNER E., PA2883, PA3946
BOERRIGTER B., PA5058
BOERS E., PA315, PA1029, PA1030
BOERSMA R., PA3999
BOERSMA W., PA381, PA397, OA1458, PA2843, PA2849, PA5118
BOESCH M., PA968
BOESING M., PA2247
BOETTICHER P., PA3483
BOGAARD H., OA743
BOGAARD H., PA445, PA451, PA1765, PA2297, OA2488, PA5173, PA5183, PA5189
BOGAARD H., PA1191, PA1207
BOGACZ K., PA4520
BOGADO J., PA512
BOGAERT D., OA4946
BOGAERTS K., PA5072
BOGAN R., PA1280
BOGDAN P., PA2713
BØGE I., PA1637
BØGELUND M., PA1655
BØGESVANG G., PA2785
BOGHANIM T., PA1230
BOGLOU P., PA4123
BOGOEVSKA V., PA2374, PA2376, PA2377, PA2378, PA2379
BOGOS K., PA1023
BOHÁCS A., OA3278, PA3923
BOHLEN J., PA4471
BOHRA G., PA1829
BOIARINA E., PA4051
BOIRE R., PA4471
BOISSELIER C., PA4490
BOISSON-DUPUIS S., PA4471
BOITIAUX J., PA427
BOIVIN J., OA884
BOJANG F., PA1111
BOJIC Z., PA2053
BOKAN A., PA5184
BOKAN A., PA5184
BOKAN D., PA1116, PA1968, PA2860
BOKOBZA J., OA4829
BOKOWSKI S., PA1915
BOLAJI J., PA3042
BOLAND A., PA3764
BOLDBAATAR B., PA2419
BOLDO R., OA786
BOLHUIS M., PA4551
BOLÍVAR S., OA3282
BOLIVAR CUEVAS S., PA3922
BOLLO E., PA1749
BOLOTBEK U. A., PA2698
BOLTON C., OA3256, PA4144, PA4145
BOLTON C., PA1181, PA1797, PA2681, OA3254
BOMAN C., PA1604
BOMANS P., PA2176
BOMBELLI S., PA1220, PA4665
BOMBIERI C., PA663
BON C., PA4490, PA4616
BON M., PA4490
BONACINA C., PA3528, OA4959
BONAITI G., PA4725
BONANNI M., PA596
BONATTI M., PA2967
BONAVOGLIA F., PA3007
BONCI E., PA2085, PA2727, PA4477
BONCI T., PA1592, PA1595, OA3185
BONDUE A., PA3959
BONE J., PA2738
BONELIS K., PA1876
BONELLA F., PA1131, PA1132, PA1139, PA2292, PA2874, PA2879, PA2883, OA3281, PA3946, PA3948
BONETTI S., PA2398
BONGARD C., PA310, PA3365
BONGERS B., OA750
BONGERS T., PA4663
BONHIVER R., OA3151, PA4466
BONIFÁCIO L., PA5110
BONIFAZI M., OA1429, PA1748, PA1779, PA4725
BONILLA G., PA3801
BONILLA ARJONA J., PA411
BONINI M., PA2422, PA4093, PA4730, PA4744
BONNABEL-BECERRA G., PA4577
BONNARDEL E., PA4490
BONNE A., PA3768
BØNNELYKKE K., OA1440, PA1627, PA1632, PA2721, OA4330, OA4331, PA4433, PA5363, PA5371
BONNET P., PA5017
BONNET S., PA441, PA445, PA449, PA453, PA458, OA3161
BONNEVIE T., PA502, PA1212, PA1214, PA1219, PA2945, PA3759, PA4980
BONNEY A., PA1120, PA1121
BONNIAUD P., PA4114, PA4750
BONO R., PA3811
BONOMI F., PA3469
BONSIGNORE M., OA4837
BONSIGNORE M., PA604, PA1783, PA4079, OA4843
BONSIGNORE M., OA4844
BONSIGNORE M., PA2828
BONTA P., PA4005, OA4850
BONTA P., OA3263
BONTA P., OA4855
BONTE M., PA2121
BONTE S., PA2277
BONTEN M., OA4864, OA4867
BONTEN M., PA2199
BONTINCK A., OA4211
BONUCCELLI C., PA1911, OA2609
BONVINI S., PA1301, PA3037
BONVINI S., PA3042, PA3044
BONVINI S., PA3045
BOON M., OA1535, PA2761, PA2765
BOONSARNGSUK V., PA1686, PA3844, PA4556
BOONSTRA A., PA5173
BOOTH S., PA1311, PA4065, OA4298
BORADE S., PA2907
BORDAG N., PA5192
BORDAS J., OA3282
BORDAS MARTINEZ J., PA3464, PA3919, PA3922
BORDAS-MARTÍNEZ J., PA408, PA3461, PA3919
BORDERIAS CLAU L., PA5070
BOREL A., OA4337
BOREL J., OA3190
BORELLI M., PA2760, PA2761
BORG B., PA3810
BORG M., PA2869, PA2872, PA3834
BORGES P., PA3396, PA4527
BORGHI SILVA A., PA1179, PA4141
BORGHI-SILVA A., PA1179, PA2261, PA4516, PA4530, PA4633, OA4932
BORGHUIS T., PA2351, PA2360
BORGWARDT L., PA3384, PA4993
BORIE R., PA402, PA417, PA420, PA427, OA858, PA1153, PA2292, OA2580, OA3280, PA3465, PA3942, PA3953
BORISOVA E., PA3561, OA4948
BORISSOVA E., PA3419
BORKHOFF C., PA5021
BORKHOFF C., OA4231, PA4429, PA5014
BORLAND M., PA1634, PA1635
BORLÉE F., PA1609
BORNESUND D., PA4416, PA4417
BOROBIA IRACHE E., PA3676
BOROS A., PA3819
BOROS M., PA4646
BOROS P., PA1737, PA5168
BORRES M., PA1619
BORSEKOFSKY S., PA1730
BORTOLOTTO C., PA3886, PA5133
BORTON R., PA429, PA1582, OA3182, PA3475
BORUCKI T., PA2374
BORYSOVA O., PA4553
BORZANI I., PA5009
BOS D., OA4222
BOS L., PA2297, PA3426
BOS L., OA782
BOS S., OA4343, OA4348
BOSACOMA A., PA442
BOSACOMA ARMORA A., PA3491
BOSCH T., OA4946
BOSCOLO A., PA2310
BOSCOLO BARIGA N., OA4848
BOSHER O., PA3444
BOSISIO D., PA600
BOSISIO F., OA1572
BOSNAK GUCLU M., PA345, PA358
BOSNAR M., PA5167
BOSNIC-ANTICEVICH S., PA1897, PA3635, PA3779
BOSSÉ Y., PA2702,

PA5225
BOSSÉ Y., OA3143
BOSSERS A., OA2516
BOSSIOS A., PA2430, PA2848, OA4334, PA5283
BOSSLEY C., OA1442, OA1552, PA4470
BOSSON J., PA1258, OA4235
BOSTAN P., PA3333, OA4232
BOSTEELS C., OA4213, PA4568
BOTINI F., PA3635
BOTLA S., PA5205
BOTNARU V., PA400
BOTTAI M., PA1606
BOTTIER M., PA1070, PA2279, PA2293, PA2827
BOTTO C., PA4733
BOTVINIKOVA L., PA5056
BOUALEM K., PA2052
BOUASSIDA I., PA331, PA1776, PA3538, PA5145
BOUAZIZ O., PA1127
BOUAZZA B., PA1026, PA2070
BOUBAKER N., PA642, PA4755, PA4760
BOUBTANE R., PA1186, PA4023
BOUCHAREB S., PA4090
BOUCHAUD G., PA2975
BOUCHER M., PA2702, PA5225
BOUCHERAT O., PA441, PA449, PA453, PA458, OA3161
BOUCHET C., OA4243
BOUCHRA A., PA4085
BOUCLY A., PA1193, PA1202, PA3957, PA5180
BOUDAWARA N., PA4090
BOUDIER A., PA656
BOUDJEMAA A., PA4114
BOUDOUSSIER A., PA2216
BOUDREAU J., PA2285
BOUFARES A., PA2993, PA2994, PA2995
BOUGACHA M., PA3643
BOUGARD N., PA989
BOUGRIDA M., PA1883, PA2258, PA3983
BOUHAMDI A., PA4147
BOUHOULA M., PA2856
BOUJIBAR F., PA502
BOUJNEH S., PA4090
BOUKADIDA N., PA2308, PA4023
BOUKHIAR H., PA336
BOULAY M., PA3651
BOULET L., PA3651
BOULOUKAKI I., PA1872, PA4091, OA4837, OA4844, PA5258
BOUMPAS D., PA1687
BOUNOUA F., PA287, PA489, PA637, PA2412, PA2895, PA3329, PA5324
BOURAHLI M., PA1883, PA2258, PA3983
BOURBEAU J., OA879, PA1032, PA1044, PA2265, PA4642, OA4933, OA4934
BOURDAIS C., OA892, PA5240
BOURDET D., PA4033, PA4485
BOURDIN A., OA1420
BOURDIN A., PA427, PA606, OA892, PA1804, PA3032, OA3280, PA4114, PA4715, PA4750, PA5206, PA5240, PA5296
BOURGEOIS A., PA441, PA449, PA453, PA458, OA3161
BOURGEOIS N., PA4488
BOURINET V., PA463
BOURKE J., OA4969
BOURKE S., PA4390
BOURKE S., PA548
BOURKE S., PA616
BOURKHIME H., PA2079
BOUROMMENA S., PA5094
BOUROS D., OA3275, PA3921
BOUROUIS N., PA2052
BOUSAMAKI J., OA4202
BOUSQUET J., PA656, OA1526, PA1965
BOUSQUET M., PA4682
BOUSSEL L., OA4955
BOUSSO A., PA4648
BOUSSOFFARA L., PA4090
BOUTBAGHA N., PA287, PA489, PA637, PA2412, PA2811, PA3329, PA5324
BOUTOU A., PA1812, PA1887
BOUVAIST H., PA5182
BOUVRY D., PA1739, PA3953
BOU-ZEID W., OA850, OA855
BOUZIGON E., PA656
BOUZIN C., PA1857, PA5211
BOVEN, VAN J., PA3816
BOVERMANN X., OA1550, PA2116
BOWATTE G., OA890
BOWDEN J., OA4302
BOWDISH D., PA3835
BOWEN K., PA4687
BOWERMAN C., OA872
BOWLER R., OA2497
BOWLER R., OA870, PA1292
BOWLER R., PA2355, PA4139
BOWLER S., OA4302
BOYD J., PA491, PA3454, PA4460
BOYER A., OA789
BOYLE B., OA893, PA1941
BOYLE K., PA4656
BOYLE N., PA1833, PA5332
BOYTON M., OA886
BOŽANIĆ B., PA4745
BOZDEMIR-OZEL C., PA5044
BOZINOVSKI S., PA2233
BOZOVIC G., OA4848
BOZZA E., PA3907, PA3910, OA4201, OA4342, OA4345
BOZZI C., PA3505
BOZZINI S., PA3907, PA3910, OA4201, OA4342, OA4345
BRAAMS N., PA5173
BRABANDT B., PA3996
BRABRAND M., OA4826
BRACCIALE P., PA4112
BRACCIALI A., PA3469
BRACHER K., PA5026
BRACKA I., PA3879, PA4592
BRACKE K., OA777
BRACKENBOROUGH K., PA5140
BRADDING P., OA1531, PA4127, PA4723
BRADDING ON BEHALF OF THE INVESTIGATORS FOR THE UK MRC REFRACTORY ASTHMA STRATIFICATION PROGRAM (RASP-UK) P., PA4675
BRADDY-GREEN A., PA1334, PA1336, PA3625, PA4144, PA4145, OA4931
BRADICICH M., PA1272, PA3598
BRADLEY J., PA1233
BRADLEY J., PA404
BRADLEY J., OA1462
BRADLEY T., PA584, OA3289
BRADLEY T., PA1287
BRADSHAW T., OA1439, PA4453
BRAGA S., PA1058, PA2716
BRAGANÇA A., PA4541
BRAGANZA S., PA3995
BRAHAM E., PA340
BRAHAM Y., PA4090
BRAHEM A., PA2856
BRAHEM E., PA342
BRAHIM D., PA638, PA3332, PA3336
BRAILSFORD W., PA1301
BRAMBILLA I., PA1631
BRANCA-AFRAZI M., PA1290
BRANCAFORTE A., PA3528, OA4959
BRAND M., PA3965
BRANDAO C., PA1842
BRANDSEN M., PA2084
BRANDSMA C., PA1250, PA1847, PA1855, PA2351, PA2360, PA2372, PA5203, PA5209
BRANDSTETTER S., OA1437, PA2745, PA2748
BRANDT J., PA305, PA311, PA1598, PA1599
BRAO PEREZ I., PA1710
BRASCHLER N., PA977
BRAT K., PA465, PA598, PA4133
BRATH M., PA2399, PA3628
BRATKUHN M., PA555
BRATTETEIG M., PA4454
BRAUN A., PA4051
BRÄUNLICH J., PA3849, PA4019
BRAUNSTAHL G., PA3655
BRAUNSTAHL G., PA2837
BRAUNSTAHL G., OA1427, PA1676, PA3783
BRAVO C., OA4344
BRAVO CORTÉS P., PA4518, PA4519
BRAVO MARQUÉS R., PA1205
BRAVO QUIROGA L., PA2707
BRAY H., PA522
BRAY J., OA757, PA2260, PA4500, OA4954, PA5039
BRAZZALE D., PA4501
BREDA NETO C., PA4593
BREDBERG A., PA3350
BREEN R., OA864
BREGNBALLE V., PA1675, PA3818
BREISNES H., PA5249
BREMNER S., PA2722, PA5355
BRENNAN E., PA1094
BRENNAN E., PA517
BRENNAN V., PA2982
BRENOT P., PA5180
BRESLAVSKY A., PA1165, PA4560, PA4588, PA4589
BRESSER P., OA3283
BRESSER P., PA5183
BRESTRICH G., PA2819
BRETH HOLMGAARD F., OA860
BRETOS T., PA5261
BRETOS DORRONSORO T., PA3890, PA4707
BREUER O., PA3383
BREUILS-BONNET S., PA441, PA449, PA453, PA458, OA3161
BREULS S., PA355, PA359, PA1033, PA2268, OA4308, OA4309, OA4314
BREW B., PA4426, PA4427
BREW B., PA664, PA4999
BREW B., PA658, PA5030
BREWER S., PA5129
BREWIS M., PA1201, PA3962
BREYER M., PA308, PA647, PA1910, PA2394, PA2425, PA3670, PA3673, PA3782, PA4146, OA4236
BREYER- KOHANSAL R., PA308, PA1910
BREYER-KOHANSAL R., PA321, PA647, OA752, PA2394, PA2425, PA3667, PA3670, PA3673, PA3782, PA4116, PA4146, OA4236
BRIANÇON-MARJOLLET A., PA3584, OA4337
BRICEÑO W., PA4089
BRICKSTOCK A., PA2071
BRICMONT N., PA393, PA1934, OA3151, PA4466
BRIDAL LØGSTRUP B., PA1828
BRIDEVAUX P., PA547
BRIDEVAUX P., PA1903, PA4743
BRIDGES J., PA1162
BRIENZA N., PA1856
BRIGANTI F., PA3907
BRIGGS A., PA2056, OA4224
BRIGGS L., PA1842, PA1843
BRIGGS-PRICE S., PA2686
BRIGHTLING C., OA1525, OA1527, OA1531, PA1691, PA2056, OA4325
BRIGHTLING C., PA1858, PA2397, OA2491
BRIGHTLING C., OA1523
BRIGHTLING C., PA1291, OA1529, OA2498, PA3662, PA4070, PA5347
BRIGHTLING C., PA1181, OA1417, PA1797, PA2681, PA3032, PA4722
BRIGHTLING C., PA1292, OA1415
BRIGHTON L., PA963
BRIGNALL K., PA4395
BRIGNOLE C., PA2144
BRIKI C., OA877, PA1174, PA1175, PA3980, PA3982, PA5055
BRILL B., PA1261
BRILLET P., OA3280, PA3953
BRIMS F., PA1120, PA1121
BRINCHAULT G., PA3780
BRINDEL A., PA4612
BRINDLE K., PA373, PA378
BRINGARD A., PA4632
BRINKHOF M., PA5068
BRINKHUES S., PA3516
BRINKMAN P., OA1437
BRINKMANN F., OA2506
BRION C., PA1934
BRIONES ALVARADO S., PA4652
BRIONES ALVARADO S., PA2417, PA3066, PA4102
BRISEBARRE A., PA1099, PA1841
BRISTER D., PA1932
BRISTER D., PA1913, PA1925, PA1927, PA1931, PA3036
BRISTOWE K., PA963
BRITES GRAVE A., PA343, PA5048
BRITES-PEREIRA M., PA1035
BRITO SILVA S., OA778
BRITSCH S., PA485, PA3581
BRITT R., PA1625

BRITTON N., PA3756
BRIXI A., PA3362
BRIZ E., PA5070
BRIZOLA L., PA298, PA3314
BROCH K., OA746
BROCHIERO E., OA2631
BROCK J., OA2592, OA2594, OA2597, PA4618, PA4623, PA4624, PA5213
BROCK JAKOBSEN L., PA2789
BROCKI B., PA1040
BRODERICK M., PA1203
BRODERSEN J., PA1120, PA1121
BRODEY A., PA5140
BROEKHUIJSEN - GODDING M., PA5067
BRÖMS K., PA612, PA1028
BRÖNNIMANN D., PA5245
BROOK M., OA757, PA2260, PA4500, OA4857, OA4954
BROOKE J., OA4857
BROOKES I., PA2097, PA3770
BROOKES J., PA1691
BROOKS D., PA343, PA346, PA351, PA362, PA1031, PA1035, PA1047, PA3478, PA3887, OA4311
BROOKS S., PA5289
BROOMFIELD H., PA1596
BROQI M., OA4848
BROSSEAU C., PA2975
BROTO A., PA1096
BROTTO A., OA879
BROUARD J., PA420
BROUARD S., PA2975
BROUPI D., PA2859
BROUQUIÈRES D., PA4419
BROUWER M., OA786
BROUZES C., PA4471
BROWARSKI M., PA1148
BROWN A., PA2818
BROWN D., PA3810
BROWN G., PA2834
BROWN G., PA368, PA3468
BROWN J., PA517, OA1462, OA1566
BROWN J., PA2397, PA3851
BROWN K., PA3921
BROWN K., PA1146
BROWN L., PA1727, OA3168
BROWN L., PA2749
BROWN M., PA660
BROWN M., PA2169
BROWN P., PA1592, OA3185
BROWN R., PA3661
BROWN R., PA1276
BROWN S., PA5129
BROWN S., PA1641
BROWN T., PA535, PA1596, PA2384, PA2986, PA3820
BROWN T., OA769
BROWN V., PA4675
BROWN ARREOLA B., PA2243
BROWN(+) G., PA3467
BRUCE A., PA579
BRUCE E., PA4584
BRUCE P., PA1893, PA2386
BRUCHFELD J., PA2793
BRÜCKNER K., OA2506
BRUEY J., OA742
BRUGGER J., PA639, PA3605
BRUGNIAUX J., PA3804
BRUGÓS L., PA1735
BRUHA T., PA4010
BRUIJNING-VERHAGEN P., PA309
BRÛLÉ E., PA450
BRUMPTON B., PA3674
BRUNBORG C., OA857, OA2621, PA2914, PA3471
BRUNEKREEF B., OA2521
BRUNEL H., PA502
BRUNELLI A., PA1122
BRUNELLI V., PA403, PA958, PA4386
BRUNELLI V., PA5352
BRUNI C., OA746, PA2914, PA3476
BRUNI C., PA3471
BRUNINI PITTA PALHARES K., PA1890, PA4711, PA4712
BRUNIO C., OA857
BRUNN T., PA4036
BRUNO A., PA4103
BRUNO I., PA4475
BRUSAMENTO M., PA4736, PA4739
BRUSCA I., PA2988
BRUSSE-KEIZER M., PA1343, PA3641
BRUSSE-KEIZER M., PA515, PA1348
BRUSSELLE G., OA777, PA1916, PA1954, PA1955, OA2605, PA3032, PA3668, PA3674, OA4211, PA4720, PA4722
BRUSSELMANS M., PA4487
BRUSSINO L., PA4112
BRUSTAD N., PA1627, PA1632, PA2721, OA4330, OA4331, PA5371
BRUTSCHE M., PA968, PA4140, PA4638, OA4862
BRUYNDONCKX R., PA2819, PA4436
BRUYNEEL A., PA286
BRUYNEEL M., PA286, PA2061
BRUZZESE J., OA3165
BRUZZI G., PA1213
BRUZZI J., OA4848
BRYNEDAL A., OA4235
BRYSCH E., PA3856
BUBENDORF L., PA2922
BUCCHIERI F., PA4684, PA4686, PA4754
BUCCHIONI E., PA3625, PA4144, PA4145
BUCCI C., PA1819
BUCCI T., PA4699
BUCHALTER C., PA3645
BUCHAN T., PA1111
BUCHMANN N., PA5190
BUCHNER S., PA2997
BUCHSHTAB N., OA1534
BUCHVALD F., OA2507, PA3384
BUCHVALD F., PA1637
BUCHWALD I., PA5316
BUCKLEY C., PA1592
BUCKLEY E., OA3185
BUCKLEY G., PA3950
BUCKROYD E., PA3976
BUCSÁN C., PA3793
BUCSÁN C., PA515
BUCSÁN C., PA1343, PA3641
BUDAK M., PA5045
BUDEUS B., PA3946
BUDGEN N., PA2382
BUDI E., OA899, PA2969
BÜDI L., PA1282, PA2207
BUDINGER G., OA2485
BUDYONNA M., PA4552
BUEKERS J., PA1592, PA1595, PA2268, OA2618, OA3183, OA3185
BUELTHOFF E., PA4763
BUENDÍA ROLDÁN I., PA1772
BUENDÍA-ROLDÁN I., PA301, PA1160, PA2330, PA3848, PA4418, OA4848
BUENO FREIRE L., PA1084, PA1662, PA5115
BUESS C., OA861, PA5087
BUGONOVIC D., PA4471
BUHL R., PA629, PA635, PA639, PA3605, PA4708, PA4752
BUI D., OA890
BUICAN I., PA2406
BUICAN L., PA2714
BUKLIOSKA ILIEVSKA D., PA1312
BULATHSINHALA L., PA1891, PA1892, PA1894
BULL J., OA2627
BULLENS D., OA4212
BULLOCK D., PA4975
BULOTTA A., OA3270
BÜLOW SAND J., PA1139
BULT L., PA3655
BUMBACEA D., PA548
BUNCK A., PA1764
BUNCLARK K., OA741, PA5177, PA5191
BUNEL V., PA3368
BUNTEMEYER O., PA486
BUONAGURIO B., PA2983
BUONAMICO E., PA4098, PA4753, PA5307
BUONAURIO S., OA1539
BURAN CIRAK Y., PA501, PA511, PA3767, PA4986
BURASCHI R., PA1048
BURAVEL H., PA2806
BURG VAN DEN J., PA4634
BURGE J., PA4507, PA5059, PA5065
BURGE S., PA3346, PA3798
BURGEL P., PA1074, PA1086, OA1458, PA3622, PA3630, PA3942, PA4150
BÜRGER P., PA4763
BURGESS A., PA2765
BURGESS G., OA3162
BURGESS H., OA864
BURGESS J., PA2351
BURGESS J., PA2355, PA2360
BURGESS K., OA873
BURGHUBER O., PA3670, PA3782
BURGHUBER O., PA308, PA1910
BURGHUBER O., PA2425
BURGOS S., PA513
BURGOYNE T., PA1842, PA2279, PA2293
BURGOYNE T., PA1843
BURGSTALLER G., PA1235, OA1569, PA4495
BURHAN H., PA1900, PA2291, PA4001, PA4100, PA4113, PA5291
BURKE A., PA2962
BURKE C., PA2704
BURKE N., PA2712
BURKE T., PA2855
BURMEISTER Y., PA5368
BURNETT B., OA786
BURNEY P., PA653, PA1021, PA3352
BURNS G., PA2780, OA3170
BURNS M., PA2897
BURNS M., PA1187
BURNS P., OA876
BURRACK N., PA1654, PA2729
BURTIN C., PA969, PA1031, PA1035, PA1050, PA1796, OA2612, OA2619, PA3395, PA3516, PA4532
BURTON C., PA1092
BURTON O., PA1095
BURTON R., PA2291, PA4001
BUSACK L., PA1073
BUSACK L., PA4472
BUSBY J., OA1528, OA1531, PA1858, PA1891, PA1892, PA1894, PA1897
BUSCETI M., PA4748
BUSCETTA M., PA4676, PA4684, PA4686
BÜSCHER E., PA496
BUSCHULTE K., PA438, PA2218, PA2230
BUSEGHIN D., OA4958
BUSH A., OA1442, PA4445, PA4460
BUSH A., OA2507, PA3658
BUSH E., PA1289, PA1290, PA1305, PA3909
BUSI L., OA872
BUSNELLI S., PA1725
BUSSE H., OA4338
BUSSE W., OA1416, PA3607
BUSSELL E., PA3484
BUSSOLARI C., PA557
BUSSOTTI M., PA3771
BUSTAMANTE A., PA5208
BUSTAMANTE G., PA1194
BUSTAMANTE J., PA4471
BUSTAMANTE M., OA886, PA3674
BUSTAMANTE-MUNGUIRA E., PA2326, PA5248
BUTABEKOV I., PA2814
BUTCHER E., PA404
BUTFIELD R., PA520
BUTLER A., PA3857
BUTLER C., OA1528
BUTLER J., PA2199
BUTLER M., PA2236
BUTLER S., PA351
BUTLER S., PA3887
BUTOV D., PA4553, PA4564
BUTOVA T., PA4553
BUTT R., PA2817
BUTT U., PA2909
BUTTERY S., PA994, OA4229, PA5224
BUTTERY S., PA2268, OA3185
BUTTINI F., OA4321
BUTTS J., OA4202
BUXTON M., PA4143
BUYLE F., PA3015
BÜYÜKŞAHIN H., PA1878
BYRNE A., OA4319
BYRNE H., OA2627
BYRNE L., PA3354, PA3797
BYRNE T., PA2910
BYRNES D., PA5237
BZIK D., PA374
C
C S., PA339
C CARTER J., PA1596
C DAVIES J., OA878, PA3986, PA3988
C DORNELES C., PA2302
C FERREIRA J., PA2302
C HALLAL P., PA316
C LUNARDI A., PA2302
C M SIMOES D., PA506, PA1800
C RIGHI N., PA2302
C STARKE A., PA2302
C V ABRAS A., PA2302
C WEHRMEISTER F., PA316
C ZAMMIT D., OA3293
C. HARMSEN M., OA2625, OA2629
C. WEHRMEISTER F., PA1015
C.HARRISON L., OA1434
C.J.J BERGMANS D., PA1211
CABALLERIA E., PA1075

CABALLERIA LAMELAS E., PA1740, PA1756
CABALLERO E., PA2433
CABALLERO J., OA788, PA2326, PA5244, PA5248
CABALLERO P., OA3282
CABALLERO R., PA1107, PA4476
CABALLERO SEGURA F., PA4652
CABANES LÓPEZ L., PA407
CABOCHE S., PA1099
CABRAL E., OA3267
CABRAL M., PA325
CABRAL AMARAL DA CUNHA M., PA413
CABRALES L., PA2776
CABRERA E., PA3656
CABRERA R., PA1084, PA1096, PA1662, PA3839
CABRERA CESAR E., PA3453
CABRERA CÉSAR E., PA5313
CABRERA GUERRERO J., PA4995
CABRERA GUERRERO S., PA5013
CABRERA LÓPEZ C., PA1242
CABRERA MARTOS I., PA1669, PA5101
CABRERA PIMENTEL L., PA4078
CABRERA PIMENTEL L., PA572
CABRERA-LÓPEZ C., PA2976, PA4719
CABRIADA V., PA1274, PA5261
CABRILLAC G., PA571
CACCIATORE E., OA4201
CACEIRO R., PA1035
CADDEN P., PA4011
CADRANEL J., PA427, PA1678, PA3465
CAETANO ALBINO DA SILVA E., OA3269
CAETANO MOTA P., PA410, OA854, PA1155, PA2919
CAFAZZO J., PA1584
CAFFARELLI C., PA1747
CAFFREY OSVALD E., PA4999, PA5359
ÇAĞLAR H., PA1651, PA5011, PA5012
ÇAĞLAYAN B., PA3401
CAGLIONI F., PA2398
ÇAĞRI ARSLAN D., PA4534
CAGUANA VÉLEZ O., PA5174
CAHALANE O., PA650
CAHILL K., PA5233
CAHINDE I., PA3892
CAHN T., PA5249
CAI D., OA2585
CAI F., PA4558
CAI H., OA3270
CAI H., PA2790
CAI S., PA3917
CAI Z., PA1703
CAIAFFA M., PA4098, PA4112, PA4748, PA4753
CAICEDO-TRUJILLO S., PA347
CAILLARD C., PA1212, PA1214, PA1219
CAILLE P., PA518
CAIN J., OA4208
CAIRES N., PA528, PA3638
CAKIR E., PA354, OA2505, PA2731, PA3374, PA5012
CAKMAK A., PA5045, PA5046, PA5047
CALA A., PA3886
CALA GARCIA J., OA4346
CALABRESE F., PA1149, PA1695, PA1708, PA2210, PA4034
CALABRÒ F., OA1564
CALA-GARCIA J., OA894
CALANDRIELLO L., PA3544, OA4848, OA4852, OA4853
CALARAS D., OA4848
CALARASU C., PA2714
CĂLĂRAȘU C., PA2406
CALCIANO L., PA663
CALDERARI G., PA3483
CALDERS P., PA361
CALDWELL J., PA4610
CALERO PARDO S., PA3445
CALIANDRO R., PA427
CALIEZ J., PA1739
CALIK BASARAN N., PA4535
CALIK KUTUKCU E., PA357, PA3393, PA3398, PA4535, PA5046, PA5047
CALIK-KUTUKCU E., OA2614, PA4525, PA5044
CALIMAN-STURDZA O., PA5084
CALINAWAGAN B., PA5095
CALLARI A., PA406
CALLE M., PA5208
CALLEJA A., PA519
CALLEJAS F., PA5208
CALLEJÓN LEBLIC B., PA1242
CALLENS S., PA2176
CALLISTER M., PA3313
CALLISTER M., PA1122
CALMA N., OA1414, OA2503, PA4125, PA5294
CALMELAT R., PA2273
CALMELAT R., PA1795, PA2267
CALMES D., PA393, PA2765, OA3151, PA4466
CALÒ O., PA4096, PA4110, PA4128
CALO' G., PA594
CALOGERO C., PA2761
ÇALTEPE G., PA5012
CALVACHE MATEO A., PA364, PA365, PA377, PA1658, PA5101
CALVAT A., PA952
CALVÉN J., PA2985
CALVERLEY P., PA1292, OA2607, PA3625, PA4144
CALVERLEY P., PA4145
CALVERT M., PA5340
CALVILLO BATLLÉS P., PA1881
CALVINHO P., PA325
CALVO N., PA2252
CALVO BENITO J., PA5241
CALVO BOTA A., PA5241
CALVO RADO N., PA2251
CALVO SÁNCHEZ M., PA3464
CALVO-ALVAREZ U., PA4106, OA4301
CALYECA J., OA4203
CALZETTA L., PA590, PA591, PA597, PA3610, PA4691
CALZOLARI E., PA406
CÂMARA AGONDI R., PA953
CAMARENA A., PA3848
CAMARGO B., PA981, PA2755
CAMARGO C., PA5033, PA5036
CAMARGO L., PA1304
CAMARGO-ÁNGELES R., PA4608
CAMBIER M., OA1452
CAMBONI D., PA3001
CAMBOULIVE A., PA3953
CAMELI P., PA1142, PA1747, PA2219, PA2221, PA2232, PA2305, PA3902, PA3949, PA4112, OA4304, PA5277
CAMERON G., PA546
CAMERON R., PA2233
CAMERON W., PA2341
CAMICIOTTOLI G., PA2274, PA2375, PA4704
CAMIDGE L., PA2392
CAMIÑA R., PA3523
CAMINATI A., PA1725, OA3274
CAMINATI M., OA1419, PA1917, PA1926
CAMINO A., OA789
CAMIOLO M., PA2142
CAMMARATA G., PA1631, PA3947
CAMMILLERI G., PA2988
CAMP C., PA5108
CAMPAGNAC M., OA900, OA4243
CAMPAINHA S., OA4848, PA5049
CAMPAÑA E., OA782
CAMPAÑA-DUEL E., PA4668, PA4672
CAMPBELL C., PA5266
CAMPINS F., PA3479
CAMPISI R., PA1908, PA4098, PA4748, PA4753
CAMPO EZQUIBELA A., PA1110
CAMPOMANES C., PA1016, PA1342, PA3794
CAMPOS E., PA4593
CAMPOS R., PA2682
CAMPOS CARO A., PA1151
CAMPOS TÉLLEZ S., PA3323
CAMPRUBI M., OA782
CAMPRUBÍ-RIMBLAS M., PA4668, PA4672
CAMUSET J., PA427
CAMUZ-LIGIOS L., PA4979
CAN D., PA5012
CAN F., PA4379
CAN OKSAY S., OA2505, PA2732, PA2753, OA4327, PA4446, PA5083
CANADA B., OA4875
CANAK I., PA1347
CÀNAVES L., PA1270, PA2319
CANBAKAN S., PA2203
CANBAY F., PA2203
CANDAL-PEDREIRA C., PA5327
CANDELARIA CÁCERES A., PA4026
CANDIA C., PA503, PA1750, PA1751, PA1753, PA4108
CANE J., PA1858
CANEIRAS C., PA370, PA371, PA962
CANESSA P., OA1558
CAÑETE C., PA3615, PA5285
CANITEZ Y., PA5012
ÇANKAYA T., OA2616
CANN J., OA780
CANNON J., OA741, PA3486, PA3493, PA3956, PA5177, PA5191
CANO I., PA4089
CANO PUMAREGA I., PA1881, PA3012, OA4841
CANO ROSALES D., PA1907
CANONICA G., PA1891, PA1892, PA1894, PA1897, PA3053, PA3618, PA4112, PA5280
CANSECO J., PA5093, PA5115
CANT E., PA382, PA383, PA1070, PA2340, PA2342, PA2827
CANTAIS A., PA420
CANTILLO-BERNI A., PA1693
CANTLE F., PA5355
CANTÓ E., PA3902
CANTUARIAS J., OA4846
CANTURK A., PA2282, PA3998
CAO D., PA454
CAO L., PA3781
CAO S., PA562
CAPARRÓS I., PA1683
CAPARRÓS-MARTÍN J., PA2957
CAPELOZZI V., PA1152
CAPENER D., OA757, PA2260, PA4500
CAPENER D., OA4954, PA5039
CAPITÃO A., PA3599
CAPNETZ-STUDY GROUP ..., PA5130
CAPOCCI S., PA1065, PA2169, PA2796
CAPONI L., PA3479
CAPPELLATO G., PA1926
CAPPELLETTI C., PA5292
CAPPELLETTI T., PA1822
CAPPIELLO C., PA4079, PA5334
CAPPON G., PA2894
CAPRIOTTI L., OA3147
CAPUANO V., PA4128
CARA A., OA3271
CARAIOLA S., PA2924, PA2925
CARAMORI G., PA452
CARAZO FERNANDEZ L., PA5217
CARBONE R., OA4848
CARBONELL N., PA2326, PA5248
CARBONELL ASINS J., PA1815
CARBONELL-ESTRANY X., PA1656
CARBONI BISSO I., PA3540, PA4480
CARDANI C., PA4497
CARDENAS L., PA1794
CARDEÑOSA PÉREZ A., PA1255
CARDER M., PA3354, PA3797
CARDOSO C., PA4541
CARDOSO C., PA1164
CARDOSO R., PA1225
CARDOSO TAVARES M., PA2716
CARDOUAT G., OA4243
CARDOZO L., PA3039, PA3040, PA3041
CARELLA F., PA2082
CARELLI C., PA1229
CARETTA S., PA2832
CAREY B., OA3276, PA4471
CARIANI L., PA2178
CARINGELLA A., PA5287
CARIOLI G., PA2298
CARLA BARBOSA DE BARROS ALBUQUERQUE L., PA4637
CARLENS J., PA424, OA2507, OA2508
CARLIER N., PA1731
CARLON M., OA2623
CARLON M., PA1716, PA5159
CARLON M., OA1572
CARLSEN J., PA3971
CARLSON L., PA2881
CARLSSON A., PA3521
CARLSSON K., PA3914
CARLSSON L., PA5157
CARMAN C., OA4860
CARME H., OA3173
CARMEZIM-CORREIA J., PA408
CARMICHAEL P., PA1326
CARMICHAEL Z., PA4387
CARMONA E., PA2201
CARMONA-IRAGUI M., PA5272
CARNEIRO F., OA1449, OA1451
CARNEIRO DE MENDONCA D., PA3061, PA4637
CARNEIRO OLIVEIRA-JUNIOR M., PA1261

CARNOVALE V., OA1539
CARO F., PA3479
CAROLI A., PA2398
CARPAGNANO G., PA1779, PA1908, PA2180, PA2429, PA3760, PA3825, PA4098, PA4662, PA4748, PA4753, PA5287, PA5288, PA5307
CARPAIJ O., PA4611
CARPENÈ N., PA5334
CARPENTIER J., PA4635
CARPENTIER M., PA4635
CARPIO C., PA3801
CARPIO SEGURA C., PA4026
CARR J., PA5129
CARR S., PA1842
CARR S., PA1843, PA2761
CARRAFIELLO G., PA5009
CARRAGETA D., PA2954
CARRANZA MUÑOZ P., PA3306
CARRANZA-MUÑOZ P., PA3302, PA3305, PA3312
CARRARA M., PA2105
CARRARO S., OA1435, PA2082
CARRASCO P., PA3919
CARRASCO HERNANDEZ L., PA2155, PA2390, PA4995
CARRASCO SÁNCHEZ M., PA1808
CARRASSI A., PA4662
CARREIRA P., OA746
CARREIRA S., PA2805, PA5090
CARREÑO A., PA4089
CARREÑO ALEJANDRE A., PA3012
CARRIÇO F., PA4083, PA5257
CARRIÉ C., OA789, PA5245
CARRIERO V., PA975, PA2224, PA4733, PA4736, PA4739, PA5160
CARRILLO DÍAZ T., PA646
CARRILLO HERNÁNDEZ-RUBIO J., PA1808
CARRINOLA R., PA324
CARRIÓN COLLADO N., PA3840
CARRIZO L., PA513
CARROLL M., OA1462
CARROLL M., PA3810
CARROLL M., PA1690
CARROLL T., PA613, PA650, PA4677
CARROLL T., OA3146, PA3310
CARROZZI L., PA392, PA1961, PA3868, PA4079, PA5334
CARSETTI R., PA2734
CARSON J., OA1461, OA4320
CARSON J., OA886
CARSON K., PA3504
CARSON S., OA1461, OA4320
CARSTENSEN S., PA608, PA2353
CARTEAUX G., PA1678
CARTER B., PA3301
CARTER J., PA579
CARTER N., PA373
CARTER V., PA1014, PA1319, PA1891, PA1892, PA1894, PA3635
CARTÓN SÁNCHEZ B., PA4086
CARTÓN SÁNCHEZ M., PA5131
CARTWRIGHT J., PA2368
CARUSO C., PA4112
CARUSO P., PA2356
CARUSO P., PA1794
CARVAJAL Á., PA5241
CARVALHO A., PA1663
CARVALHO A., PA410, OA854, PA1164, PA2214, PA2919, OA4848
CARVALHO C., PA1005, PA1794
CARVALHO C., PA352, OA4222, PA4977
CARVALHO C., PA1034, PA3405, OA4310
CARVALHO E., PA5033, PA5036
CARVALHO J., PA2805, PA2813, PA5090
CARVALHO P., PA4486
CARVALHO R., PA1102
CARVALHO R., PA1152
CARVALHO-PINTO R., PA352
CARVALHO-PINTO R., PA1034
CARVALHO-PINTO R., PA3405, OA4219
CARWANA M., PA2738
CARY R., OA3180
CASABURI R., PA1187, PA1795, PA2267, PA2273, PA4520
CASADEVALL C., PA1836
CASAGRANDE G., OA3267
CASANOVA J., PA4471
CASANOVA MACARIO C., PA1242
CASANOVA-MACARIO C., PA2976, PA4719
CASANOVAS M., PA1107, PA4476
CASARÍN LÓPEZ F., PA3306, PA3826, PA3829, PA3831
CASARTELLI A., PA472
CASAS F., PA3616, PA5208
CASAS I., PA4576
CASAS M., OA882, OA886, PA3674
CASAS S., PA1075, OA4196
CASAS RECASENS S., PA5194
CASAS-MENDEZ L., PA3362
CASAS-RECASENS S., PA1157
CASAULTA C., PA3994, PA3996
CASCINA A., PA1163, PA2162
CASCINU S., OA3270
CASCIO MARIANA M., PA4393
CASCÓN HERNÁNDEZ J., PA1816
CASE A., PA2916
CASIRAGHI N., OA4947
CASO A., PA4103
CASOTTO V., PA1019
CASS S., PA4586
CASSAI L., PA2221, PA2225
CASSANDRO R., OA3274
CASSANO G., PA2180
CASSANO P., PA3319
CASSELLS A., OA3165
CASSIBBA J., PA426, OA1554, PA4441
CASSIDY N., PA1727
CASSINI L., PA3616
CASTALDI P., OA2497
CASTAN A., PA443
CASTAN M., OA4828
CASTANEDA E., PA4975
CASTANEDA J., PA1319, PA4706
CASTAÑEDA S., PA3467, PA3468
CASTAÑEDA ORDÓÑEZ L., PA3826, PA3829, PA3831, PA3832
CASTAÑEDA ORDOÑEZ L., PA3307
CASTANIERE I., PA1213
CASTAÑO G., PA1749
CASTEIGT J., PA531
CASTEJÓN DIAZ R., PA5246
CASTEJON PINA N., PA2167
CASTELLANOS LÓPEZ L., PA2400
CASTELLI G., PA1149, PA1752, PA3847, PA5134
CASTELLO-SIMÕES V., OA4932
CASTELLVI I., OA746, PA3467, PA3468
CASTIER Y., PA1230, PA3368
CASTILHO DE FIGUEIRÊDO L., PA2685, OA4226
CASTILLO A., PA4089
CASTILLO D., OA3282, PA3902
CASTILLO D., PA1749
CASTILLO I., PA5050
CASTILLO S., PA5208
CASTILLO CORULLÓN S., PA2761, PA3381
CASTILLO GARCÍA M., PA3005, OA4841
CASTILLO URIBE V., PA5336, PA5337, PA5338
CASTILLO-CORULLÓN S., PA2760
CASTILLO-VILLEGAS D., PA5154
CASTLE L., OA864
CASTORENA-MALDONADO A., PA4418
CASTRO L., PA4521
CASTRO L., PA2933, PA2934
CASTRO M., PA2283
CASTRO M., PA3883
CASTRO M., PA3479
CASTRO P., PA3883
CASTRO S., PA5261
CASTRO QUINTAS S., PA5125
CASTRO RIERA C., PA4621
CASTRO VILLAMOR H., PA3323
CASTROGIOVANNI A., PA4079, OA4843
CASTRO-SAYAT M., PA3031
CASUTT A., PA310, PA3365
CATACUTAN H., PA5095
CATALANO F., PA604
CATALANO P., PA2736
CATALDO D., PA4132
CATALISANO A., PA4393
CATANEO D., PA4418
CATANI C., PA2398
CATANZARITI A., PA3635
CATARINO S., PA5212
CATHERINE P., OA1545
CATLIN A., PA1046
CATOZZI C., OA4947
CATTANEO R., PA3528, OA4959
CATTANEO V., PA3366
CATTELAN A., PA1089, PA3847
CAUDRI D., PA1074, PA1086
CAULFIELD B., PA1595, OA3185
CAUSHI F., PA3431
CAUSSADE S., OA872
CAUTERUCCIO R., PA2850, PA2951
CAVACO M., PA2810, PA4541
CAVACO M., PA1057, PA2799
CAVADAS C., PA3599
CAVAILLES A., PA1731
CAVALCANTI MACIEL Á., PA3506, PA3507
CAVALHERI V., PA3396, PA4527, PA5040
CAVALIER E., PA2354
CAVALLARO BARAÚNA LIMA A., PA1172, PA2685, OA4226
CAVENEY S., OA1415, PA4721
CAVICCHIA A., PA507, PA510, PA1802
CAVIGLI E., PA4590
CAYUPI F., PA5108
CAZENAVE T., PA2917
CAZES A., PA1153, PA1230
CAZORLA O., PA606, PA1804
CAZORLA-RIVERO S., PA2976, PA4719
CAZZOLA M., PA4691
CAZZOLETTI L., PA1021
CEA-CALVO L., PA1920, PA1924, PA3822
CEBERIO HUALDE L., PA3951
CEBEY-LÓPEZ M., PA2728
CEBOLA I., OA3154
CEBRIÁN-CUENCA A., OA761
CECCATO A., OA782, OA788, PA2326, PA4668, PA4672, PA5244, PA5248
CECCATO H., PA2685
CECI BONELLO E., PA4710
CÉCILE C., OA753
CECILI M., PA2110
CEDEÑO DÍAZ O., PA1255
CEDILAK M., PA5167
CEFALONI F., PA2422, PA4093, PA4730, PA4744
CEGOÑINO J., PA5070
CEJUDO RAMOS M., PA3761
CEJUDO RAMOS P., PA2243
ÇEKIÇ Ş., PA5012
CEKORJA B., PA2305
CELANT L., OA743, PA1765
CELANT L., PA5173
ÇELEBI Ö., PA5012
CELEDÓN J., PA3355
CELEN R., OA3159
CELI A., PA2246, PA2338, PA5334
CÉLIA CARLOS TIBANA R., PA1717
ÇELIK A., PA358
CELIK K., PA1839
CELIK M., PA1038
CELIK Y., OA3286
ÇELIK Z., PA345, PA4528
CÉLINE K., PA393
CELIS G., PA4487
CELLERIN L., PA463, PA1731
CELLI B., PA4719
CENGIZ SEVAL G., PA4396
CENK YANAZ M., PA5007
CENSO C., PA4977
CENTANNI S., PA1198, PA1725, PA1767, PA2298, PA3774, PA3961, PA4112
CENTENO CLEMENTE C., PA479
CENTENO-CLEMENTE C., PA1169
CENTIS R., PA2718, PA4741
CEPEDA J., PA1225
CERBU B., PA1684
CERDA MONCADES M., PA1270
CEREATTI A., OA3185
CERESER L., OA4848
CERFEUILLET V., PA3558
CERKL P., PA3483
CERÓN PISA N., PA1840
CERPS S., OA4303, OA4966, OA4968
CERQUA I., PA554, PA1852, PA2343
CERQUEIRA R., PA440
CERRATO L., PA5358
CERRATO M., PA3043
CERRI S., PA1213,

PA3461
CERTAIN M., PA443
CERTAIN M., PA1766
CERUTI P., PA1725
CERVERA E., PA1113
CERVERA V., PA3405
CERVERÓ RUBIO A., PA1881
CESANA G., PA1725
CESTARI M., PA513
CESTELLI L., PA1962
CETINKAYA E., PA956, PA4591
CETLIN A., PA1152
CETLIN A., OA851, PA1154
CEULEMANS L., PA2176, PA2710, PA3775, OA4343, OA4346, OA4348, PA4487, PA5188
CEULEMANS L., OA1535, OA3159
ÇEVIK AKYIL R., PA1671
CEYHAN M., OA4232
CHAABANE M., PA2253, PA4565, PA5097
CHAABANE M., PA642, PA4755, PA4760
CHAABI K., PA294, PA302, PA2248, PA2254
CHAABOUNI M., PA3047, PA3059, PA3541
CHABATI O., PA3983
CHABOT F., PA5251
CHACON CADIZ D., PA4995
CHADEAU HYAM M., PA2328
CHADHA R., OA2599, PA4629
CHADWICK A., PA4120
CHAE K., PA2287, PA4142
CHAGAS COSTA E., PA3061, PA4637
CHAHUAN E., PA5108
CHAI C., PA4080, PA4626
CHAI G., OA4848
CHAIBI K., PA4461
CHAIBI S., OA4829
CHAIEB W., PA323
CHAIGNE S., OA4243
CHAIN B., OA1566
CHAINI E., PA4709
CHAIT R., PA2846
CHAKINALA M., OA742
CHAKIR J., PA5225
CHAKRABORTY A., OA4208
CHAKRABORTY B., PA4021
CHALELA R., PA5154
CHALELA RENGIFO R., PA2201
CHALELA RENGIFO R., PA5174
CHALK C., OA3276
CHALMERS J., PA383, PA397, PA1071, OA1458, PA2849, PA3841, PA5098
CHALMERS J., PA382, PA385, PA1070, PA1074, PA1075, PA1086, PA1105, PA1292, OA1456, OA1459, OA1461, OA1463, PA2340, PA2342, OA2491, OA2604, PA2827, PA2852, PA3842, OA4320
CHALMERS J., PA381, PA384, PA386, PA388, PA1097, OA1457, OA1462, PA2769, PA2835, PA2843, PA2848, OA4864
CHALMERS J., PA404
CHAMBERS D., OA2585
CHAMBERS D., PA2233
CHAMBERS R., OA1566
CHAMMAS M., PA1034
CHAMPIGNEULLE B., PA1810, PA3804
CHAN A., PA1580
CHAN A., PA541
CHAN C., PA2112
CHAN C., PA1777
CHAN C., PA460
CHAN E., PA2108, PA2128
CHAN H., OA757, PA2260, PA4500, OA4857, OA4954
CHAN J., PA1014, PA1319
CHAN J., PA1780
CHAN K., PA1777, PA1780
CHAN K., PA4031
CHAN K., PA3062
CHAN L., PA4613
CHAN L., OA4967
CHAN M., PA4031
CHAN R., OA4967
CHAN R., PA632
CHAN R., PA3551
CHAN S., PA2703, OA3147
CHAN S., PA3062
CHAN S., PA4626
CHAN S., PA4080
CHAN T., PA4031
CHAN W., PA2782
CHAN W., PA369
CHAN W., PA982, PA3644
CHAN Y., PA3644
CHAN Y., PA369, PA2782
CHAN Z., PA4094
CHANDARANA S., PA4721
CHANDRA N., PA4629
CHANDRA P., PA5086
CHANDRA SHEKAR N., PA2414
CHANDRAKUMAR A., PA2271
CHANDRASEKARAN A., PA1744
CHANEZ P., PA4114, PA4750
CHANG A., OA1436, PA2740
CHANG C., PA548
CHANG C., PA1327
CHANG C., PA5163
CHANG C., PA1936
CHANG C., PA1076
CHANG G., PA1696
CHANG J., PA2076, PA2179, PA3056
CHANG M., PA3020
CHANG S., PA1327
CHANG S., PA2822, PA3575
CHANG S., PA958
CHANG V., PA2795, PA4537
CHANG W., PA1781
CHANG W., PA2320
CHANG DONG Y., PA1707
CHANG-MACCHIU P., PA1075
CHANTRANUWATANA P., PA476
CHAOUAT A., PA5251
CHAOUCH E., PA4090
CHAOUCH N., PA2253, PA4565, PA5089, PA5097, PA5112
CHAOUECH N., PA5078
CHAOUKI F., PA5260
CHAPLYNSKA N., PA1685
CHAPMAN D., PA1309
CHAPMAN L., PA1733
CHAPMAN N., PA5040
CHAPMAN R., PA517, PA3851
CHARALAMBIDIS K., PA1873
CHARANJIT S., PA1051
CHARBONNEL L., PA952
CHARBONNIER F., PA1903, PA4743
CHARBONNIER J., PA2280, PA2284
CHARBONNIER J., OA853, PA1134, PA3543, PA3997
CHARFEDDINE I., PA3047, PA3059, PA3541
CHARFI M., PA2993, PA2994, PA2995, PA3978, OA4326, PA5365
CHARITOS T., PA1745
CHARKAOUI M M., PA2873
CHARLES M., PA5015
CHARMAN S., OA1538
CHARPIDOU A., PA1119, PA1699, PA2855
CHARRAS A., OA4962
CHARRETIER R., OA1538
CHARRIOT J., PA4715, PA5296, PA5300
CHARTRAND L., PA2134
CHASAPIDOU G., PA4572
CHASCO L., PA3502
CHASIOTOU A., PA1887
CHASSANDE O., OA900
CHASTIN S., PA2416
CHATI H., PA2387
CHATTI S., PA2856
CHATTOPADHYAY D., PA2066, PA2067
CHATTRAPIBAN T., PA2800
CHATZI L., OA882
CHATZIFRANGKESKOU M., PA1859
CHATZIMICHALI E., PA3773
CHATZIPARASIDIS G., OA1438
CHATZIPETROU R., PA3420, PA4581
CHAUDHARY A., PA5339
CHAUDHARY A., PA3466
CHAUDHARY N., PA1613
CHAUDHARY S., OA4848
CHAUDHARY S., PA1012
CHAUDHARY S., PA1227
CHAUDHRY D., PA2309, PA3408, PA5221
CHAUDHRY T., PA367
CHAUDHRY Y., PA2692
CHAUDHURI N., OA2588, PA2874, PA3485, PA3921, OA4195, OA4848
CHAUDHURI R., OA1531, PA1858, OA2604, PA4675, PA4757
CHAUDRY T., PA1063
CHAUDRY Y., OA3260
CHAUHAN A., PA4434
CHAUHAN A., PA1596, PA2986, PA3820
CHAUHAN A., PA535, OA769, PA2384
CHAUHAN M., PA535, PA2384
CHAUHAN N., PA2699
CHAUHAN N., PA1829, PA4991
CHAUMAIS M., OA3160
CHAUTEMPS C., PA2216
CHAUVEAU S., OA4324
CHAUVET C., PA450
CHAUVIN P., PA1148
CHAVALERTSAKUL K., PA1686
CHAVANNES N., PA1579
CHAVANNES N., OA3184
CHAVES LOUREIRO C., PA488
CHAVEZ K., OA1567
CHÁVEZ-GALÁN L., PA301, PA2330, PA3848, PA4418
CHAWES B., OA1440, PA1627, PA1632, PA2721, OA4330, OA4331, PA5371
CHAWHAN A., PA2414, PA4151
CHAY O., PA4438
CHAYA S., OA1547
CHAZELAS P., PA4419
CHCIAŁOWSKI A., PA299, PA2339, PA3814
CHEAH C., PA3869
CHECA A., OA1440, OA1532
CHECKLEY E., PA2885
CHECKLEY W., OA862
CHEDEVERGNE F., PA3377
CHEEDARLA S., OA4215
CHEEDRALA N., OA4215
CHEFCHAOU Y., PA4147
CHEG J., PA5108
CHEIKH ROUHOU S., PA983
CHEIKHROUHOU S., PA628, PA1268, PA1315, PA1964, PA2264
CHEKROUN MARTINOT A., PA620, PA972, PA1197
CHEMINANT M., PA2975
CHEMINGUI S., PA3660
CHEN A., PA1076
CHEN A., PA2738
CHEN C., PA1888
CHEN C., OA4866, PA5141
CHEN C., PA3574, PA5141
CHEN C., PA607
CHEN C., OA4866
CHEN C., PA4546
CHEN C., PA2205
CHEN C., PA493, PA1327, PA3623, PA5163
CHEN D., OA4297
CHEN D., OA2598
CHEN E., OA2598
CHEN F., PA1959, OA4230
CHEN H., PA3836
CHEN H., PA3815
CHEN H., PA2971
CHEN H., OA4866
CHEN H., PA4136
CHEN H., PA2363, OA3150
CHEN H., PA4068
CHEN H., PA5141
CHEN J., PA1093
CHEN J., PA1290
CHEN J., PA1954
CHEN J., PA4485
CHEN J., OA849, PA1263
CHEN J., PA617, PA4045, PA4047
CHEN J., PA1704
CHEN K., PA1257
CHEN K., PA3492
CHEN K., PA607, PA1264, PA2349
CHEN L., PA1930
CHEN L., PA1632, OA4330
CHEN M., PA3899
CHEN M., PA2987
CHEN M., OA4229
CHEN P., PA307
CHEN Q., OA1532
CHEN R., PA1946, PA3663
CHEN R., PA3934
CHEN S., PA4137
CHEN W., PA3574
CHEN W., OA4866
CHEN W., PA5141
CHEN W., PA4609
CHEN W., PA3781
CHEN X., PA5243
CHEN X., PA2701
CHEN Y., PA1959
CHEN Y., PA1277, PA4514
CHEN Y., PA3632
CHEN Y., PA1066
CHEN Y., PA5163
CHEN Y., PA1831
CHEN Y., PA3781
CHEN Y., OA1440

CHEN Y., PA3623
CHEN Y., PA3565, PA4566
CHEN Y., PA1959
CHEN Y., PA1275
CHEN Y., PA5163
CHEN Y., PA3587, PA3588
CHEN Y., OA772, OA1569, OA2624, OA2626
CHEN Y., OA1440, OA1532
CHEN Y., PA3496
CHEN Y., PA3384, PA4993
CHEN Z., PA1257, PA1265, PA4400
CHENG D., PA4438
CHENG E., PA3843, PA3845
CHENG H., PA3442
CHENG H., PA4661
CHENG L., PA3029
CHENG M., PA4045, PA4047
CHENG M., PA1276, PA1807, PA2940, PA2942
CHENG M., PA2713
CHENG R., PA3934
CHENG S., PA1906, PA3632
CHENG W., OA4866, PA5141
CHENG Y., PA3448
CHENG Z., PA4438
CHENG Z., PA4385
CHENG Z., PA3410
CHENG Z., PA1141, PA1158
CHENG Z., PA1138
CHENIVESSE C., PA966, PA3465, PA4114, PA4648, PA4750
CHENNOUFI A., PA1314, PA1870, PA3978
CHEN-XU M., PA4584
CHEONG J., PA4450
CHEOUR R., PA980, PA3643
CHERATH P., PA5057
CHERIF H., PA2993, PA2994, PA2995, PA3978, OA4326, PA5365
CHERIF T., PA3513
CHERIF T., PA4461
CHERIF T., PA2191
CHERKASOVA O., PA283, PA5111
CHERMITI F., PA3629, PA3633, PA3788, PA3877
CHERNOLEVSKY B., PA5111
CHERNOVSKY M., PA2224
CHERO S., PA2683, PA2693
CHEROUNY B., PA4979
CHETTA A., PA590, PA591, PA3610
CHETTY M., OA1560, PA3434
CHEUNG A., PA3945
CHEUNG C., PA3411
CHEUNG C., PA1784
CHEUNG D., PA1291, OA2498, OA4851
CHEUNG M., PA4001
CHEUNG P., PA3551
CHEVA A., OA3152
CHEVALIER B., PA4490
CHEVURE J., OA740
CHEW H., PA3869
CHEW W., PA3428
CHEYROU O., PA4443
CHHOR L., PA3631
CHHOWALA S., PA1322, PA3785
CHIA C., PA2336, PA2346, PA4066
CHIA W., PA2295
CHIANG J., PA4469
CHIANG K., PA3062
CHIARALUCE S., PA2125
CHIARANTANO R., PA1117, OA3267
CHIARELLI F., PA2737, PA5364
CHIBA H., PA434, OA1424, PA3895
CHIBOUT N., PA2258, PA3983
CHICHIZOLA N., PA349
CHIEN B., OA2494
CHIEN J., OA4302
CHIEN J., PA4137
CHIEN M., OA1447
CHIEN N., PA5163
CHIENG J., OA787
CHIERICOZZI M., PA1220, PA4665
CHILDS L., PA2840
CHILD-TURKEY-COLLABORATION .., OA2505
CHILES J., OA2497
CHILTON L., PA576
CHIMERA D., PA392, PA3868, PA5334
CHIN H., PA2112
CHIN K., PA477, PA3415
CHIN K., PA1196
CHIN K., PA1897
CHIN S., PA1246
CHINELLATO N., PA5110
CHINER E., OA4841
CHINNA 8., PA5029
CHINO V., PA1163, PA2162
CHIOMA R., PA2736
CHIPPS B., PA985
CHIPPS B., PA5292
CHIRINE M., PA1870
CHIRINOS R., PA1113
CHIRUMBERRO A., PA286, PA2061
CHITTY J., OA4969
CHIU C., PA5357
CHIU K., PA2320
CHIU L., PA1936
CHIU M., PA3835
CHIU P., PA3442
CHIU Y., PA1781
CHLOROS D., PA545, PA1887, PA4572, PA5102
CHO H., PA2944
CHO H., PA1706
CHO I., PA3020
CHO J., PA3300
CHO J., PA654, PA1720
CHO J., PA3562
CHO K., PA3570
CHO M., PA1955, OA2497, OA3143
CHO M., OA1460
CHO M., PA2055, PA2323, PA4142
CHO P., PA1923
CHO P., PA1919, PA3403
CHO P., PA1912
CHO S., PA4765
CHO S., PA1297
CHO S., PA2944
CHO W., PA3570
CHO Y., PA645, PA3034, PA3619
CHODICK G., OA2490, PA4474, PA5031
CHOEDON J., PA5279
CHOHAN M., PA4437
CHOI B., OA1460
CHOI C., PA5216
CHOI C., PA1921, PA2709
CHOI C., PA1234
CHOI H., OA898
CHOI H., PA382, PA383, PA2844
CHOI H., PA3898
CHOI J., PA4536
CHOI J., PA5271
CHOI J., PA5149, PA5366
CHOI J., PA1085, PA5119
CHOI J., PA4765
CHOI K., PA984
CHOI M., PA2323
CHOI S., PA2287
CHOI S., PA2797
CHOI W., PA2944
CHOKHANI R., PA4690
CHOKKALINGAM A., PA2834
CHOLIDOU K., PA5223
CHONDROU E., PA5102
CHONG D., OA1568
CHONG D., PA568
CHONG I., PA1714
CHONG S., PA404
CHOO K., PA4661
CHOO X., PA982, PA3644
CHOPRA A., OA896, PA1240
CHOPRA M., PA3303
CHOPRA M., PA3303
CHOROSTOWSKA-WYNIMKO J., PA2344, PA5107
CHOTIRMALL S., PA1071, PA2340, PA2342
CHOTIRMALL S., PA385, PA2196, PA2852
CHOTIRMALL S., PA2188, PA2193
CHOU C., PA641, PA1864
CHOU H., OA893
CHOU K., PA3363
CHOUCHANE A., PA2856
CHOUCHANE O., PA2200, PA3426
CHOUDHURY A., PA4511, PA4513
CHOUDHURY G., OA2604, PA4145
CHOUDRY H., PA4027
CHOUHURY G., PA4144
CHOW C., OA874, PA3945, OA4231
CHOW P., PA369, PA2782
CHOWDHURY M., PA2183
CHOY D., OA1531, OA2498, PA4675
CHOY D., PA1291
CHRIF T., PA330
CHRIST F., OA2623
CHRISTENSEN G., PA4052
CHRISTENSEN H., OA3173
CHRISTENSEN J., PA5123
CHRISTENSEN N., PA1125, OA3268
CHRISTENSEN R., PA2399, PA3628
CHRISTENSEN V., OA3166
CHRISTENSON S., PA1308
CHRISTIAN L., PA3369
CHRISTIN-MAITRE S., PA2766, PA3386
CHRISTODOULATOS G., PA3573, PA3577
CHRISTODOULOU M., PA3933
CHRISTOFF G., PA1891
CHRISTOFF G., PA1892, PA1894, PA1897
CHRISTOPHER D., PA3304
CHRISTOPHER D., PA1885, PA3602
CHRISTOPHER D., PA2396
CHRISTOPHER D., PA4570
CHRISTOPHER D., PA1067, PA5104
CHRISTOPOULOS A., PA1296, PA3606
CHRISTOPOULOS I., PA422, PA1296, PA1782, PA3606, PA4397
CHRISTOPOULOU M., PA1296, PA2978, PA2979, PA2980
CHRISTOPOULOU M., PA3606
CHRISTOU A., PA3330
CHRISTUDASS C., PA1067
CHRONAIOU A., PA5102
CHRONIS C., PA3311, PA5102
CHRYSIKOS S., PA1687, PA2851
CHRYSOCHOOU E., PA2150, PA4997
CHRYSOCHOOU E., PA490, PA5002
CHU D., PA3033
CHU H., PA5305
CHU S., OA1440
CHU Y., PA2790
CHU RIVERA F., PA5336, PA5337, PA5338
CHUA 1., PA2723
CHUA 5., PA2723
CHUA 6., PA5029
CHUA B., PA3865, PA5120
CHUA F., PA404
CHUANG H., PA1259, PA1264, PA5243
CHUAN-XING L., PA2904
CHUBACHI K., PA5162
CHUFFART C., PA4648
CHUI WAN CHEONG P., OA4848
CHUKOWRY P., PA3669
CHUMAK I., PA3650
CHUNG C., PA4506
CHUNG C., PA3575
CHUNG C., OA1447
CHUNG C., PA1025, PA2695
CHUNG E., PA2175
CHUNG F., PA5354
CHUNG H., PA5130
CHUNG K., PA552, PA1933, PA1937, PA2328, PA3668
CHUNG K., PA2255, PA3575
CHUNG L., OA4302
CHUNG N., PA3494
CHUNG S., PA5149
CHUPP G., PA646
CHUQUIMIA MENDOZA Y., PA5217
CHURCH A., PA985
CHURCH C., PA1201, PA3529, PA3962
CHUVA DE SOUSA LOPES S., PA1866
CHUVAKOVA E., PA3532
CHYNKIAMIS N., PA1188, PA2268, OA3185, PA4526
CIANI L., PA467, PA478, PA4590, PA5214
CIARROCCHI A., OA3272
CIARROCCHI L., PA1695
CIBELLA F., OA4843
CICALINI I., PA5364
CICCIMARRA R., OA4947
CICERI R., PA3528, OA4959
CIET P., PA1074, PA1086, PA2121, PA4993
CIFALDI R., PA2890
CIFRIÁN J., PA1237, PA2321
CIFRIÁN MARTÍNEZ J., PA1140
CIFRIAN-MARTINEZ J., PA3486, PA3493
CILLONIZ C., PA3839, PA5124
CILLUFFO G., PA1616
CIMBOLLEK S., PA4097
ÇIMEN GÜNEŞ E., PA2931
CIMINO M., PA4684, PA4686
CIMMINO C., PA1229
CIMROVA M., PA4483
ÇINAR C., PA1880
ÇINAR M., PA2931
CINARKA H., PA956
CINEL G., OA2505, PA5012
CINICOLA B., PA2082
CIOLAC E., PA4530
CIONE E., PA4685

CIPOLLI M., PA2143, PA2144, PA2148
CIPOLLINA C., PA4676, PA4684, PA4686
CIPRIANO A., PA2246
CIPULO RAMOS E., PA3396, PA4527
CIRILLI L., PA1779
CIRILLO D., PA2171, PA2178
CIRIMINNA R., PA565
CIRINO G., PA554
CIRJALIU R., PA3926
CIRRI L., PA1877
CISLAK D., PA1208
CISTERNINO C., PA4096, PA4110, PA4128
CITERA G., PA2917
CIUCA I., PA3379
CIUNI A., PA2147
CIVELLI M., PA600, PA601, PA2356, OA4305, OA4947
CIVELLO J., PA1220
CIVIDINI S., PA523
CIVIT C., PA4437
CLAAS L., PA429
CLAES L., OA4314
CLAESSEN G., PA5188
CLAESSON M., PA5264
CLAEYS E., PA4555
CLAIRE H., OA1545
CLANCY L., PA5323
CLAPP P., OA4237
CLARA P., PA393
CLARENBACH C., PA4743
CLARENBACH C., OA3146
CLARENBACH C., OA3253, OA3255, OA3259
CLARK I., PA351
CLARK K., PA4386
CLARK S., PA4981
CLARK T., PA2816, PA2821
CLARK V., PA3060
CLARKE C., OA1549
CLARKE C., PA385, PA1071, OA2604
CLARKE D., PA4726
CLARKE L., OA3146
CLARKE N., PA4726
CLARKE S., PA2697
CLARKE S., PA963
CLARO I., PA528, PA3638, PA5071
CLAUDIA K., OA1545
CLAUS M., PA286
CLAUS R., PA5130
CLAVERO FERNÁNDEZ E., PA1024
CLAYTON B., PA2368
CLAYTON B., PA350
CLAYTON S., PA1199, PA1206, PA1761, PA5185
CLEARY D., PA1862
CLEMENO F., OA1529, PA3662
CLEMENO R., OA4970
CLÉMENT A., PA420
CLEMENTE S., PA5071
CLEQUIN E., PA3838
CLERCKX B., PA3389
CLERMIDI P., OA4944
CLEVES D., PA981, PA2755
CLIFF I., PA5066
CLIFTON I., PA5279
CLIFTON I., PA630
CLIN R., OA3288
CLINCHAMPS M., PA3808
CLINI E., PA1213, PA3461
CLOFENT D., PA390
CLOFENT ALARCÓN D., OA1543
CLOS BATET S., PA5272
CLOSA D., PA4672
COATS A., PA3351
COBA TABOADA T., PA4029
ÇOBANOĞLU N., PA1650, OA2505, OA2507, PA5012, PA5226
COBELENS F., PA1063
COBO I., PA1595
COBO REINOSO J., OA4864
COBOS-URIBE C., PA1600
COCCO P., PA3808
COCCONCELLI E., PA1149, PA1752, PA3847
COCHRANE B., PA3635
COCKERILL B., PA3025
CODECASA F., PA3563
CODECASA L., PA1069
CODECASA L., PA2798, PA2807
CODINA MARCET M., PA1270
CODULLO V., PA3910
COE A., OA4873
COECK C., PA2874
COELHO A., OA854
COELHO D., OA854, PA1164
COELHO L., PA4593
COELHO L., PA2805, PA5090
COENRAAD N., PA4135
COGHAN G., PA5191
COGHLAN G., OA741, PA3504, PA5177
COGOLLO A., PA1107, PA4476
COHEN A., OA1534
COHEN B., PA2729
COHEN D., OA3263
COHEN D., OA1420, PA4109, PA4130, PA4131
COHEN D., PA387
COHEN J., OA2587
COHEN S., PA1853
COHEN T., OA1534
COHEN Y., PA1739
COHEN RUBIN S., PA4588
COHEN-CYMBERKNOH M., OA1542, PA3383
COHEN-HAGAI K., PA387, PA4589
COIMBRA A., OA4851
COKER R., PA404
ÇOKUĞRAŞ H., OA2505, PA5012
COKUGRAS H., PA1622
COLAIANNI ALFONSO N., PA3031
ÇOLAK S., PA2931
COLAK Y., PA1013, PA1953, PA1956
ÇOLAKOĞLU S., PA1581
COLAPELLE J., PA2118
COLAPIETRO G., PA4393
COLARES P., PA412
COLAS M., OA1545
COLDWELL B., PA1104
COLE J., PA1308
COLEBORN E., PA4107
COLE-HUNTER T., PA305, OA2521
COLEMAN C., OA1527
COLEMAN M., OA864, PA1051, PA2184
COLEMONT M., OA4212
COLES J., PA1846, OA4248
COLES J., PA1862
COLIC N., PA2053
COLICE G., OA1415
COLL R., PA2335
COLLABORATIVE GROUP P., PA961
ÇOLLAK A., PA5012
COLLATZ L., PA1143
COLLIER G., OA757, PA1180, PA2260, PA4500, OA4857, OA4952, OA4954
COLLIER G., PA2283
COLLIGIANI L., PA5334
COLLIN J., PA5205
COLLINGRIDGE D., PA3990
COLLINGS M., PA1046
COLLINS S., PA3557
COLLISON A., OA1546
COLMENARES A., PA2776
COLNAGHI M., PA2123, PA2133
COLOMA R., PA1274, OA4841
COLOMBO C., PA298, PA3314
COLOMBO C., PA5009
COLOMBO C., OA1464
COLOMBO L., PA4505
COLOMBO P., PA2708
COLOMER-LABROUCHE S., PA3838
COLS ROIG M., PA2772
COMBRET Y., PA502
COMELLAS A., OA870
COMELLAS A., PA4139
COMIN C., PA467, PA4590
COMOLI P., OA4342
COMPAGNONE N., PA557
COMPALATI E., OA4874
COMPTON C., PA1321, PA1328, PA2392, PA2393, PA3024, PA3625, PA3663, PA4144, PA4145, PA4688, PA4698
COMPTON C., PA542, PA543
CONCA E., PA2124
CONCAS G., PA1822
CONDE P., PA4668
CONDE S., PA2933, PA2934, PA2936, PA2938
CONDLIFFE A., PA3842
CONDLIFFE R., PA3490
CONEJERO HALL L., PA1107, PA4476
CONEMANS L., PA2289
CONFALONIERI M., PA1742, PA2890, PA3505, PA5197
CONFALONIERI P., PA2890, PA3505
CONFLITTI A., PA3010
CONFORTI F., OA4239
CONGEDO A., PA2338
CONIO V., PA1163, PA2162
CONKBAYIR C., PA3601
CONLON T., PA4054
CONNELL D., PA3841
CONNETT G., PA2746
CONNON R., PA404
CONRAD A., PA288
CONSTANT C., PA2760, PA2761
CONSTANTIN D., OA3256
CONSTANTINOU S., PA1233
CONSTANTIN-TEODOSIU D., OA3256
CONTE M., PA2288
CONTE M., PA1926
CONTI C., PA2398
CONTI M., PA1647, PA2085, PA2727, PA2734, PA3984, PA4477
CONTI S., PA1725
CONTIN C., PA1089
CONTINI M., PA4505
CONTOLI M., PA1926, PA2298
CONTRERAS LEON Z., PA5336, PA5337, PA5338
CONTU C., OA752
CONWAY F., PA4613, PA5224
COOK P., PA4724
COOPER A., OA767, PA3613
COOPER B., PA3646, PA4737
COOPER C., PA4688
COOPER C., OA870
COOPER C., PA4139
COOPER J., PA3680
COOPER K., OA3180
COOPER R., PA5143
COOPER W., OA4848, OA4852, OA4853
COOPER W., OA1556
COOPOOSAMY L., PA3583
COOSEMANS I., PA4487
COPLU L., PA1038
COPPA F., PA1751, PA4108
COPPOLA A., PA2850, PA2951, PA2952, PA4580
COPPOLA M., PA1750
ÇOPUR F., PA2753
ČORAK L., PA314, PA416
CORAUX C., PA1262, OA2631
CORBACHO-ABELAIRA M., OA4301
CORBACHO-ABELAIRA M., PA4106
CORBETTA L., PA467
CORCORAN J., PA3434
CORCORAN R., PA1674
CORCUERA-ELOSEGUI P., OA1437, PA2745, PA2748
CORDA L., PA5197
CORDEIRO R., PA1057, PA2799, PA2810, PA4541
CÓRDOBA IZQUIERDO A., PA2314, PA5345
CORI L., PA1616
CORIAT A., PA538
CORINO A., PA5193, PA5197
CORLATEANU A., PA1645
CORNACCHIA D., PA5205
CORNE F., PA1731
CORNEJO R., PA3540
CORNELISSEN M., PA4674
CORNELISSEN M., PA4571, PA4574
CORNET A., OA786
CORNU HEWITT B., PA1605, OA2516
CORRAL-BLANCO M., PA4653
CORRALES A., PA1237
CORRALES M., PA5108
CORRAO G., PA2845, PA4725
CORREA C., PA3679, PA4652
CORRÊA DE ALMEIDA G., PA3796
CORREA GONZALEZ C., PA3446
CORREA GUTIERREZ C., PA4102
CORREA GUTIERREZ C., PA2417
CORREA-JIMENEZ O., PA4714
CORREIA A., PA4486
CORREIA F., PA1817
CORREIA N., OA4310
CORREIA DE SOUSA J., OA763, OA770
CORREIA PINTO S., PA1273
CORREN J., OA1419
CORRIGAN A., PA5205
CORRÒ B., PA3528, OA4959
CORSER B., PA1280
CORSICO A., OA4867, PA5107
CORSICO A., PA1163, PA2162, PA5133, PA5193, PA5197
CORSO PEREIRA M., PA1172, PA2685, OA4226
CORTE T., PA3544, OA4852, OA4853
CORTE T., PA3921
CORTEGIANI A., PA1213
CORTESÃO N., PA1817
CORTESE A., PA1912
CORTESI E., OA4343
CORTESI E., OA1572, PA1716, OA2623, PA3775
CORTES-TELLES A., PA4561, PA4577
CORTEZON L., PA5261

CORTEZÓN GARCÉS L., PA3890, PA3951, PA5309
CORTIJO J., PA2365
ÇÖRTÜK M., PA956, PA4591
CORVELEYN A., PA1716
CORVOL H., PA2129, PA5006
CORYDON H., PA1666
COSBY M., PA368
COSCONATI S., PA4685
COSGROVE G., OA1423
COSIMATO C., PA1229
COSIO B., PA1891
COSIO B., PA1892, PA1894, PA1897
COSIO M., PA1708
COSKUN F., PA2269
COŞKUN N., PA4515
COSMIC CONSORTIUM C., OA2627
COSO C., PA3005
COSO SERRANO C., OA4841
COSSETA REPOSI P., PA2162
COSSETTA REPOSI P., PA5133
COSSU L., PA2894
COSTA A., PA665
COSTA A., PA4529
COSTA C., PA1225
COSTA C., PA1591
COSTA D., PA2756, PA4082, PA5033, PA5036
COSTA I., OA1558
COSTA J., PA2121
COSTA P., PA1664, PA1665, PA2783, OA3171
COSTA R., PA504
COSTA S., PA2736
COSTA COLOMER J., PA2772
COSTA SOLÀ R., PA2192, PA2194
COSTABEL U., PA2883
COSTELLO R., PA1580, PA2982, PA3661
COSTELLO R., PA524, PA1582, PA1897
COSTI C., PA3385
CÔTÉ A., PA3651, PA4105, PA5225
COTET M., PA1156, PA2925
COTET M., PA2924
COTO E., OA783
COTTEREAU A., PA4648
COTTIN V., PA317, PA402, PA427, PA1197, OA1423, OA2580, PA2874, OA3157, OA3280, PA3460, PA3465, PA3467, PA3468, PA3921, PA3963, PA5182
COTTON F., PA286, PA2061
COUFFIGNAL C., PA4750
COUILLARD S., PA4675
COULIBALY Y., OA4324
COULOMB A., PA420, PA3940
COULOMB L'HERMINÉ A., OA4944
COULOMB L'HERMINÉ A., PA2129
COULOMBE J., OA884
COULOUMB A., PA423
COULSHED D., PA3591
COUPE N., PA3928
COUPER D., PA3319
COUPER D., OA870
COUPER D., PA4139
COURAUD S., OA3264
COURTNEY I., PA2801
COURTOIS-COMMUNIER E., PA2792
COUSINEAU C., PA1290
COUSINS D., OA2498
COUTIER L., PA420, PA1888
COUTINHO D., PA3883
COUTINHO G., PA603, PA1680, PA2824, PA2832
COUTINHO COSTA J., PA362
COUTURAUD F., PA2245, PA2792, OA4827, OA4829, OA4832
COWAN D., OA1531
COWAN J., PA2341
COWELL G., OA1560, PA3434
COWIE M., PA2996, OA4845
COWIN G., OA4956
COX D., PA4554
COX E., PA1045
COX G., OA1430, PA4125
COYNE K., PA985
COZZI D., PA4590
CRAIG C., PA3313, PA3434
CRAMER C., OA2517, PA4424
CRAPO J., PA2275
CRAVEN D., PA4471
CRAVEN T., PA550
CRAVETS M., OA742
CRAVO J., OA4311
CRAWFORD E., PA3444
CRAWSHAW A., PA2108
CRAWSHAW A., PA404
CREAMER A., OA3266
CREESE M., OA4877
CREHUÁ GAUDIZA E., PA3381
CREMONA G., PA557
CRESPO LESSMANN A., OA3144
CRESPO SEDANO A., PA4086, PA5131
CRESPO-DIZ C., PA4106
CRESPO-LESSMANN A., PA1920
CRESTA E., PA2727
CRESTANI B., PA417, PA429, OA858, PA1153, PA1230, PA1231, OA2580, OA3280, PA3465, PA3467, PA3468, PA3921, PA3942, PA3953
CREUTZENBERG M., PA3001
CRICHTON M., PA381, PA382, PA384, PA388, PA397, PA1071, PA2340, OA2604, PA2849, PA5098
CRICHTON M., PA385, PA1074, PA1086, OA1456, PA2342, PA2827
CRICHTON M., PA386, OA1457, OA1462, PA2843
CRIÉE C., PA2379
CRIEL M., PA969, PA3395, PA4532
CRILLY G., PA2781
CRILLY S., OA3287
CRIMI C., PA1908, PA4098, PA4748, PA4753, PA5172
CRIMI N., PA1908, PA4098, PA4748, PA4753
CRINE G., PA1323
CRINER G., OA870
CRINER G., PA4139, OA4929
CRINION S., PA4650
CRISAFULLI E., PA548
CRISTALDI M., PA4684, PA4686
CRISTIANO A., PA4718
CRISTIANO G., PA1229
CRISTINA GUIMARÃES DE ALMEIDA I., PA3758
CROCE G., PA472
CROCE S., PA2219, PA2221, PA2305, PA3902
CROCE S., OA4342
CROCKER C., PA2746
CROMEY K., PA4387
CRONA M., OA3179
CROOKS M., PA4610, PA5289
CROOKS M., OA2587
CROS P., PA420, PA423
CROSA F., PA2224, PA5160
CROSBIE P., PA1122
CROSBY A., OA3155
CROSS J., PA548
CROSS T., PA1309, PA1589
CROTTI P., PA4075
CROTTI S., PA1725
CROWELL R., PA967
CROWLE D., PA1787
CROWLEY L., PA4584
CROWLEY L., PA404
CROWLEY S., PA2762, PA2765
CRUJEIRAS A., PA2728
CRUST S., PA1104
CRUTSEN M., PA548, PA2289
CRUZ J., PA495, PA1031, PA1035
CRUZ M., PA3812
CRUZ M., PA3802
CRUZ T., PA1157, OA2487, OA4196
CRUZ Z., PA325
CRUZ RUÍZ J., PA4622
CRUZADO BOIX P., PA2314
CSARÍN LÓPEZ F., PA3832
CSEKO K., PA2364
CSENGERI D., PA1769
CSIZMAR V., PA5110
CSOMA B., PA2427, PA3004, PA3634
CSONKA L., PA3648
CSONKA P., PA1634, PA1635
CSORBA Z., PA1173
CUBERO P., PA2953
CUBILLOS ZAPATA C., PA2953
CUBILLOS ZAPATA C., OA4841
CUBILLOS-ZAPATA C., PA2329
CUCCARO L., PA5288
CUCCHETTO G., PA2144
CUCHI P., PA667
CUCHO VÁSQUEZ B., PA5336, PA5337, PA5338
CUDDIHY M., PA2401
CUESTA A., OA2523
CUESTA R., PA4087
CUESTA-LLAVONA E., OA783
CUEVAS J., PA5108
CUEVAS OCAÑA S., OA897
CUEVAS SALES E., PA2314
CUFARO M., PA5364
CUI J., PA1263
CUI T., PA1266
CUI Y., PA3823
CUIC D., PA3837
CUIJPERS M., PA2423, PA3653
CUKIER A., PA1034, OA4219, OA4222
CULEBRAS M., PA390
CULEBRAS AMIGO M., OA1543
CULEDDU G., PA523
CULLINAN P., PA3352, PA3674
CULLIVAN S., PA1757, PA5178
CUMELLA A., OA3176
CUMMINGS H., PA5289
CUMMINGS S., PA1253
CUNDRLE JR I., PA465
CUNHA M., PA2813
CUNHA M., PA1663
CUNHA M., PA2302
CUNHA CRAVEIRO A., PA4734
CUNHA GUIMARÃES DE ALMEIDA A., PA3758
CUNHA SILVA J., PA4734
CUNNINGHAM S., PA1624, PA1634, PA1635, OA2507
CUNNINGHAM S., PA1146
CUNNION K., PA608
CUNOOSAMY D., OA4298
CUPERUS L., PA3783
CUPURDIJA V., PA610
CURCI P., PA4725
CURDY M., OA1550, PA2116, PA2733, PA3994, PA3996
CÜRE O., PA992
CURRAN K., PA2292
CURRAS-TUALA M., PA2728, OA4246
CURRO R., PA1912
CURROW D., PA403, PA958, PA4386
CURROW D., PA5352
CURTIN J., OA886
CURTIN J., PA3674
CURTIS J., PA1946, OA2497
CURTIS J., OA870
CURTIS J., PA4139
CURTIS R., PA3510, PA4498
CURTO SÁNCHEZ E., OA3144
CURULL V., PA2201
CUSACK R., PA3843, PA3845
CUSANOVICH D., OA4964
CUSHEN B., PA2401, PA4731
CUSHION M., PA660
CUSMAN R., PA568, OA1568
CUSTÓDIO A., OA2628
CUSTODIO J., PA3892
CUSTOVIC A., OA1441, OA1547, PA2091, PA3674
CUTAIA G., OA4848
CUTHBERT K., PA5062
CUTRERA R., PA3947
CUVELIER A., PA409, PA502, PA1212, PA1214, PA1219, PA2945, OA3190, PA3759, PA4980
CUYACOT D., PA439, PA5095
CUYVERS B., PA3664
CUZZOCREA S., PA3910
CVEJOSKA-CHOLAKOVSKA V., PA5353
CVETKOVIĆ KUČIĆ D., PA1692
CYSNEIROS A., PA1210
CZAUN P., PA3608, PA3611
CZECHOWSKI P., PA2726
CZECHTIZKY W., PA566
CZIRA A., PA2392
CZYŻEWSKI D., PA474
CZYZYK P., PA3037
D
D S., PA5339
D CHALMERS J., PA4460
D EDWARDS G., PA505, PA508
D KRANEVELD A., OA1437
D KRASNODEMBSKAYA A., PA563
D M PLENTZ R., PA2302
D ROBINSON P., OA1546
D SILVA J., PA563
D SLY P., OA1546
D. BENÍTEZ I., PA4583
D. CHALMERS J., PA1106, PA2844
D. DODD J., PA3944
D. SILVA-VALENTE J., PA4633
D. VAN DER MEER A., OA2625, OA2629
D.J. BOS L., PA1211
D'AMATO M., PA4748
D'ARMIENTO J., PA3778
D'CRUZ R., PA3757
D'ERRICO L., OA741

DA COSTA D., PA1044
DA CUNHA M., OA4310
DA CUNHA FONSECA A., PA1129, PA2871
DA LUZ GOULART C., OA4932
DA SILVA E., PA4095
DA SILVA L., OA1449, OA1451
DA SILVA M., OA4324
DA SILVA V., OA1451
DA SILVA RESENDE P., PA1039
DA SILVA SENA C., OA1546, OA4940, OA4941
DAADOUCHA A., OA4960
DABBAS A., PA5085
DABEES R., PA4013
DABOUSSI S., PA300, PA1285, PA1791, PA2043
DABOUSSI S., PA642, PA4755, PA4760
DABRAL C., PA1788
D'ABRONZO R., OA4848
DĄBROWIECKA A., PA3814
DĄBROWIECKI P., PA2726, PA3814
DĄBROWSKA M., PA2866, PA2867, PA3038
DACAL QUINTAS R., PA2215
DACAL-QUINTAS R., PA4106
DACAL-RIVAS D., PA4106
DACCÒ V., OA1540, PA5009
DACHS T., PA4979
DACOSTA-URBIETA A., OA4246
DADU A., PA667
DAENEN M., PA969, PA3395
DAGAN A., PA5041
DAGHFOUS H., PA1741, PA2191, PA3325, PA3513, PA4542, PA4758
DAGHFOUS J., PA980
DAGLI E., PA3333, OA4232, PA5329
D'AGOSTINO B., PA2352, PA4685
DAHABREH M., PA1641
DAHER A., PA1335, PA1811, PA2272
DAHL M., PA2122
DAHL M., OA883, PA2069, OA4228
DAHL V., PA3867
DAHLÉN B., PA634, PA2430, OA2495
DAHLÉN S., PA634, OA1527, OA1531, OA2495, OA2499, OA4209, PA4405, PA5354
DAHM A., OA4833
DAHMA H., PA2061
DAI R., PA4130
DAI S., PA1959, OA4230
DAI X., OA4297
DAI X., OA881
DAIOU D., PA4572
DAISENBERGER L., PA1711
DAISS J., OA4215
DAKA* B., OA4842
DAKHIL B., PA336
DAL BOSCO L., PA2274, PA4702
DAL CORSO S., PA1049
DALAL P., PA1334, PA1336
DALAMAGA M., PA3573, PA3577
DALE E., OA4199
DALE E., OA4203
DALENA G., PA2429, PA5288
D'ALESSANDRO ., PA3902
D'ALESSANDRO M., PA1142, PA1747, PA2219, PA2221, PA2225, PA2232, PA3949, OA4304, PA5277
DALISAY N., PA3560
DALKILIC O., OA4307
DALLA ROSA I., PA1752
DALLAS J., PA1733
DALPHIN M., PA420
DALSGAARD C., PA3501
DALTON C., PA2697
DALY K., PA1091, PA2818
DALY L., PA2182
DAM NIELSEN S., PA5341
DAMADOĞLU E., PA1901, PA4525, PA5012
DAMANT R., PA2249
DAMANT R., PA3823
DAMARCO F., PA3366, PA4496
DAMATO D., PA3760
DAMATO F., PA1753, PA4103
D'AMATO M., PA1908, PA4108, PA4112
D'AMATO M., PA2375, PA4704
D'AMBROSIO P., PA412
DAMGÅRD SCHMIDT J., OA4202
DAMHUIS R., PA3884
DAMHUIS R., PA1705, PA3885
DAMIANI L., PA2136
DAMIAŃSKI P., PA4099
DAMIN M., PA1708
DANANCHÉ B., PA3345
D'ANCONA G., PA2380, PA3026
DANDENAULT V., PA5354
DANDURAND R., PA3678
DANESHVAR C., PA1787
DANIEL A., PA3638
DANIELE M., PA2338
DANIELS I., PA592
DANIILIDIS D., PA5127
DANILLA DÁVILA M., PA4029
DANILTSCHENKO M., PA1861
DANIYAROV A., PA5092
DANJOU W., OA4955
DANKOVA N., PA2803
D'ANNA C., PA565
D'ANNA S., PA503
DANNY M., OA4865
DANOV O., PA4051
DANTES E., PA3926
D'ANTONI C., PA4665
D'ANTONI L., PA4025
DANVERS L., PA2752
DANZAN N., PA1300, PA3908
DANZO F., PA1682, PA3854, PA4601
DAOUD S., PA3877
DARAPI D., PA314, PA1701
DARBY M., PA1122
D'ARCANGELO F., PA3528, OA4959
DARIE A., PA977, PA1786, PA2820, PA2922, OA4862, PA5227, PA5293
DARIE A., OA747
DARK P., PA2962, PA2963
DARLAN SANTOS-DE-ARAÚJO A., PA4141
DARMON M., PA1678
DARNE C., OA3178
DARRAGI M., PA5078, PA5089
DART S., PA1052
DARWICHE K., OA2593, OA2594
DAS P., OA1432
DAS S., PA1088
DAS POSSES BRIDI G., PA413
DASARI P., PA1321, PA1328, PA4698
DASHTSEREN I., PA2419
DASKALAKIS A., PA3421
DASKALOPOULOU A., PA3943
DASKALOS T., PA3879
DASKALOS T., PA4592
DASSIOS T., PA2135
DASTOT LE MOAL F., PA3938
DASTOT-LE MOAL F., PA3940
DATTA A., OA864
DAUNT C., PA1850
DAUPHIN C., PA5182
D'AURIA E., PA1643
DAUT U., PA3433
DAUVILLIERS Y., PA1804, PA2999
DAVENPORT-JONES L., PA3009
DAVÌ M., OA1429
DAVIAUD C., OA4333
DAVID A., PA400
DAVID C., OA4962
DAVID M., OA4859
DAVIDSEN J., PA436
DAVIDSON C., PA480
DAVIES B., PA2097, PA2730
DAVIES C., PA2757
DAVIES D., PA1691, OA4197
DAVIES D., PA951, PA4732
DAVIES E., PA1206, PA1761
DAVIES E., OA4197
DAVIES G., OA1462
DAVIES G., PA4998
DAVIES H., PA1180, OA4952
DAVIES J., PA2293
DAVIES J., PA2156, PA5010
DAVIES M., PA1889
DAVIES M., PA4700
DAVIES R., PA1198, PA1767, PA3961, PA5173
DAVIES S., PA1334, PA1336
DAVIES-CUTTING C., PA2187
DAVILA E., OA4955
DÁVILA I., PA1920, PA1924, PA3822
DAVILA I., PA3607
DAVIS D., OA4239
DAVIS J., PA3373
DAVIS M., PA592, PA5298
DAVIS S., OA1545
DAVISON J., PA391
DAVOREN E., PA4975
DAW P., PA954
DAWOOD H., PA462
DAY E., PA2876
DAYMA G., PA2139, PA4579
DAYNES E., PA2686, PA2687, PA2691, PA2694, PA4987
D-C MAN W., PA505, PA508
D'CRUZ L., PA535
D'CRUZ R., PA2942
D'CRUZ R., PA2940
DE S., PA4587
DE A COSTA T., PA316
DE ALMEIDA C., OA3156
DE ALMEIDA G., PA1005
DE ALMEIDA GOMES M., PA2762
DE ALMEIDA MONTEIRO R., PA5250
DE AMICIS R., PA5262
DE AMORIM CORRÊA R., PA1717
DE ANDRÉS DAVID R., PA1151
DE ANGELIS D., OA4305
DE ASSIS FERNANDES CALDEIRA D., PA563
DE BACKER J., OA742, PA1177, PA1805, PA2277, PA3553
DE BACKER W., PA1177, PA1805, PA3553
DE BAERDEMAEKER L., PA2943
DE BATLLE J., PA548, OA788, PA5109
DE BATLLE GARCIA J., OA3290
DE BECDELIÈVRE A., PA420, PA423, PA426
DE BLAY F., PA4750
DE BOER J., OA4850
DE BOER J., OA4855
DE BOER R., OA761
DE BOER W., OA766
DE BORTOLI PETIQUER CAPUCHO B., PA1112
DE BRABANDER J., PA2199, PA3426
DE BRANDT J., PA356, PA495, PA1796, OA2618
DE BRITO J., PA5250
DE BRUIN D., OA4855
DE BRUIN M., PA4005
DE BRUIN S., OA786
DE CANDIA M., PA3760, PA4662
DE CASSIA CASTRO R., PA4558
DE CASTRO J., PA3417
DE CASTRO M., OA882
DE CASTRO S., OA2628
DE CASTRO PEREIRA C., PA1717
DE CASTRO-MENDES F., PA1957
DE CREM N., PA1716, PA5159
DE CRESPIGNY A., OA4851
DE DIEGO A., PA1924
DE ESTRADA B., OA1566
DE FÁTIMA LOPES CALVO TIBÉRIO I., PA953
DE FAYS C., OA1535, PA2710, PA3775, PA5211, PA5295
DE FEO T., PA4494
DE FILIPPIS F., PA4096, PA4110, PA4128
DE FILIPPO M., PA2083
DE FONSEKA D., OA1556
DE FRANCESCO M., PA2338, PA3868
DE FRANCISCO CASADO M., PA5241
DE GEUS E., PA5060
DE GONZALO-CALVO D., OA782, OA788, PA2326, PA4583, PA5244
DE GOUVEIA BELINELO P., OA1546
DE GRAAF D., PA2696
DE GRAAF E., PA1718, PA1719
DE GROVE K., OA4211
DE GUIA T., PA1016, PA1342, PA3794
DE HOOGH K., OA2521, OA4941
DE JAGER S., PA1796
DE JONG C., PA5024
DE JONG C., PA2739
DE JONG C., OA3183
DE JONG K., PA979, PA1896
DE JONG P., PA1079, PA2280, PA2284, PA3997
DE JUANA IZQUIERDO C., PA4728
DE KONING H., PA1114, PA4003
DE KONING GANS J., PA2837
DE KRUIF M., PA548, OA4848
DE LA BLANCA A., PA2131
DE LA CONCHA DUARTE M., PA3307
DE LA CONCHA DUARTE M., PA3826, PA3829, PA3831, PA3832, PA5069
DE LA CONCHA DUARTE P., PA5069
DE LA CONCHA-DUARTE M., PA3302, PA3305, PA3306, PA3312

DE LA HOZ R., PA3355
DE LA PEÑA M., PA1274, OA4841
DE LA PEÑA BRAVO M., PA1270
DE LA TORRE M., PA2326, PA5248
DE LA TORRE CARAZO S., PA3323
DE LAAT P., PA4509
DE LANGHE E., PA5159
DE LAUZON-GUILLAIN B., PA5015
DE LEON M., PA1183
DE LIMA F., PA352
DE LIMA CURI HALLAL A., PA1957
DE LIPERI A., PA5334
DE LOOR H., OA4343
DE LORENZO R., PA557
DE LUCA D., PA2138
DE MAGALHAES E., PA5182
DE MAN F., OA743
DE MAN F., PA1191, PA1207, PA5189
DE MAN F., PA1765
DE MAN F., PA5173
DE MAN J., PA2170, PA2176
DE MARCHI P., OA1451, OA3269
DE MARCO S., PA1750
DE MASSIMI A., PA1926
DE MESA ALVAREZ J., PA5135
DE MEULDER B., OA2499, PA5354
DE MEY J., PA2943
DE MEYER Y., PA1177, PA1805
DE MICHELE F., PA4112
DE MIGUEL DÍEZ J., PA988, PA3446
DE MIGUEL-DIEZ J., PA2417, PA3066
DE MIR I., OA1416, OA1435, PA2101
DE MIRANDA S., PA3368
DE MIR-MESSA I., PA2743
DE MONESTROL I., PA4999
DE MOREUIL C., PA2245
DE MUYNCK B., PA2176
DE OLAIZ NAVARRO B., PA5170
DE OLIVEIRA G., PA4530
DE OLIVEIRA CAVAGNA R., PA1241
DE OLIVEIRA CONTERNO L., PA1172, PA2685, OA4226
DE OLIVEIRA PENA J., OA739, OA740
DE OLIVEIRA VILLALBA W., PA1172
DE PAIVA AZEVEDO M., PA1044
DE PALMA M., OA773
DE PAULA FERREIRA M., PA3399
DE PAULA SANTOS U., PA3796
DE PAULA VIEIRA R., PA1261, PA4670
DE PRADO M., PA3043
DE PRETIS S., PA2171
DE QUEIROZ V., OA2628
DE QUEIROZ ANDRADE E., OA1546
DE RIDDER M., OA2605
DE ROOIJ M., PA1609, OA2516
DE ROOIJ M., PA1605
DE ROSA C., PA1229
DE RUYSSCHER D., PA3884
DE S. RAMALHO VIANA E., PA3506, PA3507
DE SADELEER L., OA772, OA1535, OA2626, OA4346
DE SADELEER L., PA1716, PA5159
DE SADELEER L., OA1569
DE SANTI C., PA483, PA4034
DE SANTIS B., PA2736
DE SANTIS M., PA2338
DE SIMONE F., PA2850, PA2951
DE SIMONE V., PA1229
DE SOOMER K., PA4532
DE SOUZA A., OA3170
DE SOUZA J., PA352
DE SOUZA R., PA413, OA739
DE SOUZA CARVALHO E., PA1261
DE SOUZA GALVÃO M., PA390
DE SOUZA XAVIER COSTA N., OA2489, PA2984, PA5250
DE SOUZA-GALVÃO M., PA1064
DE SOYZA A., PA381, PA386, PA391, PA397, OA1457, PA2340, PA2342, PA2397, PA2843, PA2849
DE SOYZA A., OA1458
DE SOYZA J., PA394, PA3639
DE STEENHUIJSEN PITERS W., OA4946
DE TORRES J., PA1110
DE TORRES TAJES J., PA1242
DE VEGA SANCHEZ B., PA5135
DE VLIEGER G., PA5188
DE VOLDER J., OA4211
DE VOS A., PA2200
DE VOS J., OA892, PA5240
DE VOS M., OA764, OA871, PA3483, PA3508, PA3664, PA3677, PA4689
DE VOS N., PA286, PA2061
DE VOS R., OA769
DE VREEDE I., PA2126
DE VRIES M., PA5209
DE VRIES N., PA2696
DE VRIES-BOUWSTRA J., PA3467, PA3468
DE WEVER W., PA4555
DE WIT-VAN WIJCK Y., PA4571, PA4574
DEAN J., PA624, PA4503
DEAN N., PA3857, OA4860, PA5129
DEBBAN C., OA3143
DEBBICHE S., PA1007
DEBEAUMONT D., PA1212, PA1214, PA1219, PA4980
DEBICHE S., PA2865, PA3875
DEBNATH S., PA2066, PA2067
DEBOECK G., PA4647
DEBOER E., PA1146
DEBRAY M., PA1153, PA3942, PA3953
DECARIS M., OA899, OA1423, PA2969
DECATO T., PA3990
DECAUX S., PA3368
DECKER P., PA402
DECKER CHRISTENSEN T., PA379
DECOBERT F., PA2127
DECOTTIGNIES A., PA1715
DECRUE F., OA1443
DEDIU M., PA3379
DEFRANCE C., PA1731
DEGARIS J., PA1046
DEGHDEGH K., PA2408
DEGOBBI TENORIO QUIRINO DOS SANTOS LOPES F., PA2257
DEGREEF J., OA3178
DEHLINK E., PA4467
DEITEREN A., OA4296
DEKANY G., PA3994
DEKKER T., PA2745
DEL COLLE A., PA1917, PA1926, PA2082
DEL DIN S., PA1592, PA1595, OA3185
DEL FANTE C., OA4345
DEL FRATE L., PA3886
DEL GIACCO S., PA4112
DEL OLMO R., OA4936
DEL POZO R., PA3502
DEL POZZO M., PA2109
DEL RÍO B., OA3282
DEL RIO CARRERO B., PA3922
DEL ROIO L., PA1005, PA3796
DEL VALLE ESCOTORIN S., PA3479
DELACOURT C., PA420, PA423, PA2127
DELAERE B., PA2176
DELAMEILLIEURE A., PA3454
DELANEY L., PA2885
DELANY L., PA3490
DELASSASSEIGNE C., PA5245
DELAVENNE X., OA3157
DELBREL X., PA402
DELBRESSINE J., PA1032
DELCAMBRE F., PA4490
DELCROIX M., OA742, PA1191, OA3159, PA5188
DELCROIX ON BEHALF OF PHAROS INVESTIGATORS M., PA1192
DELESTRAIN C., PA420, PA2127
DELEZAY O., OA3157
DELGADO L., PA1097, PA1105, PA3842
DELGADO L., OA854, PA1155, PA1164
DELGADO M., PA3486
DELGADO - ECKERT E., OA1438
DELGADO ECKERT E., OA1443
DELGADO ORTIZ L., PA2268, OA3183
DELGADO PECELLIN I., PA4995
DELGADO ROMERO J., PA4097
DELGADO VERA-PINTO L., PA3012
DELGADO-GARCÍA D., OA4848
DELHAES L., OA789
D'ELIA G., PA1045, PA1589
DELIU N., PA3955
DELL L., PA608
DELL S., PA2762, PA3995, PA4463, PA4468
DELL S., PA2769, PA5014
DELLA GATTA B., PA3380
DELLA PASQUA O., PA3621
DELLA ZOPPA M., PA1725, PA3907
DELLACÀ R., OA752, PA2122, PA2124, PA2741, PA3545, PA3673, OA4236
DELLACÀ R., PA4457
DELL'ANIELLO S., OA884
DELLBRÜGGER E., PA5372
DELLEGROTTAGLIE S., PA1751
DELLGREN G., PA551
DELMAS P., PA2783
DELOMEZ J., PA2829
DELUCA A., OA3189
DELULIIS J., OA4198
DELVAL C., PA2937
DELVERT R., PA5015
DELYLE S., PA5274
DEMAISON C., OA2483, PA2823
DEMANT X., PA4490
DEMARCHI MUNHOZ C., PA2984, PA2991
DEMASI A., PA3911, PA3912
DEMCHUK A., PA2911, PA2912, PA5319, PA5320
DEMERTZIS P., PA334, PA3879, PA4592
DEMETRIOU H., PA5018
DEMETRIOU L., PA4757
DEMETROPOULOU A., PA3987
DEMEYER H., PA355, PA359, PA361, PA969, PA1033, PA1595, PA2268, OA3183, OA3185, PA3395, OA4308, OA4309, OA4314, PA4568
DEMICHELIS S., PA2160
DEMIR A., PA1610
DEMIR E., PA3374, PA5012
DEMIRAĞ F., PA2203
DEMIREL A., PA1038
DEMIRKOL B., PA4591
DEMKOW U., PA2227
DEMOT B., PA1183
DEN BLAUWEN N., PA3015
DEN HEIJER C., PA3516
DENDRINOU G., PA3933
DENEUVILLE E., PA420
DENG B., OA1445, PA1702
DENG M., OA1426, PA1830, PA3430, PA4040, PA4627
DENG Q., OA2630
DENG Q., OA4218
DENG S., PA4069
DENG S., PA3587, PA3588
DENG X., PA1653
DENG Z., PA1933
DENG Z., PA1937
DENG Z., OA1412
DENINA M., PA2735
DENIS A., PA2918
DENIS J., PA450
DENIZ M., PA3406
DENIZ Y., OA1416, PA2090, PA2091, PA2101, PA3607, PA3618, PA5290
DENIZOGLU KÜLLI H., PA348
DENNENY E., PA517, OA862, OA1566, PA3851
DENNEY L., OA2627
DENNING J., PA991
DENNING J., PA1200, PA1209
DENNIS C., OA4217
DENNIS S., PA541
DENNIS S., PA965
DENNISON P., PA4724
DENNISTON P., OA1561, PA1827, PA3441, PA5140
DENSENBAL D., PA643
DENSON J., PA4562
DENTE F., PA3868
DENTE F., PA392
DENTON C., OA746
DENUTTE Y., OA4314, OA4872
DEOLMI M., PA2147
DEPALO A., PA974
DEPUYDT P., PA3015, PA4568
DERAVE W., PA1796
DERBEL K., PA4455
DERBYSHIRE J., OA4229
DEROM E., PA355, PA361, PA969, PA1033, PA2943, PA3395, OA4309, PA4568
DEROUICHE S., PA2758, PA5360
DEROUICHE S., PA2093, PA5367
DER-TOROSSIAN C., PA2834
DESACHY G., PA3680
DESAI M., OA878, PA3986, PA3988

DESAI T., OA899, PA2969
DESBORDES P., OA764, OA871, PA3483, PA3508, PA3664, PA3677
DESCALÇO A., PA2113, PA2114
DESCAMPS V., PA4715
DESCHILDRE A., PA420, OA1435, PA2101
DESIDERI M., PA3868, PA4079, PA5334
DESIMONI A., PA3658
DESINIOTIS A., PA2855
DESLEE G., PA538, PA611, PA1841
DESLYS A., PA4471
DE-SOYZA A., PA1070, OA1462
DESPLANCHE E., PA606, PA1804
DESPRES J., PA3866
DESROCHES L., OA2618
DESROZIERS T., PA483, PA3938, PA3940, PA3943
DESSAU R., PA1017
DESTORS M., OA3288
DETANTE O., PA2999
DETERDING R., PA1146, PA4471
DETHO Z., PA1055
DETORAKI A., PA4098, PA4753
DE-TORRES J., OA4951
DE-TORRES J., PA4650
DETRY B., PA5211
DEU M., PA3364, OA4344, PA4482
DEUGI V., OA4208
DEUSS K., PA3552
DEUTSCH G., PA4471
DEVANEY R., OA1549
DEVANI N., PA575
DEVARAJ A., OA850, OA855, PA1334, PA1336, OA3266, OA4229
DEVARAJ U., PA1820
DEVELI E., PA3318
DEVENNY A., PA3373
DEVI S., PA4491
DEVILLIER P., OA2486, OA3145, PA3377, PA5274
DEVILLIERS M., PA611
DEVLIN L., PA1846
DEVOUASSOUX G., PA288, PA4114, PA4750
DEVULDER J., PA562
DEWACHTER C., PA3959
DEWACHTER L., PA3959
DEWAR A., PA3026
DEWITTE A., PA3838, PA5245
DEXTER K., PA2766, PA3386
DEY D., PA2926, PA3070
DEY S., PA2346, PA4066
DEZFOULI M., PA5205
DEZFULI N., PA2316
DHADGE N., PA2907, PA3602, PA3975
D'HAENENS A., PA5188
DHAHRI B., PA628, PA983, PA1268, PA1315, PA1964, PA2264
DHAKAD D., PA4054
DHALIWAL I., PA4437
DHALIWAL K., PA550
DHAMDHERE D., PA2907
DHAR R., PA385, PA1071, PA1228, PA1322, PA2340, PA2342, PA2396, PA3602, PA3785, PA4117, PA5114
DHARA T., OA4935
DHARMAGE S., OA890
DHARMAGE S., PA2078
DHASMANA D., OA2604
DHAWAN V., PA4105
DHELFT F., OA4955
DHEYAULDEEN S., PA2765
DHIFALLAH H., PA2048, PA2407, PA3659
DHIFAOUI N., PA5094
DHILLON G., PA1150
DHILLON S., PA2190
DHOORIA S., PA2229, OA4848, PA5222, PA5286
DHOTE R., PA1739
DHUMAL P., PA2396, PA3602
DHUMAL U., PA2057
DI CHIARA M., PA2736
DI CICCO M., PA2082
DI FILIPPO P., PA2737, PA5364
DI GIOIA G., PA5287
DI GIORGI F., PA3868, PA4079
DI JORGI M., PA2085
DI MARCO F., PA2298, PA2398, PA3774, PA4112, OA4864, PA5105
DI MARCO F., PA2171, PA2178
DI MARCO M., PA5307
DI MARCO BERARDINO A., PA1779
DI MARIA C., PA5172
DI MARO S., PA4685
DI MATTIA G., PA2085, PA2734, PA3984, PA4477
DI MICHIEL J., PA1170
DI MUSSI R., PA1213
DI NARDO G., PA2109, PA2110
DI PALMA L., PA3825
DI PAOLA R., PA3910
DI PIERRO I., PA2180
DI PILLO S., PA2737, PA5364
DI SANO C., PA565
DI STEFANO A., PA4108
DI TANNA G., OA762
DI VINCENZO S., PA602, PA604, PA2988, PA4042, PA4676
DIAB N., PA1913, PA1925, PA1927, PA1931, PA1932, PA3033, PA3036
DIAB-EL SCHAHAWI M., PA4467
DIACONU M., PA4445
DIAFERIA F., PA5307
DIAMANT Z., OA2494
DIAMANTEA F., PA2150
DIANA M., OA1545
DIAO W., PA1265
DIAPER J., PA3545, PA3546
DIAR BAKERLY N., PA3661
DIARRA S., PA1848
DIAS C., PA360, PA1037, OA2619, OA4311, OA4316
DIAS F., PA4974
DIAS H., PA2899
DIAS J., OA1449, OA1451
DIAS L., PA488
DIAS M., PA1129, PA2871, PA3883
DIAS DA COSTA E., PA488
DIAS FERRAZ M., PA389
DIAS PIRES E., PA3323
DIAZ A., OA1460
DIAZ E., OA782
DIAZ L., PA3069
DÍAZ CAMPOS R., PA3615
DÍAZ FERNÁNDEZ S., PA1064
DÍAZ GARCÍA E., PA2953, OA4841
DIAZ GARCÍA J., PA3445
DÍAZ GONZÁLEZ J., PA411
DIAZ GUERRERO F., PA3761
DIAZ MENINDEZ M., OA2590
DÍAZ NUEVO G., PA5246
DÍAZ OLIVAREZ I., PA1242
DÍAZ RODRÍGUEZ D., PA2791
DIAZ-CASTANON J., OA4848
DIAZ-CHURION F., OA2599
DÍAZ-FERNÁNDEZ S., PA4576
DÍAZ-GARCÍA E., PA2329
DIAZ-LAGARES A., PA2728
DIAZ-PALACIOS M., PA1920
DIBBEN G., PA961
DICIOLLA N., PA360, OA4313, PA4523
DICK C., OA1560
DICKENS A., PA3635
DICKENS J., PA431
DICKER A., PA383, PA2827
DICKER A., OA2604
DICKER A., PA382
DICKINSON J., OA786
DICKSON A., PA5205
DICKSON J., OA3266
DICKSON R., PA1215
DICKSON S., PA550
DICPINIGAITIS P., PA1911, PA3035, PA3039, PA3040, PA3041
DIDI T., PA4114
DIDIER A., PA4432, PA4750
DIDIER M., PA1739, OA4324
DIEFENBACH C., PA1132, PA2879
DIEGO ROZA C., PA1024
DIENEMANN T., OA785
DIEP P., OA857, PA2914, PA3466, PA3471, PA3476
DIERCKX W., PA1177, PA1805, PA2289
DIERDORP B., PA2745
DIERICK B., OA3181
DIESLER R., OA3280
DIETEL D., PA1702, PA3937
DIETRICH O., PA2141
DIEUDE P., PA417, OA858, PA3467, PA3468
DIEZ A., PA1194
DÍEZ IZQUIERDO A., PA2743
DÍEZ-FERRER M., PA328, PA479
DIGALAKI A., PA1687, PA2851
DIJK, VAN L., PA3816
DIJKSMAN L., PA1718, PA1719
DIJKSTRA P., OA3192
DIKMENTEPE YILMAZ E., OA4930
DILEKTAŞLI A., PA2269
DILLENHÖFER S., OA2506
DILLER G., PA3494
DIMA A., PA2924, PA2925
DIMA E., PA4602
DIMAKOU K., PA381, PA384, PA388, OA1457, OA1458, PA1687, PA2340, PA2342, PA2843, PA2849, PA2851, PA4709, PA4717, PA5102
DIMANGO E., OA3165
DIMIC D., PA3837
DIMIC N., PA3837
DIMIENE I., PA1329, PA1333
DIMITRIADIS I., PA2855
DIMITROULIS I., PA4575
DIMITROVA V., PA2189, PA2313
DIMOND C., PA2283
DIMOPOULOS K., PA3495
DIMOPOULOS T., OA1567
DIMOV D., PA1839
DINAMKU K., PA397
DING F., PA1101
DING J., PA1959
DING M., PA1860
DING Y., PA3934
DINGEMANS A., OA1427
DINO P., PA4686
DIOGO J., PA2805
DIOMATARI C., PA4688
DION G., PA4984
DIONIR BACK G., PA4633
DIPAK M., PA1617
DIPLA K., PA1812
DIROU S., PA402, OA753, PA1731
DISANTOSTEFANO R., PA3965
DISANZA A., PA596
DISDIER VICENTE C., PA5135
DISTLER O., OA746, OA857, PA2878, PA2914, PA3471, PA3474, PA3476
DITETOVA K., PA4751
DITTRICH S., OA2592, OA2597
DIVANGAHI M., PA4061
DIVECHA N., OA4239
DIVER S., PA4675
DIVO M., PA3973
DIXEY P., PA552
DIXIT B., PA1051
DIXIT R., PA1012
DIXIT S., PA3067, PA5088
DIXON C., PA3976
DIXON G., PA404
DIZIER* M., PA661
DIZITZER Y., OA2512
DJADJ A., PA2387
DJEKIC MALBASA J., PA1116, PA1330, PA1968, PA2860
DJENAYAH C., PA5152
DJENFI T., PA5260
DJERAMAN M., PA3798
DJERBOUA T., PA2070
DJOUADI C., PA432
DJOUHER T., PA3416
DJUKANOVIC R., OA1527, OA1531, PA1691, PA1895, OA2499, PA5354
DMITROVIC R., PA3853, PA5310
DMOCHOWSKI R., PA3039, PA3040, PA3041
DO Y., PA5372
DO AMARAL V., PA4530
DO CARMO M., OA3270
DO MARCO M., OA851, PA1152, PA1154
DO NASCIMENTO PINTO A., PA2279, PA2293
DOBBELS F., PA3454
DOBREVA T., PA2189
DOBROTA R., OA857, PA2914, PA3471
DOBSON R., PA1588
DOCHERTY A., OA4325
DOCHERTY C., PA2963
DOCKRY R., PA1918, PA3037
DOCTOR T., PA2104
DODD J., PA3976
DODD J., PA3620
DODD J., PA1594
DODD J., PA2236, PA2930
DODD J., OA3287
DODI G., PA5364
DOE G., PA534, PA3509
DOĞAN D., PA2931
DOĞAN ŞAHIN H., PA516
DOGAS Z., OA4837
DOGGEN C., PA3641
DOGGEN C., PA515,

PA1348
DOGLIONI C., OA3270
DOGNON N., PA409
DOĞRU D., PA1642, PA1644, PA1878, OA2505, OA2614, PA2771, PA3322, PA4462, PA5044
DOĞRU ERSÖZ D., PA2770, PA5012
DOĞRUL A., PA3392
DOHERTY M., PA4073
DOHERTY R., OA4248
DOHI M., PA644
DOHMEN W., PA309
DOHOUKPE E., PA3341
DOI K., PA1331, PA4000
DOIG C., PA3571
DOKOZA M., PA1337
DOLAN L., PA4549
DOLEZAL T., PA4483
DOLGUSHEVA Y., PA2814
DOLHNIKOFF M., PA4057, PA5250
DOLLIVER W., OA1460
DOMAGAŁA-KULAWIK J., PA2863, PA2866, PA2867, PA3827
DOMELLÖF M., PA2130
DOMENECH A., PA2411
DOMENECH DEL RÍO A., PA1341, PA5297
DOMENICI E., OA4947
DOMINGO B., PA1898
DOMINGO C., OA1416
DOMINGO J., PA3502
DOMINGO RIBAS C., PA646
DOMINGO-CARNICE A., PA408
DOMINGO-RIBAS C., PA1920, PA1924, PA3822
DOMINGOS A., PA2810, PA4541
DOMINGOS B., PA1179
DOMINGOS M., PA3413
DOMINGOS N., PA1210
DOMINGUES R., PA1152
DOMINGUES HEUBEL A., OA4932
DOMÍNGUEZ J., PA548, PA1064, PA4576
DOMINGUEZ GÓMEZ M., PA2428
DOMÍNGUEZ MOYA D., PA3306
DOMINGUEZ-JUNCAL L., PA4106
DOMÍNGUEZ-MOYA D., PA3302, PA3305, PA3312
DOMINIQUE S., OA3280
DOMNIGO CARDENAL B., PA4076
DOMNIK N., OA4951
DOMVRI K., OA3152
DOÑA E., PA2411
DOÑA DÍAZ E., PA5297
DONALDSON G., PA2815, PA3625, PA3668, PA4144
DONALDSON G., PA1334, PA1336, OA2607, PA4145, OA4931
DONALDSON G., PA2193
DONATELLA I., OA1558
DONATI Y., PA3561
DONDI C., PA3807
DONEGAN S., PA523
DONG C., PA1933
DONG H., OA1446, PA2204, PA3917
DONG K., PA5342
DONG T., PA3435, PA3438
DONGILLI R., PA2310
DONISHI T., PA1331, PA4000
DONNELLY L., PA562, PA566, PA4586, PA4683
DONNELLY L., OA779, PA4039
D'ONOFRIO M., PA4504
DONOVAN C., PA2818
DONOVAN K., OA751
DONTH LEGER G., PA2744, PA4440
DOOLEY J., PA1095
DOPPEN M., OA3187
DORAN J., PA4439
DORAN L., PA1722
DORFMÜLLER P., OA2626
DORIA B., PA3416
DORMOY V., PA611, PA1841
DORN A., PA3321
DORNA M., PA298, PA3314
DORSCHEID D., PA4726
DORSCHEID D., PA4105
DOS REIS ESTRELLA D., PA1717
DOS SANTOS D., PA3766, PA5110
DOS SANTOS D., PA1907
DOS SANTOS ROCETO RATTI L., PA1172, OA4226
DOS SANTOS ZAMARIOLI L., PA4670
DOSANJH D., PA404, PA4584
DOSKALIUK B., PA1159
DOSMAN J., PA5253
DOTAN M., OA1542
DÖTSCH J., OA4329
DOUAY B., PA580
DOUBKOVA M., PA4483
DOUCETTE J., PA3355
DOUGLAS H., PA4998
DOUGLAS L., PA1868, PA4035
DOUGLASS J., PA2703, OA3147
DOUIK EL GHARBI L., PA3874, PA5325
DOUIK ELGHARBI L., PA2847
DOULGERAKIS L., PA4572
DOUMA R., PA3426
DOURADO I., PA4141, PA4516
DOUROS K., OA3275, PA3933
DOUROS K., PA3925, PA4460
DOUSCHAN P., PA1755, PA1770, PA2992
DOUVRY B., PA2149
DOVE R., OA3149
DOWEY R., PA3842
DOWIE J., PA3904
DOWLE H., PA2115
DOWLING F., PA4584
DOWLING J., PA453
DOWNEY A., PA2916
DOWNEY D., OA1536
DOYLE C., PA3614
DOYLE L., PA4450
DOZIER M., PA318
DRABENT P., PA3935
DRAGANOV S., PA3435
DRAGHI L., PA2122
DRAGIŠIĆ D., PA1116, PA1330
DRAGO Â., PA2113, PA2114
DRAGONIERI S., PA2180, PA2429, PA5287, PA5288, PA5307
DRAGUNAS G., PA2984, PA2991
DRAKE S., PA973, PA3642, PA3652
DRAMBURG S., PA5372
DRANSFIELD M., OA870
DRANSFIELD M., PA4139, OA4929
DRAPER A., PA3889
DREHER M., PA1222, PA1335, PA1811, PA1813, PA2272
DRENGENES C., OA2517, PA3072
DRESCHER M., PA1861
DREYSE J., OA3292
DRIEHUYS B., PA2283
DRIESCH D., PA3924
DRIESEN Y., PA2092
DRIESSEN-ROELFSZEMA M., OA761
DRIGO M., PA3469
DRINNAN M., OA1431, PA3452
DRISCOLL S., PA573
DRISKEL M., PA4484, PA4492
DRÖMANN D., PA1593, PA3576, PA5316
DRORI I., PA4589
DRUCBERT M., PA409
DRUMMOND B., PA1946
DRUMMOND D., PA3935
DRUMMOND M., OA870
DRUMMOND M., PA4083, PA5257
DRYHURST-PEARCE L., PA1180
D'SOUZA A., PA2249
DU J., OA1446
DU J., PA1056
DU L., PA2701
DU S., OA2630
DU X., PA4402
DU BERRY C., PA1630, PA4450
DUAN Q., OA3143
DUARTE D., PA4541
DUARTE J., PA528, PA3638
DUARTE K., PA2299
DUARTE BARATA M., PA528
DUARTE HERRERA I., OA783
DUBBELDAM A., PA1716, PA5159
DUBINI A., PA430
DUBOIS A., PA2837
DUBOIS E., PA3037
DUBORG MIKKELSEN M., OA860
DUBREUIL M., OA4243
DUBROCK H., PA3489
DUBUIS E., PA3042
DUBUS J., PA420, PA423, PA3412
DUCA F., PA4644, PA4979
DUCEY J., OA2509
DUCHARME F., PA2101
DUCHEMANN B., PA494
DUCKERS J., OA1462
DUCKWORTH A., PA368
DUCOU LE POINTE H., PA420
DUDEK M., PA1745
DUEK O., OA2490
DUERDEN M., PA2824, PA2832
DUERR J., PA3906
DUFF A., PA3824
DUFF R., PA1065
DUFRUSINE B., PA5364
DUGDALE I., PA1792, PA1793
DUGGAN J., OA4962
DUGOLIN CECCATO H., PA1172, OA4226
DUH M., PA648
DUIGNAN J., PA2236
DUIJKERS R., PA5118
DUIJTS L., OA886, PA2121, PA2137, PA3674
DUIJVELAAR E., PA451, OA2488
DUITMAN J., PA2745
DUIVERMAN M., PA2420, OA3194, OA3195, PA3999
DUIVERMAN M., OA3192
DUKERS-MUIJRERS N., PA3516
DUMAS O., PA495, PA3340, PA3341, PA3345, PA5017
DUMISTRACEL M., PA2874
DUMITRACHE-RUJINSKI Ş., PA1156
DUMITRIU A., PA3948
DUMOULIN E., PA460
DUMOULIN O., PA620, PA972
DUNAND P., PA2299
DUNBAR J., PA2413
DUNBAR M., PA3571
DUNBAR R., PA2801
DUNFORD M., PA4024
DUNGU A., PA5128
DUNGU A., PA2154
DUNGWA J., PA4065, PA4414
DUNLEAVY A., OA864
DUNMORE B., OA3155
DUNMORE B., PA446
DUNN L., OA1528
DUNNING H., PA2840
DUNSIRE L., PA5292
DUONG H., OA866
DUONG M., PA3843, PA3845, PA4529
DUONG-VERLE T., OA742
DUPIN C., PA3942
DUPIN I., OA900, OA4243
DUPOND-ATHENOR A., OA1554
DUPONT L., OA1535, OA4212, OA4348, PA4487, PA4555
DUPUIS J., OA3190
DUPUIS M., PA2149, PA4612
DUPUY J., OA900, OA4243
DUPUY-GRASSET M., PA2149, PA4432
DURÁN D., PA4089
DURAN L., PA5095
DURAN M., PA4714
DURAN X., PA5154
DURÁN CANTOLLA J., OA4841
DURAN-CANTOLLA J., PA1274
DURAND C., OA1430
DURAND M., OA884
DURANKUS F., OA4327
DURANTI C., OA1429
DURCAN L., PA3475, PA3954
DUREL M., PA402
DURHEIM M., OA857, PA2914, PA3471
DURHEIM M., PA3466
DURHEIM M., PA3476, PA4489
DURMUŞ M., PA1581
DURNA Z., PA1671
DÜRR J., PA1861
DURRINGTON C., PA3956
DURRINGTON H., PA1307, PA3652, OA4208
DURRMEYER X., PA2127
DÜRÜSTKAN ELBAŞI N., PA501, PA511, PA3767, PA4986
DUSSAH N., PA4442, PA4444
DUSSELIER M., PA427
DUSSELIER M., PA4612
DUSSIAU C., PA3838
DUTAU H., PA463
DUTERME C., PA2061
DUTHEIL F., PA3808
DUTT N., PA1587, PA1829, PA2699
DUTTA P., PA4491
DUTTA P., PA3498
DUVAL S., PA2149
DUVAL DA SILVA V., OA3269
DUVIGNAUD A., PA3838, PA5245
DUVILLARD C., PA5182
DUYMAZ M., PA5329
DVORACEK M., PA960, PA3400
DVORACKOVA E., PA3362
DVORAK T., PA1339, PA4133
DVORKIN-GHEVA A., PA4072

DWARAKANATH A., PA4028
DWIVEDI K., PA2885, PA3490
DWORNICZAK B., PA2762
DWORSKY A., PA1235
DY J., OA2497
DYHRE-PETERSEN N., PA4115, OA4303
DYMEK B., PA1745
DYMOND A., PA521
DYSON J., OA2587
DZIUBLYK Y., PA1746, PA3931, PA5252
DŽUBUR F., PA416, PA475

E

E BASTOS H., OA1449, OA1451
E MURPHY V., OA1546
E POMPEU J., PA2302
E. GROTH E., PA496
E. HOLLAND A., OA2617
E. MCDONOUGH J., PA5295
E. VAN RAEMDONCK D., PA5295
E. WECHSLER M., PA1892
EADES S., PA965
EAGAN T., PA4681
EAGAN T., PA3449, PA5204
EAMES C., PA4724
EAPEN M., PA2336, PA2346, PA4066
EARLY F., PA544
EASON M., PA2905
EASTWOOD K., PA4700
EASTWOOD M., OA1531
EATHORNE A., PA1893, PA2071, PA2386, OA3187, PA3604
EBADI Z., OA2612
EBELTHITE C., PA1919
EBERHARD R., PA4618
EBERHARDT R., OA2592, PA4620, PA4623, PA5213
EBERT A., PA2996, OA4845
EBERT G., PA4054
EBERT T., OA4338
EBIHARA S., OA3258
EBINA M., PA434, OA1424
ECHAIDE M., PA5246
ECHEVARRIA C., PA548, PA616, PA1592, PA2397, OA3170, OA3185
ECHEVARRÍA E., PA5261
ECHEVARRIA GUERRERO E., PA3890, PA3951, PA4707, PA5125, PA5309
ECHEVERRIA GUERRERO E., PA5124
ECHI K., PA628, PA2264
ECKELMAN B., PA3052
ECKERT D., PA4514
ECKERT D., PA1275
ECKFORD P., PA3375
ECKLEY B., PA5143
EDAKUNI N., PA1331, PA2410, PA3447, PA4000
EDDY R., PA3995
EDDY R., PA3411
EDEL L., PA2128
EDENS M., OA766
EDEY A., OA1556
EDGELL S., PA4006
EDGERTON D., OA3162
EDIGER D., PA4515
EDIPOGLU O., PA3390
EDME J., PA463
EDMONDSON C., PA5010
EDRIS A., PA3668
EDUARDO NOLETO DA NOBREGA R., OA1451
EDUARDO SANTOS GALVÃO C., PA953
EDVARDSEN A., PA2159
EDVARDSEN A., PA5064
EDVARDSEN E., PA2159, PA3559, PA4454
EDWARDS C., PA4473
EDWARDS C., PA1727, OA3182
EDWARDS G., PA3509
EDWARDS M., PA1842, PA1843
EDWARDS M., PA2817
EDWARDS T., PA592
EE W., PA3298
EFFING T., PA1348
EFFNER R., PA567
EFRATI O., PA5041
EFSTATHIOU C., PA4070
EGAMBERDIEVA D., PA1254
EGASHIRA R., PA434, OA1424
EGENLAUF B., PA454
EGENOD T., PA427, PA463, PA4612
EGER A., PA1770
EGERUP P., OA2500
EGGELING S., OA2595, PA3046
EGGERS M., PA1680
EGLI S., PA3515
EGNATIA STUDY GROUP T., PA5127
EGRON C., PA420, PA423
EHAB A., PA570
EHIKIOYA R., PA2380
EHMANN R., PA629, PA635, PA639, PA3605, PA4752
EHMIG J., PA2278, OA4849
EHRHARDT B., PA605, PA4041
EICHENAUER B., PA952
EICHENLAUB M., PA4479
EICHINGER M., PA4623
EICHLER S., PA3924
EICHSTAEDT C., PA454
EICKELBERG O., PA3937
EICKHOLZ P., PA2852
EIDELMAN D., OA1575, PA2970, PA4053
EIFER MØLLER J., OA4826
EIGER G., OA4848
EIKELAND R., PA3414
EIKHOLT A., PA1579, PA1580, OA3181, PA4604
EILEEN W., PA1891, PA1894
EINARSSON G., OA1536
EINARSSON G., OA1461, OA4320
EINARSSON J., PA1886
EINBINDER Y., PA4589
EIRA I., PA1225
EISENMANN S., OA2593, OA2595, PA3046
EISNER M., OA1541, PA3370
EISSA M., PA4032
EKANAYAKE E., PA2972
EKBOM E., PA5157
EKERLJUNG L., OA888, OA3167, PA4499
EKLOF J., PA1017, PA1022, PA1295, PA4703, PA5341, PA5363
EKOUTSIDIS P., PA4572
EKSOMBATCHAI D., PA1681, PA3844, PA4556
EKSTEDT S., PA1247
EKSTRÖM M., PA403, OA879, PA958, PA1886, OA3294, PA3762, PA4386, PA4423, PA4642, PA5349, PA5351, PA5352
EKSTRÖM S., PA664, OA2518, PA5025, PA5027
EKWARU P., PA3013
EL EUCH A., PA4559
EL FAKIR S., PA525, PA2079, PA2873
EL FEKHIH L., PA4569
EL HAMRANI D., OA4243
EL HANAFY S., PA2044
EL HARCH I., PA525, PA2873
EL HOSHY M., PA1825
EL HUSSEINI K., PA402, OA3190
EL JAMMAL C., PA2111
EL JURDI H., PA2127
EL KABBOUT R., PA453, OA3161
EL KHATTABI W., PA1966, PA5082, PA5317
EL MAALEL O., PA2856
EL MENCHAWYI I., PA525
EL MENCHAY I., PA2873
EL SAGHIRE H., OA2623
EL WHADHANE I., PA4542
EL YAAGOUBI S., PA2079
EL YOUBI M., PA2873
EL-ABDEEN MOHAMED A., PA3791
EL-AJEZ R., PA2161
ELALAMI R., OA1460
ELANGO V., PA1596
ELARABI A., PA2161
ELBEHAIRY A., PA1180
ELBEK O., PA3333, OA4232
ELBIAZ M., PA4147
ELBIAZE M., PA4085
ELBORN J., OA1461, OA4320
ELBORN J., PA2843
ELBORN S., PA381, PA397, OA1458, OA1462, PA2849
ELBORN S., OA1457
ELBOUJAMAI H., PA4085
ELEFTHERAKI A., PA2852
ELEFTHERIADOU E., PA4572
ELEFTHERIOU K., PA4573
EL-EMIR E., PA534, PA3509
ELENA M., PA3761
ELEUCH E., PA2742, PA4735
ELEWAUT D., OA777
ELFETURI M., PA1222, PA1335, PA2272
ELFIDHA S., PA2197, PA4740, PA5152
ELFVIN A., PA2130
ELGHAZI K., PA4147
EL-HADI S., PA2218
ELHAI M., OA857, PA2914, PA3471
EL-HELBAWY R., PA3852
EL-HUSSEINI Z., OA4300
ELIA D., OA3274
ELIA G., OA1564
ELIAS A., OA4829
ELÍAS HERNÁNDEZ T., PA2243, PA5181
ELIASEN A., OA4331
ELIASEN B., PA4746
ELIAS-HERNANDEZ T., OA4834, OA4835
ELIE G., OA753
ELIS A., PA3014
ELISA D., PA393
ELLA N., PA2804, PA3316
ELLAYAH M., PA4437
ELLEBRECHT D., PA2290
ELLERMAN L., PA2974
ELLERTON C., PA1047
ELLERVIK C., OA883
ELLEUCH A., PA1008, PA1009
ELLINGSEN J., PA1028
ELLIOTT S., PA2986
ELLIS H., PA548
ELLIS P., PA3639
ELLIS S., OA4848
ELMAHY A., OA871, PA3508, PA3664
ELMANKABADI B., OA2494
EL-MERHIE N., PA555
ELMIGER A., PA5024
ELNAGHEEB M., PA2762
ELNEIMA O., PA1181, PA1797, PA2397, OA2491, PA2681, PA5347
ELOSUA PRATS L., PA3676
ELOWSSON L., PA561, PA2337, OA2632
EL-RHAZI K., PA1021
EL-SANKARY K., PA573
ELSEY L., PA2384, PA4729, PA5304
ELSHOF J., PA2420, OA3192
ELTAHIR S., PA5263
ELWORTHY V., PA368
ELZAIN O., PA1787
EMAD EL-DIN A., PA3791
EMBLEY M., PA4011
EMEANURU K., PA1890, PA4711, PA4712
EMECEN A., PA4149
EMERATH U., PA614
EMILSSON Ö., PA659, PA1281, OA3294, PA3585, PA4420, PA5157
EMILSSON Ö., PA1929, PA4423
EMIRALIOGLU N., PA424, PA1642, PA1644, PA1878, OA2505, OA2507, OA2614, PA2761, PA2765, PA2769, PA2770, PA2771, PA3322, PA4462, PA5012, PA5044, PA5045
EMIROVA A., PA1293
EMMA K., OA1545
EMMANUEL B., PA3564, PA4109, PA4131, PA4726
EMMANUEL N., OA2486
EMMOTT E., PA2964
EMNA B., PA3316
EMNA B., PA2804
EMOTO N., PA5179
EMS J., PA4480
ENAUD R., OA789
ENÇ N., PA3789
ENCANTADO J., PA1663
ENDER C., PA438
ENDOZO R., PA2920
ENDOZO R., PA4008
ENEROTH K., PA1606, OA2518
ENG C., PA4028
ENG J., PA1111
ENGELBERTS J., OA853, PA1134
ENGELBRECHT J., OA786
ENGELSKIRCHEN S., OA3151
ENGERT J., OA3143
ENGHELMAYER J., PA2916
ENGHELMAYER J., PA1166, PA3479
ENGLERT H., PA570
ENGLISH A., OA2587
ENGSEVI M., PA3914
ENGSTRÖM G., PA3786
ENNACERI H., PA3329
ENNACERI H., PA287, PA489, PA2412
ENNACIRI H., PA2811
ENNACIRI H., PA637, PA5324
ENOMOTO T., PA3900

ENRIQUEZ R., PA528, PA3638, PA5071
ENRIQUEZ R., PA3757
ENRIQUEZ RODRÍGUEZ A., PA3057
ENRIQUEZ-RODRIGUEZ C., PA1836
EOM J., PA4536
EPAUD R., PA420, PA423, PA426, PA2127, OA2507
EPIFANI R., PA1229
EPSTEIN D., PA548
EPSTEIN SHOCHET G., PA2373
ERAKOVIC HABER V., PA5167
ERALP E., PA2760
ERALP E., PA3374
ERANDE A., PA297
ERBAS B., OA890, OA4233, PA5321
ERCAN F., PA1651, PA5011
ERCAN S., PA2282, PA3998
ERDEM ERALP E., PA2107, OA2505, PA2731, PA2765, PA4465, PA5003, PA5007, PA5008
ERDEN S., PA5011
ERDNUESS F., PA5346
ERDSTEIN J., PA2118
EREN R., PA4591
ERGAN B., PA548
ERGENEKON A., PA5007, PA5008
ERGENEKON P., PA2107, PA3374, PA4465, PA5003
ERHARD C., PA3630, PA3777
ERICSSON A., PA551
ERIKSEN L., OA4303, OA4968
ERIKSSON STRÖM J., OA4240
ERIKSSON-STRÖM J., OA2515
ERJEFÄLT J., OA2489
ERJEFÄLT J., OA780
ERJEFÄLT J., PA4416
ERMAKOVA A., PA2832
ERMOLAEV N., PA4979
ERNST B., OA853, PA1134, PA2354, PA2915
ERNST M., PA2354
ERNST P., OA884
EROL S., PA4396
ERRHALT P., PA2209
ERSHADI V., PA2946
ERSOY A., PA1646, PA5012
ERSSON K., OA3294, PA5028
ERTAN HARPUTLU Ö., PA5043
ERTÜRK H., PA1832, PA2203
ERYILMAZ POLAT S., OA2505, PA5012
ESANU V., PA2809
ESCALANTE J., PA349
ESCARPENTER M., PA3616
ESCOBAR VALERO M., PA4086, PA5131
ESCREMIM DE PAULA F., PA1241
ESCRIBANO I., OA1413, PA2319
ESCRIBANO P., PA3958
ESCRIBANO SUBÍAS P., PA1205
ESCRIBANO-SUBIAS P., PA1191
ESCUDERO-IBARZ L., PA1233, PA5205
ESMAEILI N., PA1274, PA3597
ESMAIL H., PA2169
ESPAÑA YANDIOLA P., PA5124, PA5125
ESPEHAUG B., PA4524
ESPEJO D., PA3802, PA3812
ESPILDORA HERNANDEZ F., PA3453
ESPINASSE B., PA2245
ESPOSITO B., PA2133
ESPOSITO J., PA1750
ESPOSITO R., PA1852, PA2352, PA4685
ESPOSITO S., PA2147
ESPOSITO-FARÈSE M., PA4750
ESQUINAS C., PA2371, PA3309, PA3920, PA4398, PA5107
ESQUINAS LÓPEZ C., OA1543, PA2192, PA2194, PA4076
ESSABAHI B., PA4147
ES-SABBAHI B., PA525
ESSAID Y., PA287, PA489, PA2412, PA3329
ESSAID Y., PA303, PA637, PA5324
ESSILFIE A., PA2818
ESTEBAN C., PA548
ESTEBAN I., PA3801
ESTEBAN ESTRELLA E., PA1772
ESTELLA Á., PA2326, PA5248
ESTELLAT C., PA4114, PA4750
ESTEVÃO L., PA1668
ESTEVES F., PA1225
ESTÈVES P., OA900, OA4243
ESTEVES BRANDÃO M., PA1817
ESTRADA-Y-MARTIN R., OA4848
ESTRIBIO S., PA2813
ESUMI M., PA2898
ESUMI S., PA2898
ETAL D., PA2345
ETEVE-PITSAER C., PA538
ETTER B., PA2117
EUCHI K., PA983, PA1268, PA1315, PA1964
EUDICONE J., PA985
EULENBURG C., OA3292
EUN HAN J., PA4471
EVANGELISTI M., PA2100, PA2109, PA2110
EVANGELODIMOU A., PA3421
EVANS A., PA3635
EVANS A., PA4607
EVANS C., PA963
EVANS D., OA1439, PA1867, PA4453
EVANS D., PA4048
EVANS H., PA5347
EVANS J., OA3279
EVANS R., PA534, PA954, OA4325
EVANS R., OA885, PA1181, PA1797, PA2397, OA2491, PA2681, PA2687, PA2691, PA2694, OA3254, PA5350, PA5352
EVANS R., PA2056, PA4070, OA4224
EVANS R., PA517, OA862, PA3851, PA3894
EVANS R., OA2620
EVANS S., PA1093
EVANS T., PA2747
EVE J., PA3857
EVERAERTS S., PA355, PA1033, PA4487, PA5295
EVISON M., PA3313, PA5220
EVSTRATI E., PA2051
EWORO NCHAMA A., PA5017
EXARCHOS K., PA1724, PA3311, PA4738
EXOJO-RAMÍREZ S., OA783
EXPÓSITO F., OA3270
EXPÓSITO MARRERO A., PA2167
EYEKPEGHA J., PA1787
EYRAUD E., OA4243
EYRES M., OA4197
EYUBOGLU F., OA4307
EZERSKYTE M., PA2967
EZGETA KARAČIĆ D., PA1640
EZZINE M., PA4085
F
F CRUZ F., PA563
F XAVIER R., PA2302
F. M. WOUTERS E., OA2612
F. VAN DER VLIET B., OA2629
F.L. HEIJNEN N., PA1211
F.S AMARAL A., PA1015, PA3339
FABBIAN F., PA548
FABBRI G., PA2219, PA2305, PA3902
FABBRI L., PA1722, OA4877
FABBRI L., OA1525, OA1529, PA3662
FABER L., OA4829
FABRE A., PA1162, PA3950
FABRE F., OA4337
FABRO A., OA851
FABRO A., PA1102, PA2961
FABRO A., PA1152, PA1154, OA1449, OA1451, PA3806
FABRY-VENDRAND C., PA538
FACCHINETTI F., PA596, PA600, PA601, PA1260, OA3158
FACCIOLO F., PA590, PA591, PA597, PA3610
FACHOURIDIS T., PA337, PA3429
FACHRUCHA F., PA3418
FACI DO MARCO M., OA778, PA3806
FACIOLI DOS REIS BORGES F., PA4633
FADEL E., PA5180
FAGERAS M., PA1892, PA3564, PA3625, PA4144, PA4145
FAGETTI L., PA3825
FAGEVIK OLSÉN M., PA3394
FAGUNDES XAVIER R., PA1284, PA2262
FAHIM A., PA404
FÄHNDRICH S., PA4479
FAIETTI M., PA2356
FAIN S., PA2283
FAINARDI V., PA2082, PA2147
FAIZ A., OA777, PA1252, OA1523, PA1837, PA1847, PA2318, PA3425, PA5203, PA5207, PA5209
FAJAC I., PA3942
FAKHARIAN A., PA2316
FAKHFAKH H., PA4735
FAL A., PA2826
FALCÃO T., PA1057, PA2799, PA2810, PA4541
FALCO A., PA2160
FALCONES B., OA2632
FALFÁN-VALENCIA R., PA301, PA1160, PA2330, PA3848
FALITI K., OA4215
FALIVENE J., PA5242
FALK C., PA3369
FALK V., PA459
FALLON J., PA3434
FALQUE L., PA531
FALSTER C., PA1824, OA4826
FALVO N., OA4829
FALZONE E., PA4733
FAN F., PA1196
FAN G., PA2241, PA2242, PA3022
FAN J., PA4435
FAN T., PA2717
FAN Y., PA2882
FAN Y., PA469
FAN Y., PA1323
FANARIDIS M., PA1872, PA1876, PA4091
FANDIÑO J., PA5237
FANEN P., PA423
FANER R., PA1075, PA1157, PA1955, PA2394, OA2487, PA3668, PA3672, PA3674, PA3777, OA4196, PA5098, PA5194, PA5209
FANER-CANET R., PA1077
FANETTI M., PA2219, PA3902
FANFULLA F., PA585, PA3771, PA4075
FANG C., PA1066
FANG J., PA4425
FANG W., OA4866
FANG Y., PA3544, OA4848, OA4852
FANIS P., PA3385
FANNI S., PA5334
FANTIN A., PA1926
FANTINI M., PA3808
FANTINI R., PA1213
FAORO V., PA3787, PA4635, PA4647
FARAG ABOUELNOUR A., PA1826
FARAGO G., PA2371, PA3920, PA4398
FARAH C., PA1170
FARAH G., PA2096, PA5369
FARAH W., PA3338
FARAH TEIXEIRA DE CARVALHO E., PA2756
FARDON T., PA5171
FAREGÅS M., PA1891, PA1894
FARFOUR E., OA2486
FARHAN A., OA1441
FARHAT H., PA1283
FARHAT S., PA287, PA489, PA2412, PA2811, PA3329
FARHAT S., PA637
FARHAT S., PA5324
FARIA D., PA3413
FARIA DE OLIVEIRA M., OA3261
FARKAS Á., PA3608, PA3611
FARKAS E., PA556
FARMER N., PA5279
FARNE H., OA4970
FARNSWORTH J., PA487
FAROLFI A., PA4601
FAROOQI A., PA2130
FAROUK H., PA4595
FARQUHAR M., PA963
FARRÉ R., PA5234, PA5235
FARRE MADUELL A., PA5155
FARRÉ VENTURA R., PA1269, PA2433
FARRELL E., PA2712
FARRELLY L., OA3266
FARRERA C., PA2365
FARRERO MUÑOZ E., PA5345
FARROW C., PA3993
FARRUGIA Y., PA5146
FARSHCHI TABRIZI A., PA2071
FARTOUKH M., PA1678
FARUQI S., PA576
FARUQUI N., PA3807
FARVER-VESTERGAARD I., PA379, PA3818, PA3828, PA3834, OA4878
FASILIS T., PA3821
FASOLA S., PA312, OA752, PA1616, PA2083, PA3811, PA4754
FASSAD M., PA1070, PA2762
FASULO A., PA3820
FATIMA ZAHRA S., PA3416
FATMA M., PA1314, PA1870
FATMA T., PA4544
FATTORI C., PA1779
FAULDS C., OA768
FAÚNDEZ SILVA M., PA514
FAURHOLT-JEPSEN D., PA1806, PA2154, PA5128

FAUROUX B., PA2102, PA2105, PA2106
FAUSTINI S., OA889
FAVARD F., PA4612
FAVERIO P., PA548, PA1725, PA1763, PA2185, PA2250, PA2845, PA3974, PA4725, OA4838
FAVERZANI S., PA4989
FAVROLT N., PA427
FAYON M., PA420, PA423
FAZAL S., PA5039
FAZLEEN A., PA2413
FEARY J., PA3339
FECHT D., OA889
FEDELI U., PA1019
FEDULOV A., OA883
FEHRENBACH H., PA4051
FEIGH M., OA4202
FEKETE A., PA2364
FEKETE F., PA1023
FEKETE M., PA2690, PA4578
FEKI M., PA1268
FEKI W., PA1127, PA2864, OA4223, PA4384, PA4559
FEKIH L., PA2197, PA3017, PA4740, PA5152
FEKIH M., PA983
FELCAR J., PA4521
FELDER F., OA4848, OA4852, OA4853
FELDMAN R., OA4859
FELGUEROSO C., PA1110
FELIPE A., PA390, PA2841
FELIPE MONTIEL A., OA1543
FELIX J., PA3674
FELIX NOGUEIRA S., PA953
FÉLIX SEGURO C., PA2238
FÉLIX-SEGURA C., PA2239
FELL C., PA2913
FELLER L., OA4945
FELLRATH J., OA747
FELTBOWER R., PA1108
FELTEN M., PA4669
FELTON I., PA2156
FELTON T., PA2962, PA2963
FENG A., PA1704
FENG J., PA5213
FENG M., OA3150
FENG P., PA2349
FENG Y., PA5269
FENNICHE S., PA3332, PA3336, PA3629, PA3633, PA3788, PA3877
FENNICHE S., PA638
FENNICHE S., PA3660
FENTON M., PA5253
FENU G., OA1435, PA2082
FENWICK P., OA779, PA4683
FERDOUTSIS E., PA1689
FERENCIK S., PA4669
FEREYDOONZAD L., PA2702
FERGADIS E., PA337, PA3429
FERGUSON C., PA1187, PA1760, PA2273
FERGUSON E., PA603
FERGUSON K., OA1560
FERGUSON M., PA1199, PA1206, PA5185
FERGUSSON M., PA2187
FERKOL T., PA2769
FERMOYLE C., OA893
FERNANDES A., PA1164
FERNANDES F., PA2716
FERNANDES G., PA2214
FERNANDES N., PA518
FERNANDES S., PA488
FERNANDES T., OA4219
FERNANDES V., PA5048
FERNANDES DA SILVA JUNIOR E., PA4633
FERNANDES DOS SANTOS D., PA3758
FERNANDEZ A., PA3435
FERNANDEZ C., OA1459, PA2835
FERNANDEZ C., PA1041
FERNANDEZ C., OA850, OA855
FERNANDEZ E., PA1957
FERNANDEZ E., OA1557
FERNANDEZ E., OA2484
FERNANDEZ I., OA1445, PA1702, PA1851
FERNANDEZ I., PA3937
FERNÁNDEZ L., OA788, PA4668
FERNANDEZ L., PA1016, PA1342, PA3794
FERNÁNDEZ M., PA1064
FERNÁNDEZ M., PA3656
FERNANDEZ P., PA1907
FERNANDEZ R., PA4024
FERNÁNDEZ ÁLVAREZ R., PA3595
FERNÁNDEZ ÁLVAREZ R., PA1816, PA2426, PA3057
FERNANDEZ ARIAS C., PA526
FERNANDEZ BARAT L., OA782
FERNÁNDEZ BARAT* L., PA1662
FERNÁNDEZ CEBALLOS I., PA3540, PA4480
FERNANDEZ COIMBRA A., PA2283
FERNÁNDEZ DE ROITEGI K., OA3282
FERNÁNDEZ DELGADO M., PA317, PA1197, PA3963
FERNÁNDEZ ELVIRO C., PA2738
FERNÁNDEZ FABRELLAS E., PA3590, PA3916
FERNÁNDEZ FERNÁNDEZ E., PA4018
FERNÁNDEZ GARCÍA C., PA2243, PA4995
FERNANDEZ GAY S., PA5135
FERNÁNDEZ JIMÉNEZ R., PA3453
FERNÁNDEZ SUÁREZ I., PA3595
FERNANDEZ VILLAR A., PA2215
FERNÁNDEZ-ASENSIO C., PA2365
FERNANDEZ-BARAT L., PA1096, PA2326, PA3839, PA3850, PA5093, PA5115, PA5244, PA5248
FERNÁNDEZ-BARAT* L., PA1084
FERNANDEZ-BUSSY S., OA2599, PA4629
FERNÁNDEZ-FABRELLAS E., PA3840
FERNÁNDEZ-PLATA R., OA872
FERNÁNDEZ-RODRÍGUEZ M., OA783
FERNÁNDEZ-VELILLA M., PA3801
FERNÁNDEZ-VISIER I., PA1693
FERNANDO A., PA3064
FERNANDO FERREIRA PEREIRA L., PA415
FERNANDO SILVA L., OA2489
FERRA J., PA4541
FERRANDO GABARDA J., PA407
FERRANTE G., PA2741
FERRANTE BANNERA A., PA1310
FERRANTELLI V., PA2988
FERRARA G., PA3823
FERRARA M., PA1708
FERRARESE M., PA1069, PA2807
FERRARO M., PA602, PA604, PA2988, PA4042, PA4676
FERRARO V., OA1435
FERRAROTTI I., PA650, PA3050, PA5193, PA5197
FERRAZ B., PA1817
FERRAZ DA SILVA L., PA5250
FERRAZ-AMARO I., PA1237
FERREIRA A., PA3519, PA3520
FERREIRA D., PA2805, PA5090
FERREIRA D., PA2936, PA2938
FERREIRA D., PA403, PA958, PA4386, PA5352
FERREIRA D., PA2270
FERREIRA E., PA1759
FERREIRA F., PA371
FERREIRA J., PA1794
FERREIRA J., PA370, PA371
FERREIRA L., PA1058, PA1597, PA2716
FERREIRA L., PA4074
FERREIRA P., PA444
FERREIRA P., PA362
FERREIRA DA SILVA F., OA3269
FERREIRA DE OLIVEIRA JÚNIOR E., PA4633
FERREIRA MENDES A., PA3599
FERRER A., OA3282
FERRER D., PA2321
FERRER M., PA419
FERRER R., OA782, OA788, PA2326, PA5244
FERRER BOSCH N., PA2772
FERRER ESPINOSA S., PA1815, PA2950
FERRER GALVAN M., PA4097
FERRER PARGADA D., PA1140
FERRER QUINTANA C., PA1270
FERRER ROCA R., PA5248
FERRER SANCHO J., PA1161
FERRER-MALLOL E., PA1206, PA1761
FERRERO G., PA3765
FERRETTI G., OA4955
FERRI S., PA3053
FERRIGNO P., PA4684
FERRILLO L., OA1539
FERRINI E., OA4958
FERRIS K., PA1624
FERRO P., OA1558
FERRO LEAL L., PA1112, PA1117, PA1241, OA3269
FERRONE M., PA539, OA768, PA1313, PA1584
FERRONI V., PA1163, PA2162
FERTL A., OA2595, PA3046
FESHCHENKO Y., PA295, PA3531, PA3650, PA4564
FESU D., PA3923
FETTAL N., PA2047
FEU COLLADO N., PA1242, PA2428
FEUCHTNER G., PA532
FEUN L., PA1712
FEVANGA B., PA436
FEZEU L., PA3340
FIANE A., OA4347
FICHERA G., PA1089
FICKER J., OA2595
FICKER J., OA2593, PA3046
FIDDLER C., PA431
FIDELI A., PA5334
FIDHA S., PA5256
FIDLER K., PA2722
FIEBIG D., OA3177
FIECHTER R., PA1903
FIEDLER A., PA4510
FIEDLER M., PA485
FIELBAUM O., PA1633
FIETZE I., PA573, PA3589
FIEUX M., PA589
FIGGE M., PA5130
FIGORILLI M., PA3808
FIGUEIREDO C., PA5090
FIGUEIREDO C., PA325
FIGUEIREDO D., PA488
FIGUEROA J., PA2086, PA2744, PA4440
FIGUEROA-HURTADO E., PA4561
FIHN-WIKANDER T., OA757, PA2260, PA4500, OA4954
FILA L., PA1339, PA3362
FILATIERI A., OA3267
FILDAN A., PA3926
FILIOU A., PA1619
FILIPOVIC D., PA5167
FILIPOW N., OA1436, PA2740, PA4998
FILIS P., PA2361
FILOCHE M., PA2710, PA3775
FILOSA A., PA5197
FINA A., PA420
FINAMORE P., PA1819
FINAN K., PA4073
FINCH S., PA382, PA383, OA2604
FINGLETON J., PA3604
FINN E., PA1345
FINNEY L., PA2184, PA2815, OA4931
FINOHENOVA M., PA1064
FINSTAD P., PA2159
FINSTER K., OA2517
FIOCCHI A., PA2090
FIOCCHI A., PA2178
FIOGBE A., PA5270
FIORENTINO G., PA1229, PA2711, PA2850, PA2951, PA2952, PA4580
FIORINI S., OA1538
FIRA MLADINESCU O., PA418
FIRA-MLADINESCU O., PA5053
FIRAT M., PA4525
FIRINCIOGLULARI A., PA1832
FIRINCIOGLULARI M., PA1832
FIRSCHING T., PA4669
FISCHER G., PA3503
FISCHER R., PA4603
FISCHER CHRISTIANSEN C., PA3818
FISHER A., OA4341
FISHER D., PA2802
FISHER J., OA1430
FISHWICK D., PA3354
FISSER C., PA496, OA785, PA2996, OA3289, OA4845
FISSETTE L., OA4859
FITCH C., PA2846
FITCH N., OA770
FITOUHI N., PA342
FITZGERALD A., PA1345
FITZGERALD S., PA5355
FITZGERALD T., PA4450
FITZMAURICE T., PA2291, PA2905, PA4001, OA4863
FITZSIMMONS K., PA2389
FITZSIMONS F., OA2620
FJAELLEGAARD K., PA4437
FLAHERTY K., PA2893, PA3921
FLAHERTY K., PA3463

FLAMENT T., PA2149
FLAVIER J., PA990, PA5312
FLEISCHAUER T., PA486
FLEISCHER A., PA1270, PA1840, PA2319
FLEISCHHAUER T., PA3581
FLEMING A., PA1842, PA1843
FLEMING E., PA3509
FLEMING L., OA1442, PA1580, PA3658
FLEMING L., OA1435
FLEMMER A., PA2141
FLEMMER A., PA1851
FLETCHER A., PA5177
FLETCHER C., PA420, PA423, PA426, PA483, PA3938, PA3943
FLETCHER J., PA2846
FLETCHER S., PA2886
FLETCHER S., PA404
FLEURY M., PA420, PA423, PA426
FLEXEDER C., PA1947, OA2519
FLINKMAN E., OA2496
FLOC'H A., PA2983
FLØE A., PA3867, PA5335
FLOERCHINGER B., PA3001
FLOKSTRA-DE BLOK B., OA1529
FLOKSTRA-DE BLOK B., OA3184
FLORA S., PA1031, PA1035
FLORAS J., PA1287
FLORAS J., OA3289
FLORE R., PA4636, PA4645
FLORES T., PA2744, PA4440
FLORES-CISNEROS L., PA3312
FLÓREZ P., PA1749
FLOREZ SOLARANA P., PA4653
FLOTT T., PA1215
FLOWER V., PA3504
FLUME P., OA1537
FLYNN C., PA1181, PA1797, PA5347
FODOR G., PA3547, PA3549
FODOR H. G., PA3555
FOERSTER K., PA2141
FOGARIN J., OA3187
FOGARTY P., PA1120, PA1121
FOGGETTI G., OA3270
FOISSET F., OA892
FOLARIN A., PA1588
FOLDESI M., PA3923
FOLEY S., PA5081
FOLKERSEN P., PA4716
FOLKERTS G., PA456
FOLLIET L., OA4955
FOLTAN M., OA785
FOLTRAN G., PA5134
FOMINYKH A., PA5111
FONG A., PA4596
FONG C., PA382
FONG I., PA3428, PA3865, PA5120
FONG K., PA1120, PA1121
FONSECA A., PA2288
FONSECA E., PA1915
FONSECA J., OA758
FONSECA J., PA1891, PA1892, PA1894, PA1897
FONSECA L., PA3778
FONSECA N., PA488
FONTANA G., PA4393
FONTANA M., PA3958
FONTANELLA S., PA4070
FONTÃO ALVES S., PA4541
FONTIJN S., PA2082
FOO C., OA4956
FOONG R., OA886, PA4451
FOR THE NOVELTY SCIENTIFIC COMMUNITY AND THE NOVELTY STUDY INVESTIGATORS .., PA3622
FORD V., PA350
FORDE L., PA5153
FORESI A., OA4838
FORGERON A., PA420, PA423
FORIN E., PA5093
FORIS V., PA1755, PA1770, PA5192
FORLANI M., PA2110
FORMISANO R., PA503
FORNE C., OA782
FORNS N., OA788
FORRER A., OA748, PA1615, PA1773
FORREST I., OA1431, PA3452
FORREST I., PA404
FORSLÖW A., PA5205
FORSS C., PA3914
FORSTER J., PA2115
FÖRSTER K., PA1851
FORSTER M., PA1243
FORSTING M., PA1131, OA4332
FORT A., PA5206
FORTEA ORMAECHEA J., PA5272
FORTESCUE R., PA4460
FORTIN M., PA427
FORTIS S., OA870
FORTON J., PA2757
FORTON K., PA3787, PA4647
FORT-PETIT A., PA5240
FORTUNA GUTIERREZ A., PA5272
FORTUNA GUTIÉRREZ A., PA3008
FOSBØL E., OA887
FOSCHINO BARBARO M., PA974, PA3584, PA3598, PA4748
FOSTER K., OA1566
FOSTER P., OA2500
FOSTER-POWELL K., PA3591
FOTOOK KIAEI S., PA1182
FOUDHAILI Y., PA5089
FOUDRAKIS M., PA4437
FOUKA E., OA3152, PA4709, PA4717, PA5102
FOURAS A., OA4953
FOURNIER C., PA427, PA463
FOUZAS S., OA1438
FOVEL I., OA764
FOWLER S., PA624, PA973, OA1531, PA2384, PA2962, PA2963, PA3649, PA3652, PA4675, PA4729, PA5300, PA5304
FOWLER S., PA3642, PA5275
FOX G., PA2795, PA4537
FOX H., PA3472
FOX H., PA2997
FOX L., PA535, OA769
FRACELLA M., PA2734
FRAGKOULAKIS M., PA5187
FRAGNI D., OA4305
FRAIOLI F., PA2920, PA4008
FRANCAVILLA A., PA2082
FRANCELIN H., PA2301
FRANCESCA S., PA2952
FRANCESQUI J., PA1740, PA1749
FRANCHI M., PA4725
FRANCÍN-GALLEGO M., PA4518, PA4519
FRANCIONI A., PA2932, PA3858
FRANCIOSI A., PA428
FRANCIOSI A., PA2236
FRANCIS A., OA3176
FRANCIS B., PA2414
FRANCIS S., PA3045
FRANCK E., PA1177, PA1805
FRANCO E., PA298, PA3314, PA4593
FRANCO G., PA1725, PA4725
FRANCO P., PA1888
FRANCO V., OA742
FRANCO PARREIRA V., PA1039
FRANCO SUAREZ P., PA5217
FRANÇOIS B., OA4864, OA4867
FRANÇOISE G., PA393
FRANK B., PA2140
FRANK M., PA1243
FRANKE A., PA1243
FRANKE K., OA2595, PA3046
FRANKENBERGER M., PA1851, PA3937
FRANKLIN K., PA3585, PA4423
FRANKLIN K., PA5264
FRANKLIN L., PA4473
FRANKS K., PA1122
FRANSSEN F., PA1050, PA2261, OA2603, OA4218, OA4225, OA4312
FRANSSEN F., PA548
FRANTZ R., OA742
FRANZ E., OA4946
FRANZEN D., OA2593
FRANZEN K., PA3576, PA5316
FRANZÉN S., PA1319, PA3630, OA4936
FRASCA F., PA2734
FRASCHINI P., PA5262
FRASER E., PA1133, PA1180, PA1728, PA2900, PA3928, OA4952, OA4957
FRASSANITO A., PA1647, PA2085, PA3984, PA4477
FRASSANITO F., PA1822
FRASSON G., PA1708
FRATES M., PA4485
FRATTY I., OA4868
FRAUCHIGER B., PA2116, PA2760, PA5001
FRAUGHEN D., PA613, OA3146
FRAUGHEN D., PA3310
FRAUNE C., PA2290
FRAUSING HANSEN E., PA1040, OA4938
FRAVOLINI G., PA2727
FRAZER D., PA2818
FREDRIKSEN P., PA4060
FREDSGAARD-JONES T., PA4628
FREEDMAN N., PA3319
FREEMAN A., PA2816, PA2821
FREEMAN M., PA1301
FREGONEZI G., PA1039, PA4518, PA4519, PA4533
FREI A., PA1595, PA2268, OA3183, OA3185
FREIESLEBEN N., OA2500
FREIRE DA SILVA B., PA413
FREITAG N., OA2511
FREITAS C., PA1037
FREITAS C., OA1449, OA1451, PA2214
FREITAS J., PA1005
FREITAS P., PA4977
FREITAS DOS SANTOS S., PA346
FREMOND M., PA3935
FRENT S., PA1684, PA3002
FRENT S., OA2492
FRERICH B., PA5346
FRERICHS I., PA3552
FRERICHS M., OA3179
FRERK T., PA3581
FRESNEL E., PA1212, PA1214, PA1219, PA2102, OA3190
FRETHEIM H., OA746, OA857, PA2914, PA3471, PA3476
FREUND O., PA435, PA1137, PA1730, PA2889, PA2928, PA3014, PA4560, PA4588
FREUND-MICHEL V., OA4243
FREY U., OA1438, OA1443, OA4940, OA4941, PA5023, PA5026
FREYMOND N., PA4114
FREYNET O., PA427, PA1739
FRIBERG M., PA1604
FRICKE-GALINDO I., PA301, PA2330, PA3848
FRIDLENDER Z., PA3407
FRIEDLAND J., OA862
FRIEDLAND J., PA568, OA1568
FRIEDLANDER Y., PA2283
FRIEDRICH G., PA532
FRIEDRICH V., PA2334
FRIHA M., PA2253, PA2847, PA3874, OA4326, PA4565, PA5097, PA5325
FRIJA-MASSON J., PA571, PA3942
FRILLE A., PA3924, OA4338
FRIMA E., OA1438
FRINO GARCIA A., PA1734
FRISCHER T., OA1436, PA2740
FRISK B., PA4524
FRITZ K., PA3562
FRITZ R., PA3568
FRIX A., PA1134
FRIZZELLI A., PA590, PA591, PA3610
FRÖDERBERG ROTH L., PA3045
FROES F., PA1225
FROGET R., OA4867
FROHN L., PA311, PA1598, PA1599
FROIDURE A., PA1715, PA1857
FRØKJÆR J., PA2399, PA3628
FRØLICH A., OA3149
FRØLUND J., OA4878
FROMMELT C., OA4338
FROSSARD N., OA892
FRØSSING L., PA1949, OA4966, OA4968
FROST F., PA2905, PA3473, PA4699
FROST S., PA2097, PA2747
FROST ANDREASSEN H., OA4303
FRY S., PA4648
FRYATT G., OA4248
FRYE B., PA3360
FRYE B., PA4479
FRYE B., PA2226
FRYER A., OA4949
FSADNI P., PA5146
FU C., PA2301
FU H., OA849
FU J., PA2701
FU J., OA4244
FU P., PA3448, PA3470, PA3566, OA4866
FU Q., PA1101
FU W., PA469
FU X., PA1933
FU X., PA5286
FUCARINO A., PA4754
FUCCIA G., PA4601
FUCHS C., OA3177
FUCHS J., PA3360
FUCILLE S., PA2835
FUDIO S., PA3757
FUENTES C., PA3043
FUENTES-MATEOS R., PA1260
FUENTETAJA OLMOS M., PA2868
FUERTES E., OA2519
FUGE J., OA744, PA2278, OA4849, OA4942

FUHLROTT B., PA1073
FUHR D., PA3823
FUJIHARA B., OA2628
FUJII H., PA5179
FUJIMOTO S., OA4299, PA5238
FUJIMURA S., PA3554
FUJIOKA H., PA3860, PA3862, PA3863
FUJISAWA T., PA434, OA1424
FUJITA K., PA3859, PA3891
FUJITA M., PA2887
FUJITA Y., OA4299, PA5238
FUJITA Y., PA3666
FUJIWARA K., PA2898
FUKANO H., PA5080
FUKATSU-CHIKUMOTO A., PA1331, PA4000
FUKIHARA J., PA401, PA1236, PA1723, PA3499
FUKUDA S., PA978
FUKUHARA A., OA3148, PA3776
FUKUHARA N., OA3148, PA3776
FUKUI S., PA1768, PA1771
FUKUMITSU K., PA978
FUKUNAGA K., OA2501
FUKUOKA J., PA401, PA434, OA1424, PA1723
FUKUSHIMA Y., PA2705, PA2706, PA5306
FUKUTOMI Y., PA4406
FUKUYAMA A., PA4667
FUKUYAMA S., PA4399
FUKUZAKI S., PA1304
FULD J., PA544
FULGA A., PA3409
FULLARTON J., PA1656
FULLWOOD C., PA4484, PA4492
FULTON O., PA523, PA1895
FUMAGALLI A., PA1725
FUMAGALLI J., PA3366
FUMAT R., PA4612
FUNDEL-CLEMENS K., PA1863
FUNG S., PA1745
FUNK G., PA1590, OA3146
FURIAN M., OA748, PA1615, PA1773, PA1774, PA1809, PA2432, PA3804
FURLAN I., PA1849
FURLANETTO K., PA1049, PA3060, OA4310
FURQUIM T., PA5110
FURTADO S., PA2899
FURTADO SILVA J., PA1172, OA4226
FURUKAWA T., PA434, PA1236, OA1424
FURUSE H., PA466, OA2591, PA5137
FURUYA N., PA2059
FUSCHILLO S., PA503
FUSCO A., PA467, PA478
FUSCO R., PA3910
FUSET CABANES M., PA3922
FUSETTI L., PA1822
FUSO L., OA752
FUTOSHI MIZUTANI R., PA3796
FUURSTED K., PA5123
FYLES F., PA1900, PA2291, PA4001, PA4100, PA4113, OA4863, PA5291
FYRENIUS A., PA4646

G

G COSÍO B., PA2319
G GIBSON P., OA1546
G M H., PA339
G. BRUSSELLE G., PA666
G. LOGAN A., PA584
G. NORDESTGAARD B., PA1013, PA1953
G. SILVA C., PA1031, PA1035
GABBAY F., PA1691
GABBRIELLI L., PA5334
GABE R., PA1122
GABET S., PA2065
GABRIELLI A., OA746
GABRIEL-MEDINA P., PA2371, PA3920
GABROVSKA M., PA2176
GACH D., PA4571, PA4574
GACHELIN E., PA420
GADDOUR A., PA1124, PA2862
GADE E., OA2500
GADHAVE S., PA2396, PA3602, PA5339
GADSBØLL C., PA2130
GAETA R., PA2338, PA3868
GAFFIER M., OA790
GAFFNEY B., PA2236, PA2292, PA2930, PA3944
GAFTON J., PA2796
GAGA M., PA4717
GAGAT M., PA3915
GAGGAR A., PA456
GAGLIARDO R., PA4754
GAGLIARDO R., PA4038
GAGNADOUX F., PA581, PA1271, OA3190, OA3280, OA3285, OA4318, OA4827
GAHLEMANN M., PA1146
GAI J., OA1412
GAI X., PA5305
GAIATO M., PA4593
GAIKWAD A., PA2346, PA4066
GAILLARD E., PA2099, PA3371, PA5004
GAILLARD E., PA2752
GAILLET M., OA4955
GAINE S., PA1757, PA3958, PA5178
GAISL T., PA1615
GAIT L., PA2749
GAITANAKIS S., PA1699
GAJARDO-CARRASCO T., PA4471
GAJDÓCSI R., OA4854
GAJIC O., OA4861
GAKI E., PA4709, PA4717
GALAN P., PA3340
GALANAKIS E., PA5018
GALBAN C., OA1529
GALBAN C., PA4139
GALDEANO LOZANO M., PA526, PA1041, PA1221
GALDÍZ ITURRI J., PA1242
GALDO A., OA2507
GALE C., OA761
GALERA R., PA2329
GALEY M., PA1843
GÁLFFY G., PA3611
GALGANI S., PA1918, PA3037
GALICIA AMOR S., PA3307
GALINDO J., OA2524
GALINDO LASO M., PA5131
GALINDO-ANDÚGAR M., PA1693
GALL H., PA454
GALL R., PA2090, PA2091, PA2101
GALLANO PETIT P., OA3144
GALLARDO ESTRELLA L., PA3997
GALLARDO ESTRELLA L., OA853, PA2280, PA2284
GALLARDO-REYES R., PA3312
GALLE E., PA2415
GALLEGO I., PA390, PA2841
GALLEGO CURTO E., PA2326, PA5248
GALLELLI L., PA4685
GALLEN P., PA4746
GALLI F., PA1096, PA3850, PA5093
GALLI R., PA3548
GALLINI F., PA2736
GALLO E., PA4490
GALLO GONZÁLEZ V., PA3679, PA4659
GALLOTTI L., PA1750, PA1751, PA1753, PA4103
GALODE F., PA420
GALVAN C., PA4521
GALVÁN G., PA3829
GALVÁN BAUTISTA G., PA3306, PA3307, PA3826, PA3831, PA3832, PA5069
GALVÁN BAUTISTA G., PA3302
GALVÁN-BAUTISTA G., PA3305
GALVÃO T., PA1210
GALVIN L., PA3454, PA3467, PA3468
GALVIS C., PA2776
GAMAL W., PA3791
GAMARRA A., PA3479
GAMBADAURO A., PA5358
GAMBAZZA S., PA5358
GAMBINO F., PA4079
GAMBLE E., PA4107
GAMIL A., OA1418
GÁMIZ MOLINA A., PA2238
GÁMIZ-MOLINA A., PA2239
GAN E., PA3865
GAN T., PA3359
GANAPATHY A., PA1617
GANBOLD A., PA2419
GANDHI A., OA3182
GANDHI H., PA985
GANESH V., PA450
GANESH V., PA4395
GANESHAN B., PA2920, PA4008
GANGA R., PA1785
GANGI S., PA2219, PA2221, PA2225, PA2232, PA3902, PA3949
GANGI S., PA2123, PA2133
GANNINGER A., OA2490
GANSLANDT C., PA3484, PA3501
GANTER C., PA438, PA2218, PA2230
GAO C., PA3810
GAO J., PA1101
GAO J., PA5342
GAO L., PA4045, PA4047
GAO W., PA963, OA4206, PA5247
GAO Y., OA1434
GAPPA M., PA4752
GARAS M., PA2958
GARAVELLI E., PA2375, PA4704
GARAY LLORENTE E., PA2868, PA3890, PA4707, PA5309
GARAZZINO S., PA2735
GARBE E., PA3013
GARBE ZANIOLO B., PA1241
GARCÉS B., PA4482
GARCI F., PA2093, PA2758, PA5360, PA5367
GARCIA A., PA442
GARCIA A., PA347
GARCIA A., PA3491, PA3500
GARCÍA A., PA3502
GARCÍA A., PA4089
GARCIA A., PA3943
GARCIA E., PA5254, PA5255
GARCIA G., PA5095
GARCIA G., PA3838, PA5245
GARCIA G., PA4114, PA4648, PA4750
GARCIA I., PA1041
GARCIA J., PA4014
GARCÍA S., PA5070
GARCIA T., PA1075, PA5194
GARCÍA ALFARO M., PA2950
GARCÍA ALFONSO L., PA1816
GARCÍA ALMEIDA J., PA3453
GARCÍA ALVAREZ A., PA5181
GARCÍA BARRERA T., PA1242
GARCIA BONILA L., PA4469
GARCIA CARRASCO M., PA1166
GARCÍA CARREIRA M., PA2868
GARCÍA CASTILLO E., PA2400, PA4026
GARCIA CASTRO G., PA4538
GARCÍA CLEMENTE M., PA2426, PA3057
GARCÍA DE ALAIZ A., OA783
GARCÍA DE PEDRO J., PA4102
GARCÍA DEL TORO M., PA3840
GARCÍA DELGADO E., PA4518, PA4519
GARCÍA ECHEBERRIA L., PA2868, PA3890
GARCIA ESTEBAN A., PA3676
GARCÍA FADUL C., PA433
GARCÍA FERNÁNDEZ S., PA1270
GARCÍA FLORIDO N., PA5297
GARCÍA GARCÍA V., PA4097, OA4834
GARCÍA GIL S., PA411
GARCIA GIRALDO L., PA4538
GARCIA GONZALEZ J., PA3479
GARCÍA GONZÁLEZ M., PA411
GARCÍA GONZALO A., PA4086
GARCÍA GUTIÉRREZ A., PA3307
GARCIA GUTIÉRREZ M., OA4864
GARCÍA HERNÁNDEZ J., PA411
GARCÍA LÓPEZ J., PA3679, PA4621
GARCÍA LOVERA P., PA2428
GARCÍA LUNAR I., PA5181
GARCIA MINGO A., PA1065
GARCÍA MOGUEL I., PA3615
GARCÍA MOLINA A., PA4086, PA5131
GARCIA MOYANO M., PA3951
GARCIA OLIVÉ I., PA526, PA1113, PA1898
GARCÍA ORTEGA A., PA1881, PA3000
GARCIA PRIETO F., PA3445
GARCÍA RÍO F., OA4841
GARCÍA RIVERO J., PA1905
GARCIA RODRIGUEZ E., PA2215
GARCÍA ROMERO DE TEJADA J., PA4026
GARCIA SALAZAR I., PA3323
GARCÍA SANCHEZ A., PA1881, PA3012
GARCIA TAMAYO P., PA4995
GARCIA-ALTÉS A., OA3290
GARCIA-AYMERICH J., PA1592, PA1595, PA2066, PA2067, PA2268, OA2519, OA3183, OA3185, PA3668, PA3674
GARCÍA-COSÍO

PIQUERAS B., PA1242
GARCIA-COSIO PIQUERAS F., OA1413
GARCÍA-COSÍO PIQUERAS F., PA2251, PA5282
GARCÍA-DE VILLA S., PA4523
GARCIA-GARCIA V., OA4835
GARCIA-GASULLA D., OA788, PA2326, PA5244, PA5248
GARCÍA-GUERRA A., PA1693
GARCÍA-HIDALGO M., PA5244, PA5248
GARCÍA-HIDALGO M., PA2326
GARCIA-LARSEN V., PA1021, PA1957
GARCÍA-LERMA E., PA3919
GARCÍA-LÓPEZ N., PA1604
GARCIA-MANSFIELD K., PA2273
GARCÍA-MATEO N., PA2326, PA5248
GARCIA-MINGO A., PA2169
GARCÍA-NUÑEZ M., PA1169
GARCÍA-ORTEGA A., PA1683
GARCÍA-RÍO F., PA2329, PA2953
GARCÍA-RIVERO J., PA3043
GARCÍA-SALMONES MARTÍN M., PA1808
GARCÍA-TOVAR S., PA2329, PA2953
GARCÍA-UNZUETA M., PA618
GARDARSSON F., PA2965
GARDELLI C., PA3045
GARDINER L., PA961
GARDINER N., PA4987
GAREIOU Z., PA3320, PA5318, PA5328
GAREN T., OA746, PA3466, PA3476
GARFOOT T., PA404, PA1732, PA4381
GARG M., PA1829
GARG P., PA1829
GARG R., PA2208, PA4547, PA5088
GARGOURI I., PA4559
GARGOURI I., PA3640
GARGOURI N., PA1008
GARGOURI R., PA1008, PA1009, PA1127, PA2864, PA4384, PA4559, PA5256
GARIAZZO C., PA304, PA3811
GARIBALDI S., PA4497
GARIN M., PA1911, OA2609
GARINO S., PA4736, PA4739
GARN H., OA4333
GARNELO L., PA5362
GARNER J., PA5224
GARNER J., PA4671
GARRAPIZ I., PA5070
GARRAPIZ J., PA5070
GARRIGA-BARAUT T., PA2743
GARTNER-TIZZANO S., PA2743
GARZILLO L., OA4838
GASA GALMES M., PA2314
GASCÓN CASAREDI I., PA2772
GASER A., PA3479
GASHYNOVA K., PA4394
GASPAR L., PA3599
GASPARIC M., PA3948
GASPARINI G., PA1748
GASPARINI S., PA1779
GASS R., PA2256
GASTALDI A., PA2304, PA3766, PA5110
GASTON B., PA2762
GASTON B., PA592, PA5298
GASULL X., PA1269
GATES J., PA3889
GATHERAL T., OA1462
GATHERAL T., PA404, PA3434, PA3918
GATT D., PA4463, PA4468, PA4469
GATTI E., PA3984
GATTI M., PA3774
GATTINI M., PA2246
GATTO M., PA4593
GATTONI C., PA1187
GATZONIS S., PA3821
GATZOULIS M., PA3494
GAUA N., PA4637
GAUCI N., PA3591
GAUDEMER A., PA1153
GAUDET M., OA4336
GAUGHAN E., PA550
GAULTIER J., PA5182
GAUPMANN R., PA4467
GAUQUELIN L., PA4114
GAUR R., PA2699
GAUR V., PA4690
GAUVREAU G., PA1913, PA1925, PA1927, PA1931, PA1932, PA1941, PA3036, PA3843, PA3845
GAVARA N., PA1269, PA5234, PA5235
GAVRYSYUK V., PA1746
GAWADE P., PA649
GAWLICKI M., PA967
GAY A., PA1855
GAYÀ PUIG A., PA5241
GAYAN-RAMIREZ G., OA1535, OA1572, OA2615, OA3159, PA5211, PA5295
GAYNOR-SODEIFI K., OA3261
GAYRETLI AYDIN Z., PA5012
GAYVERT K., PA2983
GAZENGEL P., PA1739
GE H., PA3029
GE R., OA775
GEA J., PA5154
GEA J., PA1836, PA2201
GEATER S., PA2929, PA3989
GEBHARDT A., OA2595, PA3046
GECEVIC R., PA473, PA5136
GEELANI S., PA4027
GEELHOED J., PA2126
GEELHOED J., PA4571, PA4574
GEELHOED J., OA3283
GEELS C., PA311, PA1598, PA1599
GEERAERTS E., OA1569
GEERTS L., OA2615
GEESHATH J., PA3313
GEGINAT J., OA3274
GEHRIG P., PA485
GEHRING U., OA2519, PA3674, PA5027
GEISER T., PA547
GEISMANN F., OA785
GEISSLER K., PA3467
GELEFF S., PA2212
GELFOND J., OA2583
GELL L., PA3597
GEMICIOGLU B., PA3343, PA3647
GEMICIOGU B., PA3789
GENDRON N., PA1804
GENG Q., OA2598
GENKOVA K., PA3372
GENRE F., PA1140, PA1237, PA2321
GENSCH I., PA483
GENSHEIMER T., OA2625
GENT K., PA4469
GENTINA E., PA580
GENTINA T., PA580
GENY F., PA1678
GENZOR S., PA3593
GEORGANAKIS P., PA4572
GEORGATOU N., PA4709
GEORGE M., PA985, OA3165
GEORGE P., OA850, OA855, PA2331, PA3485
GEORGE P., PA404
GEORGE S., PA4567
GEORGE V., PA3439, PA4006, PA5144
GEORGELIS A., OA2518, PA3674
GEORGIEV P., PA2313
GEORGIOPOULOU V., PA4397
GEORGIOS T., PA422
GEPHINE S., PA966
GERARD S., PA4144
GERAYELI F., PA3411
GERCKE P., PA4036
GERCKENS M., PA1235, OA1569, PA3358, PA4495
GERDAY S., PA1934
GERGES C., PA3968
GERGES C., PA3487
GERHARDT F., PA1764
GERNOT M., OA786
GERRETSEN E., PA482
GERRITSMA Y., OA761
GERRY S., OA850, OA855
GERSHMAN E., PA1730, PA2928, PA3014, PA4560
GERSHON A., PA4429, PA5021
GERSHON A., PA3887
GERTZ R., PA1764
GESIERICH W., OA2593, OA2594, OA2595, PA3046
GESSNER A., PA2826
GESSNER B., PA2819, PA4436
GESSNER B., PA5127
GESSNER C., PA2374, PA2376, PA2377, PA2378, PA2379, PA4726
GESTER F., OA853, PA1134, PA2915, PA2918
GEUDENS V., OA1535, OA1572, PA2710, OA3159, PA3775, OA4343, OA4346, PA5211, PA5295
GEVAERT K., OA1557
GEVAUDAN B., PA2999
GEYER P., OA2485
GEZER N., PA2282, PA3998
GEZER T., PA3333, OA4232, PA5329
GFRS G., PA402
GHADBAN C., PA618
GHAFOOR A., PA2808
GHANEM M., PA1230, PA1231
GHANIMA W., PA3397, OA4833
GHANIZADA M., OA4303
GHANNOUCHI I., PA3991, PA3992, PA4455
GHARBI D., PA1008
GHAREEB R., PA1227
GHARIANI J., PA1124, PA2862
GHARIBZADEH HIZAL M., OA2505
GHAZY A., PA2184
GHEDIRA S., PA5112
GHELIS I., PA1967
GHEORMAN V., PA2406
GHEWADE B., PA2396, PA5339
GHEZZI E., PA2123
GHEZZI M., PA1643, PA2082
GHIANI A., PA485
GHIMISLI I., PA2045
GHIO P., PA2224, PA5160
GHIO S., PA3486, PA3493
GHIRARDO S., PA4475
GHISLA C., PA3635
GHOBRIAL J., PA550
GHOFRANI A., PA448
GHOFRANI H., OA739, OA742
GHOSH A., OA2497
GHOSH A., OA3146
GHOSH B., PA2370, OA4945
GHOSH P., PA2430, PA2848
GHOSH S., PA1088
GHOSH S., PA2926, PA3070
GHOSHAL A., PA4434
GHOUT I., PA538
GHOZAL M., PA5015
GHUYSEN A., OA4829
GIACOMARRA V., PA1926
GIAM Y., PA382
GIAM Y., PA383, PA1097, PA1105, OA1456, PA3841, PA3842
GIAMPALMA E., OA3272
GIANACAS C., OA762
GIANELLA P., PA4743
GIANNESE F., PA2171, PA2178
GIANNI D., PA1233, PA5205
GIANNÌ M., PA2133
GIANNIOU N., PA4602
GIANNOCCARO F., PA2224
GIANNOULAKI S., PA3421
GIAVINA-BIANCHI P., PA352
GIBBONS C., PA2697
GIBBONS M., OA4200
GIBBONS M., PA368
GIBBONS* M., PA404
GIBBS A., PA1204
GIBBS J., OA739
GIBBS J., OA4208
GIBBY A., PA4447
GIBERTINI I., PA420
GIBSON P., PA1589, OA4302
GIBSON P., OA2500, PA3060, PA3604
GIBSON P., PA1891, PA1892, PA1894, PA1897
GICQUELLO A., PA4648
GIDARIS D., OA1438
GIDDINGS O., PA5298
GIERASCH C., OA2490
GIEZENDANNER S., PA547, PA2247, PA4743
GIGANTO ALFAGEME P., PA5217
GIGIREY CASTRO O., PA5241
GIGLIA M., PA2798
GIGLIO E., PA1747
GIJTENBEEK R., PA3885
GIL A., PA2953
GIL B., PA3479
GILARDI E., PA1819
GILARDONI J., PA4443
GILBERT I., PA985, PA5292
GILBERT J., OA1432
GILBEY S., PA987
GILBOA H., PA464, PA2373, PA4625
GILCHRIST F., PA2730
GILCHRIST M., PA2184
GILCHRIST T., PA2115
GILELES-HILLEL A., PA3383
GILES G., OA2492
GILL C., PA428
GILL C., PA2236, PA2930
GILL I., PA1104
GILL L., PA5081
GILL S., PA380
GILL S., PA2368
GILLE T., PA494, PA495, PA498, OA4324
GILLET A., PA4635
GILLET H., OA1452, PA2918
GILLET T., OA774
GILLIAND D., PA3804

GILLIBERT A., PA409, PA2149
GILLIES C., PA1215
GILLISSEN A., PA4421, PA4428
GILLMAN A., OA4302
GILLON S., PA3764
GIL-MARTIN S., PA5208
GILMOUR A., PA1097, PA1105, OA1456, OA1463, PA3841, PA3842
GILPIN D., OA1461, OA4320
GILSON M., PA632
GILTAY L., PA2918
GIMÉNEZ P., PA1270
GIMÉNEZ BADIA S., PA5272
GIMÉNEZ MOOLHUYZEN E., PA4518, PA4519
GIMÉNEZ RUIZ P., PA3590
GIMENO SANTOS E., PA1740, PA1756, PA3500
GIMENO-SANTOS E., PA347, PA512, PA513, PA2268, OA3183, PA4518, PA4519
GINIS A., PA4121
GIN-SING W., PA3956
GIOLLO A., OA746
GIORGIO V., PA2180
GIOTOPOULOU G., OA1445
GIOVANI E., PA4572
GIOVANNI-CHAMI L., PA423
GIOVANNINI M., PA2082
GIOVANNINI-CHAMI L., PA420, PA4443
GIOXARI T., PA5150
GIRÁLDEZ SÁNCHEZ M., PA3761
GIRALDO MONTOYA A., PA4538
GIRARD M., OA4955
GIRARD P., OA4827
GIRARDELLO L., PA3620
GIRASE B., PA4434
GIRAUDO C., PA1089, PA3847
GIRAULT C., PA409, PA1212, PA1214, PA1219
GIRERD N., PA2299
GIRGIN G., PA3322
GIRGIN DINDAR B., OA2505
GIRIT S., OA2505, PA2731, PA2732, PA2753, OA4327, PA4446, PA5083
GIRODET P., OA4243
GIROLAMO R., PA3469
GIRÓN DE VELASCO P., PA1107, PA4476
GIRÓN MATUTE W., PA988
GIRÓN MORENO R., PA2400
GIROTRA S., PA3621
GIROUX-LEPRIEUR B., OA4324
GIROUX-LEPRIEUR E., PA1678
GISBY J., OA2488
GISLASON T., PA311, PA659, PA1281, PA1598, PA1599, PA2073, OA2517, PA4423
GISLER A., PA5016, PA5026
GISSEL T., PA5335
GISSEL T., PA3867
GITAU R., OA3287
GIUBERGIA V., PA2086, PA2744
GIUFFRE' M., PA4686
GIUGLIANI R., OA3281
GIUNTOLI L., PA467, PA478, PA4590, PA5214
GIVOLI-VILENSKY R., PA4560, PA4588
GJØRUP P., PA3867
GKAKOU F., PA2812
GKANTINAS G., PA337, PA3429
GKIOZOS I., PA1119, PA2855, PA2859
GKREPI G., PA1724
GLANTZ H., OA3292
GLASAUER S., PA5072
GLASGOW A., PA483, PA1865
GLASPOLE I., OA2585, PA3921, OA4852, OA4853
GLASS K., OA2497
GLEDITSCH J., PA3397, OA4833
GLEESON F., PA1180, OA4857, OA4952
GLEESON F., OA4957
GLIEMANN L., PA4478
GLIGOR L., PA3002
GLODIC G., PA416, PA475
GLOECKL R., OA4217, PA5052
GLOGOVSKA P., PA3419
GLORION M., PA3368
GLOS M., PA3589
GLÜCKL R., PA1813
GLUHOVIC V., PA1098
GLYDE H., PA1594
GLYNOS K., PA4717
GNANALINGAM C., PA4077
GNANAPRAGASAM J., PA2932
GNASS M., PA474, OA3263
GNERLICH F., PA1849
GNIADY P., PA474
GO J., PA3524
GOBBI A., OA752, PA3673, OA4236
GOBETS D., PA5068
GOCHICOA RANGEL L., OA872
GOCHICOA-RANGEL L., PA4608
GODBOUT K., PA5225
GODDING P., OA1549
GODIC I., PA374
GODINAS L., OA1535, PA2710, OA3159, PA3775, OA4343, OA4346, OA4348, PA4487, PA5188
GODOY R., PA1749
GODOY MAYORAL R., PA4622
GODTFREDSEN N., OA4315
GOEKERI C., PA1098, PA2334
GOEL A., OA3279
GOELZER L., PA2256
GOELZER M., PA1680
GOEMINNE P., PA381, PA385, PA397, PA1071, OA1457, PA2340, PA2342, PA2849
GOEMINNE P., PA1074, PA1086, OA1456, OA1463
GOEMINNE P., PA384, PA386, PA388, OA1458, PA2843
GOEMINNE T., OA4343
GOESSENS W., PA2200
GOFFINET C., PA2334
GOFFREDO D., PA3479
GOGA A., PA3583
GOGAERT S., PA1716, PA5159
GOGALI A., PA1724, PA3311, PA4126, PA4709, PA4738
GOGGIN Z., PA4017
GOGTAY J., PA1322, PA1652, PA4117, PA4690
GOH A., PA4438
GOH C., PA1891, PA1892, PA1894
GOH K., PA3893
GOH N., OA4852, OA4853
GOH N., PA2233
GOHIR Q., PA3444
GOHY S., PA2176, PA5211
GOI ROSCANI M., OA4932
GOJEVIC T., OA2615
GOJSINA B., PA1638, PA1639
GOKDEMIR Y., PA2107, OA2505, PA2731, PA3374, PA4465, PA5003, PA5007, PA5008
GOKHALE K., PA5340
GOLAN TRIPTO I., PA2095
GOLAN- TRIPTO I., OA1542, OA2512, PA2729
GOLBSKI K., PA2084
GOLD J., OA1534
GOLDBART A., OA1542, PA2095, OA2512, PA2729
GOLDBERG M., PA1965, PA2077, PA3345, PA4430
GOLDBLATT D., PA1093
GOLDIN J., PA1130
GOLDIN J., OA1423
GOLDKLANG M., PA3778
GOLDSMITH L., OA862
GOLDSTEEN P., PA2991
GOLDSTEIN R., PA351, PA1047
GOŁEBIOWSKI A., PA1745
GOLEMBO M., OA1534
GOLETTI D., OA862
GOLFE BONMATÍ A., PA4622
GOLHEN H., PA4490
GOLJAN GEREMEK A., PA2227
GOLOGANU D., PA2925
GOLOGANU D., PA2924
GOMAA A., PA2921
GOMBERG-MAITLAND M., OA739
GOMES E., PA2756, PA4082, PA5033, PA5036
GOMES J., PA444
GOMES L., PA5071
GOMES M., PA4734
GOMES M., PA360
GOMES M., PA1668
GOMES R., PA1225
GOMEZ A., PA1713
GOMEZ C., OA1413
GOMEZ H., PA2818
GOMEZ J., OA856
GÓMEZ ARIZA J., PA1242
GOMEZ BASTERO FERNÁNDEZ A., PA4097
GÓMEZ BELLVERT C., PA5241
GOMEZ BONILLA A., PA5124, PA5125
GÓMEZ BREY A., PA4482
GÓMEZ CARBALLA A., OA4246
GÓMEZ CARRERA L., PA3801
GÓMEZ CRESPO B., PA3951, PA5125
GÓMEZ DE OÑA J., OA783
GÓMEZ GARCÍA T., PA4659
GÓMEZ GARRIDO A., PA4482
GÓMEZ GIL M., PA411
GÓMEZ LARRAURI A., PA4707
GOMEZ OLIVAS J., PA1881, PA3000
GOMEZ ORTIZ A., PA2155
GÓMEZ PACIELLO L., PA529
GÓMEZ REAL F., PA311, PA1281, PA2073, OA2517, PA4423
GÓMEZ-CARBALLA A., PA2728
GÓMEZ-DUQUE M., PA2743
GOMEZ-MARIANO G., PA5208
GOMEZ-MARTIN MARTÍN-GÓMEZ M., PA2841
GOMEZ-MOLLEDA F., PA3043
GÓMEZ-OLLÉS S., PA3364, PA3802, OA4344
GÓMEZ-RIAL J., PA2728, OA4246
GOMPELMANN D., PA1738, PA2212, PA3483, PA4618, PA4620, PA4624, PA5122
GON Y., PA2409, PA3666
GONÇALVES A., OA2619
GONÇALVES M., OA3269
GONÇALVES M., OA1449, OA1451
GONÇALVES M., OA854
GONÇALVES T., PA962
GONÇALVES DE ALBUQUERQUE C., PA4637
GONÇALVES MENDES R., PA4530, OA4932
GONÇALVES PEREIRA J., PA1225
GONÇALVES RIBEIRO D., PA3396
GONDHALI G., PA2057, PA2327, PA2333
GONDOUIN A., OA3280
GONG T., PA4427, PA5030
GONNELLI F., PA1748, PA1779, PA3436
GONNELLI S., PA1747
GONSALVES A., OA4872
GONSALVES A., PA1941
GONSKA T., PA3375
GONSKI S., PA5233
GONZAGUE D., PA611
GONZALES J., OA3190
GONZÁLES VARGAS S., PA4029
GONZALEZ A., PA1113
GONZÁLEZ B., PA5261
GONZALEZ E., OA4953
GONZALEZ H., PA5237
GONZALEZ J., PA2433
GONZÁLEZ J., PA372, PA2326, PA3409, PA4583, PA5109, PA5244, PA5248
GONZALEZ M., PA5285
GONZALEZ M., PA439
GONZALEZ M., PA1273
GONZÁLEZ R., PA1633
GONZALEZ R., PA5108
GONZÁLEZ S., PA4089
GONZÁLEZ ÁLVAREZ L., PA3381
GONZALEZ ANAYA J., PA3540, PA4480
GONZALEZ BARCALA F., PA4106, PA5362
GONZÁLEZ CABO P., PA3916
GONZALEZ CASTRO S., PA3012
GONZÁLEZ DONIZ L., PA4518, PA4519
GONZÁLEZ FLORIDO N., PA1341, PA2411
GONZALEZ GUTIERREZ J., OA788
GONZÁLEZ HERNÁNDEZ A., PA577
GONZÁLEZ IGLESIAS M., OA783
GONZÁLEZ ISLAS D., PA3306, PA3307, PA5069
GONZÁLEZ MONTÁÑEZ C., PA4518, PA4519
GONZÁLEZ MUÑOZ I., PA2868, PA3890, PA4707, PA5309
GONZALEZ QUEREDA L., OA3144
GONZALEZ QUERO B., PA2868, PA3890, PA3951, PA5124
GONZÁLEZ REVILLA E., PA4026
GONZALEZ RIBEIRO M., PA2214
GONZÁLEZ SIERRA M., PA3617
GONZALEZ GARCIA J., PA5174
GONZÁLEZ-BARCALA

F., PA1924, PA3822, OA4301
GONZALEZ-CARRANZA S., PA3043
GONZÁLEZ-DÁVILA E., PA2976, PA4719
GONZÁLEZ-FERNÁNDEZ C., PA4106, OA4301
GONZÁLEZ-FERNÁNDEZ J., PA1823
GONZÁLEZ-FRECHINA M., PA3919
GONZÁLEZ-GAY M., PA1237, PA2321
GONZÁLEZ-GAY MANTECÓN M., PA1140
GONZALEZ-ISLAS D., PA3302, PA3305, PA3312
GONZÁLEZ-PACHECO N., PA2131
GONZÁLEZ-VERGARA D., PA1683
GONZALO P., PA3479
GOOBIE G., OA1430
GOODACRE R., PA2962, PA2963
GOODALL E., PA3024
GOODALL E., PA4688
GOODLAD M., PA2885
GOODLEY P., PA3313
GOODWIN A., OA4857
GOORSENBERG A., OA4855
GOOS T., PA1716, PA3775, OA4343, PA5159, PA5295
GOOSENS M., PA1579
GOOSSENS E., PA2092
GOOSSENS R., PA2896
GOPALAKRISHNAN R., PA3045
GOPALAN D., OA745, PA1767
GÖRANSSON M., PA1248
GORDILLO VALDÉS E., OA2590
GORDJUSHINA V., PA289
GORDO J., PA1035
GORDON C., PA1046
GORE M., PA2139
GORE R., PA517
GÖREK DILEKTAŞLI A., PA1081, PA1083, PA4515
GORENJAK M., OA1437, PA2745, PA2748
GORET J., PA3838
GORGOULIS V., PA2331
GORGUN I., PA5007, PA5008
GORI L., PA478, OA4321, PA4590
GORINI A., PA3771
GORLANOVA O., OA1443, OA4940, OA4941, PA5026
GOROL O., PA1222, PA1335, PA1811, PA2272
GOROS M., OA2583
GORSUCH T., OA864
GORT-PANIELLO C., OA788, PA2326, PA3409, PA4583, PA5109, PA5244, PA5248
GOSBEE J., PA1761
GOSENS R., PA1260, OA2625, OA2629, PA2984, PA2991, OA4300
GOSLIGA D., PA1855
GOSS J., PA608
GOSSAGE E., PA2389
GOSSELINK R., OA2615, PA3388, PA3389, OA4223
GOTERA C., PA494, PA495, PA1242
GOTERI G., PA1779, PA3436
GOTE-SCHNIERING J., OA772, OA1569, OA2624, OA2626
GOTHARD P., PA2169
GOTOWIEC M., OA862
GOTTLIEB D., OA3286
GOTTLIEB J., PA3369, OA4245
GOTTS N., PA2962
GOUDA HASSANEIN E., PA1826
GOUDER C., PA4710
GOULART C., PA1179, PA2261, PA4141, PA4516
GOULAS A., PA4761, PA4764, PA5196, PA5198, PA5200
GOULIAEV A., PA1125, OA3268
GOUMANS M., PA5189
GOUMANS M., PA445
GOUNAND V., PA427
GOUNARIDI M., PA1188
GOUNOPOULOS P., PA499
GOUPIL F., PA581, OA3285
GOUPOU K., PA1100
GOUR K., PA2184
GOURDOU-LATYSZENOK V., OA4832
GOURGOULIANIS K., PA3586
GOURGOULIANNIS K., PA1844, PA2966, PA3437
GOURLAY J., PA3434
GOUSSARD P., PA2801
GOUTAKI M., PA491, PA2763, PA2764, PA2765, PA2766, PA2767, PA2768, PA2769, PA3386
GOUVEIA N., PA306
GOUVEIA CARDOSO C., OA854
GOUZI F., PA606, PA1804
GOVONI M., PA1293, OA3158
GOZAL D., PA1269
GOZZI F., PA1213, PA3461
GRABCZAK E., PA4437
GRABCZAK E., PA3038
GRÄBER S., PA1861
GRABY J., PA3504
GRACIA HERNÁNDEZ B., PA577
GRACIA-LAVEDAN E., PA372, OA3290, OA3292
GRADY D., PA2839
GRAETER S., PA2703, OA3147
GRAFF S., PA1934
GRAFFEN S., PA3439
GRAFINO M., PA2899
GRAH C., OA2593, OA2595, PA3046
GRAHAM E., PA4724
GRAHAM J., PA2846
GRAHAM L., PA1736
GRAHAM P., PA2702, PA2970
GRAINGE C., OA4852, OA4853
GRAINGER J., OA4214
GRÄLER M., PA5130
GRAMEGNA A., PA399, OA1464, OA1540, PA2148, PA2171, PA3774
GRAMENOU M., PA4572
GRAMMATOPOULOU E., PA1043, PA4606
GRAMMATOPOULOU I., PA3421
GRAMMENIATIS V., PA3925
GRANADOS G., PA2371, PA3920, PA4398
GRANADOS MARTÍN M., PA2791
GRANADOS ROSALES G., PA1161
GRANADOS SANTIAGO M., PA364, PA1658, PA1669
GRANADOS-SANTIAGO M., PA2239
GRANATO E., PA554, PA1852, PA2343
GRANDI T., PA1819
GRANELL R., OA886, OA1441, PA3674
GRANIER G., PA2299
GRANSAR T., PA459
GRANT L., PA318
GRANT R., PA1850
GRANT-ORSER A., OA1430, PA4055
GRANUM B., OA882
GRAPSA D., PA1699
GRASEMANN H., PA3378, PA4996
GRASL M., PA4146
GRASPEUNTNER S., PA4412
GRASSELLI G., PA1213, PA3366, PA3367
GRASSI G., PA585
GRASSIN DELYLE S., OA2486, OA3145, PA3377, PA5274
GRASSION L., PA4616
GRASSO S., PA1213
GRAU V., OA4957
GRAVE A., OA4311
GRAVE A., PA360, PA362, PA1037, OA4316
GRAVER PETERSEN A., OA4202
GRAVIER F., PA4980
GRAVIER F., PA502, PA1212, PA1214, PA1219
GRAVISS E., PA3960
GRAY D., OA1547
GRAY E., PA4663
GRAY J., PA4562
GRAY J., OA3170
GRAY L., PA1630
GRAYSON M., PA1625
GRAZIANI E., PA4096, PA4110, PA4128
GRAZIANI L., PA4590
GRAZULEVICIENE R., OA882
GRDOSIC J., PA4452
GREALIS K., OA4953
GREAVES C., PA954
GREB D., PA2197, PA3017, PA4569, PA4740, PA5152
GREBENYUK A., OA786
GRECO N., OA3255
GRECU V., PA2714
GREEN B., PA1846
GREEN C., PA3467
GREEN D., PA2905, PA4699
GREEN H., PA4024
GREENBERG D., OA2490
GREENE C., PA1865
GREENE G., PA2982
GREENHAFF P., OA3256
GREENHAFF P., PA1181, PA1797, PA2681
GREENHALF W., PA4070
GREENING N., OA2498, PA3772, PA4985, PA5347
GREENING N., PA1181, PA1292, PA1797, PA2681, OA3254
GREENLAW N., PA546
GREENOUGH A., PA2135
GREGERSEN N., PA1673, PA2788
GREGOIRE KRIKORIAN B., PA5281
GREGSHAMMER B., PA4979
GREIFFO F., PA3937
GRENET D., OA3145
GRENZBACH C., PA5372
GRESHAM D., PA2331
GRESS C., PA2325
GREULICH T., PA2377, OA4333
GRICKSCHAT V., PA2376
GRIECO D., PA2310
GRIESE M., PA424, PA1146, OA2507, OA3275, PA4460
GRIFF S., PA3924, PA3931, PA5252
GRIFFIN P., PA1843
GRIFFITHS A., PA3434
GRIFFITHS C., PA3658, PA5284
GRIFFITHS C., OA889
GRIFFITHS D., PA4584
GRIFFON L., PA2102, PA2106
GRIGG J., PA1104, PA1624, PA1628, PA1634, PA1635, PA4460, PA5372
GRIGOLETTO I., PA3396, PA4527
GRIGORATOU T., PA3420, PA4581
GRIGORIOU I., PA1873
GRIGOROPOULOS I., PA1687
GRILLET P., PA606
GRIMBALDESTON M., OA2498
GRIMBALDESTON M., PA1291
GRIME C., PA2749
GRIMES I., PA404
GRIMM M., PA2996
GRIMWOOD K., PA4460
GRISE L., PA3864
GRISI C., PA2894
GRISOSTOMI G., PA1149, PA3847
GRIST J., PA1180, OA4857, OA4952
GRIST J., OA4957
GRITSIYK I., PA3871
GRIZE L., PA1786, PA2820, PA4761, PA4764, OA4862, PA5196, PA5198, PA5200, PA5227, PA5293
GROARKE E., PA3941
GROBE T., PA3581
GROBS Y., PA441, PA449, PA453, PA458
GROEN H., PA1079
GROEN H., PA3885
GROENE S., PA2126
GROENEN M., OA4225
GROENIER M., PA482
GROEPENHOFF H., PA4510, PA4634
GROGONO D., PA2839, PA2853
GRONGSTAD A., PA5064
GRONHAUG L., OA4878
GRONROOS N., PA4122
GRONSKI M., OA1560
GROS P., PA5281
GROS P., PA4471
GROSBOIS J., PA4980
GROSBOIS J., PA966
GROŠELJ A., PA4982
GROSSI S., PA2718, PA4741
GROSSO M., PA1725
GROSU-CREANGĂ I., PA2809
GROTE L., OA3294, PA3762, OA4837, OA4839, OA4842, OA4843, OA4844
GROUP P., OA4322
GROUTTEAU S., OA4324
GROVES A., PA2920
GROVES A., PA4008
GRUBER A., PA4669
GRUBER A., PA1098
GRUBWIESER P., PA532
GRUEST M., PA1804
GRUET M., PA1810, PA4631
GRUNEWALD J., PA2220
GRÜNEWALDT A., PA1171
GRÜNIG E., PA454, PA1196, PA1774
GRUSON D., OA789
GRUTTERS J., PA1718, PA1719
GRUZIEVA O., PA1606, OA2518, OA2519
GRYNBLAT J., OA3160
GSCHWENDTNER S., PA3358
GU C., PA3663, PA4136
GU H., PA2974
GU H., OA1412
GU K., PA4536, PA5271

GUAN N., PA5340
GUAN W., PA2836
GUARINO M., PA1229
GUARNIERI G., PA1019
GUASCONI A., PA2388, PA2391
GUAY C., PA1326
GUBER E., PA464, PA470
GUDJONSSON T., PA2965
GUDMUNDSSON G., PA548
GUDUMAC E., PA1645
GUDUR S., PA3918
GUÉANT J., PA5251
GUEANT-RODRIGUEZ R., PA5251
GUECAMBURU M., PA4616
GUEDES BALDI B., PA413
GUEDIRI N., PA4569
GUEDRI N., PA2197
GUÉGAN M., PA2245
GÜELL M., PA5155
GUELLATI O., PA2408
GUELLERIN M., OA3288
GUENAT O., PA3321
GUENDAOUI S., PA2873
GUENTHER A., PA429, PA555, PA2369, PA3939
GUENZLER V., PA2996
GUERASSIMOVA I., PA1816
GUERASSIMOVA I., PA3595
GUERRA A., PA618
GUERRA C., PA3568
GUERRA I., PA522
GUERRA S., OA4964
GUERRA AZEVEDO I., PA3506, PA3507
GUERRA CHAVES QUIRINO P., PA3061
GUERRACHE A., OA3288
GUERREIRO I., PA4632
GUERREIRO M., PA3856
GUERRERO C., PA1713
GUERRERO ZAMORA P., PA2243
GUERRIERI M., PA2221, PA2305
GUERVILLY C., PA2299
GUEZGUEZ F., PA3317, PA3991, PA3992, PA4455
GUGLIANDOLO P., PA4505
GUIBERT N., PA427, PA463, PA4612
GUIDA G., PA975, PA2180, PA2224, PA4733, PA4736, PA4739, PA5160
GUIDDIR T., PA420
GUIDET B., PA1678
GUIDO M., PA4486
GUIDUCCI S., PA3469
GUIGNABERT C., PA443
GUILBERT T., PA1634, PA1635, PA2090
GUILBERT T., PA2091
GUILLARD T., PA1099
GUILLAUME M., OA1526
GUILLEMINAULT L., OA1421, OA4318, PA4419, PA4432
GUILLIEN A., PA656, OA882, OA4955
GUILLO S., PA4114
GUILLO-SALEH H., PA4441
GUILLOT L., PA5006
GUILLOT S., PA1148
GUILLOT-DUDORET S., PA3465
GUILMIN P., PA3948
GUIMARÃES C., PA3309
GUIMARÃES F., PA2813
GUIMARÃES M., PA2270
GUIMARÃES N., PA1225
GUIMARÃES S., PA410, OA854, PA1164, OA1449, OA1451, PA2214, PA2919
GUINTO E., PA3411
GUIOT J., OA853, PA1134, OA1452, PA2354, PA2915, PA2918
GUISSARD F., PA989, PA1934, OA3151
GUITART M., PA5202
GUKHOOL K., PA3026
GUL K., PA511
GÜL S., PA4591
GUL JANAN H., PA290
GÜLEN F., OA2505
GULER R., OA861, PA5087
GULER S., OA747, OA1430
GULERIA R., PA615
GULIEVA A., PA2107, PA3374, PA4465, PA5003, PA5007, PA5008
GÜLLÜ Y., PA3451
GULSVIK A., PA1962
GÜLTEKIN B., PA3343
GUMENIUK G., PA4552
GUMENIUK G., PA295, PA1746, PA3531, PA3650, PA4552, PA4564
GUMENIUK M., PA295, PA3531, PA3650, PA4564
GUNARATNAM C., PA650, OA3146, PA3310
GUNASEKERA K., PA1021
GUNAWARDENA T., PA3375
GUNDAY Ç., PA4986
GÜNDÜZ KARAYAZI D., PA1902
GUNER M., PA3333, OA4232
GUNES-YALCIN E., PA5045
GUNGOR M., PA1610
GÜNGÖRDÜ N., PA3343, PA3356
GUNNARSSON R., PA3476
GÜNTHER A., PA3486, PA3493
GUNTHER G., OA861, PA5087
GÜNTHER S., PA1804
GUNZ H., PA3965
GÜNZLER V., OA4845
GUO A., PA1265
GUO B., PA1141, PA3410
GUO C., PA2074
GUO H., PA2259
GUO H., PA1827
GUO J., PA4144
GUO N., PA1866
GUO R., OA786
GUO S., PA3441, PA5140
GUO X., OA1445
GUO Z., OA4215
GUO Z., PA4069
GUPTA A., PA3893
GUPTA A., PA2852
GUPTA A., PA5311
GUPTA A., PA2090, PA5355
GUPTA D., PA1324
GUPTA G., PA2713
GUPTA M., PA3028
GUPTA N., PA5222
GUPTA N., PA2292
GUPTA N., PA5339
GUPTA P., OA4876
GUPTA R., PA3637, PA4747
GUPTA R., PA1785
GUPTA R., OA1562, PA1821
GUPTA R., PA3488
GUPTA S., PA2893
GUR M., OA1542
GURBANOVA E., PA2803
GÜRCAN E., PA1248
GURDAIN S., PA1943
GURRAGCHAA O., PA2419
GURSES H., PA344, PA348, PA354
GURYEV V., OA1523, PA5203
GUSHUE C., OA1541, PA3370
GUSTAFSSON L., PA1180
GUT GOBERT C., PA463
GUTBIER B., PA4051
GUTH K., OA3278
GUTIERREZ M., PA3428
GUTIÉRREZ ANGUITA J., PA3008
GUTIERREZ CLAVERIA M., OA872
GUTIÉRREZ ROUCO M., PA3008
GUTIÉRREZ-ARIAS R., PA347, PA3568
GUTIERREZ-RODRIGUES F., PA3941
GUTIERREZ-RODRIGUEZ Y., OA3282
GUTTMAN B., PA5014
GUTTMANN-DUCKE C., PA1738
GUY L., PA419
GUY M., PA2294, OA4856
GUY T., PA3780
GUYARD A., PA1153
GUYATT G., PA1925, PA1927, PA3033, PA3036
GUZEL N., PA4528
GÜZELKAŞ I., PA1644, PA1878, PA2771, PA3322, PA4462
GUZMÁN ANSADO E., PA3323, PA5135
GUZMAN-BANZON A., PA3872
GUZONJIC A., PA3837
GUZZARDELLA A., PA3367
GUZZELONI V., OA3270
GVAZAVA N., PA1854
GWATIMBA A., PA2088, PA2094
GWYNNE K., PA965
GYAWALI S., PA2073
GYERTSON K., OA3266
GYSAN M., PA2212
GYSELINCK I., PA2710, PA3775, PA4689, PA5295

H

H FOY B., PA3556
H MORICE A., PA2876
H NEERINCX A., OA1437
H. CHOTIRMALL S., PA1106
H. FATHY M., PA398
H. FODOR G., PA556
H. VERCOULEN J., OA2612
HA T., PA4506
HA Y., PA645
HAAGSMA A., PA3517, PA4012
HAAK M., PA2126
HAAPAMÄKI M., PA5264
HAARMAN E., OA1545, PA5372
HAARMAN E., PA2765, PA2769
HAAS S., PA454
HABEL M., OA786
HABERTHÜR D., PA3561
HABIB M., PA4599
HABIBECH S., PA2253, PA4565, PA5089, PA5097, PA5112
HABLAS F., PA4013
HABOUBI S., PA583, PA1283
HABOURIA C., PA3629, PA3633, PA3788, PA3877
HABRE W., PA3545, PA3546
HABSHYDZE N., PA2060, PA4043, PA5056
HACCURIA A., PA4111
HACHEM M., PA1230
HACHEM N., PA5354
HACHENI M., PA583
HACHRI H., PA525
HACHRI H H., PA2873
HACHULLA E., PA402, OA746
HACKER A., OA3266
HACKETT T., PA2336, PA2346
HACKETT T., PA1855
HACKNER K., PA2209
HACKSHAW A., OA3266
HADAD Y., PA2928
HADCHOUEL A., PA423, PA426, PA3935
HADCHOUEL DUVERGNE A., PA420
HADDA V., OA896, PA1240
HADDAD N., OA4215
HADDAR A., PA4129, PA4735
HADDEN R., PA1912
HADHUD M., PA3383
HADI F., PA3359
HADJ DAHMANE M., PA336
HADJ TAIEB S., PA983, PA1268
HADJI MITROVA M., PA4717
HADJI-MITROVA M., PA2150, PA2812
HADJISYMEOU-ANDREOU S., PA1649
HADJ-SAID D., PA2070
HADZIC S., PA2369
HAEBERER M., PA4436
HAEFNER V., PA567
HAESEVOETS S., PA969, PA3395
HAFAOUA D., PA4544
HAFEZI S., PA4410
HAFIZ S., PA414
HAFIZI H., PA1021
HAFKEMEYER S., PA2164
HÄFNER F., PA2141
HAFNER T., PA4982
HAGEDOORN P., OA3181
HAGHI M., PA2704
HAGIWARA S., PA1002
HAGL B., PA567
HAGMAN C., PA2120
HAGMEIJER R., PA2420
HAGMEYER L., PA1679, OA4840
HAGUE S., PA404
HAHN A., PA2283
HAHN S., PA2255
HAIDER R., PA1345
HAIDER Y., PA3918
HAIDICH A., PA3324
HAIFA Z., PA2804, PA3316
HAILE S., OA3253
HAIR P., PA608
HAITCHI H., PA4724
HAJDAREVIC S., OA4873
HAJI G., PA1198, PA1767, PA3961, PA5173
HAJI K., PA1300, PA3908
HAJIAN B., PA1177, PA1805, PA2289
HAJMOHAMMADI H., OA889
HAJTAEIB S., PA628
HAKAMI A., PA4392
HÅKANSSON K., PA5013
HÅKANSSON S., PA2130
HAKIZIMANA A., PA2752
HALAI L., PA3650
HALANK M., PA5175
HALAYKO A., PA2134
HALDAR K., PA4675
HALDAR K., PA1291
HALDAR P., OA864
HALDAR P., OA863
HALDAR P., PA2066,

PA2067, PA2071
HALILOVIC A., PA967
HALITIM K., PA2127
HALL G., PA4451, PA4452
HALL H., OA3266
HALL I., OA4857
HALL M., PA2273
HALLAHAN P., PA376
HALLAM C., PA2948
HALLBERG J., PA664, PA1606, PA3674, PA5025, PA5027
HALLDORSDOTTIR B., PA1661
HALLENBERGER T., PA4002
HALLETT T., PA603, PA2824, PA2832
HALLGREN O., PA551
HALLIFAX R., PA4437
HALLIFAX R., OA1561, PA3297, PA3441
HALLIWELL O., PA2913
HALLOULI S., PA5317
HALLOUMI O., PA637
HALLOUMI O., PA287, PA489, PA2412, PA3329, PA5324
HALOUBI T., PA550
HALPIN S., PA5265
HALTER J., PA2922
HALVORSEN B., PA4052
HALVORSEN T., PA4454
HALWANI R., PA4410
HAMADA K., PA1729, PA3447
HAMADA N., PA2887
HAMADA Y., PA4406
HAMADY A., PA5100
HAMALOGLU E., PA3393
HAMBLIN P., PA2817
HAMBLY N., OA1430
HAMDAN A., OA790
HAMDANI M., PA2861
HAMDI B., PA2093, PA2758, PA4461, PA5360, PA5367
HAMDY S., PA4032
HAMED A., PA4032
HAMEED M., PA2161, PA4567, PA5086
HAMELMANN E., PA629, PA635, PA639, PA2090, PA2101, PA3605, PA4708, PA4752
HAMID M., PA3435
HAMID Q., OA4336
HAMILTON G., OA890, PA3631
HAMILTON H., PA1289, PA1290, PA1305, PA3909
HAMILTON J., PA1289, PA1290, PA1305, OA2601, PA3909
HAMILTON O., PA2279, PA2293
HAMILTON R., PA1849
HAMMAD H., OA4213
HAMMAD Z., PA556
HAMMAM I., PA1688
HAMMAMI R., PA3047, PA3059, PA3541
HAMMEDI A., PA2308, PA4023
HAMMER B., PA2212
HAMMER D., PA1282, PA2207
HAMMERL P., OA2593
HÄMMERLING S., OA2507
HAMMERSLEY V., PA4599
HAMOUDA A., OA2628
HAMPSON E., PA4127, PA4723
HAMUTCU ERSU R., PA4442, PA4444
HAMZA S., PA3416
HAMZAOUI A., PA2093, PA2096, PA2758, PA4461, PA5360, PA5367, PA5369
HAN C., PA2405
HAN C., PA1259
HAN D., PA1114, PA4003
HAN D., PA3457
HAN D., PA996
HAN J., PA4584
HAN J., PA3913
HAN K., PA996, PA1025
HAN K., PA5119
HAN L., PA1101
HAN L., PA4701
HAN M., PA5366
HAN M., PA542, PA543
HAN M., OA870
HAN M., PA4139
HAN S., PA1297
HAN S., PA2300
HAN Y., PA1265, PA4400
HANAFI H., PA573
HANAFIN J., PA5323
HANANIA N., PA1308
HANCOCK D., PA1677, PA2725
HANCOCK K., PA3635
HANCOX R., PA548
HAND S., PA3600
HANDA H., PA2059
HANDA T., OA2513, OA3277
HANDOKO-DE MAN F., PA451
HANGAN L., PA3926
HANGÜL M., OA2505, PA5012
HANI Y., PA5356
HANIF H., PA4983
HANIOTOU A., PA3421, PA4606
HANITSCH L., PA436
HANKEY W., PA2762
HANKOVSZKY P., PA1173
HANNAH W., PA2762
HANNAN L., OA3191, PA4651
HANNAN N., OA897
HÄNNI R., PA2117
HANON S., OA4340
HANRAHAN S., PA2853
HANRATTY C., OA1531
HANSBRO P., OA777, PA1091
HANSBRO P., PA1837, PA2818, PA3425
HANSEL N., OA870
HANSEL N., PA4139
HANSEL T., PA2223
HANSEN A., OA2500
HANSEN C., OA3185
HANSEN E., PA2947
HANSEN E., PA5371
HANSEN G., OA875, OA2508
HANSEN H., OA4315
HANSEN K., PA5371
HANSEN M., PA3828
HANSEN S., PA1949
HANSEN T., PA2872
HANSLOT M., PA522
HANSSENS L., OA1435
HANSSON A., PA1604
HANSSON M., PA2337
HANTOS Z., OA874, OA1547, PA3678
HANTOUS S., PA342
HAO H., PA1914, PA4409
HAOUICHAT H., PA1942, PA5276
HAPPAERTS M., PA2170
HAQ A., PA2062
HAQUE A., PA4395
HARA E., PA3908
HARA H., OA4299, PA5238
HARADA E., PA2887
HARADA H., PA644
HARADA N., PA1585
HARADA T., PA2887
HARAHULIA H., PA283
HARANAGA S., PA5132
HARARI S., PA1725, OA3274
HARASHCHENKO T., PA2332
HARBAUM L., PA1769, PA3972
HARBOE Z., PA4703
HARDAKAR L., PA4500
HARDAKER L., OA757, PA2260, OA4954
HARDAVELLA G., PA327, PA334, PA2859, PA3879, PA4592, PA5147
HARDCASTLE S., PA1757
HARDER A., PA4427
HARDER E., PA3973
HARDIKAR A., PA2336
HARDIN M., PA3607, PA3618, PA5290
HARDMAN T., OA1531
HÅRDSTEDT M., PA612, PA1028
HARDY J., PA3604
HARDY L., OA3159, PA5188
HARDY M., PA2423, PA3653
HARE A., PA1879
HARGADON B., PA4675
HARGRAVE K., PA1094
HARKER E., PA1583
HARKER J., PA4671
HARKÓ T., OA4854
HARKUSHA V., PA5319, PA5320
HARLANDER M., PA976
HARLEY J., PA1190, PA3966, PA3969
HARMAN K., OA1552
HARMANCI K., PA5012
HARNEDY F., PA1582, PA2401
HARNER S., OA1437, PA2745, PA2748
HAROON S., OA765, PA1623, PA3569, OA4335, PA4600, PA5340, PA5343
HARPER A., PA3622, PA3680
HARPER H., PA2749
HARPER S., PA2746
HARRIES T., PA548
HARRINGTON J., PA4006
HARRIS A., PA2746, PA2761, PA2765
HARRIS A., PA2730
HARRIS C., PA2970
HARRIS D., OA2581
HARRISON E., OA4325
HARRISON L., PA2094
HARRISON T., PA1904, PA3792, PA4742, PA5292
HARRISON T., OA754
HARRISON T., OA1531
HARSTON G., OA850, OA855
HART J., PA3857, OA4860
HART N., PA1807, PA2940, PA2942, PA3757, PA5038
HART S., PA404, PA2972
HART S., OA2587
HART-BROWN L., PA3800
HARTH V., PA3799
HARTL S., PA308, PA320, PA647, PA1910, PA2394, PA2425, PA3670, PA3673, PA3782, PA4146, OA4236, PA4422
HARTLEY J., PA2151
HARTMAN J., OA1525, PA3999, PA4613
HARTMAN J., PA319, OA2596, OA3252, PA3543, PA4611, PA4614, PA5203
HARTMANN J., PA4478
HARTUNG J., OA2581
HARUKI K., PA4756
HARUTYUNOVA S., PA454
HARVEY E., OA4302
HARVEY J., PA534, PA3509
HARVEY J., PA3298
HARVEY J., PA1890, PA4711, PA4712
HARVEY L., PA1911, OA2609
HARVEY-DUNSTAN T., PA3772, PA4985
HARWOOD L., PA1649
HASABELGAVI L., PA5356
HASALA H., PA3458
HASAN S., PA963
HASEGAWA K., PA5017
HASEGAWA N., PA2163, PA2852
HASEGAWA T., PA2705
HASEGAWA Y., OA1424
HASHIMOTO K., PA2392
HASHIMOTO M., PA3859, PA3891
HASHIMOTO N., PA434, PA1236, OA1424
HASHIMOTO S., PA976, OA1437, PA2084, PA2745, PA2748
HASHIOKA H., PA2830
HASHMI S., OA2583
HASKARD D., PA1334, PA1336
HASPEL J., OA2490
HASSAN A., PA4713
HASSAN A., OA2620, PA5042
HASSAN M., PA1825, PA5085
HASSAN M., PA2163
HASSEN H., PA4569, PA5152
HASSEN I., OA4323
HASSENE H., PA2197, PA3017, PA3833, PA4740
HASSIBI S., PA1294, PA4046, OA4963
HASSOUN D., PA2975
HATA H., PA3859
HATABU H., PA1723
HATAJI O., PA2898
HATATA E., PA2921
HATEM O., OA864, PA1051, PA2223
HATTER L., PA1893, PA2386
HATZ R., OA1569, PA1851, OA2626
HATZIAGOROU E., PA490, PA2150, PA4997, PA5002
HATZIMITROVA M., PA4709
HATZOGLOU C., PA1844, PA2966, PA3437
HAU I., PA2127
HAUBOLD J., PA1131, OA4332
HAUCK A., PA5316
HAUG G., PA2336, PA2346, PA4066
HAUKELAND PARKER S., OA4833
HAUKELAND-PARKER S., PA3397
HAUSDORFF J., PA1595
HAUSDORFF J., OA3185
HAUSER J., PA1196
HAUSER T., PA1903
HÄUSLER H., PA4656
HAVADTŐI B., PA3611
HAVELOCK T., PA2345, PA2897
HAVLIN J., PA3362
HAVLUCU E., PA5344
HAVLUCU Y., PA4379
HAVRYSH L., PA283
HAWARI M., PA332
HAWCUTT D., PA1621
HAWCUTT D., PA5370
HAWKINS N., PA3013
HAWORTH C., PA1071
HAWORTH C., PA381, PA385, PA397, OA1457, OA1458, OA1462, OA1463, PA2340, PA2342, PA2843, PA2849
HAWORTH C., PA1074, PA1086, OA1461, PA2168, OA4320
HAYASHI M., PA4667
HAYES S., PA2389
HAYN I., PA2765
HAYOT M., PA1804

HAYTON C., PA4381
HAYWARD G., PA1596
HAYWARD S., OA862
HAZAN G., OA1542, OA2490
HAZAN I., OA1542, PA2729
HAZAN I., PA2095
HAZELETT B., OA2599
HAZENBERG P., OA4863
HBAIEB Y., PA3059
HBIBECH S., PA5078
HE B., PA3592
HE D., PA1135
HE J., PA5076
HE J., PA1061
HE J., PA4435
HE M., PA3905
HE S., PA1606
HE Z., PA1653
HEALEY A., PA1733
HEALEY C., PA3044
HEALY L., PA973, PA3642, PA3652
HEANEY L., OA1528, OA1531, PA4675
HEANEY L., PA1858, PA2397, PA3032, PA4722
HEANEY L., PA1891, PA1892, PA1894, PA1897
HEARN H., PA576
HEARNE R., PA2292
HEATH D., PA1170
HEATLEY H., PA1319
HEBBINK R., PA2420
HEBISAWA A., OA2513
HEĆIMOVIĆ A., PA416, PA1701
HECKER J., OA2497
HECTOR A., PA4460
HEDHLI A., PA628, PA983, PA1268, PA1315, PA1964, PA2264
HEDHLI H., PA302, PA2254
HEDLUND M., PA356
HEDMAN A., OA1437
HEDMAN A., PA2748
HEDMAN K., PA1189, PA4646
HEDMAN L., PA363, PA655, OA888, PA1958, PA2064, PA2072, PA2075, OA2515, OA3167, PA3328, PA4431
HEDNER J., OA4837, OA4839, OA4843, OA4844
HEDNER* J., OA4842
HÉDON C., PA1804
HEDRICH C., OA4962
HEDSTRÖM U., PA3914
HEDSUND C., PA2947
HEDTRICH S., PA1098
HEEB P., PA3483
HEEDERIK D., PA309
HEEDERIK D., PA1609
HEEDERIK D., PA1605
HEENEY R., PA613, PA650, PA3310
HEENEY R., OA3146
HEERFORDT C., PA4703
HEFFLER E., PA1891, PA1892, PA1894, PA1897, PA3053
HEFFLER E., PA3792, PA5290
HEFNAWY A., PA2187
HEGELUND M., PA5128
HEGEWALD M., PA3677, PA3990
HEGGDAL K., OA3166
HEGGE J., PA1290, PA1305, PA3909
HEGNER P., PA3001
HEIBATI B., PA1607
HEIGHTMAN M., PA517, PA3851
HEIJINK I., PA1267, OA1525
HEIJINK I., PA1855, PA2360
HEIJNEN I., PA4761, PA4764
HEIJTING I., PA2739
HEIKKILÄ P., PA2750
HEILI-FRADES ZIMMERMANN S., PA1221
HEIN HEGELUND M., PA1806
HEINE H., OA4965
HEINEMANN A., PA2359, PA2992
HEINEN F., PA2141
HEINRICH J., PA1598, OA2522
HEINSON A., PA2345
HEINZER R., PA1799, PA5270
HEINZERLING L., PA1711
HEIRWEGH E., OA1559
HEKKING P., PA3612
HEL[ER N., PA5041
HELBO SKAARUP S., PA1828
HELD J., PA3876, PA4679
HELFENSTEIN E., PA3483
HELGA THORARINSDOTTIR E., PA1281
HELLEDAY R., PA2416
HELLEMONS M., PA495
HELLGREN J., PA3624
HELLINCKX J., PA2092
HELLSTEN Y., PA4478
HELLSTRÖM WESTAS L., PA2130
HELM E., OA4830
HELM J., PA3472
HÉLUAIN V., PA4612
HELYES Z., PA2364
HEMMERLING M., PA3914
HEMMRICH-STANISAK G., PA1243
HEMY N., PA2140, PA4451, PA4452, PA4453
HEN LIM R., PA1596
HENDERSON L., PA2071
HENDERSON M., OA1527
HENDREN A., PA1869
HENDRICK A., PA2190
HENDRICKX R., PA3045
HENDRIKS J., PA2366
HENDRIKS J., PA2896
HENDRIKS L., PA3884
HENDRIKS L., PA1705, PA3885
HENDRIKS R., PA3783
HENDRIKS S., OA4829
HENGSTSCHLÄGER M., PA4056
HENKET M., OA853, PA1134, OA1452, PA1934, PA2354, PA2915, PA2918
HENNEBERGER P., PA3342
HENNEGRAVE F., PA4648
HENNEKE I., PA2369
HENNIG V., PA3552
HENNIGS J., PA3972
HENNY J., PA2077, PA4430
HENQUET M., PA989
HENRIKSEN M., PA2872
HENRIQUE VASCONCELOS ALVES L., PA2257
HENRIQUES M., PA1225
HENROT P., OA900, PA2216, OA4243, PA4616
HENRY A., PA2829
HENRY C., PA5225
HENSVOLD A., PA2337
HENTENAAR I., OA4215
HENZI N., PA3483
HEO E., PA3626
HEO J., PA1297
HEO S., PA1085
HEO Y., PA549, PA1297
HEPWORTH C., PA2749
HER C., OA899
HERANCE J., PA3840
HERAUD F., PA3635
HERAUD N., PA518, PA952, OA4875
HERBAN S., OA2492
HERBERT J., PA4051
HERCBERG S., PA3340
HEREDIA CIURÓ A., PA365, PA377, PA1658, PA2238, PA2239
HERMANN J., OA2506
HERMANS F., PA355, PA361, PA969, PA1033, PA3395, OA4309
HERMANS G., PA3388, PA3389, PA4555
HERMIDA VALVERDE T., PA3057
HERNÁNDEZ A., PA1041
HERNÁNDEZ C., OA3174
HERNANDEZ F., OA4196
HERNANDEZ G., PA5246
HERNANDEZ G., PA1041
HERNANDEZ I., PA3013
HERNANDEZ J., PA5208
HERNANDEZ R., PA3784
HERNÁNDEZ ARGUDO M., PA3922
HERNÁNDEZ BIETTE A., PA526
HERNÁNDEZ GARCÍA V., PA411
HERNANDEZ GONZALES F., PA3491
HERNÁNDEZ GONZÁLEZ A., PA1808
HERNÁNDEZ GONZÁLEZ F., PA1734, PA1740
HERNANDEZ GONZALEZ F., PA1157
HERNANDEZ GUILLAMET G., PA526
HERNÁNDEZ HERNÁNDEZ M., PA411
HERNÁNDEZ HERNÁNDEZ S., PA364, PA365, PA377, PA1658, PA1669
HERNANDEZ LOPEZ B., PA2683, PA2693
HERNÁNDEZ LÓPEZ N., PA3305, PA3306, PA3307, PA3826, PA3829, PA3831, PA3832, PA5069
HERNÁNDEZ OROPEZA J., PA1772
HERNANDEZ RIZO A., PA2192, PA2194
HERNÁNDEZ SERRANO M., PA1658, PA2238, PA4531
HERNÁNDEZ VOTH A., PA4653
HERNÁNDEZ-GONZÁLEZ F., PA442, PA5154
HERNÁNDEZ-LÓPEZ N., PA3302, PA3312
HERNANDEZ-PACHECO N., PA664, PA3674
HERNÁNDEZ-SERRANO M., PA2239
HERNÁNDEZ-ZENTENO R., PA3305
HERNÁNDEZ-ZENTENO R., PA2330
HERNÁNDEZ-ZENTENO R., PA3848
HERNANDO BENITO G., PA3005
HEROLD R., PA3799
HEROLD S., OA4329
HEROUTOVA M., PA465
HERPEL L., PA1280
HERR C., OA2603
HERRANZ A., PA5154
HERRANZ BLASCO A., PA5174
HERRANZ-DIEZ C., PA5235
HERRE J., PA1775
HERRERA FLORES E., PA4029
HERRERO CORTINA B., PA1077, PA3676
HERRERO-CORTINA B., PA2838, PA4518, PA4519
HERRMANN E., PA1171
HERRMANN F., PA1863
HERRMANN M., PA1786, PA2820, PA5227
HERRON M., PA613, OA3146, PA4677
HERRON M., PA3310
HERSH C., OA2497
HERSHKO T., PA435, PA1137, PA1730, PA2889, PA2928
HERSHMAN M., OA4865
HERTH F., PA2218, PA2230, OA2594, OA2597, OA2598, PA3581, PA4620
HERTH F., OA2592
HERTH F., OA2593
HERTH F., PA4623
HERTH F., PA469, PA485, PA5213
HERTH F., PA486, PA4618
HERTH J., PA1272
HERTZ F., PA2154
HERVÁS MARÍN D., PA2243, OA4831
HERVÉ-CARREGA A., OA4324
HERVIEUX E., PA2129, OA4944
HERZALLAH R., PA2752
HERZIG J., PA582, PA1884, PA2939
HERZOG A., PA420
HESLOP MARSHALL K., PA4981
HESLOP-MARSHALL K., PA2780, OA3170, OA3174
HESPANHOL V., PA2214
HESSAMI Z., PA3327
HESSELBERG L., PA1627
HESSELING A., PA2801
HESSELS L., OA4864, OA4867, PA5118
HESSLINGER C., PA1144, PA1147, OA2584
HESTER K., PA391
HETTICH I., PA3360, PA4479
HETZEL J., PA3515
HETZEL M., OA2593
HEUBEL A., PA4530
HEUDE B., OA882
HEUMOS L., OA1569, OA2626, PA3937
HEUNKS L., OA786
HEUSNER, PHD C., PA4502
HEUSSEL C., OA2592, PA4620
HEUSSEL C., OA2597
HEUSSER E., PA2432
HEUVELMANS M., PA1114, PA4003
HEW M., PA1580, PA1891, PA1892, PA1894, PA1897, PA2078, OA4302
HEWITT J., PA3301
HEWITT R., PA4671
HEYDARI G., PA3327
HEYMAN L., PA2943
HEYNDRICKX E., OA2615
HEYOB K., PA1625
HIBBERT E., PA3591
HICHEM A., PA2804, PA3316
HICKEY F., PA428, OA3168
HICKS A., PA535, OA769
HIDALGO MOLINA A., PA1151
HIDOURI S., PA2861
HIEMSTRA P., OA1573
HIEMSTRA P., PA5209
HIEMSTRA P., PA1866
HIGA F., PA5132
HIGASHIMOTO Y., PA3391, PA3567
HIGBEE D., PA3976
HIGES DIAZ A., PA3446

HIGGS V., PA990, PA5312
HIGHAM A., PA1311, PA3051, PA4065, OA4298, PA4414
HIGHAM J., PA1621
HIGHLAND K., PA2878
HIGMAN J., PA963
HILA E., PA3431
HILADO P., PA3523, PA3524
HILARES VERA J., PA577
HILARIO NASCIMENTO SALDIVA P., OA2489
HILBERG O., PA1325, PA2195, PA2869, PA2872, PA3834, PA4697, PA5290
HILGENDORFF A., PA560, PA1851, PA2141, OA2626
HILL A., PA381, PA397
HILL A., OA1462
HILL C., PA3490
HILL D., OA2497
HILL K., PA603
HILL K., PA5040
HILLAS G., PA623, PA1687, PA2851, PA4709, PA5102
HILLMAN T., PA517, PA3851
HILLS T., PA1893
HILLSON K., PA1641
HILTON A., PA378
HILTON J., PA2427
HILTY M., PA5001, PA5026
HIND D., PA5039
HINDERHOFER K., PA454
HINDRE R., PA1678, PA1739
HINE C., OA878, PA3986, PA3988
HINE J., PA1634, PA3658
HINKS T., PA4063, PA4628, PA4675
HINKS T., PA1858
HION T., PA2959
HIPÓLITO N., PA1031, PA1035
HIRAHARA K., OA4207
HIRAI K., PA2409, PA3666, PA4727
HIRAMA N., OA1453
HIRANI N., PA4059, PA4990
HIRANO T., PA1331, PA1729, PA2410, PA3447, PA4000
HIRANO Y., OA4299
HIRATA A., PA626
HIRATA H., PA2705
HIRATA K., PA5179
HIRECHE K., PA5240
HIRJI A., PA4596
HIROKAWA H., PA5306
HIRONS B., PA1912, PA1919, PA1923
HIROSE VENTURA A., PA5254, PA5255
HIRSCH H., PA2820, PA3864, OA4862
HIRSCHI S., OA3280
HIRST R., PA2762
HISADA T., PA2357
HISHAM R., PA4990
HISINGER-MÖLKÄNEN H., PA530, PA2381, PA2385
HITCHING M., PA2747
HITES M., PA2176
HITZENBICHLER F., OA785
HJEIJ R., PA4465
HJORT J., PA1601, OA2520
HLAVATY A., OA3160
HO B., OA899
HO E., PA3669
HO I., PA3945
HO J., PA3062, PA4594
HO J., PA2088, PA2094
HO L., PA1133, PA1728, OA2491, OA2627, PA2900, PA3928, OA4857
HO M., PA3370
HO P., PA4594
HO R., PA4626
HO S., PA1264
HO S., OA899
HO T., PA2283, PA3835, PA3843, PA3845, PA4125, PA4529
HO V., PA4039
HO Y., PA4080
HO Y., OA868
HO DAC L., PA2116, PA2733
HOANG NGUYEN O., PA600
HOBBS B., OA2497
HOBBS B., OA3146
HOBI N., PA2186, PA3321
HOCHDÖRFER T., OA2495
HOCKE A., PA4051
HODA M., PA2212
HODGDON K., OA752
HODGE S., OA4302
HODGSON S., PA3373
HODIN S., OA3157
HODREA J., PA2364
HODZHEV V., PA2263
HOEBE C., PA3516
HOEFLER T., PA2334
HOEK G., PA1605, OA2521
HOEK R., PA2837
HOEKSTRA R., PA550
HOENING C., PA2166
HOEPER M., OA740, PA4058, OA4245
HOEPER M., PA2276
HOEPER M., OA739, OA744, OA4942
HOESEIN F., PA4571
HOFER M., PA3515, PA4585
HOFF E., OA4839
HOFFMAN E., PA4144
HOFFMAN E., OA870
HOFFMAN E., PA2283, PA4139
HOFFMAN M., OA2617
HOFFMANN H., PA636
HOFFMANN H., PA4749
HOFFMANN M., PA3511
HOFFMANN S., PA5252
HOFFMANN-VOLD A., OA857, PA2914, PA3467, PA3468
HOFFMANN-VOLD A., OA746, PA3466, PA3471, PA3474, PA3476, PA3964
HOFMANN H., PA1882
HOFMANN L., OA4338
HOFMANN M., PA3360
HOFSØ K., OA3166
HOFVING T., PA1301
HÖGER P., PA2218, PA2230
HOGG C., PA1842, PA1843, PA2279, PA2293, PA2760
HOGG J., PA2285, OA4933
HOGG J., OA4934
HOGGARTH G., OA3187
HÖGMAN M., PA612, PA1028
HOGSTRÖM L., PA1849
HOHEISEL A., PA2820
HOHENADEL I., PA5315
HOHLFELD J., PA608
HOHLFELD J., OA744, PA2325, PA2353
HOJO M., PA5080
HOJSAK I., PA1640
HOLBOURN A., PA1115, OA1425
HOLDEN K., PA1621, PA2749, PA5370
HOLDER M., PA3009
HOLDSTOCK L., PA1760
HOLGADO TERRIZA J., PA3805
HOLGATE S., PA1691
HOLGERSEN M., PA2842
HOLGUIN F., PA2990, OA4215
HOLL J., PA1679
HOLLAND A., OA2595, PA3046
HOLLAND A., OA2588
HOLLAUER C., PA567
HOLLIDAY M., PA2386
HOLLINS C., PA1853
HOLLMÉN M., OA2579
HOLLOWAY J., PA1845, PA1950
HOLLOWAY J., PA3674
HOLLOWAY R., PA4683
HOLM A., OA4347
HOLM A., PA3466, PA4489
HOLM M., PA311, PA1598, OA2517, PA4423
HOLMDAHL I., PA1619
HOLMES L., PA4729, PA5304
HOLMSTOCK L., PA4517
HOLST R., OA4833
HOLSTAD A., PA5064
HOLT K., PA3037
HOLTDIRK A., PA629
HOLTZLANDER M., OA1541
HOLUB S., PA610
HOLVERDA S., PA4571, PA4574
HOLWEG C., OA1531
HOLZ O., PA608
HOLZHAUSEN C., PA2290
HOMMA S., PA2877
HOMMA Y., PA3860, PA3862, PA3863
HON P., PA1316
HONDA K., PA626
HONDA N., PA4756
HONEYFORD K., OA1528
HONG J., PA1246
HONG J., PA1286
HONG Y., PA645
HONGJING L., PA2786
HONKOOP P., PA524
HONORATO BORGES JUNIOR L., PA3758
HONORÉ J., PA1317
HOOFT C., OA1535, OA3159, OA4343, OA4346, PA5211, PA5295
HOOI 9., PA2723
HOOL S., PA2765
HOOLE S., OA741
HOOPER-LEE J., PA3510, PA4498
HOOSHIAR KASHANI B., OA1569
HOPKINS P., OA4852, OA4853
HOPKINSON N., PA994, OA4229, PA5224
HOPKINSON N., PA3049
HOPKINSON N., OA3183, OA3185
HOPKINSON N., PA534
HOPKINSON N., PA2268
HOPMANS R., PA1046
HOPPE B., OA1573, OA3263
HOPPE B., PA3539
HOPPENOT D., PA1329, PA1333
HOPPER J., OA890
HORACK M., PA4421, PA4428
HOREV A., PA2095, PA2729
HORGAN L., PA4028
HORN M., PA3994
HORNBERG J., PA2368
HORNDAHL J., PA1849
HORNER D., OA4330
HOROVA P., PA960, PA3400
HORSEY D., OA4945
HORSLEY A., PA4484, PA4492
HORSLEY A., PA1180, OA2491, OA4952
HORST C., OA3266
HORTON K., OA4248
HORTON K., PA1862
HORVAT J., PA1091, PA2818
HORVATH A., PA3608, PA3611, PA4578
HORVATH C., PA1287
HORVATH C., OA3289
HORVATH G., PA296, PA2690, PA3923
HORVÁTH I., PA1226, PA1735, PA2831
HORVÁTH P., PA1282, PA2207
HOSAKA Y., OA4299
HOSCH R., PA1131, OA4332
HÖSCHLER B., PA605, PA4041
HOSHINO T., PA2403, PA2887, PA3063
HOSHINO Y., PA5080
HOSHINO Y., PA633, PA1938
HOSOUNE L., PA4593
HOSP-COVID COLLABORATIVE GROUP P., PA2687, PA2694
HOSSZU A., PA2364
HOSTERMANN D., PA4641
HOSTETTLER K., PA3936, OA4204
HOSTETTLER K., PA2922
HÖTZENECKER K., PA3361, PA5192
HOU C., PA3496
HOU G., OA1426, PA1830, PA3430, PA4040, PA4627
HOU J., PA2836
HOU R., PA4138
HOU X., OA4851
HOUBEN-WILKE S., PA548, PA964, OA4218
HOUCHEN-WOLLOFF L., PA959, PA2056, PA2686, OA3256, OA4224, PA4987
HOUDA R., PA1314, PA1870
HOUDOUIN V., PA420
HOUGHTON C., PA1893
HOUSTON C., OA1536
HOUWELING L., PA4571, PA4574, PA4674
HOV B., OA2621
HOVE K., PA5249
HOVHANNESYAN A., PA2803
HOVLAND V., OA2621
HOWARD D., PA3475, PA3954
HOWARD L., PA1198, PA1767, PA3486, PA3493, PA3961, PA5177, PA5191
HOWARD L., PA1192
HOWARD L., PA5173
HOWARD M., OA3191, PA4651
HOWARTH P., PA552, PA630, PA632, PA646, OA1531, PA1858, PA1895, PA4675, PA4757, PA5354
HOWARTH P., PA2986
HOWELL I., PA1858
HOWELL J., PA579
HOWIE K., PA1913, PA1925, PA1927, PA1931, PA1932, PA3036
HOWIE K., PA1941
HOWIESON E., PA2293
HOWLETT-FOSTER M., OA755
HOXHA M., PA5037
HOXHALLARI A., PA974, PA3598
HOY R., PA2233
HOYER N., PA1143, PA4007, PA4060
HOYLES R., PA1133, PA3928
HOYLES R., PA1728, PA2900
HOYTE F., PA3779
HOZUMI H., PA434, OA1424
HRKAČ S., PA1798, PA1818
HRVOIĆ L., PA3376

HSEIN Y., PA3623
HSIA T., PA2320, PA5141
HSU A., PA1091, PA2818
HSU J., PA5164
HSU Y., PA1781
HSU Y., PA3632
HSUAN C., PA607
HU C., PA1288
HU C., PA5286
HU G., OA2630
HU H., PA1141
HU J., PA4047
HU M., PA431
HU S., PA617, PA3663, PA4136
HU W., PA1274
HU X., OA3163, PA3497
HU X., PA2237
HUA Y., PA1959
HUANG C., OA2587
HUANG C., PA1704
HUANG C., PA1714
HUANG C., OA1414, OA2503, PA4125, PA5294
HUANG C., PA1278, PA5269
HUANG H., PA1138, PA1141, PA1158, PA4385
HUANG H., PA2833
HUANG H., OA867
HUANG J., PA383, PA2827
HUANG J., OA1412, PA1709, PA2217
HUANG J., PA5357
HUANG K., PA1011
HUANG K., PA1937
HUANG M., PA1937
HUANG M., OA1440, OA1532
HUANG R., OA886
HUANG S., PA3363
HUANG S., PA652
HUANG S., OA2620, PA5042
HUANG S., OA1575
HUANG V., PA2182
HUANG W., PA4068
HUANG X., PA2234, PA2235
HUANG X., PA453
HUANG Y., PA4068
HUANG Y., OA1432
HUANG Y., PA3363
HUANG Y., PA2283
HUANG Y., PA1781
HUANG Y., PA3497
HUANG Z., PA469
HUANG Z., PA3836
HUAYANAY L., PA5336, PA5337, PA5338
HUBACEK P., PA3362
HUBBARD R., PA1014
HÜBENER C., PA1851
HUBER B., PA5068
HUBER M., PA1903
HÜBNER R., OA2594, OA2595, PA3046, PA4615
HUCHARD T., PA2945, PA3759
HUEDEPOHL R., PA5190
HUESPE I., PA3540
HUETSCH J., OA2601
HÜGEL C., PA1171
HUGG T., PA1601
HUGG T., PA1607, OA2520
HUGHES C., PA1097, PA1105, OA1456, PA3841, PA3842
HUGHES D., PA5039
HUGHES D., PA523
HUGHES F., PA546
HUGHES J., PA3301, PA3855
HUGHES K., PA4095
HUGHES M., PA3472
HUGHES P., OA757, PA2260, PA4500, OA4857, OA4954
HUGHES R., PA614, OA757, OA1524, PA1928, PA2260, PA3622, PA3630, PA4500, OA4936, OA4954
HUGLI O., OA4829
HUH J., PA3450
HUI D., PA1316
HUI D., PA1780
HUI D., PA1777, PA4031
HUI S., PA3428
HUIJZER-VAN REENEN N., PA4135
HUISMAN M., OA4829
HULL J., PA1919, PA2295, OA2609
HULL J., PA1879
HULL J., PA1912
HULL R., PA1097
HULL R., PA1105, OA1456, OA1463, PA3842
HULLEGIE S., OA4864, OA4867
HULLO E., PA420
HULSTRØM V., OA4859
HUMANN M., PA3342
HUMBERT M., PA4766
HUMBERT M., PA443, PA452, PA495, OA739, PA1193, PA1202, PA1766, OA3160, PA3957, PA5180
HUME E., PA1592, OA3185, PA4981
HUMPHRIES E., PA3045
HUMPHRIES S., PA2280, PA2284, PA3997
HUNG J., PA1714
HUNNINGHAKE G., OA2588
HUNT W., PA2152
HUNTER B., PA4558
HUNTER G., OA1418, PA3032, PA4722
HUNTER L., OA1560
HUNTER S., PA3061, PA4637
HUNTLEY C., PA3348, PA3798
HUNTLEY C., PA404
HUNZINGER N., PA3377
HUPKENS E., PA3959
HUR G., PA3911, PA3912
HURLEY K., PA483, OA1570, PA1865, PA3475, PA3941, PA3954, PA4034
HURLEY P., PA5154
HURST J., PA436, PA1588, PA2397
HURST J., OA1462
HURT K., PA2190
HURTADO J., PA5070
HURTADO P., PA620
HURTADO FUENTES Á., PA4622
HURTADO ORTEGA J., PA3676
HUSEBØ G., PA3449, PA4681
HUSSAIN F., OA2604
HUSSAIN I., PA1345, PA4009
HUSSAIN J., OA1549
HUSSAIN S., PA1728, PA2900
HUSSEIN H., PA987, PA3348
HUSSEIN K., PA4032
HUSSEIN M., PA2161, PA4567, PA5086
HUSSELL T., OA4214
HUSSEY A., PA539, OA768, PA1313, PA1584
HUST STORGAARD L., PA4658, PA4664
HUTCHINS E., PA2273
HUTCHINSON A., PA534
HUTS H., PA4689
HÜTTMANN G., PA2290, PA2989
HUYNH A., PA5294
HUYNH L., PA648
HUZJAN KORUNIĆ R., PA1798, PA1818
HVIDTFELDT M., PA1949, OA4966, OA4968
HVIID-VYFF B., PA4749
HWANG H., PA5216
HWANG J., OA4957
HWANG J., PA493
HWANG P., PA4605
HWANG Y., PA2076
HWANG Y., PA3056
HWE C., PA1187
HWEE J., PA648
HYAMS C., PA4107
HYBA Y., PA2060
HYLAND M., PA951
HYLAND M., PA4732
HYLANDER J., PA4646
HYLDGAARD C., PA5335
HYON Y., PA4506
HYRKÄS-PALMU H., PA3349
HYSENBELLI E., PA3431
HYUN D., PA984
HYUN I., PA5149

I

I ABDEL-AZIZ M., OA1437
IACONE R., OA2623
IACOPINI E., PA5334
IACOTUCCI P., OA1539
IACOVELLI A., PA2315, PA2402, PA4025
IACOVINO M., PA1187
IAMONTI V., PA1794
IANNACCI L., PA5197
IANNUZO N., OA4964
IASONIDOU H., PA3518
IAVORSCHI C., PA2045
IBAD H., PA3870
IBÁÑEZ FONSECA A., PA561
IBÁÑEZ-FONSECA A., PA2955
IBATÁ L., PA2776
IBBETSON A., PA2056, OA4224
IBERL G., PA485
IBN MEJD Y., PA3011
IBRAHIM E., PA4701
IBRAHIM I., PA1688
IBRAHIM K., PA4387
IBRAHIM M., PA5085
IBRAHIM N., PA477, PA3415
IBRAHIM S., PA4410
IBRAHIM W., PA5086
IBRAHIM BAESS A., PA1826
IBRAR K., PA2876
IBSEN R., PA1325, PA2195, PA2872, PA4697
IBTIHEL K., PA1314, PA1870
ICHIKADO K., PA434, OA1424
ICKSAN A., PA3418
ICTHO J., PA4457
IDÄNPÄÄN-HEIKKILÄ J., PA662
IDES K., PA1177, PA1805, PA2103
IDREES S., PA1837, PA2318, PA3425, PA5207
IDRIS E., OA767, PA3613
IDZKO M., PA321, PA629, PA635, PA639, PA647, PA1738, PA2212, PA3605, PA4116, PA4752, PA5122
IDZKO M., PA4708
IELO G., PA2892
IELO N., PA3396
IEMURA H., PA633, PA1938
IEPSEN U., PA4478
IFTIKHAR S., PA1345
IGARASHI M., PA4762
IGAWA M., PA2891
IGBOEKWE E., PA4122
IGLESIAS A., OA1413, PA1840, PA2252, PA5241
IGLESIAS I., PA1194
IGLESIAS R., PA513
IGLESIAS COMA A., PA2319
IGLESIAS COMAS A., PA5282
IGLESIAS-SERRANO I., PA2743
IGNATIEVA V., PA295, PA3531, PA3650, PA4564
IHSAN M., PA1087
IKARI J., PA2281, PA2358
IKARI T., PA5215
IKEDA M., PA1585
IKEDA T., PA1059
IKEYAMA Y., PA1236
IKIN J., PA3810
IKROU H., PA489, PA637, PA2412, PA2811, PA3329, PA5324
IKROU H., PA287
ILAGAN J., PA1694
ILARDO G., PA1616
ILHEM C., PA3048, PA5079
ILIĆ M., PA610, PA3459
ILIEVA N., PA2189
ILKKILIÇ K., PA992
ILLERGÅRD K., PA4420
ILLIFE L., PA2097
ILLIG T., PA4679
ILMARINEN P., PA662, PA2075, OA2496, PA3054, PA3058, PA5278
ILYÉS N., PA3611
IM Y., OA1428
IMABAYASHI T., PA466, OA2591
IMABAYASHI T., PA5137
IMAI R., PA5229
IMAKITA T., PA3891
IMAMOTO T., PA2281
IMAMURA M., PA644
IMAMURA S., PA970
IMBERDIS K., OA4296
IMBERT S., OA789
IMEN G., PA2153
IMERI G., PA2398
IMITAZIONE P., PA2850, PA4580
IMORU Y., PA5326
IMPELLIZZERI P., PA1908
IMRAN M., PA2808, PA4557
IMTIAZ Y., PA3071
IMZIL A., PA287
IMZIL A., PA489, PA2412, PA3329
IMZIL A., PA637, PA5324
IN ´T VEEN J., PA4135
IN 'T VEEN H., PA3783
IN 'T VEEN J., PA3655
IN 'T VEEN J., PA1579
IN 'T VEEN J., OA1427
INAL H., PA4986
INAL INCE D., PA3393, PA3398, PA4535, PA5046, PA5047
INAL-INCE D., PA284, OA2614, OA4307, PA5044, PA5045
INCHINGOLO R., OA752
INES Z., PA1314, PA1870
INÊS COSTA M., PA1817
INFANTINO R., PA2429
ING A., PA2762
INGADOTTIR Þ., PA1661
INGADOTTIR Þ., PA1659
INGELSTEN M., PA1248
INGET M., PA530
INGLE T., PA2839
INGLÉS AZORIN M., PA1881, PA3000
INGLIS S., PA2722
INGOLE J., PA3602, PA5339
INGRAM K., PA963
INGRASSIA E., PA2375, PA4704
INGUANTA R., PA4042
INIESTA GONZÁLEZ S., PA3381

IÑIGUEZ DE HEREDIA MONFORTE P., PA3676
INOUE H., PA3777
INOUE Y., PA434, OA1424, PA2877, OA3277, PA3463
INSALACO G., PA5268
INSALATA G., PA2274
INSEL M., PA1204
INSTALLÉ S., PA2103
INTELANGELO L., PA349
INTIGLIETTA P., PA3760, PA4662
INTOTERO M., PA3528, OA4959
INVESTIGATORS T., PA2815
IOAKEIM F., PA3365
IOAN I., PA1888
IOANNIDOU I., PA2307
IOANNOU M., PA4602
IOANNOU P., PA3385
ION I., PA2924
ION I., PA2925
IONESCU A., PA3434
IONESCU A., PA1595
IONESCU R., PA2924, PA2925
IORILLO I., PA2429, PA5287, PA5288
IOSIFIDIS T., PA2088, PA2094
IOVINE E., PA1647, PA2085, PA2727
IP M., PA3062, PA4594
IPPOLITI L., PA590, PA591, PA3610
IQBAL B., OA1561, PA1827, PA3441, PA5140
IQBAL Z., PA2808, PA4557
IRFAN M., PA1087, PA3870
IRIBERRI PASCUAL M., PA4707
IRIE M., OA2501
IRMAK I., PA5012
IROKAWA M., PA5306
IRUSEN E., PA3888
IRVIN C., PA3673, OA4236
IRVING L., PA1120, PA1121
ISAAC B., PA1067, PA1885, PA4570, PA5104
ISAAC H., PA1016, PA1342, PA3794
ISAAC R., PA318
ISAMAN D., PA4605
ÍSCAR URRUTIA M., PA2426, PA3057
ISHIDA A., PA2059
ISHIDA M., PA626
ISHIDA T., PA1168
ISHIDA T., PA1331, PA4000
ISHII H., PA626, OA3277
ISHII H., PA2887
ISHII M., PA434, PA1236, OA1424
ISHII R., PA633, PA1938
ISHII T., PA1890, PA2392
ISHII Y., PA4399
ISHIKAWA N., OA1424
ISHIOKA Y., PA5162
ISIK Ö., PA4396
ISIKCI B., PA501, PA511, PA3767
ISKANDAR I., PA3797
ISLAM Q., OA1575
ISMAIL A., PA4626
ISMAILA A., PA3024
ISMAILA A., PA1321, PA1328, PA2392, PA2393, PA4122, PA4698
ISMAILA A., PA4688
ISMATULLAH S., OA3187
ISON M., OA4859
ISRAEL E., OA1415
ISRAEL-BIET D., PA3465
ISRAELI-SHANI L., PA387
ISRAËLS J., PA2126
ISSA S., PA4706
ISSHIKI T., PA4072
ISSOP S., PA3044
ITENOV T., PA5341
ITO H., PA3860, PA3862, PA3863
ITO K., PA1294, PA2182, PA4046, OA4963, PA5302
ITO K., PA978
ITO K., PA2898
ITO K., PA5228
ITO R., PA5228
ITO S., OA4299, PA5238
ITO S., PA5215
ITO S., OA898
ITO T., PA3891
ITO Y., PA2362
ITO Y., PA2706
ITO Y., PA978
ITOH Y., PA4673
ITTRICH C., PA1132, PA1146, PA2879
ITURBE FERNÁNDEZ D., PA1140
ITURBE-FERNÁNDEZ D., PA1237
IURLARO A., PA4112
IUS F., OA2508
IVAN F., PA2188, PA2193, PA2196
IVANAGA I., PA1759
IVANES A., PA2046, PA2051
IVANES I., PA2046, PA2051
IVANKOVSKA S., PA3419
IVANOV Y., PA292, PA293, PA4643
IVANOVA V., PA2959
IVANOVA Z., PA292, PA293, PA4643
IVARSSON E., PA1301
IVERSEN B., PA2788
IVKOVIC A., PA3526, PA3527, PA3530, PA3533, PA3534, PA3535
IVKOVIĆ D., PA3526, PA3527, PA3530, PA3533, PA3534, PA3535
IVKOVIC S., PA3526, PA3527, PA3530, PA3533, PA3534, PA3535
IWANAGA T., PA1891, PA1892, PA1894, PA1897
IWANOWSKI P., PA1745
IWASE N., OA898
IWATA M., PA4406
IWATA T., PA3859
IWATSUBO Y., PA3345
IYER V., PA1911
IZAWA H., PA1768, PA1771
IZHAKIAN S., PA2891
IZQUIERDO J., OA4841
IZQUIERDO S., PA2321
IZQUIERDO ALONSO J., PA2707
IZQUIERDO CUERVO S., PA1140
J
J COLLARO A., PA4460
J JACKSON D., OA4970
J SINGH S., PA2907, PA4983
J STROLLO JR P., OA3291
J. A. JANSSEN D., OA2612
J. BERTELSEN R., PA1281, OA2517, PA3335
J. CEULEMANS L., PA5295
J. PARNHAM M., PA599, PA4680
J. SCHULTZ M., PA1211
JAAKKOLA J., PA1601
JAAKKOLA J., PA661, PA1607, OA2520, PA3349
JAAKKOLA M., PA661, PA1601, PA1607, OA2520, PA3349
JABLONSKA J., OA1534
JABRI H., PA5082, PA5317
JABRI H., PA1966
JACINTO A., PA1241
JACINTO T., OA758, PA4499
JACKOWSKA T., PA2726
JACKSON A., PA5289
JACKSON C., PA1862, OA4248
JACKSON C., PA1846
JACKSON D., OA1415, OA1531
JACKSON D., OA1418
JACKSON D., PA1891, PA1892, PA1894, PA1897, PA4109, PA4131
JACKSON G., PA2968
JACKSON K., PA4437
JACKSON L., PA5340
JACKSON N., PA2684
JACKSON R., PA1266
JACKSON S., PA4628
JACOB J., PA436, PA1588, PA1716, PA3467, OA4857, PA5159
JACOB K., PA1180
JACOB S., PA5208
JACOB S., PA5356
JACOB-NARA J., PA4605
JACOB-NARA J., OA1416, PA2090, PA2091, PA2101, PA3607, PA3618, PA5290
JACOB-NARA J., PA4605
JACOBS B., PA1952
JACOBS C., OA1547
JACOBS J., PA4571, PA4574
JACOBS J., PA3468
JACOBS M., OA777
JACOBS S., PA2969
JACOBS JR. D., PA3319
JACOBSEN N., PA492, PA1824
JACOBSON P., PA3023
JACOBY D., OA4949
JÁCOME C., PA488, PA2933, PA2934, PA2936, PA2938, PA4517
JACQUEMIN B., PA1965
JACQUES A., PA5040
JAENSCH L., PA3924
JAFFAR J., PA2346
JAFFUEL D., OA3285
JAFRI A., PA3858
JAGGI T., PA2188, PA2193, PA2196
JAGIRDAR R., PA1844, PA2966, PA3437
JAHJA R., OA4864, OA4867
JAHN A., PA5241
JAHN K., PA1786, PA2820, PA2922, PA3864, PA4617, PA4619, OA4862, PA5227
JAHNZ- RÓŻYK K., OA1450, PA2339
JAHNZ-RÓŻYK K., PA299, PA2222
JAILLET M., PA1230, PA1231
JAIN A., PA1068, PA4543
JAIN K., PA2730
JAIN P., PA1068
JAIS X., PA1193, PA1202, PA1766, OA3160, PA5180
JAISWAL K., PA4649, PA5311
JAJBHAY D., PA3889
JAK P., OA759, PA5058
JAKI L., PA3360
JAKOB J., PA5023
JAKOBSSON J., PA356
JAKOET-BASSIER F., OA861, PA5087
JAKOPOVIĆ M., PA3542
JAKSCH P., PA3361
JAKUBEC P., PA2719, PA3593
JAKUPOVIC I., OA4195
JAKYMELEN D., OA757, PA2260, PA4500, OA4954
JALALEDDINE N., OA4336
JALALI FARAHANI V., PA1612
JALASTO J., OA3167, PA3337
JALEL K., OA4323
JALIL KHAN A., PA4557
JALIL-CONTRERAS Y., PA2136
JAMAL K., PA2808
JAMAL JAMEEL K., PA4763
JAMBON M., OA3170
JAMEL A., PA1185, PA1186
JAMEL A., PA2096, PA5369
JAMES A., OA4302
JAMES C., PA3838, PA5245
JAMES D., PA2746, PA5355
JAMES M., PA4650
JAMES M., OA4951
JAMES P., OA1562
JAMIL R., PA3835
JAMLI S., OA877, PA1174, PA1175, PA3980, PA3982, PA5055
JAMOUSSI B., PA983
JAN S., PA965
JANAHI I., PA5356
JANAUDIS-FERREIRA T., PA1044, PA4488
JANCIAUSKIENE S., PA2344, PA3876, PA4679
JANCIAUSKIENE WALLMARK S., OA1571
JANCOVIC MAKEK M., PA2168
JANDL M., PA635, PA639, PA3605, PA4752
JANDUS P., PA1903
JANELA C., PA2799
JANES S., PA1111, OA3266
JANETTE T., PA5299
JANG A., PA1246
JANG B., PA3300
JANG C., PA2944
JANG H., PA2300
JANG I., PA2695
JANG S., PA5216
JANG S., PA2076
JANISSET L., OA4828
JANKEVICS A., OA772, OA2626
JANKOVIC J., PA610, PA2053
JANKOVIĆ MAKEK M., PA416
JANKOWSKI R., PA4715
JANNAT A., PA4473
JANNOWITZ C., PA4421, PA4428
JANSA P., OA742, PA1196, PA5175
JANSEN D., PA3516
JANSEN M., PA1943
JANSEN S., PA1765
JANSON C., PA4499
JANSON C., PA311, PA548, PA612, PA634, PA1028, OA1530, PA1598, PA1602, PA2381, PA2382, PA2385, OA2517, PA3335, PA3630, PA3786, PA4423, PA4424, PA5028
JANSSEN D., PA320, PA964, PA1050, OA4218, OA4225, PA4422
JANSSEN D., PA2424
JANSSEN E., PA3965
JANSSEN J., PA4437
JANSSEN R., OA2603
JANSSEN S., PA486
JANSSENS A., PA2366, OA3265
JANSSENS E., OA1559, OA3265
JANSSENS H., PA2098
JANSSENS L., OA2615
JANSSENS V., OA1572
JANSSENS W., PA355,

PA359, PA1033, PA2710, PA3483, PA3775, OA4308, OA4309, OA4314, PA4487, PA4555, PA4689, OA4870, OA4872, PA5295
JANSSON C., PA3585, PA5157
JANUÁRIO F., PA1031
JANULAITYTE I., PA2977
JANUS M., PA5014
JANUSKEVICIUS A., PA2977, PA4401
JANUSZEWSKI A., PA480, PA1126
JAO M., PA1224
JARA I., PA4089
JARA ALONSO I., PA3012
JARA PALOMARES L., PA2243, OA4834
JARAND J., PA2802
JARA-PALOMARES L., PA3502, OA4835, PA5181
JARKOVSKY J., PA610
JAROSCH I., OA4217, PA5052
JARREAU P., PA420
JARROLD I., PA534
JARTTI T., PA1634, PA1635
JARVIS F., PA2151
JARVIS H., PA2223
JASMIN J., PA3954
JASON P., PA1183
JASPERS I., PA1600, OA4237
JAUN F., PA4743
JAVAID S., PA2808
JAVAUD N., OA4829
JAVIER CALLEJAS GONZÁLEZ F., PA659, PA1281
JAVORAC J., PA3459
JAYAMAHA A., PA3064
JAYARATNAM A., PA4143
JAYASIMHAN D., OA787
JAZIC I., PA649
JEAGAL E., PA1309
JEANFREAU R., PA4558
JEAN-LOUIS P., PA1279
JEANNERAT D., PA4005
JEANNERET G., PA3493
JEBALI A., PA2758, PA5360
JEBALI M., PA2093, PA5331, PA5367
JEBALI R., PA1741
JEBRAK G., PA1317
JEDIDI N., PA420, PA423
JEE H., PA5366
JEGAL Y., PA2179
JEGARD J., OA4944
JEHN L., PA2883
JEHN L., PA3946
JELASSI W., PA1268, PA3629, PA3633, PA3788
JELAVIĆ M., PA2145
JELIC S., OA3286
JELINČIĆ V., OA4871
JENKINS A., PA2265, OA3261, OA4225
JENKINS C., OA762, PA3522, PA3635, OA4302
JENKINS C., PA965
JENKINS D., OA741, PA5177, PA5191
JENKINS G., OA897, OA1423, PA1722, OA3182, OA4857
JENKINS G., OA2588
JENKINS R., PA1132
JENKINS R., OA858
JENKINS T., PA505, PA508, PA3509
JENNISON T., PA2392
JENSEN A., PA5128
JENSEN C., PA5123
JENSEN D., OA879, PA1032, PA2265, OA3261, PA4642
JENSEN J., PA1295, PA5098
JENSEN J., PA5099
JENSEN J., PA1017
JENSEN J., OA2608, OA4938
JENSEN J., PA1838
JENSEN J., PA2947, PA4703, PA5363
JENSEN K., PA2273
JENSEN K., PA461
JENSEN P., PA2154
JENSEN S., OA4331
JENSEN-FANGEL S., PA5335
JENTZSCH C., OA772
JENTZSCH R., OA1569, OA2624, OA2626
JENY F., PA1739
JEON D., PA4101
JEON J., PA1302, PA3911, PA3912
JEON J., PA2175
JEONG I., PA1080
JEONG M., PA645
JEONG S., PA5165, PA5199
JEONG Y., PA2179
JERBI S., PA330
JEREZ POMBO J., PA4746
JERIDI D., PA2048, PA2407
JERKIC S., OA2507
JERSMANN H., PA4678
JERVAN Ø., PA3397, OA4833
JESKIEWICZ M., PA421
JESPERSEN A., PA4115
JESSEL A., OA3281
JESSEN H., PA1139, PA4060
JESTIN-GUYON N., PA531, PA4432
JESUS F., PA1058, PA1597, PA2716
JESUS PEREIRA J., PA1164
JEVNIKAR M., PA5180
JEYAKUMAR K., PA5038
JEYATHEESAN J., PA2796
JEŽIĆ I., PA1798, PA1818
JGARKAVA M., PA4067
JH VIJVERBERG S., OA1437
JHA M., PA3589
JHENG Y., PA1259
JHUN B., PA2172
JHUNIOR-SOLIS A., PA4576
JI H., PA2405, OA2606
JI W., PA5216
JI Y., PA4425
JI Z., PA988, PA2417, PA3066
JIA C.
JIA J., OA1445, PA1702
JIA L., PA1866
JIA Y., PA2787
JIA Y., OA849
JIANG B., PA1114
JIANG Q., PA3934
JIANG R., PA3497
JIANG W., PA1933
JIANG Y., PA1950
JIHENE B., PA2804, PA3316
JIMENEZ D., OA4829
JIMENEZ J., PA4990
JIMÉNEZ AGUILELLA J., PA1881
JIMÉNEZ CASTRO D., PA1881
JIMENEZ GALLARDO L., PA3306, PA3307, PA3826, PA3831, PA5069
JIMENEZ GALLARDO L., PA3312, PA3832
JIMÉNEZ GARCÍA R., PA3446
JIMÉNEZ LÓPEZ J., PA4622
JIMÉNEZ VALENTÍN A., PA3306, PA3307, PA5069
JIMÉNEZ-FUENTES M., PA1064
JIMÉNEZ-GALLARDO L., PA3302, PA3305
JIMÉNEZ-GÓMEZ G., PA1151
JIMENEZ-MALDONADO L., PA4714
JIMÉNEZ-MARTÍN A., PA4523
JIMÉNEZ-VALENTÍN A., PA3302, PA3305, PA3312
JIN F., PA1700
JIN G., PA2287
JIN L., OA2598
JIN M., PA1933
JIN X., OA4343, PA5295
JIN Y., PA2974
JIN Y., PA2074
JIN Z., PA1257, PA1265
JIN WOO K., PA1707
JINDAL A., PA2071
JINDAL A., PA1648
JINDAL S., PA2071
JING J., PA4071
JINTA T., PA5229
JIRAWAT N., OA3188
JIRHOLT J., PA553, PA1860, PA3914
JISON M., PA1323, PA4130
JO M., PA2695
JO Y., PA2880, PA2884
JOACHIM C., PA5005
JOANNES A., PA559
JOBST R., PA5299
JOCHMANN A., PA4743
JOELSSON J., PA2965
JOENS O., PA4144
JOGDAND P., OA780
JÖGI N., PA659, OA2517
JOGI R., PA1598, OA2517, PA4423, PA4424
JOGLEKAR M., PA2355
JOH J., PA1080
JOHANNE KATRINE STUBSGAARD A., OA2500
JOHANNESSEN A., PA311, PA1598, PA1599, PA1602, PA1611, PA1962, PA2073, PA3072, PA4423
JOHANNESSEN H., PA3397, OA4833
JOHANNSON K., OA2588, PA4055
JOHANNSON K., OA1430
JOHANSEN H., PA2842
JOHANSEN M., PA3425
JOHANSSON H., PA1929, PA4420, PA4423, PA5028
JOHANSSON K., PA2985
JOHANSSON U., OA2632
JOHKOH T., PA401, PA434, OA1424, PA1723
JOHN A., PA404
JOHN N., PA1770
JOHN R., PA1885
JOHN S., PA1842, PA1843
JOHN S., PA1784
JOHN TANG T., PA3869
JOHNS C., PA3490
JOHNS D., OA890
JOHNSEN S., OA887
JOHNSON B., PA500, OA893, PA3562
JOHNSON E., OA1459, PA2340, PA2342
JOHNSON J., PA1732
JOHNSON K., OA893
JOHNSON K., OA4867
JOHNSON K., OA4864
JOHNSON K., OA4857
JOHNSON M., PA1201, PA3956, PA3962, PA5177, PA5191
JOHNSON M., PA4122
JOHNSON M., OA4964
JOHNSON M., PA3403
JOHNSON M., PA958, OA2587, PA4386
JOHNSON S., PA1589
JOHNSON S., PA437
JOHNSTON J., PA3313, PA4381
JOHNSTON K., PA4105
JOHNSTON S., PA2817
JOKSAITE S., PA2392
JOLLEY C., PA1912, PA1919, PA1923, PA3403
JOLY L., OA4829
JOLY O., OA850, OA855
JONAKOWSKI M., PA2322
JONCKHEER T., PA2092
JONCKHEERE C., PA3432
JONES A., PA4529
JONES A., PA396, PA2964
JONES B., PA1123, PA4021
JONES G., PA2190
JONES M., PA2897, OA4197, OA4239
JONES M., PA404
JONES P., PA617, PA3625, PA3663, PA4136, PA4144, PA4145
JONES R., PA3955
JONES R., PA951
JONES S., PA1180
JONES S., OA3182, PA3454, PA3467, PA3468
JONES T., PA2986
JONGEDIJK E., PA4551
JONGEN V., PA2801
JONIGK D., PA3369, PA3936, OA4204
JONIGK D., OA4942
JONIGK D., PA4058, OA4245
JONKER L., PA309
JONKER R., PA4571, PA4574
JONKERS R., OA3283
JÖNS O., PA3625, PA4145
JONSDOTTIR H., PA1659, PA1661
JÖNSSON J., OA780, OA2489, PA4416, PA4417
JONSSON FAGERLUND M., PA5264
JOO D., PA2049
JOO H., PA564, PA2055
JOOS G., OA4211
JOOS ZELLWEGER L., PA547
JOPLIN H., PA1900, PA4100, PA4113, PA5291
JORDAN A., PA5098, PA5363
JORDAN A., PA5099
JORDAN S., OA857, PA2914, PA3471
JORDAN X., PA5068
JORDANA M., PA3835
JORDÃO PEREZ SANT'ANNA MOTTA T., PA4633
JORGE P., PA1210
JORGE GARCÍA R., PA2326, PA5248
JØRGENSEN E., PA1092
JØRGENSEN L., PA379
JÖRGER P., PA2766
JÖRN B., PA1222, PA1335, PA1811, PA2272
JÖRRES R., OA2603, PA5072
JÖRRES R., PA1318
JOSE R., PA396, PA1842, PA1843
JOSE NIETO-FONTARIGO J., OA4968
JOSEPH K J D., PA1821
JOSHI V., PA2932
JOSHUA V., PA2337
JOSHY G., PA3602
JOSIĆ L., PA2145
JOUAND N., PA2975
JOUANJAN L., PA2226
JOUFFROY R., PA1678
JOUGON J., PA4490
JOUIDA A., PA425,

PA1162, PA3944, PA3950
JOUNEAU S., PA427, PA559, PA1148, OA2580
JOUNIEAUX V., PA2829, OA3264
JOURET N., PA2092, PA2103
JOVER SAENZ A., PA372
JOYA Z., OA3187
JOYCE L., PA5038
JOYCE M., PA4018
JRIDI D., PA3659
JU X., OA1414
JUAN GARCÍA J., PA5217
JUAN SABORIDO E., PA2243
JUANG Y., PA4609
JUCHET H., OA4829
JUCIUTE N., PA3916
JUDAH G., PA3658
JUGE P., PA417
JUHL-OLSEN P., PA1828
JUJO T., PA451
JUKIC F., PA4603
JUL ANDREASEN L., OA4202
JULIE H., PA393
JULIOUS S., PA4597
JULJANI S., PA3308
JULVEZ J., OA882
JUN T., OA2581
JUNG C., PA2127
JUNG C., PA984
JUNG H., PA5271
JUNG H., PA3912
JUNG H., PA1302, PA3911
JUNG J., PA5271
JUNG J., PA2405, OA2606, PA2709
JUNG J., PA2896
JUNG J., PA3457
JUNG K., PA4142
JUNG K., PA2076
JUNG P., PA351
JUNG S., PA4536
JUNG W., PA2797
JUNG W., PA996
JUNG Y., PA5216
JUNHASAVASDIKUL D., OA784, PA3844
JUNIER P., PA2186
JUNKER E., PA1593
JURADO A., PA1269, PA5234, PA5235
JURADO L., PA4061
JURADO GAMEZ B., PA2428
JURADO GARCÍA A., PA2428
JUREK M., OA1423
JURGENSEN M., PA4524
JURKA N., PA289
JURKOWICZ M., OA4868
JUSS M., PA2959
JUST N., PA4114
JUSTEAU G., PA1271
JUSTET A., OA894, PA1230, PA1231, OA3280, OA4198
JUSTICE J., OA2583
JUSTO A., PA3405
JUTANT E., PA498
JUUSELA M., PA971
JUVEKAR S., PA2139, PA4579, PA4992

K

K. AWAD A., PA398
K. JAGGI T., PA1106
KAABI L., PA3930
KAARTEENAHO R., OA2579, PA3458
KABALIUK N., PA4017
KABAMBA B., PA3412
KABANOV D., PA598
KABATA H., OA2501
KABBACH E., PA4530
KABÉLE M., PA1258, OA4235
KABESCH M., OA1437, PA2745, PA2748
KABIL A., PA5106
KABRA S., PA4434
KACEM A., PA1124, PA1176, PA1185, PA1186, PA2862, OA4960
KACEM A., PA2308, PA2312, PA4023
KACEM I., PA2856
KACEM M., PA578, PA642, PA1791, PA4755, PA4760
KACHKOVSKA V., PA2317, PA3654, PA4411, PA5348
KACHROO P., OA1440
KADAR D., PA2389
KADARDAR F., PA583, PA1283
KADDOUSII R., PA4569
KADDOUSSI R., PA4740
KADEFORS M., PA551, PA561
KADIR M., PA3352
KADITIS A., OA1551
KADOTA T., OA4299
KAENMUANG P., PA2929, PA3989
KAES J., OA1535, OA3159, OA4343, OA4346, OA4348, PA5295
KAESTLE M., OA4199, OA4203
KAFA N., PA4528
KAFKA S., PA3373
KAGAWA S., PA2362
KAHARA U., PA2054
KAHLE-WROBLESKI K., PA4122
KAHN N., PA438, PA2218, PA2230
KAHNERT K., PA1318
KAHNT M., OA2632
KAHONEN M., PA1618
KAHR V., PA2190
KAI H., PA4667
KAIMAKAMIS E., PA2307
KAINTH N., PA1180
KAIRA K., PA283
KAIRAITIS K., PA3993
KAIREIT T., PA2276
KAISER B., PA3480
KAISER H., PA5371
KAISER R., PA1851
KAISER R., PA3970
KAJITA Y., OA1453
KAKKOURA M., PA5018
KAKLAMANOU D., PA3820
KAKOLYRIS A., PA2150
KAKUGAWA T., PA1331, PA4000
KALAFATIS D., PA2337, PA2881
KALBOUSSI H., PA2856
KALDENBACH M., PA4510
KALDEREN C., PA1247
KALHAN R., PA3319
KALHAUGE A., PA461
KALIA P., OA864
KALINKE L., PA1123
KALINOV R., PA2263
KALLEL M., PA2864
KALLEL N., PA4559
KALLEL N., PA1009
KALLEL N., PA1127, PA2864
KALLEL N., PA1127, PA4559
KALLEL S., PA3047, PA3059, PA3541
KALLEMOSE T., OA4315
KÄLLÉN K., PA2130
KALLIERI M., OA3275, PA4717, PA5102
KALMYKOVA I., PA2806
KALOMENIDIS I., PA3773
KALTSAKAS G., PA1188, PA2940, PA2942, PA3757, PA4526, PA5038
KALTSOGIANNI O., PA2135
KALUCZA S., OA4873
KALUZHNY Y., PA2968
KALYONCU A., PA1610
KALYONCU A., PA1901
KALYONCU M., PA2107, PA4465, PA5003, PA5007, PA5008
KAMAL 8., PA2723
KAMAL F., PA2815
KAMARIOTOU E., PA4572
KAMARUDIN N., PA2684
KAMATANI T., OA2501
KAMATH N., PA5164
KAMBAL A., PA4567
KAMBLE M., PA297
KAMGOUÉ A., PA1848
KAMI W., PA2830
KAMIDE Y., PA4406
KAMIL A., OA863
KAMIN W., PA5346
KAMINSKA T., PA2332
KAMINSKI N., OA894, OA4198
KAMINSKY D., OA752
KAMINSKY N., OA1535
KAMINUMA O., PA4406
KAMIYAMA I., PA333
KAMMERL I., PA1947
KAMMERLANDER A., PA4644, PA4979
KAMMOUN H., PA2197, PA4569, PA4740
KAMMOUN I., PA4735
KAMMOUN R., PA2742, PA4129, PA4735
KAMMOUN S., PA3047, PA3059, PA3541
KAMMOUN S., PA4384
KAMMOUN S., PA1008, PA1009, PA1127, PA2864, OA4223, PA4559, PA5256
KAMOCSAY M., PA1018
KAMONDI A., PA1023
KAMOUN H., PA3017, PA3875, PA5152
KAMP J., PA3369, PA4058, OA4245, OA4942
KAMPHUIS L., PA2837
KAMPOLIS C., PA2173
KAMPOURIS S., PA1103
KAMSTRUP P., PA1017, PA1838
KAN K., PA4135
KAN P., PA3492
KANAI M., PA998
KANAI O., PA998, PA3859, PA3891
KANAKA-GANTENBEIN C., OA1551
KANAZAWA K., OA3148, PA3776
KANAZAWA S., PA3901
KANCHI L., PA613, OA3146, PA3310, PA4677
KANDAN R., PA3504
KANE E., PA3764
KANE M., PA4549
KANEKO T., OA1453
KANELLAKIS N., PA3435
KANELLAKIS N., PA3438
KANEMITSU Y., PA978
KANER R., OA870
KANERVA M., PA1178, PA1184
KANEZAKI M., OA3258
KANG D., PA2695
KANG H., PA1698, PA3881
KANG H., PA2049
KANG H., PA1145
KANG J., PA1937
KANG J., OA2606
KANG J., PA1656
KANG L., PA1702
KANG N., PA2172, PA3034, PA4765
KANG S., PA2944
KANG S., PA3034
KANG Y., PA2175
KANG Y., PA3619
KANIA-PUDLO M., PA299
KANIARIS E., PA2307
KANKAANRANTA H., PA662, OA888, PA2075, OA2496, PA3054, PA3058, OA3167, PA3337, PA4499, PA5278
KANNENGIESSER C., PA1153, OA2580, PA3465, PA3953
KANNER R., OA870
KAN-O K., PA4399
KANT A., PA2760, PA2761
KANT S., PA537, PA1012, PA3067, PA3637, PA4543, PA4547, PA4747, PA5088
KANTAR A., PA2082, PA4456, PA4460
KAO C., PA5243
KAOLOMENIDIS I., PA4573
KAPARIANOS A., PA4397
KAPELLOS T., PA4054
KAPELLOS T., OA2485
KAPELLOS T., PA3937
KAPITANOV K., PA2189
KAPLAN A., OA770
KAPLAN A., PA1764
KAPOOR N., PA4143
KAPSALAKI E., PA3586
KAPUGE R., OA774
KAPUR A., PA5355
KAR A., PA2926, PA3070
KARAAHMETOGLU F., PA956
KARABATIĆ S., PA375
KARABEY S., OA4233
KARABINA S., PA3938, PA3943
KARABORNI B., PA3017, PA4740, PA5152
KARABULUT S., PA2107, PA2731, PA4465, PA5003, PA5007, PA5008
KARACA S., PA3589
KARACHALIA SANDRI A., PA1027
KARACHALIOU A., PA1119
KARACHRYSAFI S., OA3152
KARADAG B., PA2107, OA2505, PA2761, PA2765, PA3374, PA4460, PA4465, PA5003, PA5007, PA5008, PA5372
KARADAĞ M., PA1081, PA1083, PA2269
KARADOĞAN D., PA992, PA993, PA2395
KARADZINSKA-BISLIMOVSKA J., PA3813
KARAGEORGIOU A., PA490
KARAGEORGOU V., PA5102
KARAKAS F., PA4049
KARAKAYA G., PA1901
KARAKIOULAKI M., PA977, PA3864, PA4002, PA4761, PA4764
KARAKOC D., PA3393
KARAKOC F., PA2107, PA3374, PA5007, PA5008
KARAKULAK V., PA3374
KARAKURT S., PA3424
KARAKURT Z., PA548
KARAKUŞ I., PA5329
KARAMANCIOGLU B., OA4307
KARAMARKOVIĆ LAZARUŠIĆ N., PA1337
KARAMEH M., PA3407
KARAMERI M., PA4606
KARAMPELA I.,

PA3573, PA3577
KARAMPINIS I., PA327, PA334, PA3879, PA4592, PA5147
KARAMPITSAKOS T., PA422, PA1782, PA1790, PA4397
KARANAM V., PA2370, OA4945
KARANOVIĆ B., PA1798, PA1818
KARANTAGLIS N., OA1438
KARAPETSAS V., PA3324
KARASU S., PA3462
KARATAS M., PA3647
KARDES K., PA501, PA511, PA3767
KARDOS P., PA2826, PA4421, PA4428
KÅREDAL M., PA2955, PA3807
KAREKLAS N., PA4123
KAREN I., PA3509
KARETSI E., PA2859
KARIMDJANOVA G., PA1254
KARIO E., OA1534
KARIU T., PA4667
KARJALAINEN J., PA1618, PA3648
KARKOULIAS K., PA4397
KARL V., PA3360
KARLOH M., PA1049, OA4310
KARLSDORF B., PA1593
KARLSEN C., PA5064
KARLSEN M., OA3166
KARLSRUD BERG K., PA3414
KARLSSON C., PA551
KARLSSON F., PA1849
KARLSSON H., PA3350
KARLSSON M., PA553, PA1233
KARLSSON N., OA3183
KARLSSON SUNDBAUM J., PA363
KARMAKAR S., PA2396, PA3602
KARMAKAR S., PA2926
KARMANN B., PA4421, PA4428
KARMAUS W., OA1546
KARMAUS W., PA1950
KAROLINE MOREIRA BEZERRA S., PA953
KARP T., OA1523, OA1525
KARPATHAK S., PA2208
KARPIEVITCH Y., PA1677, PA2088, PA2094
KARRAMAS T., OA886
KARRAMASS T., PA3674
KARRASCH S., PA1851, PA1947
KARSANJI U., OA885, PA2687, PA2694, PA5350, PA5352
KARSDAL M., PA4060
KARTAL Y., PA5045
KARTAL ÖZTÜRK G., PA5012
KARTSTEIN H., PA1941
KARUNANAYAKE C., PA5253
KARUNATILLAKE R., PA3064
KARYTINOU M., PA3821
KASACKA I., PA447
KASAHARA D., PA1289, PA1290
KASAP F., PA3393
KASHIMA M., PA5215
KASIKCI M., PA1642
KASLER M., PA1023
KASMI K., OA779
KASPERS J., PA3677
KASSIM A., PA2723, PA5029
KASSIM A., PA2997
KASTNER J., PA4644, PA4979
KASUGA K., PA626
KASUYA Y., PA2358
KATA A., PA963
KATAOKA K., PA401, PA1236, OA1424, PA1723, PA3499
KATAYAMA K., PA633, PA1938
KATELARIS C., OA4302
KATO T., PA5231
KATOTO P., OA861, PA5087
KATRAMADOS I., PA2279, PA2293
KATRINE DRASBÆK PHILIPSEN L., OA2613
KATSANDRI A., PA3773
KATSANTONIS A., PA337, PA3429
KATSAOUNOU P., PA499, OA3152, PA3518, PA3773, PA3821, PA4602, PA5127
KATSARAS M., PA422, PA1782, PA1790, PA4397
KATSAROU M., PA499, PA3518
KATSOULIS K., OA3152, PA4709, PA4717
KATSOULOTOS G., OA4302
KATSUMATA M., PA2281, PA2358
KATSURA H., PA970
KATZ J., PA4474
KATZ S., PA4442, PA4444
KAUCZOR H., PA3906
KAUFFMANN-GUERRERO D., PA3358
KAUFMAN E., PA4485
KAUKE T., PA1851, PA5161
KAUL S., PA1227
KAULAMO J., PA3458
KAUPPI P., PA3337
KAUR H., PA4579, PA4992
KAUR N., PA4408
KAVALIERATOS D., PA2152
KAVANAGH A., PA1046
KAVANAUGH A., OA3165
KAVATHA D., PA1687
KAWADE A., PA2139
KAWAGUCHI T., PA468
KAWAHATA K., PA644
KAWAI H., PA1768, PA1771
KAWAKAMI D., PA4530
KAWAMATA T., OA3148, PA3776
KAWAMATAWONG T., PA1935
KAWAMOTO H., OA4299, PA5238
KAWANO H., PA1300, PA3908
KAWANO K., PA4667
KAWANO M., PA644
KAWANO-DOURADO L., OA858, OA2588, PA3921
KAWASAKI M., PA2887
KAWASAKI Y., PA4406
KAWATA N., PA2281
KAWAYAMA T., PA2403, PA3063
KAYA I., PA2395
KAYA M., PA344
KAYA M., PA348
KAYANIYIL S., PA1313, PA4105, PA4109, PA4131, PA4726
KAYA-UTLU D., OA4307
KAYE L., PA315, PA1578, PA1608, OA4876
KAYIKCI A., PA4380
KAZEMIZADEH H., PA1182
KAZEROONI E., PA4139
KAZMIERSKI J., PA2334
KCHAOU K., OA877, PA1174, PA1175, PA3317, PA3980, PA3982, PA5055
KEANE J., PA4549, PA4554
KEANE M., PA425, PA3921
KEANE M., PA428, PA2236, PA2930, OA3168, PA3950
KEANE M., PA1162
KEARNEY P., PA2968
KEARY I., PA1656
KEAVENY A., PA3778
KEBEDE MERID S., OA2502, PA3674, OA4240, PA5025
KECSKÉS S., PA556
KEDWANY A., PA1688
KEELEY T., PA1895
KEENAN N., PA4143
KEENE S., PA548
KEEVIL B., PA5275
KEGODE E., PA3861
KEHOE B., PA1757
KEIR H., PA383, PA3841
KEIR H., PA1105, OA1456, OA1459, OA1463, PA2340, PA2342, OA2604, PA2827, PA3842
KEIR H., PA382, PA1097
KEKEÇ H., OA2505
KELER S., OA4868
KELL C., PA1690
KELLEHER P., PA2331
KELLER N., OA4868
KELLEY E., OA893
KELLGREN L., PA2169
KELLOGG D., OA2583
KELLY A., PA1853
KELLY C., OA3173
KELLY G., PA3988
KELLY G., PA650, OA3146
KELLY J., PA1879
KELLY L., OA1560
KELLY M., OA1462
KELLY R., OA1440
KELLY R., PA1736
KELLY S., PA550
KEMP S., PA5224
KEMPA A., PA485, PA486, PA3581
KEMPA A., PA570
KEMPA A., PA5184
KEMPENEERS C., PA2765, OA3151, PA4466
KENDALL R., PA1321, PA1328, PA4698
KENDZERSKA T., PA4429, PA5021
KENIA P., PA2097
KENIS COSKUN O., PA5007, PA5008
KENN K., PA1721
KENNEDY E., PA546
KENNEDY L., PA3373
KENNEDY M., PA1122
KENNY S., PA483
KENT B., OA2586
KENTEPOZIDOU E., PA1233
KENTGENS A., PA2117, PA2733, PA5023
KEOGH S., PA4439
KEPENEK-VAROL B., PA284
KERAMIDA E., PA327, PA334, PA3879, PA4592
KERBRAT J., PA3011
KERBRAT S., PA581
KERCKHOF P., PA2710
KERCKHOF P., OA1535, OA3159, OA4343, OA4346, OA4348, PA5295
KERCKHOF P., PA3775
KERCKHOFFS J., PA1605
KERE M., OA2502, PA4407
KEREM E., OA1534, PA3383
KERFOURN A., PA1212, PA1214, PA1219, OA3190
KERGET B., PA2071
KERJOUAN M., PA1148
KERKHOF M., OA761, PA4135
KERKHOFF J., PA4437
KERKHOFF T., OA4338
KERLEY S., PA4724
KERN A., OA744
KERN B., PA5024
KERN L., PA4638, PA4743
KERPEL-FRONIUS A., OA4854
KERR P., PA2982
KERR S., OA4325
KERSH O., PA435
KERSHAW M., PA3669
KERSTEN A., PA1222
KERSTEN E., OA1523
KERSTEN H., PA3414
KERSTJENS H., OA766, OA1525, PA1579, OA3181, PA3777, PA3783, PA4540, PA5203
KERSTJENS H., OA1523
KERSTJENS H., OA761, PA979
KESAVAN H., PA1912, PA1919, PA1923
KESHTGAR S., PA3009
KESKIN O., PA3392
KESKIN Ö., PA5012
KETATA I., PA285, PA957
KETZEL M., PA305
KEUSCH S., PA3483
KEVANE B., PA5178
KEWIN E., PA382
KHABIR A., PA2861
KHALDI S., PA1175, PA3982, PA4455, PA5055
KHALENKOW D., OA4300
KHALEVA E., OA1527
KHALFALLAH N., PA3875
KHALFAOUI L., PA4675
KHALFFALLAH N., PA2865
KHALIFA H., PA3591
KHALIL A., PA3021
KHALIL N., OA1430
KHALLOUFI F., PA2408
KHAMIS R., PA1334, PA1336
KHAN A., PA1625
KHAN A., PA4605
KHAN B., PA3894
KHAN F., PA3841
KHAN F., PA404, OA3182
KHAN G., PA4030
KHAN I., PA4437
KHAN I., PA4105
KHAN J., PA428
KHAN K., PA2368
KHAN M., PA2151
KHAN M., PA1855
KHAN M., PA2927
KHAN M., PA2808
KHAN N., PA414
KHAN P., PA3936, OA4204
KHAN P., PA4490
KHAN S., PA4666
KHAN S., PA2808
KHAN S., PA1344
KHAN T., PA1778, PA2184
KHAN T., PA4471
KHAN Z., PA3893
KHANAL A., PA648
KHANIN A., PA3931
KHANIN A., PA5252
KHANNA N., PA2820, OA4862
KHANNOUS A., PA287, PA489, PA2412
KHANNOUS A., PA637, PA2895, PA3329, PA5324
KHAPEDI A., PA1617
KHARRAT I., PA1124, PA2862
KHATTAB A., PA1082, PA2865, PA3875,

PA3930, PA5116
KHEDHRI M., PA2248
KHEDOE P., PA1866
KHEMAKHEM R., PA2864, PA4384, PA5256
KHEMANI P., PA5057
KHENNOUF K., PA533, PA2418
KHETAN R., PA2779
KHÉZAMI N., PA2264
KHEZRIAN M., PA1904, PA3564
KHIL H., PA2797
KHILZI ALVAREZ K., PA5174
KHIN A., PA2840
KHIN A., PA404
KHIRANI S., PA2102, PA2105, PA2106
KHLAS E., PA335
KHO B., PA1062, PA3018
KHO B., PA2303
KHO S., PA4080, PA4626
KHODAMORADI Y., PA1171
KHODOSH E., PA3871, PA3931, PA5252
KHOO E., OA770
KHOO M., PA3481
KHOO S., PA2088, PA2094
KHOUAJA I., PA1082, PA2048, PA2407, PA2865, PA3659, PA3930, PA5116
KHOULOUD C., PA2804, PA3316
KHOURI C., OA3160
KHOURY C., PA3843, PA3845
KHROMYKH K., PA2773
KHULE S., PA2057, PA2333
KHUNTI K., OA885
KIANZAD A., PA5173
KIAROSTAMI K., PA1096, PA3839
KIBBLER J., PA4390
KIBLER A., PA3946
KICIC A., PA1867, PA2088, PA2094, PA4048
KIDA H., PA2059
KIDDLE S., PA3564
KIDY F., OA765
KIELY D., PA1197, PA3490, PA5177, PA5191
KIENINGER E., PA3994, PA3996, PA5001
KIENS O., PA2959
KIENTSCH J., PA2939
KIENZL M., PA2992
KIKHNEY J., PA4615
KIKNADZE T., PA3429
KILANOWSKI A., PA3674
KILDUFF J., PA3769, PA4975
KILIC B., PA4149
KILIÇ G., PA5012
KILIÇ K., OA2614
KILIC L., PA3046
KILIÇ M., PA5012
KILIÇ BASKAN A., PA1622, OA2505, PA3374
KILICKAP S., PA3398
KILINÇ A., OA2505
KILINC O., PA4149
KILINC SAKALLI A., PA1622, PA3374
KILK K., PA2959
KILLIAN K., PA1913, PA1922, PA1925, PA1927, PA3036
KIM A., PA2695
KIM B., PA2901
KIM B., PA1223
KIM B., PA2172
KIM B., PA3034
KIM B., PA2797
KIM C., OA4215
KIM C., PA1233, PA5205
KIM C., PA2405
KIM C., PA524
KIM C., PA3898
KIM C., PA3562
KIM D., PA2172
KIM D., PA1286
KIM D., PA1629
KIM D., PA3626
KIM D., PA1246
KIM D., PA2695
KIM E., PA5119
KIM E., PA1054
KIM E., PA3898, PA4481
KIM F., OA4222
KIM G., OA1423
KIM G., PA1130
KIM H., PA3898, PA4481
KIM H., PA1216
KIM H., PA5156
KIM H., PA1629
KIM H., OA2606
KIM H., OA4237
KIM H., PA2198
KIM H., PA1203, PA3489
KIM H., PA2179
KIM H., PA2884
KIM I., PA2944
KIM J., PA1297
KIM J., PA5271
KIM J., PA1223, PA2822, PA3575
KIM J., OA863
KIM J., PA1286
KIM J., PA1080
KIM J., PA564, PA1698, PA3881
KIM J., PA1251
KIM J., OA1432
KIM J., PA1216
KIM J., PA1080
KIM J., PA3034, PA3665
KIM J., PA5366
KIM J., PA1698, PA2179, PA3881
KIM J., PA5149
KIM K., PA1629
KIM K., PA2884
KIM K., PA984
KIM K., PA2880
KIM K., PA1216
KIM K., PA2901
KIM M., PA5216
KIM M., PA5366
KIM M., OA1440, PA1627, PA1632, OA4330
KIM M., PA1085
KIM M., PA5156
KIM M., PA1216
KIM M., OA4957
KIM M., PA5113
KIM N., PA3300, PA5149
KIM N., OA1545
KIM R., PA2818
KIM S., PA2172, PA3034
KIM S., PA5165
KIM S., PA2055, PA5113
KIM S., PA5366
KIM S., PA1698, PA1706, PA3881
KIM S., PA645
KIM S., PA5149
KIM S., PA2287, PA3034
KIM S., PA3913
KIM S., PA1216
KIM S., PA2765
KIM S., PA1223
KIM S., PA3034
KIM S., PA1698, PA3881
KIM S., PA1085
KIM S., PA2172
KIM T., PA2202
KIM T., PA3619, PA4765
KIM T., PA3570, PA3580
KIM T., PA4101
KIM T., PA1062, PA3018
KIM W., PA5271
KIM W., PA2709
KIM Y., PA1921
KIM Y., PA1234
KIM Y., PA1698, PA2880, PA3881
KIM Y., PA1216
KIM Y., PA4506
KIM Y., PA2323, PA4142
KIM Y., PA4536
KIM Y., PA5366
KIM Y., PA654, PA1720, PA2255, PA2300, PA3913
KIM Y., PA3300
KIM Y., PA1223
KIM Y., PA3018
KIM Y., PA2179, PA3580
KIM Y., PA4101
KIMBERLEY H., PA1918
KIMMOUN A., PA2299
KIMOTO Y., PA3567
KIMPARA K., PA3402
KIMURA G., PA1294, PA4046
KIMURA S., PA3347
KIMURA T., PA3567
KIMURA T., PA1960
KIMURA T., PA401, PA1723, PA3499
KINCHIN I., PA5352
KINDT A., PA1851, PA2141
KING C., PA1621
KING C., PA3489
KING D., OA2581
KING G., PA1309
KING J., PA1918, PA3037
KING K., PA379
KING L., PA1630
KING M., PA5253
KINGDOM L., OA3143
KINGMA P., PA2138
KINJO T., PA2830
KINNERSLEY N., PA1744
KINNI P., PA5018
KINOSHITA T., PA2403, PA3063
KINSELLA E., PA404, PA2886
KIPER N., PA424, PA1642, PA1644, PA1878, OA2505, OA2507, OA2614, PA2770, PA2771, PA3322, PA4462, PA5012
KIPOUROU M., OA3152, PA4709, PA4717
KIRACI B., PA2770
KIRAKLI C., PA3390
KIRAN S., PA1785
KIRBY M., PA2285, PA3557, PA3667, OA4933, OA4934
KIRDLARP S., PA1686
KIRIA N., OA865, PA1053, PA4545
KIRIA N., PA1053, PA4545
KIRIEIEVA T., OA4234
KIRK A., OA1560
KIRKBY N., PA554
KIRKLAND J., OA2583
KIRKNESS J., OA4953
KIRKWOOD R., PA4529
KIRSTEN A., OA875, PA1593
KIRSTEN H., PA2334
KIRTON L., OA3187
KIRVASILI S., PA2150
KIRWAN D., PA568
KIRYCHUK S., PA5253
KISELINOVA M., PA2176
KISHABA T., PA2830
KISHIHATA M., OA898
KISHIMOTO T., PA4667
KISS Z., PA1023
KISTEMAKER L., PA1260
KITAGAWA C., PA1697
KITAJIMA R., PA5306
KITAMURA A., PA5229
KITAMURA H., OA1424
KITAMURA N., OA3277, OA4322
KITASATO Y., PA2887
KITOV S., PA2263
KIU LO P., OA897
KIUCHI M., OA4207
KIVISTÖ J., PA1618
KIYAN E., PA5043
KIYMAÇ SARI M., PA1671
KIYOTA T., PA1762
KIZAWA Y., PA1294, PA4046
KIZILIRMAK D., PA4379, PA5344
KJÆR POULSEN M., OA4826
KJÆRGAARD KLEIN D., OA1574
KJÆRSGAARD HANSEN S., PA1332
KJARSGAARD M., OA1414, PA1945, OA2503, PA4125, PA5294
KKADDOUR AYEDI A., PA329
KLARENBEEK A., PA3426
KLARLUND PEDERSEN B., PA1806
KLASS M., PA4635
KLASSERT T., PA3924
KLAUSNER M., PA2968
KLÄY A., OA3253
KLEIN D., OA4968
KLEIN D., OA4966
KLEIN J., PA2388
KLEINHENDLER E., PA2928, PA3014
KLEMMEIER T., PA1579, OA3181, PA4604
KLENERMAN P., PA4063
KLENK J., PA1595
KLEPETKO W., PA5175
KLEVEBRO S., PA1606
KLIJN P., PA1050, PA3657
KLIMEK L., PA2826
KLIMOVIC S., PA598
KLITGAARD A., PA1325, PA2195, PA4697
KLOK F., OA4833
KLOK F., OA4829
KLOK R., OA740, PA1190, PA3966, PA3969
KLONT F., PA2355
KLOOSTER K., PA319, PA1855, PA3543, PA4611, PA4613, PA4614, PA5203
KLOPP-SAVINO S., PA419
KLOS K., PA299
KLOSE H., PA1593, PA1769, PA3972
KLOSSOWSKI S., PA1289, PA1290, PA1305, PA3909
KLOTZ L., OA2597
KLUG D., PA4039
KLUG T., PA4424
KLUYTMANS J., PA2199
KLYMENKO O., OA4329
KNAPCZYK A., PA474
KNAZ A., PA3640
KNEIDINGER N., PA629, PA1235, OA1569, PA1851, PA3358, PA3937, PA4495
KNENI J., PA4090
KNETKI-WROBLEWSKA M., PA1245, PA2863
KNIGHT D., PA3956
KNIGHT M., PA3578
KNIGHT S., OA4214
KNOBLOCH J., PA4763
KNÖPFEL G., PA4638
KNOSALLA C., PA459
KNOTT K., PA1336
KNOTT K., PA1334
KNOWLES R., PA5354
KNOX D., PA5129
KNOX-BROWN B., PA653, PA3339, PA5063
KNUDSEN K., PA4681
KNUDSEN K., PA3449
KNUDSEN L., PA3936, OA4204, OA4942

KO B., PA3635
KO E., PA5271
KO F., PA4031
KO F., PA1780
KO F., PA548, PA1316, PA1777
KO P., PA2833
KO Y., PA2179
KOBAYASHI K., PA527
KOBAYASHI T., PA2706
KOBBERNAGEL H., PA2769
KOBLIZEK V., PA610, PA1339, PA4133
KOCA AKDEVE H., PA3350
KOCA KALKAN I., PA1901
KOCAAGA E., PA5044
KOCAKAYA D., PA3424, PA5176
KOCAMAZ D., PA5007, PA5008
KOCH R., PA4974
KOCH S., OA2519
KOCH S., PA1595, PA2268, OA3185
KOCH S., PA1853
KOCH RYRSØ C., PA1806
KOCHAR R., PA2699
KOCHAR S., PA3602
KOCHAR S., PA4434
KOCHOVSKA S., PA958, PA5352
KOCIANOVA J., PA610
KOCKS J., OA763, OA770, OA1529, OA3181, PA3661, PA3662, PA3779, PA4135, PA4607
KOCKS J., OA761
KOCKS J., PA524, OA3184
KOCOŃ P., PA474
KOCOURKOVA L., PA2719
KOĆWIN M., PA2322
KOCZULLA A., OA4217, PA5052
KOCZULLA R., PA2374
KODAXAKIS A., PA499
KODDE C., PA2828, PA3924
KODRIC M., PA2890
KOEFOED H., PA5027
KOEGELENBERG C., PA3888
KOEHNCKE N., PA5253
KOENIG C., PA2774
KOENIG J., PA3835
KOENIGSHOFF M., PA560
KOERNER-RETTBERG C., OA2506, PA2760, PA4752
KOETHER V., PA402
KOFOD L., PA1040
KOGA Y., PA2357
KOGURE Y., PA1697
KOH M., PA1892, PA2188, PA2196
KOH Y., PA4438
KOHLBRENNER D., PA2432, OA3253, OA3255
KÖHLER J., PA2828
KOHLER M., PA547
KOHLER M., PA582, PA1272
KÖHLER U., PA4421
KOITKA S., PA1131
KOJIMA M., OA898
KOJONAZAROV B., OA4329
KOKELJ S., PA2720
KOKHODZE R., PA2814
KOKKOTOU E., PA1119, PA1699, PA2855
KOKOSI M., PA404
KÖKSAL N., PA3451
KOKTURK N., PA4528
KOLADE Y., PA1680
KOLAHIAN S., PA4036
KOLB M., PA1132, PA1232, OA1430, PA2879, PA3463, PA3921, PA4072
KOLBE J., OA787
KOLE T., OA1529, PA1855
KOLEVA MANDADZHIEVA S., PA3055
KOLILEKAS L., OA3275, PA3420, PA4581
KOLJENOVIC S., PA2366
KOLLER M., PA2767
KOLMERT J., PA634, OA1531, PA1632, OA2499
KOŁODZIEJSKI P., PA4044
KOLOKO NGASSIE M., PA2360
KOLOSIONEK E., PA5205
KOLOZSVARI D., PA2690
KOLPEN M., PA2154
KOLSTAD H., PA4424
KOLTAI H., PA1309
KOLTSIDA G., OA1551
KOLTSIDA O., PA545
KOMARZYNSKI S., PA1761
KOMATSU M., OA2513
KOMIYA K., PA5132
KOMNINOS D., PA1296, PA3606
KOMNINOS D., PA422
KOMORI M., PA2887
KON O., OA864, PA1051, PA2223
KON S., PA534, PA3509
KONDA S., PA2948
KONDOH Y., PA401, PA434, PA1236, OA1424, PA1723, PA2877, PA3499
KONDYLIS A., PA3933
KONG A., PA2413
KONG A., PA2345
KONGE L., PA492, PA1814
KONGERUD J., PA3414
KONGPOLPROM N., OA3188
KONIETZKE P., PA3906
KÖNIG P., PA2290, PA2989, PA4412
KONIGSBERG I., OA2497
KÖNIGSHOFF M., OA2624
KONING F., PA1866
KONINGS K., PA3516
KONKEL J., OA4214
KONNO S., PA5215, PA5228
KONOMI Y., PA3347
KONOPKA K., PA1215
KONOPKINA L., PA5056
KONOPKINA L., PA2060
KONRADSEN J., PA2754
KONRADSEN J., PA363, PA1619, PA5283
KONSTADINIDOU M., PA4572
KONSTAN M., OA1537
KONSTANTINIDIS A., PA3311, PA5127
KONSTANTINIDIS M., PA3320, PA5318, PA5328
KONSTANTINOU T., PA1859
KONSTANTYNOVSKA O., PA2806
KONTAXAKIS A., PA3518
KONTOGIANNI C., PA3420, PA4581
KONTOGIANNI C., PA4709
KONTOGIANNI K., OA2592, OA2593, OA2597, PA4618, PA5213
KONTONASIOU G., OA3275, PA5102
KONTOU P., PA2307
KONUK S., OA2616
KONYALIHATIPOĞLU E., PA993, PA2395
KONYER N., PA2283
KOO H., PA2179
KOO K., PA645
KOO M., OA4933, OA4934
KOOISTRA W., PA1250, PA2372
KOOK RHEE C., PA1892
KOOPMAN L., PA2137
KOPEC G., PA5175
KOPECKY M., PA1339
KOPIŃSKI P., PA3915
KOPITOVIĆ I., PA1330, PA1347, PA3671
KOPP B., PA1625
KOPP B., PA4678
KOPP M., OA875
KOPPELMAN G., PA3674, OA4300
KOPPELMAN G., OA1523, OA2519, PA5027
KÖPRÜLÜOGLU M., PA516
KORANTENG J., PA552
KORASIDIS S., OA1564
KORATALA A., PA4629
KORENIN K., PA1672
KOREVAAR D., OA3263
KORFEI M., PA2369, PA3939
KORFF G., PA5051
KORKMAZ EKREN P., PA5012
KORN S., PA629, PA635, PA639, OA1417, PA3032, PA3605, PA4708, PA4752
KORNELIUSZ G., PA4674
KOROŠEC P., PA4982
KOROTYCH O., PA2803
KORPPI M., PA2750
KORSAH P., PA5171
KORSBÆK N., OA4228
KORŠIĆ M., PA475, PA3542
KORSÓS A., PA1173
KORSUN L., PA5111
KORTA-MURUA J., OA1437, PA2745, PA2748
KORTAS M., PA330
KORTEN I., PA2733, PA3996, PA5001, PA5026
KORUL F., PA3299
KORZENIEWSKA-KOSELA M., PA667
KORZH G., PA1306, PA2266, PA3027, PA4976
KORZH N., PA1306, PA2266, PA3027, PA5075
KORZH N., PA4976
KOS R., PA2769
KOS V., PA4678
KOSCHEL D., PA2875, PA3463
KÖSE M., PA1646, OA2505, PA5012
KOSHIMIZU N., OA1424
KOSHY S., OA1562
KOSKAS M., PA2111
KOSKELA H., PA3458
KOSKELA J., OA2579
KOSMIDOU A., PA3330
KOŠNIK M., PA4982
KOSSACK N., PA3013
KOSSYVAKI V., PA5127
KOSTADINOVA V., PA2189
KOSTAKIS I., PA2384, PA3820
KOSTANTINIDOU E., PA499
KOSTANYAN L., OA4859
KOSTEN T., PA4982
KOSTER C., PA2991
KOSTER T., PA4611
KOSTERELI E., PA2731
KOSTI C., PA1687, PA2851
KOSTIANEV S., PA2263
KOSTIKAS K., PA1724, PA3021, PA3311, PA4123, PA4126, PA4709, PA4717, PA4738, PA5102, PA5127
KOSTITSKA I., PA5075
KOSTOVA P., PA2089
KOSZUTSKI M., PA2299
KOTAK P., PA2969
KOTALIK A., OA1415, OA1419
KOTE A., PA4575
KOTHALAWALA D., OA1441
KOTHE H., OA2523
KOTOULAS S., PA1873
KOTOULAS S., PA2150
KOTOULAS S., PA2812
KOTOWSKI T., PA3362
KOTS M., OA1525, OA1529, PA3662
KOTSAMIDI I., PA3518
KOTSIOU O., PA4709
KOTSIOU R., PA3437
KOTSIOUS O., PA1844
KOTSIOUS R., PA2966
KOTUR STEVULJEVIC J., PA3837
KOTZ M., OA1523
KOTZAMANI M., PA5002
KOTZE T., OA861
KOUIDI E., PA1887, PA4997
KOUIS P., OA1545, PA1859, PA3385, PA3987, PA5018, PA5019
KOUKAKI E., PA1188
KOUKAKI E., PA462, PA2348, PA5102, PA5223
KOUKIDOU S., PA2851, PA4709, PA4717, PA5102
KOUL P., PA3637
KOUL P., PA4747
KOULLE A., PA1859
KOULOPOULOU M., PA963, PA3403
KOULOURIS N., PA1188, PA4526
KOULOUSOUSA E., PA422, PA1296, PA1782, PA3606, PA4397
KOULOUSOUSA I., PA1790
KOUMANTAKIS G., PA3421
KOUMANTAKIS G., PA4606
KOURANOS V., PA404
KOURANOS V., PA3488, PA3494, PA3495
KOURELEA S., PA4575
KOUSLIS J., PA4997
KOUTLAS A., PA1812
KOUTRAKIS P., PA5018
KOUTSOKERA A., PA2186, PA3365
KOUTSOUKOU A., PA1188, PA2307, PA4526, PA5223
KOUYAMA S., PA4406
KOVAČEVIĆ D., PA3459
KOVACEVIC D., OA4965
KOVACEVIC I., PA473
KOVACEVIC T., PA1116, PA1968, PA2860
KOVACS G., PA1755, PA1764, PA1770
KOVÁCS T., PA3611
KOVACS Z., PA3361
KOVAL D., PA625
KOVATS Z., PA2690
KOVCHUN A., PA2317, PA4411, PA5348
KOVCHUN V., PA5348
KOWLESSUR S., PA2998
KOYAMA A., PA2705, PA2706, PA5306
KOYAMA K., PA1300, PA3908
KOYAMA K., PA2705, PA2706, PA5306
KOZHAMKULOV U., PA5092
KOZIAR-VASAKOVA M., PA4483
KOZŁOWSKA H., PA447

KOZMA E., PA3431
KOZU R., PA2177
KRAFT M., OA1416, OA1523, OA1525, OA1529, PA1691, PA3662
KRAGHOLM K., PA1010
KRAGSBERGER R., PA1941
KRAKOWIAK K., OA4208
KRALL C., PA639
KRAMER M., PA2212
KRAMER M., PA2891
KRÄMER S., OA4338
KRAMER T., OA3263, PA4005
KRANEVELD A., PA2745, PA2748
KRASNODEMBSKAYA A., PA5239
KRASNOVA T., PA5016, PA5024
KRASTEVA R., PA2189
KRAUSE A., PA3467, PA3468
KRAUSE B., PA3468
KRAUSS E., PA429, PA2369
KRAUSS-ETSCHMANN S., PA605, PA4041, OA4965
KRAVCHENKO E., PA4670
KRAVCHENKO N., PA283, OA4234, PA5111
KREBS T., PA3321
KREIPE H., OA4942
KREIPE H., OA4245
KRENKE K., PA424, OA2507, OA2510
KRENKE R., PA4437
KRENKE R., PA3038
KRESS S., OA2519, PA3674
KREUTER M., PA438, PA1136, PA1197, PA1721, PA2218, PA2230, OA2588, OA3278, PA3454, PA3467, PA3468, PA4623
KRICKER J., PA2965
KRIEGSMANN K., PA438, PA2218, PA2230
KRIGER O., OA4868
KRISHMURTHY S., PA3602
KRISHNA T., PA3348
KRISHNAN A., PA3669
KRISHNAN J., OA870
KRISHNAN J., PA4139
KRISHNAN S., PA1228
KRISHNMURTHY S., PA2396
KRISTENSEN A., PA1838
KRISTENSEN L., PA5335
KRISTENSEN M., PA1040
KRISTENSEN P., PA5128
KRISTENSON K., PA1189, PA4646
KRISTENSSON C., PA3622
KRITCHEVSKY S., OA2583
KRITIKAKI E., PA506, PA1800
KRITZINGER F., PA4463, PA4468
KRIVEC U., PA1672, PA3382
KROES J., PA1896
KROG N., OA882
KRÖGER J., PA1764
KROGH-MADSEN R., PA1806, PA5128
KROMANN LUND T., PA461
KROMHOUT H., PA3339
KROMMIDAS G., PA4121
KROMPA A., PA2940
KRONBERGER C., PA1758, OA4220, PA4644, PA4979
KRONBORG-WHITE S., PA5166
KRONIG F., OA4948
KRONSBEIN J., PA4763
KROON A., PA2137
KROPPEN D., PA2909, PA2935, PA4152, PA4655, PA4657, PA4666
KROUSKOS A., PA5102
KRPINA K., PA1701
KRUDYS P., PA474
KRUG K., OA2511
KRUG N., PA5354
KRUGER N., PA2823
KRÜGER R., PA4472
KRUISSELBRINK R., PA4529
KRUPKA E., OA4296
KRYKHTINA M., PA2060, PA5056
KRYMSKAYA V., OA3279
KRYVENKO V., PA3065
KRZYŻEWSKA A., PA447
KU S., OA4866
KUANG J., PA3587
KUBAT B., PA3525
KUBBA S., PA1204
KUBO S., OA1453
KUBO T., PA4762
KUCHAR E., PA2826
KUCHERENKO M., PA459
KUCK A., PA2935
KUDO K., PA5151
KUDO M., OA1453
KUE J., PA1852
KUEBLER W., PA459, PA4051, PA5242
KUEHL P., PA2187
KUEHNEL M., PA3936, OA4204, OA4942
KUEHNI C., PA2760, PA2761, PA2774
KUEHNI C., PA2763, PA2764, PA2766, PA2767, PA3386, PA5016, PA5024, PA5032
KUEHNI C., PA2768
KUENG C., PA2247
KUFA J., PA3593
KUHN H., OA4338
KUHN M., OA3253, OA3255
KÜHNEL M., PA4058
KÜHNEL M., OA4245
KUIJVENHOVEN J., OA3263
KUIPER K., PA5204
KUIPER - VAN DER VALK H., PA3612
KUJA-HALKOLA R., PA4427, PA5030
KUKS P., OA1525
KULAR R., PA404
KULARATNE M., OA3160, PA5180
KULASEKARAN A., PA603
KULCIŢKAIA S., PA2045, PA2051
KULIROVA M., PA1339
KULKARNI T., OA2588, PA2878, PA2893
KULKARNI V., PA1093
KULL I., PA664, OA2518, PA3674, PA5025, PA5027
KULLBERG L., PA5205
KULYNYCH-MISKIV M., PA621, PA1306, PA2266, PA3027, PA4976
KUM E., PA1913, PA1925, PA1927, PA3033, PA3036
KUMANOGOH A., PA3900
KUMAR A., PA3067, PA4547
KUMAR A., PA3674
KUMAR A., PA5330
KUMAR A., PA5096
KUMAR L., PA1324
KUMAR M., OA3281
KUMAR N., PA5088
KUMAR N., PA4547
KUMAR R., PA4567
KUMAR S., PA4547
KUMAR S., PA3893
KUMAR S., PA1338
KUMAR S., PA1775
KUMAR V., PA1785
KUMAR SRIVASTAV A., PA2208
KUMARI N., PA3067
KÜMMEL A., PA4059
KUNA P., PA1891, PA1892, PA1894, PA1897, PA2322, PA4099
KUNASEELAN 4., PA2723
KUNDER S., PA1098
KUNG S., OA3187
KUNISHIGE H., PA1890
KUNST H., OA864, PA1052, PA4546, PA5081
KUNST P., PA3884
KUNST P., PA1705
KÜNSTLE N., OA4940, OA4941, PA5026
KUN-SZABÓ F., PA556, PA3547, PA3549
KUNT N., PA1646
KUNT UZASLAN E., PA1081, PA1083
KUO F., PA307
KUO H., PA641, PA1864, PA2987
KUO J., PA5163
KUO L., OA4866
KUO P., PA5163
KUO Y., PA1831
KUO Y., PA3574
KUP K., PA2690
KUPCINSKAS J., PA2206
KUPCZYK M., PA4099
KUPPE A., PA1861
KURAKULA K., PA445
KURAN ASLAN G., PA5043
KURIAN L., OA4329
KURIHARA M., PA326
KURIHARA Y., PA3347
KURMI O., PA1922
KURMI O., PA1613
KURODA M., PA3900
KUROHASHI S., PA3900
KURONUMA K., PA3895
KURSAWE L., PA4615
KURUKULAARATCHY R., OA1441, PA4724
KURUKULAARATCHY R., OA1441
KURUL I., PA358
KUSABA Y., PA5080
KUSHWAHA A., PA1088
KUSHWAHA R., PA1068, PA3067, PA4547, PA5088
KUSS P., PA4479
KUSS S., OA4875
KUSTER S., PA2820
KUŠTRIMOVIĆ N., PA2240
KUTSCHENREUTER J., PA568, OA1568
KUTSCHKE D., PA567
KUTSUZAWA N., PA2362
KUTTLER K., OA4860
KUWALAIRAT P., PA540
KUWANA M., PA434, OA1424, PA3474
KUWANO K., OA4299, PA5238
KUYPERS D., PA5188
KUZUNISHI Y., PA5231
KVALE G., PA4524
KVANDE M., OA3166
KWAK N., PA1251
KWAK S., PA1085, PA1720, PA3913
KWAKKEL-VAN-ERP J., PA2366
KWANT C., PA1207
KWAPISZEWSKA G., PA555
KWAS H., PA285, PA3537, PA3929, PA5322
KWASS H., PA957
KWEE A., PA1079, PA3997
KWEE A., PA2280, PA2284
KWIATEK J., OA1420, PA1891, PA1892, PA1894, PA4109
KWIECIEŃ I., OA1450, PA2222, PA2339
KWIECIEŃ P., PA3827
KWOK W., PA3062, PA3551, PA4594
KWON B., PA3457
KWON H., PA2695
KWON H., PA3619
KWON O., PA564
KWON Y., PA3018
KWON Y., PA4536
KWUSHUE F., PA3315
KYI M., PA1115, PA1118, OA1425
KYNØ N., OA3166
KYRELTSI P., PA2812
KYRIACOU A., PA3420, PA4581
KYRIAKOPOULOS C., PA4126
KYRIAKOPOULOS C., PA1724, PA3311, PA4738, PA5102
KYRIAKOPOULOU M., PA2307
KYRIAKOU F., PA327, PA334, PA3879, PA4592
KYRIAKOUDI A., PA2307, PA3548
KYRITSIS I., PA327, PA5147
KYRVASILLIS F., PA490
KYU S., OA4215
KYU YEAN K., PA1707
KYUCHUKOV N., PA292, PA293, PA4643
KYUNG S., PA5165
KYVSGAARD J., PA2721, OA4331
L
L JOHNSTON S., OA4970
L MATTE D., PA2302
L. CAVALLERI G., PA3954
L. MAROTT J., PA1953
LA GRUTTA S., PA312, OA752, PA1616, PA1631, PA2083, PA3811, PA3947, PA4676, PA4754
LA MENSA A., PA4684, PA4686
LA REGINA D., PA2727
LA REGINA D., PA1647, PA2085, PA3984
LA ROCCA M., PA2111, PA4441
LA ROSA C., OA2610, PA3035, PA3039, PA3040, PA3041
LA ROVERE M., PA3771
LAADHAR L., PA628
LAAKA A., OA2579
LABAKI W., OA870, PA4139
LABARCA G., PA4437
LABARCA G., OA788, PA1274, OA3292, PA3597
LABATE L., PA3760
LABBE V., PA1678
LABOURET G., PA420, PA4443
LABROUCHE-COLOMER S., PA5245
LACÁRCEL BAUTISTA C., PA1242
LACAZE I., PA5017
LACEDONIA D., PA974, PA1917, PA3584, PA3598, PA3902
LACERDA C., PA389
LACHAND R., OA4828
LACHKAR S., PA463
LACHMANN N., PA483, PA4471
LACHMANN R., OA3281
LACINA L., PA4483
LACOLLEY P., PA5251
LACOMA A., PA548, PA4576
LACOSTE-PALASSET T., PA1766, PA5180
LACROIX J., PA964
LACUESTA G., PA4105

LACUT K., PA2245, OA4827
LACY P., PA2066, PA2067, PA2071
LADAURADE A., PA420
LADHARI N., PA638, PA3332, PA3336, PA3660
LADIAS A., PA4738
LADOMIRSKA J., PA667
LADOR F., OA747, PA4632
LADRERA G., PA3892
LAEMMLE B., PA1863
LAENGER F., OA4942
LAERTE BOECHAT J., PA488
LAFFERTY M., PA4024
LAFFEY J., PA5237
LAGACHE L., PA409
LAGADIC-GOSSMANN D., PA559
LAGOWALA A., OA4945
LÄHELMÄ S., PA530
LAHMAR M., PA5206
LAHOUSSE L., PA666, PA1954, PA1955, OA2605, PA3015, PA3668, PA3674, PA4692
LAHUERTA M., PA5127
LAI C., OA4866
LAI C., PA1046
LAI E., PA1208
LAI H., PA2165
LAI K., PA4130
LAI L., PA3025
LAI S., PA552
LAI Y., PA4105
LAI Y., OA3156
LAIKITMONGKHON J., PA1681
LAINEY E., OA2580
LAING I., PA2088, PA2094
LAITINEN S., PA2750
LAJUNEN T., PA661
LAKE P., PA4502, PA4512
LAKER B., PA3620
LAL A., PA1792, PA1793, PA2054, PA3830, PA5158
LAL A., PA4562
LALANI M., PA4491
LALANI M., PA3498
LALCHANDANI J., PA5208
LALIC N., PA1347
LALIC CICKOVIC I., PA374
LALMOLDA PUYOL C., PA4653
LALVANI A., PA2223
LALWANI L., PA2309, PA5221
LALWANI S., PA3770
LAM C., PA3897
LAM D., PA3062, PA4594
LAM G., PA3823
LAM G., PA2249
LAM S., PA1120, PA1121
LAM T., OA775
LAM W., PA1780
LAM Y., PA2765, PA2767, PA2768, PA3386
LAMB A., PA4548
LAMB D., PA2697
LAMBERT G., PA1596
LAMBERT J., PA2169
LAMBERTUCCI R., OA2628
LAMBINET F., PA5274
LAMBIRI I., PA5187
LAMBRAKI E., PA5258
LAMBRECHT B., OA4213
LAMBRECHT B., OA776
LAMI V., PA2246
LAMIA B., PA1317
LAMOTE K., OA1557, OA1559, PA2415, OA3265, PA3432, PA3434
LAMOTHE P., PA2152, OA4215
LAMPADAKIS S., PA5102
LAMPOU M., PA5258
LAMPRECHT B., PA3480
LAMPROPOULOS I., PA3586
LAMY E., OA2486, PA3377
LAN A., OA4300
LAN J., PA2217
LANANI K., PA1026
LANARIO J., PA368, PA951, PA4732
LANCASTER L., PA3485
LANCELLOTTI D., PA3479
LANCLUS M., PA2277, PA3553
LANDEKIC M., PA4471
LANDETA M., PA5212
LANDETE RODRÍGUEZ P., OA3293
LANDO V., PA663
LANDONI V., PA5262
LANDS L., PA4488
LANDS L., PA2118
LANDT E., OA4228
LANDT E., OA883, PA2069
LANDTHALER M., PA2334
LANE N., PA548
LANE T., PA3810
LANFRANCHI F., PA5134, PA5139
LANG D., PA3480
LANG I., PA1191, PA3487, PA3968
LANG I., PA5175
LANG N., OA772, OA2624
LANG N., OA1569
LANGBALLE E., OA857, PA2914, PA3466, PA3471, PA3476
LANGE C., PA2168
LANGE C., OA860
LANGE J., PA424, OA2507
LANGE P., PA1013, PA1953
LANGE T., PA4036
LANGE T., PA3958
LANGE T., PA5192
LANGER D., OA2615, PA3388, PA3389, PA4517, PA4518, PA4519, OA4870, OA4871
LÄNGER F., OA2508
LANGERMAN H., PA1915
LANGERUD A., OA3166
LANGFORT R., PA421
LANGHAMMER A., PA1951, PA2075, OA3167, PA3337, PA3674
LANGHOFF THUESEN L., OA2500
LANGLAIS P., OA4964
LANGLEY R., PA2087
LANGLOIS C., OA4231
LANGLOTZ C., OA4860
LANGTON D., OA4302
LANGWIŃSKI W., PA1854, PA4044
LANKS C., PA1187
LANOUETTE S., PA1911, OA2609
LANOY E., OA790
LANTERI C., PA4501
LANTTO J., PA3344
LANTZ A., PA2430
LANZ I., PA2359, PA2992
LANZA MARTÍNEZ Á., PA1816, PA2426, PA3057, PA3595
LANZARONE N., PA406
LANZI P., PA1725
LANZILLO A., PA503
LAO J., OA899
LAO M., PA4081
LAOR A., PA3407
LAOUAN SIDI E., PA1326
LAPEBIE F., OA4829
LAPORTA R., OA3282
LAPORTA HERNANDEZ R., PA433
LAPPERRE T., PA2366, PA2415, OA4303
LAPPERRE T., PA4532
LAPSHYN V., PA2332
LARATTA C., PA3823
LARBY J., PA2336, PA2346, PA4066
LARCHÉ M., PA3835
LARENAS-LINNEMANN D., PA1891, PA1892, PA1894, PA1897
LARRATEGUY L., PA512, PA513
LARRATEGUY S., PA512, PA513, PA2683, PA2693
LARROSA BARRERO R., PA4026
LARROSA JIMÉNEZ R., PA1238, PA1239
LARROUTURE I., PA2216
LARRUSKAIN A., PA5212
LARRY H., PA1183
LARSEN K., PA4052
LARSEN L., PA1027
LARSEN M., OA3166
LARSEN T., PA5204
LARSON P., PA2720
LARSSON C., PA1948
LARSSON M., PA2368
LARSSON CALLERFELT A., PA5201
LARSSON-CALLERFELT A., PA551, PA2955, PA3807
LAS HERAS M., PA3540, PA4480
LASK C., PA1171
LASKY J., PA1144
LASKY-SU J., OA1440, OA1532, PA1632
LASON W., PA4063
L'ASSAINATO S., PA1643
LASZKOWSKI J., PA1243
LATHAM J., OA1560
LATIF ESSA I., PA4652
LATIMER L., PA1797, OA3256
LATINI L., PA1748
LATORRE I., PA1064, PA4576
LATRASSE M., PA3953
LATSHANG T., PA1877
LATSIOS D., PA4121, PA4709
LÄTTI A., PA3458
LATZIN P., OA1443, OA1545, OA1550, PA2116, PA2117, PA2733, PA2760, PA2761, PA2765, PA3994, PA3996, OA4940, PA5001, PA5023, PA5026
LAU A., PA3823
LAU C., PA1777
LAU C., PA2151
LAU D., OA2494
LAU L., PA2986
LAUCHO-CONTRERAS M., PA1907
LAUGSCH M., PA454
LAUHKONEN E., PA2750, OA4943
LAUKS S., OA1414, PA1945, PA4125
LAUMONNIER Y., PA4412
LAUNAY D., PA402, OA3157
LAUNOIS C., PA581, OA3285
LAUNOIS S., OA3285
LAURENT P., OA753
LAURIDSEN M., OA887
LAURINO L., PA5134, PA5139
LAURITS T., PA2959
LAURSEN C., PA492, PA1814, PA1824
LAURSEN C., PA3867
LAUS A., OA3267
LAUSTRUP L., PA4007
LAUTENSCHLAGER N., PA4036
LAUTERIO M., PA2835
LAUTSCH D., OA740, PA1190, PA3966, PA3969
LAUWERS E., PA1177, PA1805
LAVERGNE F., PA3011
LAVERGNE F., OA3178
LAVERTY A., PA994, OA4229
LAVEY J., PA3562
LAVIN B., PA618
LAVIÑA SORIANO E., PA2707
LAVINE E., PA1655
LAVIOLETTE M., PA5225
LAVIZZARI A., PA2122, PA2123, PA2133
LAVOIE G., PA640
LAVON B., OA742, PA1177
LAVON B., PA1805, PA3553
LAVORINI F., PA467, PA478, PA2274, PA2275, PA3469, OA4321, PA4393, PA4590, PA4702
LAW F., OA2492
LAW W., PA1780
LAW-GLEEN S., PA2099
LAWRENCE A., PA404, PA405, PA1733, OA2582, PA3494
LAWRENCE P., OA2509
LAWS A., PA1180
LAWS E., PA1308, PA5286
LAWSON A., PA4607
LAWSON C., OA885, PA5350
LAWSON K., PA4720, PA4721
LAYEK A., PA1324
LAYTON M., PA5249
LÁZÁR Z., PA1018, PA2427, PA3634
LAZARINIS N., PA2430
LÁZARO L., PA5208
LÁZARO L., PA5049
LÁZARO Y DE MERCADO P., OA3293
LAZARUS A., PA3583
LAZARUS H., PA1200, PA1209
LAZNER M., PA5355
LAZOVIC B., PA4508, PA5310
LAZREG N., PA3992
LAZZARA V., PA602, PA604, PA2988, PA4042, PA4676
LAZZARONI G., PA472
LE A., PA3935
LE T., PA4726
LE T., PA1891, PA1894
LE T., PA3635
LE BER C., PA2792
LE BORGNE A., PA3940
LE BOUAR G., PA1212, PA1214, PA1219
LE BRUN M., PA3942, PA4750
LE CHENG P., PA3635
LE CLAINCHE VIALA L., PA420, PA3377
LE GAL G., OA4827
LE GUELLEC S., PA3558
LE GUEN P., PA1153
LE GUILLOU F., PA531, PA4432
LE GUILLOU Y., PA3780
LE LIEPVRE S., PA3780
LE LIEVRE C., PA3635
LE MAO R., PA2245, OA4827
LE MOIGNE E., PA2245
LE MOUAL N., PA3340, PA3341, PA3345, PA3348, PA5017
LE NAOURES C., PA559
LE ROUX J., PA3843,

PA3845
LE ROUZIC O., PA966
LE RÜTTE T., OA761
LE SOUEF P., PA2088, PA2094
LE VOYER T., PA4471
LEA S., PA3051, PA4065
LEACHE L., PA2738
LEACY E., PA613, PA3310
LEACY E., OA3146
LEAL J., PA2249
LEAL L., OA3267
LEAL L., OA1449, OA1451
LEAL GARCÍA M., PA2192, PA2194
LEAVY O., OA4325
LEAVY O., OA2491
LEAVY O., OA858
LEBRASSEUR N., OA2583
LEBRET M., PA2102
LECCA R., PA3808
LECCI A., PA4636, PA4645
LECCISOTTI R., PA3598
LECHARTIER B., PA310
LECHNER A., PA2939
LECHOWICZ U., PA1245, PA2344
LECLAIR-VISONNEAU L., PA581, OA3285
LECOCQ M., PA1857, PA5211
LECONTE T., OA4828
LEDANOIS O., PA2090, PA2091, PA2101
LEDERER C., PA2218, OA3278
LEDERER D., PA5286
LEDERLIN M., PA1148
LEDERMÜLLER R., PA4603, PA5368
LEDESMA RUIZ C., PA3829, PA3832
LEDFORD J., PA2974, OA4964
LEDGER T., OA873
LE-DONG N., PA4088
LEE 2., PA2723
LEE 5., PA5029
LEE A., PA1621, PA5370
LEE A., OA1461, OA4320
LEE A., PA351
LEE B., PA1624, PA1634, PA1635, PA3658
LEE B., PA2300, PA5216
LEE B., PA2323
LEE B., PA3034
LEE C., PA1720, PA3913
LEE C., PA4134
LEE C., OA866
LEE C., PA1936
LEE D., PA1302, PA3911, PA3912
LEE D., PA3591
LEE D., PA1706
LEE D., OA4859
LEE D., PA1286
LEE E., PA1085, PA2179, PA5119
LEE E., PA2797
LEE E., PA549
LEE E., PA2834
LEE F., OA4215
LEE H., PA3034, PA5366
LEE H., PA2822
LEE H., PA3626
LEE H., PA2323, PA4142
LEE H., PA2255
LEE H., PA4413
LEE H., PA3626
LEE I., PA1080
LEE J., PA4536
LEE J., PA1060
LEE J., PA1062, PA3018
LEE J., PA1080
LEE J., PA1130
LEE J., PA3020, PA3034
LEE J., PA645, PA3619, PA4765
LEE J., PA3913, PA4481
LEE J., PA3056
LEE J., PA4765
LEE J., OA863
LEE J., PA3575
LEE J., PA2884
LEE J., PA3898
LEE J., PA1580, OA4302
LEE J., PA1246
LEE J., PA2405
LEE J., PA1660
LEE J., PA3626
LEE J., PA1629
LEE K., OA1447
LEE K., PA607, PA1259, PA1264, PA2349
LEE K., PA369, PA2782
LEE K., PA1251, PA4413
LEE K., PA996, PA1025
LEE K., PA4536
LEE K., PA1130
LEE L., PA4661
LEE L., PA4122
LEE M., PA2987
LEE M., OA867
LEE M., PA2179
LEE M., OA866
LEE M., PA5126
LEE R., PA3756
LEE S., PA2405
LEE S., PA1698, PA3881
LEE S., PA2323, PA3898
LEE S., PA2797
LEE S., PA1251
LEE S., PA1706
LEE S., PA4136
LEE S., PA996, PA1025, OA2606, PA2695
LEE S., PA3521
LEE S., PA2695
LEE S., PA1223
LEE S., PA2202
LEE S., PA3034, PA4101
LEE S., PA3911, PA3912
LEE S., PA1297
LEE S., PA2323
LEE S., PA4506
LEE S., PA3034
LEE S., PA4605
LEE S., PA4481
LEE S., PA2405
LEE S., PA1297
LEE S., PA2179
LEE S., PA4506
LEE T., PA3034
LEE T., OA3148, PA3776
LEE V., PA965
LEE W., PA4101
LEE Y., PA1780
LEE Y., PA3857
LEE Y., PA3570
LEE Y., PA2049
LEE Y., OA2494
LEE Y., PA1216
LEE Y., PA3881
LEE Y., PA5165
LEE Y., PA2822, PA3575
LEE Y., PA3034
LEE Y., PA3913
LEE Y., PA2055
LEELAYUWATANAKUL N., PA476
LEEMING D., PA4060
LEEMING D., PA2355
LEEMING D., PA1139, PA5249
LEENA R., PA3304
LEES N., OA4319
LEE-SARWAR K., OA1440
LEFEBVRE É., OA1423
LEFEBVRE G., PA3919
LEFEBVRE P., PA4466
LEGARRETA G., PA2916
LEGEBEKE J., PA1845
LEGENDRE M., PA420, PA423, PA426, PA2129, PA2762, OA3280, PA3938, PA3940, PA3942, OA4944
LEGER P., PA2129
LEGODEC J., PA463
LEGTENBERG R., PA2166
LEHALLE C., OA892
LEHMANN M., PA560, OA2624
LEHMANN S., PA3449
LEHNEN N., PA5072
LEHRBAUM F., PA1049
LEHTIMÄKI J., PA2721
LEHTIMÄKI L., PA662, PA1618, PA2075, PA2381, PA2385, PA3054, PA3648
LEHTINEN M., PA971
LEHTOLA K., PA5278
LEI J., PA1011
LEIBER L., PA3369
LEIBOVITZ E., OA4868
LEICK E., PA1304
LEIGH M., PA2762
LEILA A., OA4323
LEILA B., PA1314, PA1870
LEITE C., PA370
LEITE G., PA2199
LEITE-MOREIRA A., PA440
LEITE-MOREIRA A., PA440
LEITL D., OA4217, PA5052
LEITZ D., PA3906
LEKKA C., PA4526
LELEU H., PA538
LELEU O., OA3264
LELII M., PA5358
LELLI L., PA2727
LEMAHIEU A., OA4861
LEMARIÉ C., OA4827, OA4832
LEMA-VARELA L., PA5327
LEMAY S., PA441, PA449, PA453, PA458, OA3161
LEME A., PA1152
LEMES-CASTELLANO A., PA2976
LEMES-CATELLANO A., PA4719
LEMIÈRE C., PA640, PA3651
LEMME F., PA4436
LEMONARIS M., PA5019
LEMOS J., PA1595
LEMOS L., PA1665, OA3171
LENCZEWSKA M., PA5224
LENFERINK A., PA515, PA1343, PA1348, PA3641
LENTA E., OA4342
LENTJES C., PA4135
LENZINI G., PA392
LENZOTTI A., PA3340
LEÓN JIMÉNEZ A., PA1151
LEONARD C., PA4381
LEONARD E., PA2368
LEONARD T., PA1144, PA1147
LEONARDI G., PA1069, PA2807
LEONARDI N., PA4530
LEONARDO G., PA467
LEONG 1., PA2723
LEONG H., PA1233
LEONG K., OA745
LEONG P., PA3635
LEONG T., PA2233
LEÔNIDAS ALVES-JR J., PA413
LEONOVA E., OA4200
LEOW W., PA3481
LEPAGE B., PA463
LEPEJ D., PA3382
LEPORE G., PA974
LEPORINI M., PA4096, PA4128
LERDA S., PA2890, PA3505
LEROY M., PA4648
LEROYER C., PA2245, OA4827
LESAGA LÓPEZ E., PA2428
LESKÓ-JANCSÓ V., OA4854
LESNIC E., PA5091
LESTER S., PA4678
LETASIOVA S., PA2968
LETH S., PA5335
LETTIERI S., PA1725, PA3886, OA4201, OA4342
LEUCKFELD I., OA4347, PA4489
LEUNG A., PA5020
LEUNG G., PA5205
LEUNG J., PA3062
LEUNG J., PA3411
LEUNG S., PA4594
LEUNG T., PA5020
LEUPPI J., PA547
LEUPPI J., PA2247, PA4743
LEUPPI J., PA1903
LEUPPI-TAEGTMEYER A., PA2247
LEURS A., PA402
LEUSCHNER G., PA5161
LEUZINGER K., PA3864
LEV V., OA1534
LEVACIC G., PA374
LEVERINGTON V., PA4632
LEVINE A., PA3756
LEVINE H., PA4474, PA5031
LEVING M., OA1529
LEVOUNETS A., PA3420, PA4581
LEVRA S., PA975, PA2224, PA4733, PA4736, PA4739, PA5160
LEVY B., PA2299
LEVY G., PA497
LEVY L., PA1137, PA2889
LEVY M., PA3779
LEVY P., OA3288, OA4337
LEVY Y., PA2129
LEVY Y., PA1165
LEVY NAÓN A., PA3617
LEVY-SAAR I., OA1534
LEW S., PA3572
LEWIS B., PA1625
LEWIS G., PA3824
LEWIS S., PA3622
LEWIS S., PA1634, PA1635
LEWKOWICH I., PA4412
LEWTHWAITE H., OA879, PA1045, PA1589, OA3261, PA4642
LEY D., PA2130
LEYNAERT B., PA1965, PA3345
LEYNAUD D., PA538, OA1420
LEYVA A., OA752
LI A., PA2112
LI A., PA5286
LI C., PA2971
LI D., PA3781
LI D., PA3995
LI D., PA1834
LI F., PA2836
LI G., PA3009
LI H., OA1455
LI H., PA1141, PA1158
LI H., OA3179
LI J., PA1120, PA1121
LI J., PA456
LI J., PA3781
LI J., PA1853, PA4669
LI L., PA3880
LI L., PA5305
LI M., PA4051
LI M., PA1959
LI N., OA4964
LI N., PA1138, PA3836
LI N., OA856
LI P., PA2882, PA3455
LI P., PA2960
LI Q., PA1937, OA4206, PA5247
LI Q., PA3035
LI S., OA1537

LI S., OA1455, OA4297
LI S., OA2598
LI S., PA2078
LI S., PA4063
LI T., PA4105
LI V., PA5286
LI W., PA3494
LI W., PA2081, PA3880, PA3882
LI W., PA2217
LI W., PA1265, PA4400, PA5286
LI W., PA4062
LI W., PA3965
LI X., PA3029
LI X., PA3934
LI X., PA3911, PA3912
LI X., OA4964
LI X., PA3411
LI X., PA4136
LI X., PA3905
LI Y., PA1141
LI Y., PA3587, PA3588
LI Y., OA4842
LI Y., PA2242
LI Y.
LI Y., PA5213
LI Y., PA3663
LI Z., PA5342
LI Z., PA2893
LI Z., PA1257
LIA A., PA4419
LIAGKA N., PA3454
LIAGKAKI M., OA1551
LIAM C., PA477
LIAM C., PA3415
LIANG C., PA2819, PA4436
LIANG L., OA3257
LIANG S., PA1275, PA1277, PA1278, PA3592
LIANG W., PA5342
LIANG W., PA4435
LIANG X., PA3342
LIANG Z., PA1946
LIANG Z., PA1158, PA4385
LIANG PENG C., PA1051
LIAO G., PA2981
LIAO H., PA2204
LIAO P., PA3579
LIAO W., PA5141
LIAO W., OA775, PA2367
LIAO Y., PA3470
LIAPIKOU A., PA1003, PA4575
LIAPIKOU A., PA5127
LIBERGE R., PA1731
LIBRA A., PA2892
LICARDI A., OA1435
LICARI A., PA1631, PA2082, PA2083
LICHT A., PA1824
LICHT B., PA2379
LICHTBLAU M., OA747, OA748, PA1615, PA1773, PA1774
LICHTENSTEIN P., PA5030
LICKLITER J., OA2581
LICSKAI C., PA539, OA768, PA1313, PA1584, PA4429
LIDDICOAT H., OA1560
LIDWINE W., OA753
LIEBERS U., PA3351
LIENDO MARTÍNEZ K., PA2417, PA3066, PA4102, PA4621, PA4652, PA4659
LIEW F., PA4070
LIEW S., PA4028
LIFAR P., OA1421
LIGO C., PA439
LIHU A., PA2713
LIKIĆ R., PA314
LILAH M., PA3481
LILEY J., PA5191
LILJA SECHER E., PA461
LILLEBAEK T., OA860
LILLEY A., PA2749
LILLIECRONA J., PA3394
LILLO GONZÁLEZ E., PA4728
LIM A., OA868
LIM B., PA3913
LIM C., PA1649
LIM C., PA4056
LIM E., OA786
LIM H., PA4125
LIM J., PA5113
LIM L., PA4609
LIM M., PA4438
LIM R., PA2802
LIM S., PA564, PA2323, PA4142
LIM S., PA3018
LIM W., PA2983
LIM Y., PA305, OA2521
LIM Y., PA2087
LIMA F., OA4310
LIMA F., PA3405
LIMA R., PA2270
LIMA CABRAL FAGUNDES M., PA1039
LIMA VAZQUEZ F., PA1112
LIMA VIEIRA G., PA4057
LIMNANDER A., PA4408
LIMPER A., OA2583
LIMPIN M., PA1000, PA3308, PA3560
LIN C., PA3623
LIN C., PA652
LIN C., PA1704
LIN H., PA3363
LIN H., PA509, PA3755
LIN H., PA652
LIN J., PA5233
LIN J., PA5286
LIN J., PA1830
LIN J., PA1914
LIN L., PA1109, OA1455
LIN L., PA2964
LIN L., PA1120, PA1121
LIN M., PA657, PA2080
LIN R., PA1138, PA1141, PA3410, PA3836
LIN S., PA1288
LIN S., OA3279
LIN T., PA2165
LIN V., PA455
LIN X., PA3676
LIN Y., PA307
LIN Y., PA657, PA2080
LIN Y., PA2987
LINARES S., PA4530
LIND H., OA1456
LIND M., PA3370
LINDBERG A., PA1958
LINDBERG A., PA363, OA888, PA1340, PA2064, PA2072, OA2515, OA3167, PA3624, PA3668, OA4240, PA4431
LINDBERG E., PA659, PA1281, PA2073, PA3585, PA5264
LINDBERG P., PA2967, PA3521
LINDBLAD U., OA4842
LINDE K., PA309
LINDEGAARD B., PA1806, PA2154, PA5128
LINDELL K., PA1719
LINDER N., OA4338
LINDER R., OA4240
LINDERS P., PA4571, PA4574
LINDGREN R., PA1604
LINDHOLM P., OA745
LINDNER J., PA5175
LINDÖ C., OA780, OA2489, PA4416, PA4417
LINDQVIST A., PA3337
LINDSAY M., OA4200
LINDSLEY A., PA4720
LINDSLEY A., PA3032
LINDSTEDT S., PA551, OA780, OA2489
LINDSTRÖM F., PA2120
LINDTRÖM I., PA3344
LINES S., PA368
LING K., PA1777
LINKE K., PA1098
LINNEBERG A., PA1295
LINO P., PA1034
LINZ D., PA2996, OA4845
LIONEL B., PA393
LIONELLO F., PA1019
LIONETTI A., PA5133
LIOTINO V., PA2180
LIOUMPAS D., PA337, PA3429
LIP G., PA4699
LIPMAN M., OA864
LIPSON D., OA4929
LIPTROTT N., OA4962
LISA P., PA4483
LISANTI R., PA3479
LISCHKE R., PA3362, PA4483
LISCINSCAIA C., PA2045
LISIK D., OA888
LISSPERS K., PA612, OA770, PA1028
LISTA PAZ A., PA4517, PA4518, PA4519
LISTA-PAZ A., PA349
LISTON A., PA1095
LIT M., PA369, PA2782
LITKE N., PA486
LITONJUA A., OA1440
LITSCHAUER B., OA4220
LITTLE F., OA1547
LITTLE* J., PA480
LIU C., OA2598
LIU D., PA1244, PA2081, PA3882, PA4435
LIU G., PA5213
LIU G., OA2598
LIU H., PA4003
LIU H., PA2836
LIU H., PA404
LIU H., PA3029
LIU J., PA3914
LIU J., PA1959
LIU J., PA595, PA1303, PA4404
LIU J., OA3163, PA3497
LIU L., PA5237
LIU L., PA3899, PA5195
LIU L., PA3029
LIU M., PA4757
LIU M., PA2701
LIU M., OA4297
LIU M., PA1141, PA1158, PA3410
LIU N., OA1435
LIU P., PA3815
LIU Q., PA1061, PA5076
LIU R., OA740
LIU R., OA1445
LIU S., PA459
LIU S., PA1278, PA4514
LIU T., PA3663, PA4136
LIU W., PA1288
LIU X., PA1959
LIU Y., OA1445
LIU Y., PA2882, PA3460
LIU Y., PA1109
LIU Y., PA2080
LIU Y., PA2259
LIVANOU M., PA1119
LIVERAKOU E., PA3773
LIVERKO I., PA1874, PA1875, PA2347, PA2715, PA2814, PA2825, PA3016, PA3030, PA3512, PA3514, PA5121, PA5303
LIVESEY A., PA3313
LIVIERO F., PA3795
LIVINGSTON J., PA2937
LIVINGSTON R., PA517
LIVNAT G., OA1542
LIVSHITS L., PA2332
LJILJA POSAVEC A., PA1692, PA1798, PA1818
LJUBICIC D., PA473, PA5136
LJUNGGREN G., PA3521
LJUNGGREN M., OA3294, PA3762, PA5259
LJUNGGREN M., PA3585
LJUNGMAN P., OA2518
LK TANG M., OA1434
LLANOS J., OA1419, PA4722, PA4726
LLANOS GONZALEZ A., PA411, PA1823
LLANOS-GONZÁLEZ A., PA408
LLEÓ BISA A., PA5272
LLONCH B., PA1096, PA3839
LLOP J., PA1255
LLOPIS PASTOR E., PA1808
LLOP-RIUS R., PA408
LLOYD C., PA4671
LLUCH BISBAL A., PA3590
LLUCH TORTAJADA I., PA407
LLUCIÀ-VALLDEPERAS A., PA5189
LLUIS H., PA1269
LLUNELL CASANOVAS A., PA1242
LO D., PA2752
LO J., PA3417
LO L., PA1777
LO R., PA1780
LO GIUDICE F., PA1198, PA1767, PA3961, PA5173
LO IACONO G., PA4684
LO MUZIO G., PA4096, PA4110, PA4128, PA4636, PA4645
LO NANO V., PA4079
LOBB I., PA1869
LØBERG E., PA4052
LOBIER M., PA3013
LOBO L., PA2882
LOBO S., OA786
LOCATELLI F., PA304
LOCHORO P., PA4457
LOCK C., OA1552
LOCK JOHANSSON S., PA380
LOCOCO S., PA1019
LOCOROTONDO C., PA2180
LODGE C., OA881, OA890
LODGE C., PA2078
LOEBINGER M., PA2769
LOEBINGER M., PA381, PA385, PA396, PA397, OA864, PA1071, PA1842, PA1843, PA2168, PA2340, PA2342, PA2849
LOEBINGER M., PA1070
LOEBINGER M., PA1074, PA1086, OA1461, PA2835, OA4320
LOEBINGER M., OA1457, OA1462, PA2843
LOEBINGER M., OA1458
LOEFFLER-RAGG J., PA532
LOEHR L., PA3319
LOEKABINO J., OA1427
LOERCH S., PA5346
LÖFBERG L., PA2130
LÖFDAHL A., PA2955
LOFFLER K., OA3292
LOFT S., PA305, OA2521
LOFTAGER A., PA1655
LOGAN A., PA1287
LOGES S., PA1700
LOH 1., PA2723
LOH T., PA477, PA3415
LOHMAN HAGA, PER LARSSON, SPELA KOKELJ, LINUS SCHIÖLER S., PA2720
LOI M., PA5214
LOIRAND G., PA2975
LOK S., OA1430
LOKE A., PA4661
LØKKE A., PA379, PA1325, PA1675,

PA2195, PA2869, PA2872, PA3818, PA3828, PA3834, PA4697, OA4878
LOLAS M., PA5108
LOMAURO A., PA2128, OA3189, PA3563, PA5262
LOMAX M., OA769
LOMBARD C., PA2801
LOMBARD L., PA2982
LOMBARDI C., OA4838, OA4846
LOMBARDI E., OA1435, PA2760
LOMBARDI F., PA2902
LOMBARDINI M., PA4988
LOMBI A., PA1763, PA2250, PA3974
LOMMATZSCH M., PA629, OA1420
LÖNDAHL J., PA2120
LONDNER C., PA571
LONDON S., PA3319
LONE N., OA4325
LONERGAN T., OA770
LONG D., PA1582
LONG F., OA2598
LONG M., PA2340, PA2342, PA3841
LONG M., OA1456, OA1463, PA3842
LONG M., PA1097
LONG M., PA1105
LONG P., PA3467, PA3468
LONGARÓN R., PA2201
LONGBOTTOM H., PA965
LONGCROFT-HARRIS B., PA2738
LONGO C., PA5354
LONGO F., PA2147
LONGO V., PA2708
LONGOBARDI S., PA1220, PA4665
LONGONI A., PA1822
LØNNEBOTN M., PA2073
LOOI K., PA2094
LOONG Y., PA3869
LOOR K., PA390
LOOR REYES K., OA1543
LOPES A., PA2682
LOPES C., PA2146, PA2157, PA5308
LOPES F., PA306
LOPES F., PA5048
LOPES CALVO TIBÉRIO I., PA2257
LOPES PIRES M., PA554
LOPEZ C., OA3165
LÓPEZ F., PA3919
LÓPEZ F., PA1041
LÓPEZ J., PA3656
LOPEZ M., PA1322, PA1652, PA4117
LÓPEZ M., PA1840, PA2319
LOPEZ M., PA5212
LOPEZ R., PA1334, PA1336, OA4931
LOPEZ R., OA4829
LOPEZ R., OA2503, PA3502
LÓPEZ ALADID R., PA1662
LOPEZ DE ANDRES A., PA3446
LOPEZ GARAY C., PA5217
LOPEZ GONZALEZ A., PA4660
LÓPEZ GONZÁLEZ F., PA1816, PA3057
LOPEZ LOPEZ L., PA364, PA1669, PA4531, PA5101
LÓPEZ MARTÍN S., PA4026, PA4652
LÓPEZ MARTÍNEZ S., PA4659
LOPEZ MEILLER M., PA1166
LÓPEZ MEJÍAS R., PA1140
LOPEZ MESEGUER M., PA3491
LÓPEZ MESSA J., PA2326, PA5248
LÓPEZ MIGUEL C., PA4622
LÓPEZ MONZONI S., PA3005
LÓPEZ PADILLA D., PA3679, PA4026, PA4652
LÓPEZ PADILLA D., PA4659
LÓPEZ PAVÍA C., PA3381
LOPEZ PERAL D., PA1239
LOPEZ RAMON R., PA4628
LOPEZ RUZ S., OA4834
LOPEZ SAIZ G., PA1157
LÓPEZ SEGUÍ F., PA526
LÓPEZ VILARÓ L., PA479
LÓPEZ ZAMORA M., PA5282
LÓPEZ-ALADID R., PA1084, PA1096, PA3839, PA5115
LÓPEZ-ALONSO I., OA783
LOPEZ-CAMPOS J., PA548, PA5208
LOPEZ-CAMPOS BODINEAU J., PA1242, PA2390, PA4995
LÓPEZ-CARO J., PA3043
LÓPEZ-CERVANTES J., PA3335
LÓPEZ-COLLAZO E., PA2329
LÓPEZ-COTARELO P., PA1920
LÓPEZ-LISBONA R., PA328, PA479
LÓPEZ-MARTÍNEZ A., PA4576
LÓPEZ-MARTÍNEZ C., OA783
LÓPEZ-MEJÍAS R., PA1237, PA2321
LÓPEZ-MESEGUER M., PA442, OA4344
LÓPEZ-MUÑIZ B., PA1749
LOPEZ-MUÑIZ BALLESTEROS B., PA3446
LOPEZ-RIDAURA R., PA4608
LOPEZ-RODRIGUEZ E., PA1098
LOPEZ-RUZ S., OA4835
LOPEZ-SANCHEZ M., PA3461
LOPEZ-SILVARREY A., PA5362
LÓPEZ-VIZCAÍNO E., PA5327
LOPRIORE E., PA2126
LORD J., PA2681, PA5343
LORD J., PA1181, PA1797
LORD R., PA2964, PA5300
LORDAN J., OA1531, PA5177, PA5191
LORDAN J., OA4341
LORDAN J., PA3956
LORÈ N., PA2178
LORE' N., PA2171
LORENA M., PA3314
LORENT N., PA384, PA385, PA386, PA388, PA1070, PA1071, PA2168, PA2170, PA2176, PA2340, PA2342, PA2760, PA2765, PA2769, PA4555
LORENTE J., OA782
LORENTE-BALANZA J., PA2326, PA5244, PA5248
LORENZI P., PA1093
LORENZI-FILHO G., PA1284, PA2262
LORILLON G., OA3280
LŐRINCZI L., PA3809
LORINI G., PA2298
LORUT C., PA463
LOS M., PA2126
LOSADA-OLIVA P., PA2131, PA5246
LOS-ARCOS I., PA3364
LOSCERTALES VACAS G., PA3676
LOSONCZY G., PA1282
LOSTAKOVA V., PA4483
LOTFI T., OA4223
LOTUFO P., PA306, PA2431
LOUCKS C., PA2762
LOUDON A., PA1307
LOUGH G., PA3921
LOUGHEED D., PA630
LOUGHEED M., PA3651
LOUHAICHI S., PA2093, PA2758, PA4461, PA5360, PA5367
LOUIE A., PA3887
LOUIS B., PA588
LOUIS G., OA1526
LOUIS R., OA853, PA989, PA1134, OA1452, OA1526, PA1934, PA2915, PA2918, OA3151, PA4466
LOUISE TITLESTAD I., PA380
LOUKERI A., PA2173
LOUKIDES S., PA4709, PA4717, PA5102
LOUKIDES S., PA623
LOUREIRO C., PA4109, PA4131
LOURENÇO A., PA440
LOURENÇO DA CONCEIÇÃO C., PA1112
LOURO D., PA3413
LOUVARIS Z., OA2615
LOUVRIER C., PA420, PA423, PA426, PA2129, PA3938, PA3943, OA4944
LOUW S., PA4386
LOUZIR B., PA980, PA1007, PA3643, PA5331
LOVE C., OA4237
LOVRIĆ T., PA416
LOW S., PA477
LOW T., PA1106
LOWE A., OA881, OA890
LOWE L., PA3652, PA3674
LOWE S., PA573
LOWERS J., PA2152
LOWMAN G., OA4214
LOWNDES L., PA4447
LOWRIE R., PA546
LOZANO J., PA442
LOZANO CUESTA P., PA1816, PA3595
LOZANO PERAL D., PA1238
LOZA-VÁZQUEZ A., PA2326, PA5248
LU D., PA664
LU D., PA3592
LU M., PA453
LU S., OA2610, PA3039, PA3040, PA3041
LU T., PA1954
LU W., PA2336, PA2346, PA4066
LU X., PA1308
LU Y., PA4427
LU Z., OA768
LUBNOW M., OA785
LUBURICH P., OA3282
LUCAS J., OA1545, PA1843, PA1845, PA2760, PA2761
LUCAS J., PA1862, PA2763, OA4248
LUCAS J., PA1846
LUCAS J., PA2769
LUCAS K., PA2182
LUCCA F., PA2143, PA2144, PA2148
LUCCHI M., OA1564
LUCERO B., PA2086, PA2744
LÚCIO M., PA3856
LUCKHARDT T., PA1144
LÜCKL J., PA556
LUCZKA E., PA1262
LUDLOW S., PA3649
LUDVIGSSON J., PA4427
LUDWIG H., PA5192
LUECKEN M., OA1569, OA2626
LUGOGO N., PA4721
LUGOGO N., PA5290
LUI 7., PA2723
LUI G., PA4031
LUI R., PA2970
LUIJK B., PA1079
LUÍS F., PA1058
LUIS HERCILLA V., OA786
LUIS SÁNCHEZ RAMOS J., PA659
LUISI F., OA3274
LUIZ J., PA4082
LUJÁN TORNÉ M., PA4653
LUK M., OA4945
LUKIĆ FRANOLIĆ I., PA375
Ł
ŁUKOMSKA A., PA4044
L
LUKOSEVICIUS R., PA2206
LUKS V., PA2341
LULAJ E., PA2429, PA5287, PA5288
LUM J., PA4077
LUMJIAKTASE P., PA1935
LUN C., PA548
LUNA CRUZ M., PA3506, PA3507
LUNA-LOPEZ F., PA4608
LUNARDI A., PA352
LUNARDI A., PA1034
LUNARDI A., PA4022, OA4222, PA4977
LUND T., PA4478
LUNDBÄCK M., PA1258, OA4235
LUNDBERG B., PA1606, PA5025
LUNDELL S., PA1036, OA4873
LUNDHOLM C., PA658, PA4426, PA4427, PA4999, PA5359
LUNDKVIST JOSENBY A., PA5034
LUNDQUIST A., OA2515
LÜNING S., PA1619
LUNN E., PA3025
LUNZ D., OA785
LUO F., PA3952
LUO F., OA2598
LUO J., PA1653
LUO M., PA1256, PA1703
LUO Q., PA2241
LUO T., PA3917
LUO W., PA1944
LUO Y., PA1632
LUO Y., PA1275, PA1277, PA1278, PA3029, PA3592, PA4514, PA5269
LUO Y., PA2904
LÜÖND L., OA748, PA1773
LUPORINI SARAIVA G., PA1323
LUPPI F., PA1725, PA1763, PA2250, PA2298, PA2845, PA3974, PA4725, OA4838
LUSSAC-SORTON F., OA789
LUSTREMANT C., PA426
LUTAS A., PA2899
LUTCHEN K., PA2124
LÜTHI-CORRIDORI G., PA2247
LUTTER R., OA2494, PA2745
LUTTUN A., OA3159
LUTZKO C., OA3276
LUUKKONEN R., PA1178, PA1184, PA3337
LUZ GOULART C., PA4633
LUZIA R., PA4585
LUZÓN E., PA5285
LUZÓN ALONSO E., PA3615, PA3616, PA3617

LUZZI S., PA2232, PA5277
LUZZI V., PA467, PA478, PA4590, PA5214
LV C., PA1914
LV Y., PA2717
LYBEROPOULOS P., OA3275, PA4717
LYDEN G., PA2142
LYKOURAS D., PA4397
LYNCH D., PA2275
LYNCH D., PA2280, PA2284, PA3543, PA3997
LYNCH G., OA1556
LYNN E., PA425, PA428, PA3944, PA3950
LYNN J., PA487
LYNNYK M., PA295, PA3531, PA4564
LYONS N., PA5205
LYONS P., PA5140
LYRONI K., PA1872

M

M M., PA4491
M M., PA5074
M ALBAICETA G., OA783
M KHAMIS A., OA4223
M NOLAN C., PA505, PA508
M SILVA A., PA2113, PA2114
M SMITH B., OA3143
M V SARDINHA L., PA316
M V SILVA A., PA2302
M WEIGERT R., PA2302
M. HORVATH C., PA584
M. J. GÖERTZ Y., OA2612
M. MAUCH R., PA4417
M. PÉREZ N., PA1104
M. RYAN C., PA584
M. SCHNABEL R., PA1211
M. VAN DER DOES A., OA2625, OA2629
M. VANAUDENAERDE B., PA5295
M. WOUTERS I., OA2517
M.C. VERHAMME K., PA666
MA H., OA4965
MA J., PA5342
MA J., PA1781
MA M., PA493
MA Q., PA3663
MA R., PA2234, PA2235
MA S., OA1432
MA Y., OA3276
MAALEJ M., PA2742, PA4129, PA4735
MAALEJ S., PA1082, PA2048, PA2407, PA2865, PA3659, PA3875, PA3930, PA5078, PA5116
MAATALLAH A., PA1124, PA1176, PA1185, PA1186, PA2308, PA2312, PA2862, PA4023, OA4960
MAAZAOUI S., PA2253, PA4565, PA5078, PA5089, PA5097, PA5112
MAC AOGÁIN M., PA1106, PA2188
MAC GIOLLA EAIN M., PA4018
MAC HALE E., PA524, PA2982
MAC LOUGHLIN R., PA4018
MACAGNO F., PA2375, PA4704
MACCHIONE M., PA1794
MACCHIONE M., PA4057
MACDONALD M., PA3631
MACDONALD R., PA2368
MACDOUGALL M., PA3434
MACDUFF E., OA1560
MACEACHERN P., PA460
MACEDO N., PA1663
MACEFIELD V., PA1335, PA1811, PA2272
MACERA F., PA3959
MACEY J., OA3280, PA4490
MACFARLANE R., PA3904
MACGREGOR C., OA1560
MACHADO A., OA4316
MACHADO A., OA2619
MACHADO F., PA2919
MACHADO L., PA298, PA3314, PA4593
MACHADO P., PA1663
MACIEL CAMPOS DA SILVA A., PA3638
MACINA D., PA3866
MACISAAC S., OA1430
MACKAY E., PA480
MACKENZIE A., PA3504
MACKENZIE H., OA769
MACKENZIE ROSS R., PA3504
MACKINNON A., PA4059
MACKINTOSH J., PA3544, OA4848, OA4852, OA4853
MACKNEY J., PA1045
MACLAY J., PA3313, PA3434
MACLELLAN K., PA3904
MACLEOD J., PA5062
MACLEOD K., PA2759
MACLEOD K., PA2115
MACLEOD M., PA1334, PA1336, PA2815, PA3625, OA4931
MACLEOD M., PA4145
MACLEOD M., PA1094
MACNAUGHTON L., OA1560
MACOWAN M., PA1850
MACPHERSON A., PA3434
MACRAE C., OA1560
MADAMA SANTOS SILVA D., PA2954
MADAS S., PA2396
MADDEN-SCOTT S., PA5038
MADDOCKS M., PA963
MADEMILOV M., PA1809, PA2698
MADEN M., PA523
MADGE J., OA1553, PA2104, PA2119, PA3371
MADHANI-LOVELY F., PA487
MADHAV B., PA5057
MADHI F., PA2127
MADHI S., PA329, PA1776, PA5145
MADI W., PA3929
MADINI B., PA5358
MADISON L., PA3418
MADISSOON E., OA774
MADJID C., PA3416
MADONI A., PA522
MADOTTO F., PA1725
MADUENO L., OA2523
MAEDA C., OA1453
MAENO K., PA978
MAENO T., PA2357
MÄENPÄÄ J., PA614
MAES A., PA2835
MAES J., PA534, PA536, OA764, OA871, PA3483, PA3508, PA3677
MAES K., OA1535, PA2710, PA3775
MAES N., PA2354
MAES P., PA4132
MAES T., OA4211
MAESTRE SÁNCHEZ M., PA4097
MAESTRELLI P., PA3795
MAESTRI R., PA585, PA3771
MAESTRONI R., PA585
MAETZLER W., OA3185
MAEYAMA T., PA2887
MAFFEIS G., OA3271
MAFFONI M., PA585, PA3771
MAFORT T., PA2682
MAFTEI (MUTU) A., PA1156
MAGALHÃES A., PA2214
MAGALHÃES FERREIRA P., PA2919, PA5257
MAGALHÃES LAGE MORAES M., OA778
MAGDELAINE C., PA4419
MAGEE M., PA2152
MAGER D., PA1578
MAGHUYOP N., PA519
MAGIS C., PA529
MAGLIANO D., PA2998
MAGLIO A., PA1310, PA4748
MAGLIONED P., PA436
MAGLIULO S., PA2402, PA4696
MAGNAVAL J., OA1421
MAGNES C., PA5192
MAGNET F., PA2909, PA2935, PA4152, PA4657, PA4666
MAGNI S., PA5193, PA5197
MAGNOLATO A., PA4475
MAGNONI C., PA3007
MAGNONI M., PA5280
MAGNUS N., PA3779
MAGNUSSON J., PA2881
MAGOULIOTIS D., PA3773
MAGRINI A., PA590, PA591, PA3610
MAGUIRE G., PA965
MAGUIRE J., PA5014
MAGUIRE P., PA5178
MAGY L., PA4419
MAH J., PA3625, PA4145, OA4931
MAHAJAN V., PA1801
MAHARAJ T., PA4549
MAHAVADI P., PA2369, PA3939
MAHAY G., PA4750
MAHBOUB B., PA1891, PA1892, PA1894, PA1897, PA1907
MAHBUB R., PA1847
MAHDEV S., PA541
MAHDI A., PA995
MAHDI M., PA4586
MAHDI N., PA2839
MAHÉ I., PA2245, OA4829
MAHER E., PA431
MAHER R., PA2964
MAHER T., PA2920, PA3456, PA3484, PA3509
MAHER T., PA1132, PA1136, OA2586, PA2875, PA2879, PA3460, PA3467, PA3468, PA3932, OA4195
MAHER T., OA2584
MAHESH P., PA4434
MAHESWARI K U., PA1820
MAHILANG D., PA4587
MAHMOUD N., PA995
MAHMOUDI K., PA3992
MAHMUTOVIC A., PA3680
MAI C., PA2366
MAI T., PA5164
MAI V., OA4827
MAIA E COSTA J., PA1655
MAIA E SILVA M., PA5308
MAIDSTONE R., PA1307, PA3652, OA4208
MAIELLO G., PA1742
MAIER C., OA2506
MAIER L., PA3001
MAIER L., OA785
MAIER P., OA2502
MAIETTA P., PA3582
MAILLÉ É., OA2631
MAILLEUX A., PA1230, PA1231
MAILLOTE A., PA4443
MAILLY L., OA2623
MAIN E., PA575, PA2949, PA4998
MAINGOT L., PA2111
MAINZER R., PA1630, PA4450
MAIO S., PA304, PA312, PA1961, PA3803, PA3811, PA5334
MAIOLI L., PA579
MAIR F., PA546, PA954
MAITLAND - VAN DER ZEE A., OA1437
MAITLAND-VAN DER ZEE A., PA2745, PA2748, PA2769, PA4571, PA4574
MAITLAND-VAN DER ZEE A., PA2084, PA4674, PA5354
MAITRE B., PA498, PA2766, PA3386
MAÎTRE B., PA2769
MAITRE L., OA882
MAITRE T., PA427
MAJDOUB FEHRI S., PA285, PA957, PA3537, PA5322
MAJETIĆ S., PA475
MAJOR M., PA2876
MAJORSKI D., PA2909, PA2935, PA4152, PA4655, PA4657, PA4666
MAJOS A., PA2322
MÁK B., PA3477
MAK F., PA369, PA2782
MAKAREVICH T., PA667
MAKE B., OA4936
MÄKELÄ M., PA2751
MAKHECHA S., PA1580
MAKHOUL J., PA4111
MAKHOUL R., PA5032
MAKIGUCHI T., PA5162
MAKIMOTO K., OA4933
MAKITA N., PA4706
MAKOIDA I., PA621, PA2266, PA5075
MAKOYDA I., PA1306
MAKRIS G., PA1689
MAKRIS M., PA4717
MAKUYANA N., PA1095
MAL H., PA1153, PA1230, PA3368
MALAJ V., PA5037
MALAKAUSKAS K., PA2977, PA4401
MALAKOUNIDOU E., PA422, PA1782, PA1790, PA4397
MALANDRINO L., PA2298, PA5105
MALATERRE V., OA1461, OA4320
MALBY SCHOOS A., PA1627, OA4330
MALCOLM D., PA2698, PA4983
MALCOLM H., PA2306
MALDONADO BERTACCO E., PA4527
MALERBA G., PA663
MALERBA M., PA586
MALESEVIC S., PA1272
MALFACINI D., PA594
MALFERTHEINER M., OA785
MALHOTRA A., PA1029, PA1030
MALHOTRA-KUMAR S., PA2199
MALIBORSKI A., PA299
MALIC A., PA5091
MALIK J., PA3536
MALIK J., PA3927
MALINOVSCHI A., PA612, PA634, PA1028, OA1530, PA1939, OA2517, PA3786, PA4111, PA4423, PA4499, PA5028, PA5157
MALISHCHUK A., PA3768
MALIZIA V., PA312, PA1616, PA1631, PA3947, PA4676, PA4754

MALL M., PA2852
MALL M., PA1073, PA1861, PA3561, PA3906, PA4472, OA4948, PA5005
MALLA-BAÑERES M., PA3409
MALLAT J., PA414
MALLET M., PA5024
MALLI F., PA3586
MALLIA P., PA4522
MALLOUHI A., PA4562
MALM TILLGREN S., OA4303
MALMBERG P., PA2751
MALMHÄLL C., PA2985, OA4334
MALMSTROM J., PA551
MALMSTROM K., PA971
MALO D., PA4471
MALONEY J., PA1308
MALOUIN F., OA2631
MALOYAN A., OA4949
MALPHETTES M., PA436
MALTAIS F., PA1326, OA2618
MALU K., PA4548
MALVY D., PA3838, PA5245
MAMALETZI D., PA1887
MAMANI-MATSUDA M., PA3838
MAMAZHAKYPOV A., PA448
MAMUYA S., PA3977
MÁN I., PA3809
MAN W., PA534
MAN W., PA3509, PA3769
MAN W., OA3254
MAN W., PA963
MAN W., PA1181, PA1797, PA2681
MANALAN K., OA864, PA1051, PA2223
MANALI E., OA3280
MANALI E., OA3275
MAÑAS E., PA4089
MAÑAS BAENA E., PA1881, PA3012
MANCA M., PA602
MANCINELLI S., PA3886, PA3907, PA5197
MANCINI C., PA4989
MANCINO E., PA1647, PA2085, PA2727, PA2734, PA3984, PA4477
MANCIÑO J., PA4482
MANCINO L., PA5134, PA5139
MANCOPES R., PA3478
MANDADZHIEVA S., PA4563
MANDAL S., PA575, PA587, PA2941
MANDELBERG A., PA1654
MANDELBOIM M., OA4868
MANDIN C., PA5017
MANDIZHA J., PA368
MANDURINO MIRIZZI F., PA472, PA4601
MANE M., PA1821
MANE T., PA4151
MANEL K., PA2804
MANEL K., PA3316
MANENTI L., OA2623
MANETTAS A., OA3255
MANFREDINI G., PA5334
MANFRINI G., PA4112
MANGAL D., PA4434
MANGANAS H., OA1430
MANGAS A., PA2329
MANGE K., OA1459
MANGIAPAN G., PA427, PA2149
MANGION K., PA3529
MANGSETH H., PA3466, PA4489
MANGUEIRA SARAIVA-ROMANHOLO B., PA953
MANGUGAN N., PA4014
MANI M., PA1119, PA1699, PA2855
MANI R., PA2762
MANICHAIKUL A., OA3143
MANIFIELD J., PA2692, OA3260, PA4983, PA4991
MANIKA K., PA2150, PA2812
MANIMARAN S., OA739
MANION M., PA2766, PA3386
MANISCALCO M., PA503, PA4108
MANITO N., PA3013
MANIVONG P., PA1313
MANKIKIAN J., PA427
MANKOWSKI M., PA1691
MANLEY C., PA4005
MANLEY R., PA2846
MANN E., OA4214
MANNA O., PA4754
MANNENT L., PA1308
MANNENT L., PA5286
MANNINI C., PA4393
MANNINO D., PA2713
MANOLESCU D., PA5053
MANONELLES G., PA3479
MANOUSAKI E., PA5187
MANRY J., PA4471
MANSELL S., PA587, PA2949
MANSELL S., PA575
MANSER R., PA1120, PA1121
MANSFIELD A., PA3669
MANSOUR B., PA5100
MANSOURI N., OA773, PA3365
MANSUETO G., PA3598
MANSUR A., OA876, PA987, OA1531, PA1623, PA2421, PA3348, PA3569, PA3646, PA4004, OA4335, PA4600, PA4675, PA4737
MANTERO M., PA399, PA1069, PA2807, PA3007, PA3357
MANTI S., PA2082
MANTIN H., PA4474
MANTINI D., OA4870
MANTOVANI L., PA1725
MANUEL O., PA3365
MANUEL REIS R., OA3269
MANZANA G., PA1747
MANZANO SENRA C., PA5109
MANZETTI G., PA4691
MANZUR-JATTIN F., PA1957
MAO B., PA2701
MAO B., OA4244
MAO Z., PA1257
MAOUA M., PA2856
MAR J., PA1291
MARAIN N., OA4212
MARAN A., PA5053
MARANHÃO A., PA5267
MARANHÃO R., PA4486
MARASOVIC I., PA473
MARAVIC M., PA4715
MARAZ F., PA3357
MARC M., PA3596
MARCAIS A., OA2580
MARÇALO R., PA1835
MARCHAND-ADAM S., OA2580, OA3157, OA3280
MARCHBANK A., PA1787
MARCHENA J., PA1595
MARCHESANI F., PA2375, PA4704
MARCHESI G., PA5105
MARCHESI S., PA596
MARCHESINI STIVAL R., PA3517, PA4012
MARCHETTI G., PA1779
MARCHETTI P., PA304, PA3811, PA5268
MARCHI G., PA5334
MARCHI P., OA1449
MARCHIONI A., PA1213
MARCIANO S., PA2917
MARCINIAK S., PA2775, OA3155
MARC-MALOVRH M., PA4437
MARCO M., PA1102
MARCO S., PA2433
MARÇOA R., PA389, PA2270
MARCOBAL J., PA4482
MARCON A., PA304, PA311, PA1598, PA3811
MARCOS C., PA2400
MARCOS M., PA4480
MARCOUX J., PA4682
MARCOUX V., OA1430
MARCQ E., OA1559, OA3265
MARCU M., OA2492
MARCUCCIO G., PA503
MARCUS J., PA5173
MARCUS J., OA743
MARCUS M., PA5299
MARCZAK H., OA2510
MARÉCHAL C., OA4859
MAREI Y., PA5100
MARENGHI G., PA4988
MAREY J., PA1678
MARGAGLIOTTI A., PA663
MARGARITI S., PA3821
MARGARITTE-JEANNIN P., PA661
MARGHELI A., PA329, PA5145
MARGHLANI D., PA2181
MARGHLI A., PA331, PA335, PA338, PA340, PA341, PA342, PA1776, PA3538, PA5148
MARGINEAN C., PA3483
MARGUET C., PA420
MARÍ S., PA3674
MARIA BARROS DELMONDES G., PA3061, PA4637
MARIA DE ALMEIDA F., PA953
MARIA DE CARVALHO PINTO R., PA1284, PA2262
MARIA DUARTE MIRANDA S., PA415
MARÍA MOLINA MOLINA* (* EQUAL CONTRIBUTION) M., PA3464
MARIA STANFOCA CASAGRANDE G., OA3269
MARIANI A., PA2123
MARIANI F., PA5197
MARIANI S., PA4665
MARIAPPAN V., PA3846
MARIC M., PA305, OA2521
MARICOTO T., OA770, PA1664, PA1665, OA3171
MARIE CHRISTENSEN H., PA380
MARIE-CHRISTINE S., PA393
MARIEM B., PA3048
MARILLIER M., PA1810, PA4631, OA4951
MARÍN A., PA4576
MARIN A., PA1041
MARÍN J., PA2953
MARIN ANDREU A., PA1151
MARÍN MUÑIZ A., PA5345
MARIN MUÑIZ A., PA526
MARIN MUÑIZ T., PA1221
MARIN MUÑOZ A., PA1710
MARIN ROMERO S., OA4834
MARÍN ROMERO1 S., PA5181
MARÍN ROYO M., PA1242
MARÍN TRIGO J., PA1242
MARINA MALANDA N., PA4707
MARINARI L., OA4865
MARÍN-BARRERA L., PA1683
MARÍN-CORRAL J., PA2326, PA5248
MARINCU I., PA1684, OA2492
MARINELLI A., PA2429, PA5287, PA5288
MARINESCU D., OA1430
MARINHO A., PA3979
MARINHO A., PA1225
MARINHO R., PA5049
MARINHO S., PA4516
MARINO P., PA2940, PA2942, PA3757
MARINO P., PA3494
MARINOU I., PA3573, PA3577
MARINOV B., PA2263, PA4563
MARIN-ROMERO S., OA4835
MARISCAL P., PA1749
MARISCAL AGUILAR C., PA3801
MARISCAL AGUILAR P., PA3801
MARITANO J., PA3479
MARK E., PA2399, PA3628
MARKATIS E., PA5127
MARKATOS M., PA4709, PA4717
MARKELIĆ I., PA2158, PA3376
MARKEVYCH I., PA311, PA1598
MARKOPOULOU K., PA4717
MARKOU T., PA1248, PA1301
MARKOZANNES E., PA3420, PA4581
MARKOZANNES G., PA4126
MARKS G., OA762, PA3522, OA4302
MARKS M., PA2056, OA2491, OA4224
MARKUS C., PA3472
MARKUS J., PA2968
MARKWIRTH P., PA3970
MAROGIANNI C., PA3586
MARON B., PA5192
MARONE E., PA1667
MAROTT S., OA4228
MAROTTA A., PA2951, PA4580
MAROZKINA N., PA5298
MARQUES A., PA343, PA346, PA360, PA362, PA1031, PA1035, PA1037, PA1042, PA1835, OA2619, OA4311, OA4312, OA4313, PA4523, PA5048
MARQUES R., PA1663
MARQUES S., PA1835
MARQUES DA SILVA C., OA4222, PA4977
MARQUES DIOGO J., PA5090
MÁRQUEZ MARTÍN E., PA1242
MARR N., PA4471
MARRADES P., OA2487
MARRICHI MAUCH R., PA4416
MARRIOTT J., PA987, PA2421
MARSDEN A., PA2361
MARSDEN P., PA1918, PA3037
MARSEGLIA G., PA1631, PA2083
MARSH J., PA3646, PA4004
MARSH L., PA2749

MARSH L., PA2359
MARSH L., OA4333
MARSHALL A., OA1461, OA4320
MARSHALL C., PA1952
MARSHALL G., OA4197
MARSHALL H., OA757, PA2260, PA4500, OA4857, OA4954, PA5039
MARSHALL H., PA1120, PA1121
MARSHALL J., PA1319, PA1928, PA4687
MARSHALL J., PA4628
MARSHALL N., PA5259
MARSHALL T., PA5340
MARSHALL-NICHOLS K., PA959
MARSLAND B., PA1850
MARTANI M., PA1883, PA2258
MARTELO-VIDAL L., OA4301
MARTEN A., OA4940, OA4941, PA5026
MARTENS T., PA2092
MARTH K., PA321, PA4116
MARTHAN R., OA4243
MARTHIN J., OA1545, PA2761
MARTHIN J., PA2769
MARTHIN J., PA2842
MARTHIN J., PA4464
MARTÍ J., PA4482
MARTÍ S., PA4660
MARTÍN A., PA1041, PA4482
MARTIN A., PA2319
MARTIN A., PA1321, PA1328, PA4698
MARTIN A., OA762, PA3522
MARTÍN C., PA1713
MARTIN C., PA442
MARTIN I., PA3378
MARTIN J., PA5208
MARTIN L., OA864, PA1051, PA2184
MARTIN L., PA1869, PA4035
MARTIN M., PA4742
MARTIN M., PA3792
MARTIN M., OA754
MARTIN M., OA746, OA2618
MARTIN N., OA1415, OA1418, PA1891, PA1892, PA1894, PA1897, PA4722, PA4726
MARTIN N., OA1417
MARTIN S., PA1868
MARTÍN T., PA528, PA3638
MARTIN U., PA1323
MARTIN U., OA1573
MARTÍN BOTE S., PA4026
MARTÍN CARPI M., PA572
MARTÍN CARPI T., PA4078
MARTÍN CORTIJO C., PA4518, PA4519
MARTÍN DE LEÓN R., PA2428
MARTÍN DELGADO M., PA2326, PA5248
MARTIN GALLEGO E., PA5217
MARTIN GRIFFIN BERG R., PA3971
MARTIN LANA M., PA3676
MARTÍN MEDINA A., PA5241
MARTIN NGUYEN A., OA2610, PA3039, PA3040, PA3041
MARTÍN NUÑEZ J., PA365, PA377, PA1669, PA2238, PA4531
MARTÍN ONTIYUELO C., PA1756, PA3491, PA3500
MARTIN PASCUAL A., PA526, PA1221
MARTIN PENA L., PA2251
MARTÍN RIOJA T., PA3309
MARTIN-AUDERA P., PA618
MARTINEAU A., OA889
MARTINEAU S., PA449, PA453, PA458, OA3161
MARTINEZ A., PA3656, PA5285
MARTÍNEZ A., PA3502
MARTINEZ C., PA3615
MARTINEZ C., PA1271
MARTÍNEZ D., PA1274
MARTINEZ E., OA740
MARTINEZ F., OA1432
MARTINEZ F., PA2875, PA3921
MARTINEZ F., PA4139, OA4929
MARTINEZ J., PA2252
MARTÍNEZ R., PA1840, PA2319
MARTÍNEZ ARACIL A., PA3590
MARTÍNEZ CARBONELL E., OA3290
MARTÍNEZ DE LA GÁNDARA A., PA2326, PA5248
MARTÍNEZ DE LARA A., PA2400
MARTINEZ DELGADO B., PA5208
MARTÍNEZ GARCÍA M., PA1881, PA3000
MARTÍNEZ GONZÁLEZ C., PA1242
MARTINEZ GONZÁLEZ-POSADA I., PA1816, PA2426, PA3057
MARTÍNEZ GOZÁLEZ-POSADA I., PA3595
MARTÍNEZ MARTÍNEZ R., PA5282
MARTÍNEZ MENÉNDEZ J., PA2251
MARTINEZ MESA A., PA3615
MARTÍNEZ MORAGÓN E., PA646, PA3617, PA4104, PA4728
MARTINEZ NÚÑEZ F., PA3951
MARTÍNEZ RIVERA C., PA1898, PA3616
MARTÍNEZ VARELA I., PA2326, PA5248
MARTÍNEZ VEGA L., PA1816, PA2426, PA3057, PA3595
MARTÍNEZ-BRISEÑO D., OA872
MARTINEZ-CÁCERES E., PA1169
MARTINEZ-DELGADO B., PA2344
MARTÍNEZ-LLORENS J., PA5154
MARTÍNEZ-MORAGÓN E., PA1924
MARTINEZ-NUNEZ R., PA4586
MARTÍNEZ-OLONDRIS P., PA1075
MARTÍNEZ-SÁNCHEZ J., PA2743
MARTIN-FERNANDEZ M., PA4471
MARTINI M., PA2374
MARTÍN-MEDINA A., PA1840
MARTINO L., PA406
MARTINÓN-TORRES F., PA2728, OA4246
MARTINOT J., PA4088
MARTINOVIC J., OA2586
MARTINS Â., PA2113, PA2114
MARTINS A., PA1586
MARTINS B., PA3979
MARTINS P., PA1225
MARTINS S., PA1005
MARTINS V., PA1031, PA1835
MARTINSEN Ø., PA2754
MARTINU V., PA2760, PA2761
MARTÍN-VALERO R., PA4518, PA4519
MARTÍN-VICENTE P., OA783
MARTIS F., PA418
MARTUSEWICZ-BOROS M., PA1737, PA5168
MARUGO F., OA1558
MARULANDA J., PA2776
MARUSIC A., PA1115
MARVISI M., PA4989
MARWA B., PA3930
MARWAH I., PA2223
MARZOUKI S., PA300, PA628, PA1285, PA2043
MASA J., PA3005, OA4841
MASARWEH K., PA1654
MASCAMBRONI S., PA2100
MASCARENO PONTE M., PA3004
MASCHIO M., PA4475
MASCHIO DE CENSO C., PA1284, PA2262
MASDEU M., PA1274, OA4841
MASELLI D., OA1460
MASELLI D., OA1416
MASELLI L., PA2429, PA5287, PA5288
MASHINYIRA A., OA861, PA5087
MASKELL N., PA4437
MASKELL N., OA1563, PA3301, PA3855
MASKELL N., PA3298
MASLOVA E., PA2382
MASMOUDI K., PA2742, PA4129
MASMOUDI K., PA4735
MASNAGHETTI S., PA3771
MASOLI M., PA4732
MASOLI M., PA951, PA1895
MASON P., PA3795
MASON T., PA3488, PA3495
MÁSPERO J., PA1891, PA1892, PA1894, PA1897
MASPERO J., PA632
MASSARI L., OA1539
MASSARO C., PA3760, PA4662
MASSEY L., PA2393
MASSEY O., PA2392
MASSIN N., PA2766, PA3386
MASSON P., OA3285
MASSON P., PA581
MASSON-ROUCHAUD A., PA420
MASSRI A., OA789
MASTELLA C., PA2128
MASTERNAK M., OA2583
MASTERSON C., PA5237
MASTORIDIS P., PA1584
MASTROIANNI C., PA2315, PA4020
MASTROMARINO M., OA1564
MASUCCI A., PA1631, PA3947
MASUDA A., PA5231
MATA J., PA2283
MATA SALVADOR M., PA1756
MATAMA C., PA2403, PA3063
MATAMALA N., PA5208
MATAR M., PA427
MATEI M., PA2714
MATEO M., PA3308
MATEOS-TOLEDO H., PA4561
MATERA L., PA2085, PA2734, PA3984, PA4477
MATESANZ LÓPEZ C., PA3445, PA5170
MATEU GÓMEZ L., PA5345
MATEUS L., PA1057, PA2799, PA2810, PA4541
MATEUS-MEDINA É., PA1856
MATHES T., PA2909, PA2935, PA4152, PA4666
MATHEUS E., PA1696
MATHEUS RAMÍREZ E., PA1734
MATHEW J., PA1821
MATHEW J., PA4994
MATHEW N., PA1004, PA4695
MATHEWS K., PA3620
MATHIESEN K., PA3072
MATHIOUDAKIS A., OA2608, OA4214
MATHIOUDAKIS A., PA3021, PA3324
MATHSSON-ALM L., PA2337
MATHUR S., PA3399
MATIAS T., OA4310
MATIAS DE ALMEIDA SANTOS C., PA3061
MATILDE P., PA1057
MATLLÓ J., PA4576
MATOS P., PA488
MATOS DA CRUZ F., PA953
MATOUSEK M., PA2209
MATOVU DUNGU A., PA1806
MATRICARDI P., PA5372
MATSOUKI N., PA3320, PA5318, PA5328
MATSUBAYASHI S., OA4299, PA5238
MATSUDA T., PA401, PA1723, PA3499
MATSUI A., OA2513
MATSUI S., OA2513
MATSUMOTO F., PA3554
MATSUMOTO H., PA3443
MATSUMOTO I., PA4706
MATSUMOTO K., PA2306, PA2948
MATSUMOTO K., PA4399
MATSUMOTO S., PA1059
MATSUMOTO Y., PA468
MATSUMOTO Y., PA466, PA468, OA2591, PA5137
MATSUMURA Y., PA3900
MATSUNAGA K., PA1331, PA1729, PA2410, PA3447, PA4000
MATSUOKA M., PA2403, PA3063
MATSUSHITA S., PA644
MATSUZAWA S., PA2059
MATTANA G., PA588
MATTEIS S., PA3352
MATTES J., OA1546
MATTHAIOU A., PA2851, PA3385
MATTHAIOU A., PA2854, PA3987, PA4037, PA5187
MATTHES S., PA1679, OA4840
MATTHEW R., OA1545
MATTHEWS J., OA1531
MATTHEWS K., PA5340
MATTHEWS N., PA4454
MATTHEWS S., PA1115, PA1118, OA1425
MATTHEWS V., PA1180
MATTSSON J., PA1233
MATUCCI A., PA4757
MATUCCI-CERINIC M., OA746
MATUPUMANON S., PA1935
MATURU V., PA1907
MATUTE VILLACIS M., PA1041
MATUTE VILLACIS M., PA526, PA1221
MATVIIENKO Y., PA4552
MATZNER-LOBER E., PA5296

MAUAD E., PA1117
MAUAD T., PA306, OA780, OA2489, PA2984, PA4057, PA5250
MAUCH R., OA780
MAUCLIN M., PA656
MAUFROY E., PA3787, PA4647
MAURAC A., PA4616
MAURAT E., OA900, OA4243
MAURER B., PA3467
MAURER C., PA4114
MAURER H., PA3576
MAURER M., PA4051
MAURY E., PA1943
MAUTONE S., OA3177
MAVI D., OA4327, PA4446, PA5083
MAVI TORTOP D., PA2731, PA2732, PA2753
MAVRONASSOU A., PA499
MAVROUDI E., PA4091
MAWER A., PA4628
MAWHINNEY T., PA2335
MAWSON P., OA1462
MAXIMINK ESTEVES VILLAR P., PA1172, PA2685, OA4226
MAY GAMBLE G., PA1603
MAYALL J., PA1091, PA2818
MAYAUX J., PA1678
MAYER A., OA1566
MAYER L., OA747, OA748, PA1773, PA1774
MAYHEW A., PA1922
MAYOR ÁLVAREZ M., PA5309
MAYOS M., PA1274, OA4841
MAYOS PÉREZ M., PA5272
MAYOS PÉREZ M., PA3008
MAYR C., OA2624
MAYR C., OA1569, OA2626
MAZELLIER N., PA2149
MAZENQ J., PA420, PA423, PA4443
MAZO C., PA4482
MAZULOV O., PA2773, PA4460
MAZUREK J., PA5169
MAZZA A., PA2082
MAZZÀ C., PA1592
MAZZARELLA E., PA4702
MAZZOTTA P., PA1783
MAZZUCA M., PA2100
MAZZUCCO G., PA349, PA513
MBATA M., PA2247
MC CARTHY C., PA428, PA2236, PA2930
MC CARTHY S., PA5237
MC CRAE C., OA780
MC DONNELL-NAUGHTON M., PA2910
MC DONOUGH J., OA1572
MC GRATH E., PA2930
MC KENZIE A., PA2140
MCADAM J., PA3444
MCALEES J., PA4412
MCARTHUR S., PA5062
MCAULEY D., PA2335
MCAULEY D., PA5239
MCAULEY H., PA1181, PA1797, PA2681, PA2687, PA2694, PA5347
MCAULEY H., PA2397, OA2491
MCCABE C., PA3488, PA3494, PA3495
MCCABE J., OA3266
MCCAFFREY L., PA2416
MCCAFFREY T., PA3810
MCCALLION P., PA391
MCCANN W., PA985
MCCARREN B., PA1803, PA3985
MCCARRY A., PA4610
MCCARTHY C., PA425, PA1162, PA2292, OA3168, PA3944, PA3950
MCCARTHY J., PA1833
MCCARTHY K., PA4502, PA4512
MCCARTHY N., OA765
MCCLATCHEY K., PA3404, PA4599
MCCLEAN M., PA2063
MCCLOUD P., PA4386
MCCOLLUM E., PA2801
MCCONNACHIE A., PA3529
MCCOOL C., PA1736
MCCORKELL A., PA1736
MCCORMACK C., PA1757, PA5178
MCCORMACK F., PA2292
MCCOWEN D., PA965
MCCOY J., OA1548, PA4469
MCCOY K., OA1541, PA1625, PA3370
MCCRACKEN B., PA1215
MCCRAE C., PA2985, PA3051
MCCREADY C., OA1547
MCCULLAGH B., PA1757, PA5178
MCDERMOTT R., PA2796
MCDONALD B., PA3571
MCDONALD C., PA2233
MCDONALD M., OA2497
MCDONALD V., OA4302
MCDONALD V., PA3060
MCDONALD V., PA1045, PA1589, PA1895, OA2500, PA3604
MCDONNELL L., PA587
MCDONOUGH J., OA894, OA1535, PA2710, PA3775
MCDOWELL P., OA1528
MCDOWELL P., OA1531
MCEACHAN R., OA882
MCELROY M., PA2361, PA3897, PA3904
MCELVANEY G., PA5107
MCELVANEY G., PA650, PA4677
MCELVANEY N., PA3310
MCELVANEY N., PA613, OA3146
MCELVANEY O., OA3146, PA3310
MCEVOY A., PA2746
MCEVOY D., OA3292
MCEVOY R., PA1275
MCEVOY R., PA4514
MCEWAN K., PA5265
MCFADDEN P., PA3950
MCGARRY J., PA3434
MCGARRY L., PA2142
MCGARVEY L., PA1911, OA2610, PA4144, PA4145, PA4675
MCGEE K., PA3763
MCGETTRICK M., PA3763, PA4978
MCGOWAN B., PA1276
MCGRATH E., OA3168
MCINNES E., OA1552
MCINTOSH A., PA3529
MCINTOSH E., PA546
MCINTOSH E., OA1456, OA1463
MCKAY G., OA2631
MCKEE C., PA2335
MCKEEVER T., PA5275
MCKELVEY M., PA2335
MCKENZIE A., PA2703
MCKEOUGH Z., PA541, PA965
MCKERNAN C., PA1200, PA1209
MCKINNELL J., PA4558
MCLACHLAN G., PA2823
MCLACHLAN R., PA3604
MCLAUGHLIN A., PA4549
MCLAUGHLIN V., OA740, PA1203
MCLAUGHLIN V., OA739, OA742
MCLEAN S., PA1867
MCLEAN S., PA4048
MCMENAMIN A., OA3165
MCMULLAN I., PA542, PA543
MCMULLAN R., PA2962, PA2963
MCMULLEN S., PA1313
MCMULLIN K., PA5253
MCMURRAY A., PA1634, PA2759
MCNAB J., PA965
MCNALLY R., OA1462
MCNAMARA P., PA2964, OA4962
MCNAMEE M., PA5332
MCNICHOLAS-BEVENSEE C., PA456
MCNULTY S., PA2762
MCPHERSON A., PA546
MCQUALTER J., PA2233
MCQUILTEN H., OA2483, PA2823
MCSHANE H., PA4628
MCSHANE P., PA2852
MCVEIGH N., PA2292
MCWILLIAMS A., PA1120, PA1121
MDONOUGH J., OA4346
MEACHERY G., OA4341
MEAD D., PA1941
MEAH S., PA3049
MEALING S., PA521
MEANI P., PA3367
MECHERGUI N., PA638, PA3332, PA3336, PA3660
MEDEIROS D., PA3061, PA4637
MEDFORD A., PA3298
MEDI W., PA285
MEDIANO O., PA1274, PA3005, OA4841
MEDIANO SAN ANDRÉS R., PA3005, OA4841
MEDIAVILLA ANGULO D., PA1161
MEDINA G., PA1166
MEDINA BADENES P., PA2243, OA4831
MEDINA GALLARDO J., PA4097
MEDINA-IGLESIAS P., PA3678
MEDJAHDI N., PA2111
MEDJIOFACK DJEUJO F., PA594
MEDRINAL C., PA502, PA1212, PA1214, PA1219
MEDYEDALI F., PA4129
MEECHOOVET B., PA2273
MEEK D., PA3313
MEERAN K., PA4723
MEERBURG J., PA1074
MEERBURG J., PA1086
MEERSMANN T., OA4857
MEETSCHEN M., PA1131
MEGARITIS D., PA1592, PA2268, OA3185
MEGDICHE L., PA3833
MEGDICHE M., PA3875
MEGDICHE M., PA2197, PA4569, PA4740, PA5152
MEGGED O., PA1654
MEGHDICHE M., PA3017
MEHANDALE S., PA4579
MEHARG D., PA965
MEHDI KHAN M., PA3870
MEHIRI N., PA1007, PA3643, PA5331
MEHIRI N., PA980
MEHMOOD T., PA3637, PA4747
MEHRA R., PA573
MEHRAVARAN H., PA548
MEHTA A., PA481
MEHTA P., OA1566
MEHTÄLÄ J., PA662
MEI F., OA1429, PA1748, PA1779, PA3436, PA4725
MEIJBOOM L., OA743
MEIJBOOM L., PA1765, PA5183
MEIJBOOM L., PA5173
MEIJER E., OA3184
MEINERS S., PA1947, PA4682
MEIS J., PA3581
MEISCHL T., OA3146
MEI-ZAHAV M., OA1542, PA4474, PA5031
MEJDOUB FEHRI S., PA3929
MEJÍA M., PA1160
MEJRI I., PA578, PA1791
MEJRI I., PA3875
MEKIDECHE A., PA2387
MEKKI M., PA955
MEKONTSO-DESSAP A., PA1678
MEKOV E., PA548
MELACINI C., PA3528, OA4959
MELAMED D., PA1261, PA4670
MELANIE G., PA4381
MELARAM R., PA313
MELDGAARD A., PA4658, PA4664
MELDRUM C., PA4139
MELDRUM O., PA2193
MELÉN E., PA664, PA1606, OA2502, OA2518, OA2519, PA3674, OA4240, PA4407, PA5025, PA5027
MELENEVYCH A., PA1346
MELENKA L., PA2071
MELETIS G., PA1689
MELGAARD M., OA4331
MELGERT B., PA1260
MELGERT B., PA2355, PA2360
MELIS E., PA590, PA591, PA597, PA3610
MELISSARI L., PA3004
MELLE M., PA3635
MELLONI B., PA4419, PA4432
MELLONI G., PA3907
MELNUK-SHEREMETA O., PA5075
MELNYK-SHEREMETA O., PA2266
MELNYK-SHEREMETA O., PA621
MELO D., OA4310
MELO N., PA410, OA854, PA1155, PA1164, PA2919
MELO CRUZ M., PA410
MELO NARVÁEZ M., PA560
MELO-NARVÁEZ M., OA2624
MELONE J., PA2267
MELONE M., PA1212, PA1214, PA1219
MELONI F., PA3486, PA3493, PA3907, PA3910, OA4201, OA4342, OA4345
MEMON A., PA2722
MENAHEM S., PA2132
MÉNARD F., PA5245
MENA-YI D., PA1957
MENCARINI J., OA4321

MENCHACA S., PA471
MENDELSON E., OA4868
MENDES A., PA4734
MENDES B., PA325
MENDES F., PA528
MENDES M., PA362, OA4316, PA5049
MENDES M., PA343, PA1037, PA1835, OA4311, PA5048
MENDES P., PA1762, PA2685, OA4226
MENDES R., PA4141, PA4516
MENDES S., PA1739
MENDES-FERREIRA P., PA440
MÉNDEZ A., PA1633
MÉNDEZ C., PA5127
MENDEZ K., OA1440
MÉNDEZ ALONSO A., PA3761
MENDEZ DIAZ C., PA4436
MÉNDEZ GONZÁLEZ L., PA370, PA371
MENDEZ MANGAS L., PA1710
MÉNDEZ-BREA P., OA4301
MENDILUCE-OCHANDORENA L., PA349
MENDONÇA I., PA1225
MENDONÇA DE OLIVEIRA L., PA2257
MENDOZA N., PA1075, PA1157, OA2487, OA4196, PA5194
MENDOZA BRAVO C., PA5254, PA5255
MENDOZA ZAMBRANO E., PA5181
MENDOZA-VALDERREY A., OA4344
MENEGAS D., PA5127
MENEGHELLI I., PA2143
MENENDES R., PA397
MENENDEZ R., PA381, PA384, PA388, OA782, OA788, OA1457, OA1458, PA2326, PA2843, PA2849, PA5244, PA5248
MENENDEZ SANCHEZ C., PA5217
MENÉNDEZ VILLANUEVA R., OA4864
MENESES PETERSEN E., PA407
MENEZES P., PA1907
MENG F., PA1959
MENG H., PA4136
MENG L., PA1709
MENG S., PA3781
MENG Y., PA1249, PA3896, PA4062
MENG Z., OA4297
MENICHINI I., PA430, PA4025
MENIGOZ C., PA1731
MENON M., OA4214
MENOTTI G., PA2798
MENTENS X., PA2103
MENZEL M., OA4303, OA4966, OA4968
MENZELLA F., PA4112
MENZIES D., PA5143
MENZIES-GOW A., OA1420, OA1531, PA2382, PA4131
MENZIES-GOW A., PA1891, PA1892, PA1894, PA1897
MEOCCI M., PA2305, PA5277
MERCADO VELÁZQUEZ P., PA1772
MERCIECA D., PA5146
MERCIER J., PA4416, PA4417
MERCIER M., PA3011
MERCURI F., OA2483, PA2823
MERENKOVA I., PA1746
MERGULHÃO P., PA1225
MERIEM M., PA1964
MERIGGI P., OA4838
MERKUS P., PA2739
MERLO C., PA2142
MERSNI M., PA638
MERSNI M., PA3332, PA3336, PA3660
MERTZ P., PA5007, PA5008
MERY G., PA288
MERZI ÖZTÜRK A., PA2203
MESA LEÓN N., PA411
MESCHI C., PA4079, PA5334
MESEGUER SISTERNES M., PA407
MESINELE J., PA5006
MESLIER N., PA581
MESQUITA R., PA4527
MESQUITA MONTES A., PA962
MESSA M., PA2250
MESSA M., PA5205
MESSER B., OA3193
MESSIER R., PA5007, PA5008
MESSIKA J., PA498, PA3368
MESSINA M., PA2221, PA2305, PA5277
MESSINEO L., PA1274, PA3594, PA3597
MESSORE B., PA2160
MESTDAGH P., OA777
MESTIRI T., PA342
MESZAROS G., PA1192, PA3503
MÉSZÁROS M., PA582, PA1282, PA2207, PA3002
METAXAS E., PA337, PA3429
METAXAS G., PA2859
METCALF J., PA4127
METERAN H., PA3668
METERSKY M., PA2835
METIN CAKAR N., PA2107, PA4465, PA5003
METINTAS M., PA2870, PA3299
METINTAS S., PA2870, PA3299
METS O., OA4850
METTING E., PA2906
METWALLY N., PA2745
MEULEMAN R., PA1250
MEULEMAN R., PA2360
MEURLING J., PA1276
MEUWLY N., PA2116
MEXATAS G., PA3330
MEYER C., PA5098
MEYER C., PA5099
MEYER C., PA5099, PA5123
MEYER D., OA4329
MEYER G., OA4827
MEYER K., OA774
MEYER M., OA2623
MEYER M., PA1615, PA1809
MEYRICK V., PA3403
MEYS R., PA1050
MEZIDI M., OA4955
MEZZASALMA F., PA2219, PA2221, PA2225, PA2305, PA3902
MEZZI K., PA1584, PA3625, PA4144, PA4145
MHAMDI S., PA578, PA1285, PA1791, PA2043, PA4755
MHAMEDI S., PA300, PA642, PA4760
MHIRI F., PA1082, PA5116
MHIRI F., PA3930
MIADLIKOWSKA E., PA1167, PA3482
MIAH A., PA4138
MIAO L., PA5314
MIAO T., OA4244
MIAO Y., PA457
MICELI A., PA1089
MICELI V., PA406
MICHAELIDOU E., PA5018
MICHAELOUDES C., PA552
MICHAILIDIS N., PA545
MICHAILIDOU A., PA1873
MICHAILIDOU I., PA5150
MICHALICK L., PA4051
MICHALIKOVÁ B., OA2632
MICHANIKOU A., PA5018
MICHELETTO C., PA2298
MICHELIS S., PA337, PA3429
MICHELL S., PA2846
MICHELS E., PA3426
MICHELS E., PA2199
MICHELS J., PA3581
MICHELS J., PA486, PA4623
MICHELS J., PA485
MICHIELETTO L., PA5134, PA5139
MICHIELS J., OA3159
MICHILS A., PA3787, PA4111
MICIELI C., OA2498
MICO AMIGO E., PA1595
MICÓ-AMIGO E., OA3185
MICOULAUD J., PA580
MIDHUN M., PA1004, PA4695
MIDTVEDT Ø., OA746, OA857, PA2914, PA3471, PA3476
MIDULLA F., PA1647, PA2085, PA2727, PA2734, PA3984, PA4460, PA4477
MIEDE C., PA2874, PA2878, PA3463
MIEDINGER D., PA547
MIEDINGER D., PA4743
MIEMCZYK S., PA3425
MIFFRE C., PA952
MIGAS S., PA1915
MIGAUD M., PA4471
MIGHRI I., PA2308
MIGLIARINI A., PA4025
MIGLIETTA D., PA975, OA4305
MIGUEL J., PA3784
MIGUÉNS-SUÁREZ P., OA4301
MIGULINA N., PA2351
MIHAI A., PA2406
MIHAI C., PA3471
MIHAI C., OA857, PA2914
MIHAICUTA S., PA1684, PA2713, PA3002, PA3003, OA4837
MIHAILOVA S., PA2089
MIHELČIĆ KORTE D., PA416, PA1701
MIJAKOSKI D., PA3353, PA3813
MIKÁCZÓ A., PA1735
MIKALSEN I., OA2621
MIKAMI Y., PA468
MIKE D., PA5253
MIKHAILOVA E., OA739
MIKI M., PA5132
MIKIASHVILI L., OA865
MIKKELSEN H., PA2069
MIKLÓS Z., PA1226
MIKLUSZ P., PA2222
MIKOV J., PA1347
MIKROVASILI E., PA3330
MILACEK C., PA1738, PA5122
MILANESE G., PA2147
MILANI L., PA472, PA4601
MILANO C., PA1763, PA2250, PA3528, PA3974, OA4959
MILARA J., PA2365
MILEA D., PA1316, PA1906
MILENKOVIĆ A., PA1968, PA2860, PA3459
MILENKOVIC B., PA610, PA2053
MILES C., PA1846
MILES J., PA3044
MILESI I., PA4988
MILET I., PA1225
MILEVA S., PA2089
MILGER K., PA639
MILGER K., PA635, PA3358, PA4708, PA4752
MILGER-KNEIDINGER K., PA629, PA3605, PA5161
MILGER-KNEIDINGER, K., PA4726
MILIAUSKAS S., PA1329, PA1333, PA2206
MILIGHETTI M., OA1566
MILINKOVIC T., PA374
MILIONIS H., PA5127
MILITARU A., PA3003
MILITO C., PA436
MILJKOVIC D., PA3459
MIŁKOWSKA-DYMANOWSKA J., PA1167, PA1743, PA3482
MILLAN A., PA2252
MILLAN P., PA1749, OA3282
MILLAN PONS A., PA5282
MILLAN-BILLI P., PA1169
MILLER B., PA4087
MILLER B., PA2823
MILLER B., OA2483
MILLER C., PA3434
MILLER D., PA1843
MILLER M., PA4678
MILLER, JR. W., OA4865
MILLETTE G., OA2631
MILLS A., PA2846
MILLS B., PA550
MILLS G., PA1181, PA1797, PA2686
MILNE A., PA3897
MILNE A., PA3855
MILNE K., OA4951
MILNE S., PA3411
MILNES L., PA3824
MILOSAVLJEVIC T., PA3526, PA3527, PA3530
MILROSS M., OA2620, PA5042
MILWARD E., PA2818
MIN B., PA4055
MIN J., PA2179
MIN K., PA2822
MINAGAWA S., OA4299, PA5238
MIÑAMBRES E., PA4482
MINAMOTO H., PA412
MINAMOTO S., OA2513
MINATO I., OA4947
MINELLI C., PA653, OA858, PA1952, PA3339, PA3352
MINEMURA H., OA3148, PA3776
MINENNA E., PA4748
MINESHITA M., PA2059
MINGOTE A., PA5246
MÍNGUEZ O., OA788, PA1274
MINNIS P., PA404, PA1736
MINNITI M., PA2338
MINOV J., PA1312, PA3353, PA3813
MINOVES M., PA3584
MINSHALL H., OA767, PA3613
MIO T., PA998, PA3859, PA3891
MIR A., PA4458
MIR VILADRICH I., PA1242
MIRABELLI F., PA4020
MIRABELLI F., PA4636, PA4645

MIRAKHUR A., PA2913
MIRANDA I., PA440
MIRANDA J., PA3883
MIRANDA K., OA1449, OA1451
MIRANDA M., PA4078
MIRANDA HERNÁNDEZ M., PA572
MIRANDA MIÑO M., PA514
MIRAVETE-LAGUNES K., OA783
MIRAVITLLES M., PA548, PA2192, PA2194, PA2371, PA3309, PA3920, PA4398, PA5107, PA5208
MIRCHANDANI P., PA297
MIRELLA SPALLUTO C., PA2286
MIRIZZI A., PA2952
MIRIZZI A., PA4580
MIRRA D., PA2352, PA4685
MIRY F., PA1676
MIRZA S., PA446
MIRZALIEVA G., PA1809, PA2698
MISHARIN A., OA2485
MISHRA D., PA1789
MISIUKIEWICZ-STĘPIEŃ P., OA2510
MISKIV V., PA3027
MISKOWIAK K., PA4115
MISMETTI P., OA4827
MISMETTI V., OA3157, OA4828, PA5182
MISRA N., PA2208
MISTRY V., PA1291
MISURACA S., PA2148, PA3850, PA5093
MITCHELL H., PA484, PA4143
MITCHELL J., PA554
MITCHELL J., PA1918
MITCHELL M., PA4437
MITCHELMORE P., PA2840, PA2846
MITCHINSON H., PA1842
MITCHISON H., PA1843, PA2762
MITCHISON H., PA1070
MITEVA D., PA2189
MITEVA D., PA3372
MITROPOULOU G., PA1799
MITROUSKA I., PA5187
MITROVIĆ J., PA1798, PA1818
MITTON C., PA4628
MIU F., PA3442
MIURA Y., PA3901
MIURA Y., PA2357
MIWA M., PA3554
MIYAMOTO A., PA468
MIYAOKA C., PA626
MIYASHITA L., PA1104
MIYAUCHI S., PA633, PA1938
MIYAZAKI T., OA4247
MIYAZAKI Y., PA434, OA1424
MIYOSHI M., PA5231
MIZERA J., PA3593
MIZIARA J., PA1112, PA1117
MIZIOU K., PA2859
MIZUGUCHI K., PA3900
MIZUKAMI A., PA2392
MIZUTA Y., PA2887
MIZUTANI R., PA1005
MJID M., PA2264
MJID M., PA628, PA983, PA1268, PA1315
MJÖSBERG J., OA2495, OA2502, PA4407
MKADDEM S., PA2993, PA2994, PA2995
MLIKA M., PA323, PA5148
MO C., PA1653
MOATAMERI Z., PA642, PA4755, PA4760
MOATE R., PA1690
MOATEMRI Z., PA578, PA1791
MOBARREZ F., PA1258
MOĆAN A., PA416
MOCAN C., PA5053
MOCAN ÇAĞLAR Y., PA2732, PA2753, PA4446, PA5083
MOCNIK T., OA3169
MODARESI M., PA4471
MODI M., PA2907, PA5339
MODIG L., PA311, PA2073, OA2517
MODIN D., PA1838
MODINA D., PA1725
MODY C., PA460
MOELLER A., PA5024
MOEN B., PA3977
MOERMANS C., PA989, PA1934, OA3151
MOETAMRI Z., PA1285, PA3875
MOETEMRI Z., PA300, PA2043
MOFFAT K., PA2115
MOGAL R., PA484, PA4143
MOGNE T., PA325
MOGULKOC N., PA3454
MOHAMAD 3., PA2723
MOHAMADY Y., OA1535, OA3159, OA4346, PA5211
MOHAMADY Y., PA2710, PA3775
MOHAMADY Y., OA4343
MOHAMADZADEH I., PA4471
MOHAMED AMINE C., PA5079
MOHAMED HOESEIN F., PA1079
MOHAMED JAMIL N., PA1784
MOHAMED-HUSSEIN A., PA1688
MOHAMMAD M., PA3971
MOHAMMADI A., PA2369
MOHAMMED S., PA4434
MOHAMMED S., OA2498
MOHAMMED ELSHAZLY A., PA4013
MOHAN A., PA615, OA896
MOHAN D., PA1292
MOHANKUMAR R., OA883
MOHD HAIRI 1., PA2723
MOHEIMANI F., PA1253
MOHER ALSADY T., PA2276
MOHIUDDIN N., PA4663
MOHR T., PA5316
MOINARD J., PA531
MOINE E., PA518
MOIR J., PA546
MOISÉS J., PA1683
MOITRA S., PA2066, PA2067, PA2071, PA3602
MOITRA S., PA2066, PA2067, PA2071, PA4596
MOK H., OA2490
MOKADDEM S., OA4326, PA5365
MOKADEM S., PA3978
MOKHTAR EMARA D., PA1826
MOKOSOVA R., PA4483
MOKRANI M., OA4324
MOLANI A., PA324
MOLANO L., PA1212, PA1214, PA1219
MOLBERG Ø., OA857, PA2914, PA3466, PA3471, PA3476
MOLDEN N., PA1603
MOLFINO N., OA1415, OA1417
MOLIMARD M., PA531, PA4432
MOLIN M., OA1530
MOLINA M., OA2588, OA4196
MOLINA FERRAGUT L., PA5174
MOLINA MOLINA M., PA328, PA3491, PA3922
MOLINA SALDARRIAGA F., PA5093
MOLINA-MOLINA M., PA408, PA429, PA442, OA3282, PA3461, PA3919, PA3921, PA5154
MOLINA-MOYA B., PA4576
MOLINARI L., PA3479
MOLINARI N., PA5206, PA5296
MOLINERO M., PA2326, PA5244
MOLINERO GARCÍA M., PA5248
MOLINIER V., PA518, PA952
MOLINO A., PA503, PA4108
MOLL M., OA2497
MOLLA KAFI H., PA5012
MÖLLER A., PA4460
MØLLER J., PA2228
MØLLER U., OA887
MØLLER FELL A., PA3414
MØLLER WEINREICH U., PA1010, PA1027, PA1332
MOLLOY E., PA2930
MOLODOVETS O., PA3027, PA4976
MOLODOVETS O., PA5075
MOLTENI F., PA5262
MOLYNEAUX P., OA4857
MOLYNEAUX P., PA404, OA2586, PA3484, PA3509
MOLYNEAUX P., PA3932, OA4195, PA4671
MOLYNEAUX P., PA3456
MOLYNEUX L., PA1111
MOMAS I., PA2065
MOMENILANDI M., PA4471
MOMI H., PA2697
MOMPEAN RODRÍGUEZ S., PA1881, PA3000
MOMVILLE M., PA4539
MONACO F., PA3436
MONAGHAN S., PA965
MONASTERIO PONSA* C., PA3464
MONCUSÍ-MOIX A., OA788, PA2326, OA3292, PA5109, PA5244, PA5248
MONDILLO C., PA1747
MONDONI M., PA1198, PA1725, PA1767, PA3774
MONFORTE V., PA3364
MONG M., PA2320
MONGE A., OA788, PA4583
MONIAKI V., PA4091
MONK P., PA1691
MONONEN M., PA3458
MONSHI TOUSI N., PA2277
MONSON V., PA2853
MONSURRÒ G., PA1229
MONTACLAIR K., OA4829
MONTAGNA L., PA1631
MONTAGNOLO F., PA2180, PA2429, PA5287, PA5288
MONTALBÁN K., PA1107, PA4476
MONTALBANO A., PA2708, PA4038
MONTAÑEZ A., PA3831
MONTAÑEZ OROZCO A., PA3306, PA3307, PA3826, PA3829, PA5069
MONTAÑEZ-OROZCO A., PA3302, PA3305, PA3312
MONTANI D., PA1193, PA1202, PA1766, OA3157, OA3160, PA3486, PA3493, PA3957, PA5180
MONTANINI B., OA4947
MONTASTRUC F., OA1421
MONTAVA GARRIGA L., PA1233
MONTEIRO CANHOTO D., PA5077
MONTERO P., PA2365
MONTES A., PA5048
MONTES L., PA4089
MONTESI S., OA2588
MONTESINOS M., PA453
MONTES-WORBOYS A., OA3282, PA3464
MONTEVERDE C., PA5090
MONTGOMERY B., PA4035
MONTGOMERY B., OA4969
MONTGOMERY H., PA1732
MONTGOMERY S., PA1677, PA2094, PA2957
MONTI M., PA5197
MONTIEL G., PA3031
MONTINI S., PA1163, PA2162
MONTMERLE M., PA3948
MONTÓN SOLER C., PA4653
MONTRAVERS P., PA3368
MONTSERRAT J., PA1274, OA4841
MONTUORI G., PA2219, PA3902
MONZANI A., OA4838
MONZIO COMPAGNONI M., PA2845, PA4725
MOODIE E., OA884
MOODLEY Y., OA4852, OA4853
MOOIJ - KALVERDA K., OA4850
MOON D., PA549
MOON H., PA2901
MOON K., PA645
MOON S., PA2174
MOOR C., OA3283
MOOR C., PA495, OA1427
MOOR K., PA429, OA852
MOORCROFT C., PA1628
MOORE G., PA2757
MOORE S., OA3155
MOORE V., PA3346, PA5059, PA5065
MOORTHY 7., PA5029
MOR MARTÍNEZ M., PA4102, PA4652
MORA A., OA4199
MORA A., OA4203
MORA CUESTA V., PA1140
MORA-CUESTA V., PA1237
MORAES M., OA851, PA1152, PA1154, PA3806
MORAES T., PA3375, PA5021
MORAES T., OA4231, PA5014
MORAGA-ESPINOZA D., PA2187
MORA-GARCIA G., PA1957
MORAIS A., PA410, OA854, PA1155, PA1164, PA2919
MORAIS N., PA1031, PA1035
MORAITI P., PA2979, PA2980
MORAJDA B., PA321
MORALES BARROSO I., OA4867
MORALES PORTILLO A., PA372
MORALES SATAN M., PA2683, PA2693
MORALES-

QUINTEROS L., PA4668
MORAN E., PA4033
MORAN E., PA4485
MORAN MENDOZA O., PA1150
MORANCHO A., PA1041
MORANCHO PALLARUELO A., PA526
MORANI C., PA2338
MORAN-MENDOZA O., PA1810, PA4631, OA4951
MORANTE F., PA5155
MORBERG WEJSE C., OA860
MORDANT P., PA1153, PA1230, PA3368
MORECCHIATO F., OA4321
MOREIRA A., PA444
MOREIRA I., PA1037
MOREIRA K., PA4022
MOREIRA M., PA1762
MOREIRA S., PA3621
MOREIRA T., PA306
MOREIRA SOUSA D., PA2270
MOREIRA-COSTA L., PA440
MORELL D., PA2252
MORELL F., PA3921
MORELL GARCIA D., PA2251
MORELL-GARCIA D., PA1270
MORELLI N., PA3657
MORELLI T., PA2816, PA2821
MORELOT-PANZINI C., PA1317, OA3178, PA4648
MORENO A., OA4215
MORENO A., PA1169
MORENO A., OA4324
MORENO A., PA1194
MORENO ZABALETA R., PA4026
MORENO-GALDÓ A., PA2743
MOREO E., PA1713
MORER L., PA3942
MORETTI A., PA1213, OA3263
MORGAN C., PA3976
MORGAN D., PA958
MORGAN L., PA2760, PA2761
MORGAN L., PA2769
MORGAN S., PA4063
MORI A., PA4406
MORI Y., PA978
MORIANO C., PA4477
MORIANOS I., PA623
MORICE A., PA373, PA378, OA2609, PA3035, PA5289
MORICHON L., OA892
MORIKAWA Y., PA4673
MORILLO M., PA1194
MORIMOTO J., OA3148, PA3776
MORIMOTO K., PA1059
MORIMOTO K., PA2163
MORIN H., PA3678
MORINAGA D., PA5215
MORINO E., PA5080
MORIONDO G., PA974, PA3584, PA3598, PA3902
MORISSE-PRADIER H., PA2149, OA3280
MORISSET J., OA1430
MORITA C., PA5080
MORLA O., PA1731
MORLACCHI L., PA3366, PA3367
MORLACCHI L., PA3357, PA4494, PA4496
MORLANDO GEIGER J., PA2142
MORLEY A., OA1556
MORLEY M., OA3279
MORONI GRANDINI R., PA4496
MOROZUMI N., PA1960
MORRELL N., PA446
MORRELL N., OA3155
MORRIS B., PA4092
MORRIS H., PA1732
MORRIS J., PA3319
MORRIS L., PA2097
MORRIS S., PA544
MORRISEY E., OA3279
MORRIS-JONES S., PA1065, PA2169
MORRISON D., PA573
MORRISON H., PA4628
MORRISON-PORTER A., OA4215
MORRIS-ROSENDAHL D., PA1842, PA1843
MORRIS-ROSENDAHL D., PA2156
MORRIS-ROSENDAHL7 D., PA2762
MORROW A., PA3529
MORROW J., PA3944
MORTAMET G., OA1554
MORTAZ E., PA2316
MORTENSEN E., PA1308
MORTENSEN J., PA461, PA3971, PA4464
MORTENSEN L., OA2521
MORTENSEN L., PA305
MORTIMER H., PA2840
MORTON A., OA1560
MORTON B., PA2962, PA2963
MORVIDUCCI M., PA4636, PA4645
MORZADEC C., PA559
MOSCA F., PA2123, PA2133
MOSCHOPOULOS T., PA1689
MOSCHOS C., PA2173
MOSCOSO ALTAMIRA G., PA514, PA2136
MOSER L., OA2601
MÖSGES R., PA4388
MOSGROVE F., OA761, OA770
MOSKALENKO S., PA3650, PA4564
MOSKOVITZ N., PA2373
MOSNAIM G., PA3779
MOSOR E., PA3467, PA3468
MOSQUERA C., PA5261
MOSSETTO C., PA2160
MOSTACCI N., PA5026
MOSTARD R., OA3283
MOSTEIRO M., OA1413, PA2319
MOSTEIRO-AÑÓN M., PA4106, OA4301
MOSTEPAN T., PA4670
MOSTOVOY Y., PA2058, PA2911, PA2912, PA4693, PA4694, PA5319, PA5320
MOTA A., PA1665, OA3171
MOTA G., PA4593
MOTA P., PA1164
MOTA P., PA2211
MOTER A., PA4615
MOTOFELEA A., PA3596, PA5053
MOTOS A., OA788, PA2326, PA3839, PA5244, PA5248
MOTOS A., OA782, PA1096, PA3850, PA5093, PA5115
MOTOSAKU A., PA4391
MOTREFF C., OA4827
MOTTA A., PA4108
MOTTA E., PA597
MOTTOLA D., OA742
MOUBACHIR H., PA287, PA303, PA395, PA489, PA637, PA2412, PA2811, PA2895, PA3329, PA5324
MOUDAKI A., OA1551
MOUDED M., OA2497
MOUDGIL H., PA3444
MOUGIN M., OA3161
MOUI A., PA1731
MOUNIA S., PA4085
MOUNIR N., PA3416
MOURA G., PA1835
MOURA M., OA4311
MOURÃO DIAS J., PA1241
MOURATO T., PA2805, PA5090
MOURINO N., PA5327
MOURTADA F., PA4682
MOURVILLIER B., OA786
MOUSAVI R., OA4220
MOUSAVI R., PA1758
MOUSING C., PA379
MOUSSA A., PA3332
MOUSSA C., PA995, PA1082, PA1314, PA2048, PA2407, PA2865, PA3659, PA3875, PA3930, PA5078, PA5116
MOUSSA I., PA2847, PA3874, PA5145, PA5325
MOUSSA N., PA5256
MOUSSA N., PA1008, PA2864
MOUSTADRAF S., OA2631
MOUSTAKA CHRISTODOULOU M., PA5102
MOUTHON L., PA402
MOUTON C., PA5245
MOUTZOURI M., PA3421, PA4606
MOVÉRARE R., OA1530
MOYA A., PA3364
MOYA E., PA5039
MOYA DOMÍNGUEZ D., PA3307
MOYA OLIVARES A., OA872
MOYA TORRES B., PA514
MOYA-GALLARDO E., PA2136
MOYANO V., PA3479
MOYNA N., PA1757
MOZOLOWSKI R., PA582
MRASSI H., PA578, PA2847, PA3833, PA3874, PA5325
MRAZ T., PA3670, PA3782
MRAZ T., PA2425, PA3667
MRAZGUIA C., PA5094
MRIZAK N., PA2856
MSAAD S., PA1008
MSAAED S., PA5256
MSIKA S., PA5082
MU G., PA1890
MU J., PA2217
MUALA A., PA1604
MUBIRU A., OA2523
MUÇA T., PA1715
MUCHMORE P., OA742, PA2121
MUDWAY I., OA889, PA3807
MUDWAY I., OA3149
MUELLER C., PA548
MUELLER G., PA5068
MUELLER K., PA2700
MUELLER R., PA2276
MUELLER T., OA785
MUEMMLER C., PA4495
MUGGEO A., PA1099
MUGLAR J., PA2283
MUHAMEDOVA M., PA2814
MÜHLBACHER A., PA3965
MUHONGERVA C., OA2523
MUIJSENBERG A., PA964
MUILWIJK-KROES J., PA3783
MUIR J., PA502, PA2945, OA3190, PA3759
MUISER S., PA3777
MUJAKOVIC S., PA3516
MUKASA S., OA861, PA5087
MUKHERJEE A., PA2926
MUKHERJEE B., PA3494
MUKHERJEE D., PA5114
MUKHERJEE D., PA1784
MUKHERJEE M., OA1414, OA2503, PA3835, PA4125, OA4968, PA5294
MUKHERJEE R., PA2071, PA4021
MUKHERJEE S., PA3303
MUKHERJEE S., PA5249
MUKHITOV A., OA3279
MUKHOPADHAYAY A., PA4690
MUKHOPADHYAY S., PA2722
MUKHSINOV F., PA2825
MUKHSINOV F., PA3512
MUKHTAR K., PA2151
MULDER F., OA4829
MULDER H., PA1144
MULET ARABI A., PA3916
MULETTE P., PA1841
MULEY M., PA1819
MULEY T., PA3876
MULGREW P., PA4663
MULHOLLAND S., PA404
MÜLLER A., PA320, PA4422
MULLER A., PA3958
MÜLLER C., OA2508
MULLER C., PA1023
MÜLLER H., PA1136
MULLER J., PA3389
MÜLLER J., OA747, OA748, PA1773, PA1774
MÜLLER L., OA4940, OA4941
MÜLLER M., PA608, PA2325, PA2353
MÜLLER M., PA3581
MÜLLER M., OA2626
MÜLLER P., PA2256, PA4974
MULLER S., PA1842, PA1843
MÜLLER V., OA3278
MÜLLER V., PA296, PA1023, PA2207, PA2690, PA3477, PA3634, PA3923
MÜLLER-LADNER U., OA746
MÜLLEROVÁ H., PA1319, OA1524, PA1928, PA3013, PA3622, PA3630, PA3777, PA4706, OA4936
MULLERPATTAN J., PA297
MÜLLER-QUERNHEIM J., PA2226
MÜLLINGER B., PA5190
MULLOOLY N., PA5205
MULLS S., PA414
MULPURU S., PA2341, PA3651
MULRENNAN S., PA5040
MULVEY C., PA2982
MUMBY S., PA452
MÜMMLER C., PA3358, PA4708
MUMMY D., PA2283
MUNAVVAR M., OA864
MUNCH G., PA4478
MUNCUNILL J., PA1270, PA2319
MUNDIN R., PA4027
MUNIDASA S., PA3995
MUNKHOLM ANDREASSEN L., OA4303
MUNKHOLM ANDREASSON L., OA1574
MUNNS A., PA3820
MUÑOZ A., PA2411
MUÑOZ C., PA1274
MUÑOZ X., PA3802, PA3812
MUÑOZ BASTIDAS F., OA2590

MUÑOZ CARRANZA P., PA3307
MUÑOZ CORROTO C., PA2428
MUÑOZ GALL X., PA1161
MUÑOZ MONTIEL A., PA1341, PA5297
MUÑOZ SÁNCHEZ B., PA4097
MUÑOZ-BOLAÑO M., PA408
MUÑOZ-FERRER A., PA4076
MUNRO R., OA757, PA2260, PA4500, OA4954, PA5039
MUNT O., PA1279
MUNTEANU O., PA400
MUNTONI F., PA1889, PA2128
MUNUSAMY V., PA477, PA3415
MURAISHI K., PA2877
MURAKAMI A., PA5231
MURAKAMI K., PA1300, PA3908
MURAKÖZY G., PA3361
MURALEEDHARAN V., PA368
MURAO H., PA1697
MURAOKA H., PA2059
MURATA Y., PA1331, PA2410, PA3447, PA4000
MURGIA N., PA2071
MURGIA X., OA4947
MURGOLO F., PA1213
MURIEL GARCÍA A., PA3012
MURILLO CORTÉS J., PA3590
MURLIS M., PA4447
MURNANE D., PA4701
MURPHIE P., OA3174
MURPHY A., PA2983, PA4408
MURPHY A., PA3019, PA4127
MURPHY D., PA2292, OA3287, PA3944
MURPHY D., PA2236, PA2930
MURPHY F., OA2509
MURPHY G., PA5153
MURPHY K., PA985
MURPHY K., PA2090
MURPHY M., PA613, PA4677
MURPHY M., PA3310
MURPHY P., PA1807, PA2942, PA5038
MURPHY P., PA3757
MURPHY P., PA548
MURPHY P., PA2940, OA3190
MURRAY B., PA1674, OA3173
MURRAY C., PA973, OA1441, PA3652
MURRAY C., PA3642, PA3674
MURRAY C., PA4452
MURRAY K., PA4978
MURRAY N., PA2910
MURRAY N., PA4998
MURRAY R., PA3635
MURRAY S., PA4139
MURRIS M., PA381, PA397
MURRIS-ESPIN M., PA2149
MURTAGH E., PA404, PA1736
MURTHY A., OA1567
MUSCATO G., PA2892
MUSE H., PA4981
MUSI N., OA2583
MUSIENKO N., PA3531
MUSILOVA P., PA1339, PA4483
MUSSAFFI H., PA4474
MUSSCHE C., PA2121
MUSSO E., PA4504
MUSSO V., PA3367, PA4494
MUSTAFA A., PA5000, PA5361
MUSTAFA F., PA2189, PA2313
MUSTAFA G., PA5000, PA5361
MUSTFA N., PA5066
MUSTONEN T., PA1178, PA1184
MUTGAN C., PA555
MUTHAS D., PA2345
MUTHUSAMI R., PA404, PA4009
MUTLU B., PA1880
MUTO Y., PA5231
MWANGA H., PA3977
MWASUKU C., PA4586
MYALL K., PA1923, OA2586
MYAT NOE H., PA2697
MYERS J., PA2261
MYERYEMKHAAN A., PA2419
MYLES P., PA5340
MYLLÄRNIEMI M., OA2579
MYNHARDT S., PA2823
MYONG J., PA2055
MYRBERG T., PA4431
MYRNYI D., PA3006

N

N M., PA4491
N BEHALF OF THE ERS CADSET CLINICAL RESEARCH COLLABORATION O., PA3674
N SANT'ANNA G., PA2302
N. M A., PA2396
NA Y., PA1062, PA3018
NÂAROURA A., PA300, PA619, PA627, PA2043
NAAROURA, A., PA1285
NABEYA D., PA2830
NABNEY I., PA1594
NACASCH N., PA4589
NACHTIGALL D., PA2374, PA2376, PA2377, PA2378, PA2379
NACHTIGALL I., PA2828
NACK J., PA4122
NACKAERTS K., OA1559, PA3432
NADAI T., PA1152
NADAI T., OA851, PA1154
NADAL ALFORJA E., PA1710
NADALIN M., PA2845
NADAUD M., PA5240
NADEEM I., PA2839
NADERISEMIROMI M., PA4729
NADIF M., PA1965
NADIF R., PA656, PA1965, PA3341, PA3345, PA4430, PA5017
NADIF* R., PA661, PA2077
NADJET A., PA3416
NAEEM A., PA2724
NAEHRLICH L., OA1538, PA2164
NAESENS M., OA4343
NAFEES A., PA1021, PA3352
NAFISA S., PA4389
NAFTEL J., PA404, PA2886
NAGAE Y., PA3391
NAGAHARA Y., OA1453
NAGAI T., PA3860, PA3862, PA3863
NAGAKUMAR P., OA878, PA1623, PA2097, PA3569, PA3770, PA3986, OA4335, PA4600
NAGAMATSU R., PA5228
NAGAMOTO T., OA898
NAGAOKA S., OA1453
NAGARAJ C., PA5192
NAGARAJAH M., PA2237
NAGARAJAN S., PA1652
NAGASHIMA K., PA2983
NAGATA M., PA633, PA644, PA1938
NAGEL M., PA2383, PA3614
NAGY A., PA296, PA3477
NAGY B., PA5192
NAGY E., PA2831
NAGY P., PA1023
NAHATA R., OA4215
NAHUM U., OA1443, OA4940, OA4941
NAIA J., PA4074
NAIDU S., PA1111
NAIEL S., PA4072
NAIK H., PA1200, PA1209
NAIK V., PA1322, PA1652, PA4117
NAIR A., PA1111, OA1566, OA3266
NAIR A., OA4341, PA4981
NAIR A., OA2503
NAIR A., PA1821
NAIR D., PA405, OA2582, PA3485
NAIR G., PA2396, PA5339
NAIR H., PA2139, PA4579
NAIR P., PA1292, OA1414, PA1945, PA2283, OA2503, PA4105, PA4109, PA4125, PA4131, OA4968, PA5294
NAIR R., PA4567
NAITO N., PA1300, PA3908
NAITOU E., PA1938
NAJIB M., PA4713
NAJLA B., PA3048, PA5079
NAKAGIRI T., OA1571
NAKAGOME K., PA633, PA644, PA1938
NAKAI T., PA468
NAKAMOTO K., PA626
NAKAMOTO Y., PA626
NAKAMURA H., PA633, PA1938
NAKAMURA M., PA3554
NAKAMURA T., PA5229
NAKAMURA Y., PA4406
NAKANISHI Y., OA1424, PA2887
NAKANO K., PA5306
NAKASHIMA K., PA3860, PA3862, PA3863
NAKATA K., OA3277, OA4322
NAKATANI Y., PA5333
NAKAYAMA M., PA4673
NAKAYAMA T., OA4207
NAKAZATO L., PA1762
NAKHMANI A., OA4937
NAKKEN N., PA1050, PA2424
NAKOU I., PA5102
NAKRANI K., OA4953
NAKSHBANDI G., OA3283
NAKWAN N., PA2068
NALESNIK M., PA1600
NALIBAEVA R., PA3016, PA5121
NALINTHASNAI N., PA3844
NAM J., PA1698
NAM Y., PA3034
NAMA N., PA2738
NAMBIAR A., OA2583
NAMBIAR VEETIL N., PA459
NAME CHAUL VIDIGAL D., PA3758
NAMSARAEVA A., PA3937
NAN Y., PA3544, OA4853
NANAN J., OA864, PA2223
NANDAKUMAR K., PA1118, OA1425
NANDI M., PA3897
NANDIGAMA R., PA555
NANGLE L., PA419
NANOU V., PA3330
NANSHAN Z., PA4415, PA5286
NANWANI-NANWANI K., PA2329
NAOKO S., PA3347
NAPOLITANO G., OA2521
NAPOLITANO G., PA305
NAQVI A., PA4072
NAQVI M., PA404, PA1726, PA1733
NARAN P., OA864
NARAN R., PA2941
NARANG P., PA2704
NARAYANA J., PA1106, PA2193
NARAYANASAMY S., PA339
NARCISO M., PA5234
NARCISO M., PA3979
NARDELLI P., OA1460, PA3491
NARSAVAGE G., OA3173, OA3174
NARUKE M., PA333
NASCIMENTO J., PA5110
NASCIMENTO L., PA4533
NASCIMENTO SALDIVA P., PA5250
NASETHOLT DAHL V., OA860
NASH S., PA4605, PA5290
NASIMUDEEN A., PA1115, PA1118, OA1425
NASRALLAH E., PA1654
NASRI A., OA892
NASSAR H., PA5100
NAST I., PA3515
NATALIE C., PA378
NATARAJAN P., PA3889
NATER U., PA1590
NATHAN N., PA420, PA423, PA426, PA483, PA2129, OA2507, OA3280, PA3938, PA3940, PA3942, PA3943, PA3953, OA4944
NATHAN S., PA1195, PA3488, PA3489
NATHAN S., OA2588
NATSUME-KITATANI Y., PA3900
NAU V., PA3938, PA3940
NAVA F., PA4665
NAVA R., PA2286
NAVA QUIROZ K., PA1160
NAVAJAS D., PA5234
NAVAL N., PA3479
NAVAL SENDRA E., PA407
NAVANI N., PA1111
NAVA-QUIROZ K., PA301
NAVA-QUIROZ K., PA3848
NAVARATNAM V., OA1462
NAVARIN S., PA1819
NAVARRETE E., PA5285
NAVARRETE ROUCO E., PA3617
NAVARRO COLOM M., PA2784, PA5219
NAVARRO IVÁÑEZ R., PA3590
NAVARRO MARTIN A., PA1710
NAVARRO REY L., PA3540, PA4480
NAVARRO ROLON A., PA2192, PA2194
NAVAS OTERO A., PA377, PA4531, PA5101
NAVASAKULPONG A., PA2929
NAVEED S., PA4127, PA4723
NAWAR N., PA5085
NAWAZ S., PA3843, PA3845
NAWIJN M., OA774, PA1267, OA4300

NAWIJN M., OA1523, PA1855, PA2360
NAYAK B., PA2992
NAYIR BUYUKSAHIN H., PA1642, PA1644, OA2505, PA2770, PA3322, PA4462
NAYIR NUYUKSAHIN H., PA2771
NAZ I., PA516, PA3390
NAZ S., PA290
NAZARETH D., PA2905
NAZAROFF C., OA780
NAZZARI E., OA1540
NAZZARO G., PA4103
NDIAYE M., PA2798
NEAR A., PA1195
NEATU R., PA1846
NEDELCU V., PA2924, PA2925
NEDER J., PA1810, PA4631, PA4650, OA4951
NEEHUS A., PA4471
NEELY M., PA1144, PA1147, PA2882, PA3455
NEEP B., PA451
NEERINCX A., PA2745, PA2748
NEETZ B., PA485, PA3581
NEGAHDAR M., OA4851
NEGIGOWDA M., PA3498
NEGRI G., OA3270
NEIGHBORS M., PA4558
NEIL-DWYER J., OA1549
NEILLY M., PA3434
NEISH A., OA4215
NEJI H., PA335
NEJO JR R., PA1225
NEKOEE H., PA1934
NEMET M., PA3671
NEMLEGHI M., PA3017
NEMOTO M., OA4207
NEMSI E., PA2248, PA4461
NENNA R., PA1647, PA2082, PA2085, PA2727, PA2734, PA3984, PA4477
NENSA F., PA1131, OA4332
NEOCLEOUS V., PA3385
NEOH 1., PA2723
NERI T., PA2246, PA2338
NERI GOMES F., PA325
NERY L., PA1759
NERY T., PA1005
NESHAT S., PA4629
NETCHITAILO M., OA4337
NETO S., PA1835
NETTESHEIM A., PA1098
NEUBERT L., PA3369, OA4245, OA4942
NEUBUHR M., PA5253
NEUKIRCH C., PA4750
NEUKIRCHEN D., OA786
NEUROHR C., PA485, PA486, PA3581
NEVENZAL H., OA1534
NEVES A., PA488
NEVES I., PA1164
NEVEU W., OA4215
NEVILLE D., PA1596
NEVO Y., PA4474
NEVRLKA J., PA4751
NEVRLKOVA Z., PA4751
NEW B., PA3842
NEW J., PA1915
NEWMAN A., PA3319
NEWMAN B., PA4701
NEWMAN J., PA965
NEWMAN J., PA1206, PA1761, PA3503
NEWMAN K., PA404, PA1732, PA4381
NEWNHAM M., PA3639
NEWTON C., PA2893
NEWTON J., OA3170
NEYRINCK A., PA5188
NEYT K., OA4213
NG C., OA741, PA5177, PA5191
NG C., PA2779
NG C., PA369
NG D., PA1584
NG J., PA1780
NG K., PA1777
NG K., PA1180, OA4952
NG K., OA4857
NG S., PA4031
NG S., PA1780
NG W., PA3475, PA3954
NGAI J., PA1777, PA1780
NGO H., PA2778
NGO M., PA427
NGU N., PA4080, PA4626
NGUYEN B., PA2795
NGUYEN D., PA1712
NGUYEN D., OA2631
NGUYEN D., PA3425, PA3960
NGUYEN L., PA531, PA4432
NGUYEN M., PA1259
NGUYEN N., PA2795
NGUYEN T., PA4673
NGUYEN T., PA1288
NGUYEN T., OA2511
NGUYEN T., PA2795
NGUYEN VAN D., OA866
NI M., PA2181
NIAINLE F., PA5178
NIAZI M., PA1792, PA1793
NIBHANI R., OA3155
NICALI R., PA1725
NICCOLI A., PA2082
NICEFORO M., PA2338, PA3868
NICHOL K., PA1091, PA2818, PA3425
NICHOLAS V., PA4731
NICKOLAUS P., PA1863
NICOL E., PA1334, PA1336
NICOL L., PA404
NICOL M., OA1547
NICOLA F., PA2178
NICOLA T., PA455
NICOLARDI M., PA2310, PA4025
NICOLAU JR. D., PA4586
NICOLÈ L., PA5134, PA5139
NICOLETI TURAZZA DA SILVA W., PA3758
NICOLINO M., PA1888
NIE M., PA595, PA1303, PA4404
NIE Y., OA4202
NIE Z., OA4949
NIEDBALSKI P., PA2283
NIEDERSEER D., PA4641
NIEKRENZ L., PA1811, PA2272
NIELSEN A., PA1814
NIELSEN A., PA492
NIELSEN H., OA2500
NIELSEN H., PA5123
NIELSEN K., PA2760, PA3384
NIELSEN K., PA2769, PA2842
NIELSEN K., PA1637, PA4464, PA4993
NIELSEN L., PA322, PA4148
NIELSEN R., PA1962, PA3449, PA4681, PA5204
NIELSEN S., PA5249
NIELSEN X., PA5123
NIEMELÄ O., OA2496, PA3054, PA3058, PA5278
NIEMITZ M., PA424
NIERI D., PA2246, PA2338
NIȚESCU D., PA2925
NIESPODZIANA K., PA656
NIETO M., PA3502
NIETO M., PA1920
NIETO CABRERA M., PA2244
NIETO CODESIDO I., PA1024
NIETO-FONTARIGO J., OA4301
NIETO-FONTARIGO J., PA4106, OA4966, PA5362
NIEUWENHUIJSEN M., OA882
NIEVES A., PA402
NIEVES SALCEDA J., PA1816
NIEVES SALCEDA J., PA3057
NIEVES SALCEDA J., PA2426, PA3595
NIEZINK A., OA3192
NIGRO M., PA384, PA388, PA399, PA2843
NIGULEANU A., PA1967, PA5091
NIIMI A., PA978
NIITSUMA K., PA5117
NIJMAN S., OA3283
NIKAIDO T., OA3148, PA3776
NIKESJÖ F., PA1189
NIKITINA D., PA2206
NIKOLAKOPOULOU A., PA5186
NIKOLAOU C., PA3556
NIKOLIC M., OA1566
NIKOLLA J., PA997, PA3431
NIKOLOPOULOS I., PA3330
NIKOLOULI E., PA4471
NIKOLOV I., PA3372
NIKOPOULOU C., OA4329
NILSEN K., OA4956
NILSSON U., PA1958, PA2998
NINABER D., OA1573
NINABER M., OA3263
NINAN T., PA2747
NINGSHAN L., OA894
NIRANJAN V., PA1744
NIRANTARAKUMAR K., PA1623, PA3569, OA4335
NIRANTHARAKUMAR K., OA765
NIRANTHARAKUMAR K., PA4600, PA5340, PA5343
NISAR M., PA2932
NISHII Y., PA2898
NISHIKAWA K., OA898
NISHIMOTO Y., PA1294, PA4046
NISHIMURA M., PA468
NISHIMURA N., PA5229
NISHINE H., PA2059
NISHIOKA Y., PA434, PA1300, OA1424, PA3908
NISHIYAMA A., PA2281
NISHIYAMA H., PA978
NISHIYAMA N., PA2830
NISHIYAMA O., OA1424, PA3443
NISREEN R., OA1545
NISSEN-KRATZERT A., PA5026
NIVEN A., PA3562
NIWA H., PA1697
NIYAZOVA F., PA2825, PA3030, PA3514
NIYOMTHONG P., PA2800
NIZA G., PA3615
NIZAMOGLU M., PA2360
NJIE B., PA3756
NJØTEN K., PA4524
NOACCO Y., PA1747
NOBILE S., PA2736
NOBLE A., PA1232
NOBLE C., OA1560
NOBLE D., PA546
NOBLE P., PA2122
NOBOA SEVILLA M., PA1734
NOCENT C., PA531, PA4432
NOEL G., OA4196
NOGAMI-ITOH M., PA3900
NOGEE L., PA4471
NOGUEIRA C., PA2936, PA2938
NOGUEIRA F., PA3856
NOGUEIRA J., PA1225
NOGUEIRA P., PA665
NOGUEIRA ALBUQUERQUE LEAL A., PA415
NOIBI S., PA1907
NOIJ L., PA4674
NOIJ L., PA4571, PA4574
NOJE NOJE L., PA2251
NOLAN C., PA3769
NOLAN C., PA963
NOLASCO S., PA1908, PA4098, PA4748, PA4753
NOLD M., PA2132
NOLETO DA NÓBREGA OLIVEIRA R., PA1241
NOLFF L., PA3052
NOMURA N., PA1585
NONENT M., OA4827
NONIASHVILI M., PA4067
NOOMON N., PA4119
NOONAN K., PA2292
NOOR S., PA5356
NOORDHOF A., PA1705, PA3884
NOORDUYN S., PA1321, PA1328, PA3024
NOORDUYN S., PA2393, PA4122, PA4698
NOORDUYN S., PA4688
NORBÄCK D., OA2517, PA4424
NORDBØ S., PA3414
NORDEIDE E., PA5204
NORDESTGAARD B., OA4228
NORDESTGAARD B., PA1956, PA2069
NORDMAN L., PA3054
NORDON C., PA3630
NORDON, ON BEHALF OF THE EXACOS-CV STUDY GROUP C., PA3013
NORIZ BERARDINELLI G., PA1241
NORMAN M., PA2130
NORMANN E., PA2130
NORQUAY G., OA757, PA2260, PA4500, OA4857, OA4954, PA5039
NORTHEY S., OA4962
NOSETTI L., PA4449
NOSOTTI M., PA3357, PA3367, PA4494, PA4496
NOSSENT E., PA5183
NOSSENT E., PA4571, PA4574, PA5173
NOTH I., PA1132, OA1432, PA2879, OA3281, PA3948
NOTO-CAMPANELLA C., OA4828
NOTOMI SATO M., PA2257
NOUAILLES G., PA1098, PA2334
NOUIRA I., PA3833
NOUMAIRA B., PA3416
NOUR LAHBIB J., PA3325, PA4544
NOURA S., PA3048
NOURA S., PA5079
NOURSEDEGHI M., OA1566
NOVAIS BASTOS H., PA410, OA854, PA1155, PA1164
NOVAIS-BASTOS H., PA2214, PA2919
NOVELLA SÁNCHEZ L., PA407
NOVELLI F., OA1558
NOVELLI L., PA2298, PA2398, PA5105
NOVOTNA B., PA1339, PA4133
NOVOTNY P., PA2397

NOVSARKA I., OA863
NOWACKI G., PA4706
NOWAK D., PA3351, PA5072
NOWAK E., PA2245
NOWAK J., PA4682
NOWAKOWSKA J., PA1854
NOWINSKI A., PA667
NTAKOULA M., PA4717
NTALAKOU E., PA1699
NTENTI C., PA2979, PA5196, PA5198, PA5200
NTINOPOULOU E., PA3821
NTOUMOU V., PA1003
NTRITSOS G., PA4126
NUCHOVICH N., PA3778
NUEVO J., PA3615, PA3616, PA4109, PA4131, PA5285
NUEVO RIVERO J., PA3617
NUKIWA T., PA2877
NUMATA S., PA5333
NUMATA T., OA4299
NUMATA Y., PA5132
NUMBERE B., PA3024, PA4688
NUNES A., PA1057, PA2799, PA2810
NUNES H., PA494, PA1739, OA2580, OA3157, OA3280, PA3465, PA3486, PA3493, PA3953, OA4324
NUNES R., PA2933, PA2934, PA2936, PA2938
NUNES DA SILVA D., PA3765
NUNES DUARTE NETO A., PA5250
NUNES DUARTENETO A., OA2489
NUNES SILVA R., PA2261
NÚÑEZ A., PA2371, PA4398
NÚÑEZ A., PA1113, PA1898
NUÑEZ B., PA2252
NUNEZ C., PA1029, PA1030
NÚÑEZ ARES A., PA4622
NUÑEZ CONDOMINAS A., PA1221
NUÑEZ DUBON A., PA3920
NUÑEZ FERNANDEZ M., PA1710
NUÑEZ OLLERO L., PA3761
NUÑEZ OLLERO M., PA2243, PA2390, PA4995
NÚÑEZ ROBAINAS A., PA1078, PA5202
NÚÑEZ SÁNCHEZ B., PA2251
NUÑEZ SILVEIRA J., PA3540, PA4480
NÚÑEZ-ROBAINAS A., PA1072
NUNOKAWA H., PA626
NURI BAYDILI K., PA4591
NURMI E., PA2075
NURMI H., PA3458
NUSSSTEIN H., PA5299
NUTALL J., PA2821
NUTTALL A., PA1900, PA2291, PA4100, PA4113, PA5291
NUTTALL J., PA2816
NUTTENS C., PA2819, PA4436
NWANKWO L., PA2181
NWARU B., OA888, PA2075, OA2496
NWARU B., OA3167
NWOKORO C., PA1641
NWOZOR K., PA1855
NYBERG A., PA356, OA2618
NYBERG F., OA888, PA1340, PA3624, PA5157
NYGREN-BONNIER M., PA2793
NYKAMP K., PA2762
NYLANDER E., PA1189
NYS J., PA1853

O

O W., PA369
O'CALLAGHAN M., PA3944
O'CONNOR G., PA3319
O'CONNOR R., PA4998
O'CONNOR U., PA2781
O'HELY M., OA1434
O'SHEA C., PA5249
O'SHEA P., PA1233
O'SULLIVAN B., PA2233
OANCEA C., OA2492, PA5053
OATEN A., PA3439
OATES A., PA2972
OBEDENCIO G., PA4485
O'BEIRNE S., PA2684
OBERG L., PA2345
OBERHUBER-KURTH J., OA4338
OBIZU M., PA4457
OBMINSKI C., PA1913, PA1925, PA1927, PA1931, PA1932, PA3036
OBRADOVIĆ D., PA2240
OBRADOVIC M., PA2166
OBRAZTSOVA K., OA3279
O'BRIEN H., PA425, PA428, PA2236
OBRIST D., PA2117
O'BYRNE P., OA1414, PA1922, PA1925, PA1927, PA1931, PA1932, PA3033, PA3036
O'BYRNE P., PA1913
ÖCAL N., PA2931
O'CALLAGHAN C., PA1108
O'CALLAGHAN M., PA428, PA1162, PA2930, PA3950
O'CALLAHAN T., OA768
OCAMPO BARAO M., PA2143
OCAÑA-GUZMAN R., PA4418
O'CARROLL M., OA2601
OCCHIPINTI M., PA2274, PA2275
OCHEA B., PA3069
OCHI T., PA326
OCHIAI K., PA2877
OCHS M., PA1098
OCON M., PA1110
O'CONNOR-MCCOURT M., PA450
OCTAVIANO A., PA2213
ODAGAKI T., PA3859
ODAGIRI H., PA5162
ODENDAAL M., OA4946
ODEYEMI Y., PA3338, OA4861
ÖDLING M., PA2754, PA5283
ODOBASIC PALKOVIC T., PA374
O'DONNELL A., PA2852
O'DONNELL C., OA3287
O'DONNELL D., PA4650, OA4951
O'DONNELL S., PA1069
O'DONNELL S., PA2807
O'DOWD G., PA1727
ODRLJIN T., PA1868
O'DWYER D., OA1432
OȚELEA M., PA1156
OELSNER E., PA3319
OESTREICH M., PA5001
OESTREICH M., PA2117
OEYEN S., PA4568
OFFER E., OA4197
OFTEDAL B., OA882
OGASAWARA C., PA4667
OGAWA H., PA5302
OGAWA H., PA1300, PA3908
OGAWA T., PA4399
OGDEN M., PA963
OGGIONI T., PA1725
OGISHI M., PA4471
OGLESBY I., PA483, OA1570, PA1865
OGUNSAN O., PA3338
OGUNYEMI L., PA4389
OGURA T., PA434, OA1424, PA2877
OGURI T., PA978
OĞUZ B., PA1644, OA2505
OĞUZ G., PA1671
OĞUZÜLGEN I., PA1901
OH J., PA2179
OH J., PA3619
OH J., PA1130
OH S., PA5216
OHASHI M., PA5306
OHATA S., PA1331, PA4000
OHATA S., PA2410, PA3447
OHKUBO H., PA978
OHNE Y., PA1853
OHNSTAD M., OA3166
ÖHRNEMAN H., PA2120
OHTA K., PA626
OHTOMO T., PA4406
OHTOMO-ABE A., PA4406
OHTSUKA T., PA333
OHURA N., PA1960
OI I., PA3891
OIKONOMOU E., PA1188
OISHI K., PA1331, PA1729, PA2410, PA3447, PA4000
OJANGUREN I., PA3802, PA3812, PA3921
OJANGUREN ARRANZ I., PA1161
OJEDA CASTILLEJO E., PA4652, PA4659
OKAFUJI K., PA5229
OKAMORI S., OA1424
OKAMOTO I., PA2887, PA4399
OKAMOTO M., OA1424
OKANARI E., OA898
O'KANE C., PA5239
O'KANE C., PA2335
OKAWA K., PA4727
OKAZAWA S., OA2513
O'KEEFFE E., PA544
O'KEEFFE H., PA4143
OKI M., PA1697
OKORI S., PA4457
OKOSHI M., PA4593
OKSAY S., PA2731
OKSUZ CAPANOGLU M., PA4535
OKTEM S., PA2731, PA3374
OKUDA M., PA4654
OKULICZ J., PA2834
OKUMUS G., PA5043
OKYALTIRIK F., PA344, PA348
OLAGUIBEL J., PA3777
OLAJIDE O., PA1621
OLDEN C., PA5010
OLDENBURG M., PA3463
OLDFIELD K., OA3187
OLDHAM J., PA1136
OLEJNICKA B., PA2344
OLGUN YILDIZELI Ş., PA1880, PA3424, PA5176
OLIN A., PA2720, PA3350, PA4499
OLIVA A., PA2315, PA4020
OLIVAS MELENDEZ P., OA2590
OLIVEIRA A., PA343, PA346, PA960, PA1031, PA1035, PA1047, PA3478
OLIVEIRA A., OA4311
OLIVEIRA H., PA1225
OLIVEIRA J., PA2682
OLIVEIRA J., PA3060, OA4310
OLIVEIRA J., PA1049
OLIVEIRA L., PA306
OLIVEIRA M., PA1179, PA4141, PA4516
OLIVEIRA N., PA3517
OLIVEIRA P., PA2936, PA2938, PA2954
OLIVEIRA R., OA3267
OLIVEIRA R., PA2431
OLIVEIRA T., PA389
OLIVEIRA V., PA3758, PA3765
OLIVEIRA CAVAGNA R., OA3269
OLIVEIRA DOS SANTOS D., PA2304
OLIVER A., OA774
OLIVER A., OA1562
OLIVER B., PA1252, PA2318, PA2363, PA2704, OA3150, PA5207
OLIVER N., PA952
OLIVER P., PA4597
OLIVERA A., OA4316
OLIVERIA J., PA1931, PA1932
OLIVIER H., PA393
OLIVIERI C., PA1747
OLIVIERI M., PA304, PA663
OLIVO C., PA2431
OLLER H., OA1443, OA4941
OLLERSTAM A., PA2368
OLLIER E., OA3157
OLMATI F., PA2402, PA4020, PA4025
OLMEDA LOZANO B., PA2131, PA5246
OLMER R., OA1573
OLSCHEWSKI A., PA5192
OLSCHEWSKI H., PA1755, PA1764, PA1770, PA5192
OLSEN P., PA2154
OLSON A., PA3455
OLSON A., PA2882
OLSSON H., PA1233, PA2985, PA5205
OLSSON J., PA1292
OLSSON K., PA2276
OLSSON K., OA744, OA4942
OLSSON M., PA614
OLSSON M., PA5349, PA5351
OLTMANS R., PA2896
OLVEIRA FUSTER C., PA1341, PA5297
OLVERA N., PA3668, PA3674, PA5098, PA5194
OLVERA OCAÑA N., PA3672
O'MAHONY A., PA1778, OA3287
OMAR O., OA3168
OMARI M., PA525
OMARI M., PA2873
OMARJEE B., PA5281
OMBREDANE H., OA4963
ÖMER TOPÇU D., PA1081, PA1083
ÖMEROGLU SIMSEK G., PA1902, PA2282, PA3356, PA3998
OMERZA L., PA3376
OMRAN H., PA2760, PA2761, PA4465
ON BEHALF OF THE CONCORD-19 STUDY TEAM ..., PA1677
ON BEHALF OF THE NCT 03651986 TRIAL INVESTIGATORS -., PA4435
ON BEHALF OF THE REHAP INVESTIGATORS .., PA1205
ÖNAL A., OA4233
ONANGA M., PA3942
ONAY Z., OA2505, PA2731, PA2732, PA2753, OA4327, PA4446, PA5083
ÖNDER Y., OA4346
ONDRLJI T., PA4035

ONEA L., PA400
O'NEILL E., OA755
ONEL B., PA3052
ÖNER ERKEKOL F., PA1901
ONETO C., PA2178
ONG C., OA862
ONG C., PA1781
ONG T., PA1106, PA2188, PA2196
ONG Y., PA3889
ONG-CABRERA G., PA2688
ONG-DELA CRUZ B., PA1016, PA3560
ONO K., PA2177
ONUMA T., OA3148, PA3776
ONYWNWOKE R., PA5314
OOMMEN A., PA1634, PA1635
OORE S., PA573
OOSTERHOLT S., PA3621
OOSTVEEN E., PA4532
OPENSHAW P., PA2815
OPENSHAW P., PA4070
OPHORST M., PA2123, PA2133
OPIMAKH S., PA295, PA3531, PA3650, PA4564
OPITZ M., PA1131, OA4332
OPPENHEIMER J., PA646
OQUEKA T., PA1593
ORA J., PA590, PA591, PA597, PA3610
ORAUSCLIO P., PA2917
ORAZI M., PA4480
ORCESE B., OA2631
ORDAX CARBAJO E., OA4841
ORDE S., PA5042
OREA TEJEDA A., PA3306, PA3307, PA3826, PA3829, PA3831, PA5069
OREA-TEJEDA A., PA3302, PA3305, PA3312
O'REILLY K., PA1727, PA5153
O'REILLY R., PA4439
OREJAS J., OA1460
ORELL S., PA3807
ÖREN M., OA4233
ORENA B., PA2178
ORENA CHÁVEZ V., PA544
ORENGO J., PA2983, PA4408
ORENGO J., OA2489
ORHAN D., OA2505
ORI M., PA399
ORIEUX A., OA789
ORIGUCHI T., OA2513
ORIHUELA SANDOVAL C., PA1772
ORINI M., PA1588
O'RIORDAN B., OA3287
ORKISZ M., OA4955
ORLOVIC M., PA522
ORME M., PA3064
ORME M., PA2691, PA2692, PA2698, PA4983, PA4991
ORME M., OA3260
ORÓ D., OA4202
OROSZ Z., PA2831
ORPHALUNG O., PA402
ORPHALUNG NETWORK T., OA2580
ORR URTREGER N., PA1137
ORRE A., OA4209
ORRIOLS G., PA2371, PA3920, PA4398
ORRU H., PA311, PA1598
ORRÙ M., PA1819
ORSI F., PA3345
ORSI L., PA661, PA1965, PA3341, PA3345, PA4430
ORSI* L., PA2077
ORTEGA A., PA2326, PA5248
ORTEGA-VALLBONA R., PA3840
ORTIZ B., PA1110
ORTIZ L., PA5241
ORTÍZ FARÍAS D., PA4561
ORTIZ MOLINA I., PA3761
ORTIZ RUBIO A., PA4531, PA5101
ORTOLAN D., PA2210
ORTON C., PA5224
ORTON C., PA4613, PA4671
ORTWEIN F., PA2700
OSADCHY A., PA387
OSADNIK C., PA548, PA1046
OSCANOA P., PA1084, PA1662
OSCULLO YEPEZ G., PA1881, PA3000
OSENENKO K., PA4105
O'SHEA D., OA3287
O'SHEA O., PA5153
OSINIBI M., PA4470
OSIPOV T., PA1967, PA5091
OSKAR JÖGI N., PA1281
OSMAN L., PA5038
OSMAN M., PA2306
OSSENBERG M., OA4338
OSTENDORF E., OA2490

Ø

ØSTERGAARD L., PA2399, PA3628
ØSTERHAUG M., PA2159

O

OSTERHOUT R., OA742
OSTERMANN J., PA1769, PA3972
OSTHOFF M., OA4862
OSTIR M., PA1672
OSTRIDGE K., PA5204
OSTRIDGE K., PA2286, PA2294, PA2345, PA3625, PA4144, PA4145, PA4766, OA4856
OSTROVSKYY M., PA621, PA1306, PA2266, PA3027, PA4976, PA5075
OSUNA R., PA3902
OSUNA PADILLA I., OA2590
OSWALD L., PA1676
OTA R., PA5231
OTA-ARAKAKI J., PA1759
OTANI G., PA5231
OTAOLA M., PA2917, PA3479
OTERO J., PA1269, PA5235
OTERO CANDELERA R., PA1683, PA2243, OA4831, PA5181
OTERO-MARRUGO G., PA1957
OTHAYAMOORTHY 2., PA5029
OTHMANI S., PA302, PA2254
OTO MARTÍNEZ J., PA2243, OA4831
O'TOOLE D., PA5237
OTSUBO K., PA1232
OTSUJI N., PA2706
OTSUKI A., PA3860, PA3862, PA3863
OTTAVIANI M., PA443
OTTAVIANI S., PA650, PA5193, PA5197
OTTEWILL C., PA4549
OTTIGER M., PA2700
OTTOSSON T., PA1248
OTTO-YAÑES M., PA512
OTTO-YAÑEZ M., PA513
OTVAS T., OA4953
OU C., PA1933
OU C., PA1937
OU Q., PA1278, PA4081
OU YANG H., PA5230
OUAALAYA E., PA531, PA4432
OUAALAYA E., PA4150
OUAHCHI Y., PA983, PA1268, PA1315, PA1964
OUAHCHI Y., PA628, PA2264
OUDIN A., PA1598, PA4423
OUDIZ R., PA1760
OUDKERK M., PA1114, PA4003
OUERGHI S., PA323, PA338, PA342, PA1776, PA5148
OUERTANI H., PA294, PA302, PA619, PA627, PA2254
OULAHBIB A., PA287, PA489, PA637, PA3329, PA5324
OULD SETTI M., PA2387
OULHBIB A., PA2412
OUSOVA O., OA4243
OUSSAMA T., OA4323
OVALLE O., PA2776
OVERBECK K., PA3501
OVERBEEK M., OA3283
OVERED-SAYER C., PA1233
OVESNA P., PA4483
OWADA T., PA2706
OWCZAREK T., PA2726
OWEN C., PA3622
OWEN C., PA614
OWEN R., OA4221
OWEN R., PA2913
OWLES H., OA779
OWUSU ACHIAW S., PA546
OYAMA S., OA1424
OYARZÚN AGUIRRE I., PA514, PA2136
OZAKI A., PA2705
OZAKI M., OA1570, PA3941
OZAWA Y., PA2281
ÖZBEK C., PA3318
ÖZCAN G., PA1650, PA5012, PA5226
OZCAN Z., PA956
ÖZÇELIK U., PA1642, PA1644, PA1878, OA2505, OA2614, PA2760, PA2765, PA2770, PA2771, PA3322, PA4462, PA5012, PA5046, PA5047
ÖZDEMIR A., PA2731, PA5012
ÖZDEMIR F., PA3401
ÖZDEMIR N., PA3789
ÖZDEMIR KUMBASAR Ö., PA4396
ÖZDOĞAN Ş., PA5012
OZGEC D., PA3601
OZGEN ALPAYDIN A., PA2282, PA3998
OZIER A., PA531, PA4432
OZISIK L., PA4535
ÖZKAN KOYUNCUOĞLU N., PA358
OZKAN TABAKCI S., PA5012
ÖZKUL A., PA5344
OZONOVA A., PA2698
ÖZSARI E., OA2616
ÖZŞEKER Z., PA4049
OZSEZEN B., PA1878, OA2505, PA2771, PA3322, PA5226
OZTOSUN B., PA1622
ÖZTÜRK B., PA1758, OA4220
OZTÜRK G., OA2505
ÖZTÜRK G., PA2107
OZTURK M., PA1878
OZTURK N., PA2269
OZUYGUR ERMIS S., PA2282, PA3998
ÖZYENER F., PA4515
ÖZYILMAZ S., PA4534

P

P HART S., PA2876
P ISENSEE L., PA2302
P. KEANE M., PA3944
P.G. MARSHALL I., OA2517
PAAG SVANE S., PA380
PABELICK C., PA2351
PABLO M., PA5070
PACE E., PA565, PA602, PA604, PA2988, PA4042, PA4676, PA4684
PACHECO DA SILVA E., PA3340, PA3341
PACHL F., PA2368
PACIELO L., PA3314
PACIENCIA I., PA1601, PA1607, OA2520
PACIOCCO G., PA1725, PA1763, PA2250, PA3974
PACIONI G., PA557
PACIUCCI G., PA4020
PACKHAM S., PA4700
PACKHAM S., PA4118
PACLIBAR C., PA1833, PA5332
PACZKOWSKI R., PA4122
PADAWER D., PA3407
PADDEU A., PA1822
PADERVINSKIENE L., PA1333
PADHILA J., PA4607
PADHYE R., PA2907
PADILHA J., PA366
PADILHA J., PA1664, PA1665, OA3171, OA3174
PADILHA M., PA1663, PA2783
PADILHA M., OA3173
PADILLA A., PA3615
PADILLA GALO A., PA3616
PADILLA-GALO A., PA4109, PA4131
PADILLO A., PA5285
PADMANABHAN A., PA3602
PADRÓ C., PA1898
PADRÓN FRAYSSE L., PA1242
PADRONES SANCHEZ S., PA1710
PADULA M., PA2318, PA5207
PAES B., PA1656
PAFFILE J., PA573
PAGAN L., PA4593
PAGÁN BUZO F., PA4086, PA5131
PAGANI S., PA3528, OA4959
PAGANO L., PA541
PAGCATIPUNAN R., PA1016, PA1342, PA3794
PAGE C., PA599, PA1690, PA4680
PAGE J., PA1115, PA1118, OA1425
PAGEL K., PA1098
PAGEN D., PA3516
PAGGIARO P., PA3053, PA3621
PAGLIARO M., PA565
PAGLINO G., PA4748
PAGNINI F., OA4874
PAGONI P., PA1626
PAGONIDIS K., PA5187
PAHWA P., PA5253
PAI S., PA2839
PAILLASSEUR J., PA4150
PAINE III R., OA870, PA4139
PAIOLA G., PA2144
PAITA L., PA2274
PAIVA A., PA368
PAIVA J., PA1225
PAIXÃO C., PA362, OA4316, PA5048, PA5049
PAJARES V., PA479, PA2784
PAJARES RUIZ V., PA5219
PAJARO-CASTRO N., PA1957
PAKHALE S., PA4429, PA5021
PAKNEJAD O., PA1182
PAKPAHAN E., PA4390
PAL R., PA4570
PAL S., PA5114

PALACIONYTE J., PA2977, PA4401
PALACIOS M., PA1200, PA1209
PALACIOS S., PA1871, PA4539
PALACIOS CLAR C., PA2167
PALANGE P., PA2310, PA2315, PA2402, PA4020, PA4025, PA4096, PA4110, PA4128, PA4636, PA4645, PA4696
PALANICAWANDAR R., PA2184
PALANO E., PA4079
PALCZA J., PA1208
PALEA S., PA1848
PALEIRON N., OA4827
PÁLFI A., PA1173
PALING F., PA2199
PALLARDÓ CALATAYUD F., PA3916
PALLARES-SANMARTIN A., PA4106
PALLAVICINI D., PA541
PALLERO M., PA4660
PALLESCHI A., PA324, PA4494
PALM A., PA612, PA1028, PA1886, OA3294, PA3762, PA4423
PALM Ø., PA3476
PALMA CHAMBILLA N., OA872
PALMER C., PA2722
PALMER L., PA1046
PALMER M., PA2801
PALMER S., PA3485
PALMER S., PA1144, PA2882
PALMER SANCHO J., PA2251
PALMERINI L., OA3183, OA3185
PALMERO SANCHEZ R., PA1710
PALMES P., PA1871, PA4539
PALMIERI F., PA2186
PALMUCCI S., PA2892
PALOMEQUE A., PA1084, PA1662, PA3850
PALOMEQUE A., PA5093
PALOMEQUE FLORES A., PA5115
PALOMINO M., PA1633
PALOMINO-SCHÄTZLEIN M., PA3840
PALONES FEMENIA E., OA3144
PALOP M., PA3616
PALUMBO A., PA3760
PAN J.
PAN L., PA5164
PAN P., PA3029
PAN X., PA451
PAN Y., PA4409
PANADERO C., OA2487
PANAGAMUWA C., PA3770
PANAGIOTOU E., PA1119
PANAGUITON J., PA3889
PANALIGAN R., PA1016, PA1342, PA3794
PANASIUKOVA O., PA4552
PANAYIOTOU A., PA5019
PANCANI R., PA392, PA2246, PA3868, PA5334
PANCERA S., PA1048
PANCHAL R., PA3434
PANCHARATNAM R., PA3894
PANDEY A., PA537, PA1012
PANDIT-ABID N., OA1416, PA5290
PANDOLFI L., OA4201
PANDOLFO A., PA1616
PANDYA H., PA1690
PANEK M., PA2322
PANEN H., PA666
PANERONI M., PA507, PA510, PA1802
PANESCU M., PA2809
PANG P., PA2196
PANG S., PA1120, PA1121
PANG Y., PA5275
PANG Y., PA477
PANG Y., PA3415
PANICO F., PA4685
PANIKULAM P., PA4471
PANINA S., PA593, PA4043
PANNAUX M., PA1196
PANNU K., PA1617, PA1784
PANSKY I., OA2512
PANTALEÓN GARCÍA J., PA1093
PANTIN C., PA3649
PANTIN T., PA4729, PA5304
PANZA L., PA2402, PA4636, PA4645
PAO C., PA1641
PAOLETTI G., PA3792
PAOLETTI M., PA2274, PA2275
PAPADAKI E., PA2150, PA2812
PAPADAKI G., OA3275
PAPADIMITRIOU-OLIVGERIS M., PA3365
PAPADOPOULOS M., PA3925
PAPADOPOULOS N., PA1892, PA1894, PA1897
PAPADOPOULOU A., PA1699
PAPADOPOULOU E., PA3021, PA3324
PAPAEMMANOUIL S., OA3152
PAPAGIANIS P., PA2233
PAPAGIOUVANNI I., PA1873
PAPAIOANNOU A., PA462, PA4526
PAPAIOANNOU A., OA3275
PAPAIOANNOU A., PA1897, PA4717
PAPAIOANNOU A., PA4709
PAPAIOANNOU O., PA422, PA1782, PA1790, PA4397
PAPAIOANOU A., PA5102
PAPAKONSTANTINOU E., PA2978, PA2979, PA2980, PA4764, PA5196, PA5198, PA5200
PAPAKOSTA D., OA3152, PA4709, PA4717
PAPALAMPIDOU A., PA4573
PAPALEXATOS D., PA4397
PAPALLA K., PA5150
PAPAMITSOU T., OA3152
PAPANASTASIOU P., PA4123
PAPANIKOLAOU I., PA4709
PAPANIKOLAOU I., PA4717
PAPAPETROU D., PA4709
PAPAPORFYRIOU A., PA4717
PAPATHANASSIOU E., PA2173
PAPATHEODOROU S., PA5018
PAPAVASIEIOU A., PA2168
PAPAVASILEIOU A., PA2173
PAPAVASILEIOU V., PA5102
PAPAZOGLOU E., PA1844, PA2966, PA3437
PAPETTI M., PA1725
PAPI A., PA1308, PA1320, OA1523, OA1524, OA1525, OA1529, PA1926, PA1928, PA2338, PA3662, OA4859, OA4936, PA5292
PAPIA F., PA4098, PA4748, PA4753
PAPIRIS S., PA623
PAPIRIS S., OA3280
PAPIRIS S., OA3275, PA5102
PAPIRIS S., PA4717
PAPLIŃSKA-GORYCA M., OA2510
PAPOCHIEVA V., PA3372
PAPON J., PA2765, PA2768
PAPP M., PA2831
PAPPA S., PA3821
PAPPACENA S., PA2298, PA5105
PAPPALETTERA M., PA4496
PAPPANI A., OA4305
PAPPAS A., PA4573
PAPPE E., PA4615
PAPPISCH J., OA4338
PARAB R., PA2913
PARACCHINI E., PA1779
PARACHA M., OA2604
PARACHINI L., PA3528, OA4959
PARACKAL S., PA5096
PARADA N., PA4562
PARAMESWARAN VENUGOPAL K., PA5096
PARAMESWARI R., PA4695, PA5096
PÁRAMO PÉREZ M., PA2350
PARAMOTHAYAN S., PA4395
PARATI G., OA4838, OA4846
PARAVASTHU M., PA3473
PARDAL M., PA4109, PA4131
PARDESSUS A., PA2784
PARDESSUS OTERO A., PA3008, PA5219
PARDO A., PA2433
PARDO-SECO J., PA2728, OA4246
PAREDES D., PA4482
PARENTE LAMELAS I., PA2215
PARERA RUIZ A., PA5219
PARFREY H., PA431, PA2888
PARIKH H., PA1014, PA4687
PARIS C., PA3340
PARIS D., PA4108
PARISI P., PA2100, PA2109, PA2110
PARK C., PA1698, PA3881, PA5113
PARK C., PA3034
PARK C., PA3665
PARK D., OA744, OA4942
PARK D., PA2175
PARK H., PA3034, PA4130
PARK H., PA3034, PA4413
PARK H., PA1145
PARK J., PA2179
PARK J., PA3665
PARK J., PA3440
PARK J., PA3913
PARK J., PA5165, PA5199
PARK J., PA1060
PARK J., PA2255
PARK J., PA2255
PARK J., PA1251
PARK J., PA1921, PA2709
PARK J., OA4215
PARK J., PA3665
PARK J., PA3457
PARK J., PA5366
PARK K., PA5366
PARK M., PA2198
PARK M., OA864, PA1778
PARK M., PA1216
PARK M., PA3898, PA4481
PARK M., PA1921, PA2202
PARK O., PA1302, PA3911, PA3912
PARK S., PA2405
PARK S., PA1246
PARK S., PA5165, PA5271
PARK S., PA3056
PARK S., PA3034
PARK S., PA1246
PARK T., PA3626
PARK Y., PA4536
PARK Y., PA2175
PARKER C., OA4951
PARKER J., PA3439
PARKES E., PA4700
PARKIN P., PA5014
PARMAR K., PA963
PARMAR V., PA1131
PARMIGIANI M., PA2422
PARNELL L., PA4127, PA4723
PARNES J., OA1417, OA1418
PARÓCZAI D., OA776, PA1684, OA2492
PAROLO S., OA4947
PARONEN N., PA530
PARPIEVA N., PA2814
PARR D., OA4830
PARR D., PA4511, PA4513, PA5059
PARR D., PA4507, PA5065, PA5107
PARRA CORDERO S., OA3172
PARRA JARQUE M., PA3012
PARRA ORDAZ O., PA1221
PARRA-RUIZ D., OA783
PARREIRA P., PA2288
PARRONCHI P., PA4590
PARROT A., PA1678
PARROTT H., PA1583
PARRY G., OA4341
PARRY R., PA587
PARSLEY E., OA742
PARSONS K., PA1728, PA2900
PARTANEN J., OA2579
PARTENOPE V., PA1163
PARTHASARATHY P., PA4027
PARTHASARTHY P., PA4072
PARVATHY A., PA339
PARVEZ W., PA3313
PARVU M., PA2924, PA2925
PASCARELLA M., PA1786, PA5227, PA5293
PASCHALAKI K., PA2331
PASCHALIDIS N., PA2348
PASCHE H., OA3293
PASCOAL I., PA389
PASCUAL R., OA2583
PASCUAL GARCÍA S., PA5170
PASCUAL-GUARDIA S., PA1836
PASCUTTI M., PA1866
PASHA Z., PA547
PASHLEY C., PA5004
PASIN D., PA3847
PASINI V., PA467
PASKA C., PA3627
PASPARAKI E., PA1689
PASSWEG J., PA2922
PASTAKA C., PA3586
PASTELI N., OA3152
PASTEUR M., OA3180
PASTOR CAMPO A., PA1670
PASTOR CAMPO V., PA1670
PASTRÉ J., OA3157, OA4827
PASZAT L., PA3887
PATAKA A., PA1873, OA4837, OA4844

PATANAYINDEE P., PA4119
PATARIN J., PA5296, PA5300
PATARIN V., PA1731
PATBERG K., PA1579
PATEL B., PA4522
PATEL B., OA4195
PATEL D., PA5004
PATEL D., OA1552
PATEL H., PA4072
PATEL H., PA2730
PATEL J., PA308, PA653
PATEL K., PA4434
PATEL K., PA1126, PA3639, PA3669
PATEL K., PA480
PATEL M., PA1208
PATEL M., OA2604
PATEL M., PA3033
PATEL M., PA1014, PA1928, PA4687
PATEL M., PA1843
PATEL N., OA4296
PATEL N., OA2599, PA4629
PATEL N., PA1126
PATEL N., PA2817
PATEL P., OA1553, PA2104, PA2119
PATEL P., PA1649
PATEL P., PA4731
PATEL R., PA456
PATEL S., PA573
PATEL S., PA1111
PATEL S., PA505, PA508, PA534, PA3509, PA3769
PATEL U., PA1578
PATEL Z., PA2341, PA3835, PA5294
PATELIS V., PA2108
PATELLA B., PA4042
PATER F., OA2492
PATHINAYAKE P., PA4066
PATHINAYAKE P., PA1837
PATIL D., PA2057, PA2327, PA2333
PATIL N., PA5057
PATIL R., PA2057, PA2327, PA2333
PATIL R., PA4579
PATIL S., PA1620, PA2057, PA2327, PA2333
PATIL S., PA2327
PATIL S., PA1620, PA2057, PA2333
PATOCKA K., PA321, PA4116
PATOLE S., OA1556, OA1563, PA3298
PATOUT M., PA494, PA495, PA498, PA502, PA571, PA2945, OA3190, PA3759
PATRIA M., PA5358
PATRICK T., PA1111
PATRIKELIS P., PA3821
PATRINOS S., PA499, PA4602
PATRUNO M., PA5307
PATRUS ANANIAS DE ASSIS PIRES G., PA415
PATSAKI I., PA1043, PA3421, PA4606
PATSOURAS A., PA5186
PATTERSON D., PA4502, PA4512
PATTERSON J., OA1431, PA3452
PAUDICE F., PA1229
PAUL B., PA318
PAUL E., PA4087
PAUL G., PA3370
PAUL H., PA4570
PAUL S., PA481
PAUL PRABHAKAR A., PA4570
PAULIN F., PA3479
PAULIN R., PA1233, PA5205
PAULINETTI R., PA2211
PAULING J., PA3504
PAULSEN C., PA3568
PAULUS V., PA989, PA1934
PAULUSSEN J., PA2103
PAURO F., PA2143
PAVESIO C., PA1051
PAVIĆ I., PA1640
PAVLIŠA G., PA1337
PAVLOV A., PA3485
PAVLOV N., PA1903, PA4743
PAVLOV P., PA3419
PAVLOVSKAYA G., OA4857
PAVORD I., OA1531, PA3604, PA3777, PA4675
PAVORD I., OA1415, OA1418, PA1858
PAVORD I., PA3607
PAVORD I., PA632, OA1417
PAWLIUK C., PA2738
PAYNE G., PA455
PAYNE M., PA3928
PAYTON A., PA1600
PAYTUVI A., PA3449
PAYTUVÍ-GALLART A., PA4681
PAZETTI R., PA4486
PCHELNIKOVA P., PA3467, PA3468
PEABODY LEVER J., PA455
PEAKE S., PA396, PA2794
PEARCE K., OA3170
PEARCE N., PA3414
PEARMAIN L., PA3921, OA4214, PA4381
PEARSE C., PA2760
PECAN S., PA5012
PECCHIARI M., PA3548
PECE SONMEZ U., PA3333
PECES-BARBA ROMERO G., PA1242, PA1255
PECKHAM D., PA1108, PA2712
PEDEN D., PA1600
PEDERSEN B., PA4478
PEDERSEN B., PA2785
PEDERSEN C., PA2721
PEDERSEN E., PA5024
PEDERSEN E., PA5016, PA5032
PEDERSEN E., PA2767, PA2768
PEDERSEN E., PA2763, PA2764, PA2766, PA3386
PEDERSEN F., PA1947, OA4333
PEDERSEN L., OA4938
PEDERSEN L., PA631, PA636
PEDERSEN L., PA5273
PEDERSON W., PA2974
PEDICA F., OA3270
PEDRAZZANI B., PA3517, PA4012
PEDRERA A., PA4089
PEDRO M., PA4734
PEDRO PORTILLO A., PA3826, PA3829, PA3831, PA3832
PEDROSO A., OA4310
PEDROSO M., PA3396, PA4527
PEEBLES S., PA5233
PEGLIDOU V., PA4572
PÊGO-FERNANDES P., PA412, PA4486
PEGORARO A., PA2144
PEHK K., PA3486, PA3493
PEHLIVAN E., PA956
PEHRSON R., PA3914
PEI G., PA4081
PEI T., PA1289, PA1290, PA1305, PA3909
PEINADO V., OA4831
PEINADO V., PA442
PEIRED A., PA2354
PEITER T., PA1680
PEIXOTO B., PA5214
PEIXOTO PEDROSO A., PA4074
PEJČIĆ T., PA4745
PEKCAN S., PA1646, PA1651, OA2505, PA3374, PA5011
PEKER Y., PA1880, OA3286, OA3291, OA3292
PELÁEZ A., PA2400, OA2484
PELÁEZ G., PA2086, PA2744
PELÁEZ HERNÁNDEZ V., PA3826, PA3829, PA3831, PA3832
PELAIA C., PA1310, PA1908, PA4098, PA4748, PA4753
PELAIA G., PA1310, PA1908, PA4098, PA4109, PA4112, PA4131, PA4748, PA4753
PELDSCHUS K., PA3799
PELEGRÍ D., OA886
PELGROM A., OA2494
PELICARIĆ D., PA416
PELICON SLABANJA K., PA976
PELKONEN A., PA2751
PELLAS E., PA4437
PELLEGRINO D., PA2315, PA4025
PELLERIN C., PA4490
PELLICORO A., PA550
PELOSI G., OA3274
PELTAN I., PA5129
PEMBRIDGE O., PA5205
PEMBRIDGE T., PA1097, PA1105, OA1456, OA2604, PA3841, PA3842
PEÑA ZARZA J., PA1270
PEÑACOBA P., PA5155
PENALOZA A., OA4829
PEÑALVER M., PA4482
PEÑASCO Y., PA2326, PA5248
PENEVA P., PA2189, PA2313
PENG H., PA493, PA3623
PENG M., PA4435
PENG Y., PA3435, PA3438
PENNACCHINI G., PA3007
PENNATI F., PA324, OA4958, PA5009
PENNINGS H., PA2423
PENNINGS H., PA3653
PENNINGTON S., OA4962
PENNISI A., PA2375, PA4704
PENNITZ P., PA1098, PA2334
PEÑUELAS O., OA782, OA788, PA2326, PA5244, PA5248
PENZEL T., PA573, PA3589
PÉPIN J., OA3288
PEPIN J., PA580, OA1554, PA2999, PA3584, PA4088, OA4337, OA4844
PEPIN, ON BEHALF OF ESADA J., OA4843
PEPIN, ON BEHALF OF THE ESADA GROUP J., OA4837
PEPKE-ZABA J., OA741, PA1192, PA3503, PA5177, PA5191
PEQUIGNOT B., PA2299
PEQUITO T., PA2899
PERA V., PA666
PERADOTTO F., PA3380
PERADZE M., PA3532
PERADZYŃSKA J., OA2510
PÉRAN L., PA2792
PERANDONES M., PA2917
PERBONI A., PA2160
PERCH M., PA461, PA4478
PERDIJK O., PA1850
PEREA B., PA2305, PA3949, PA5277
PEREA L., PA383, PA1070, PA1075, OA1459, OA2487, PA2827, PA5194
PEREA SORIANO L., PA382
PEREA-SORIANO L., PA1077
PEREDA ARNAU D., PA5181
PEREIRA L., PA360
PEREIRA M., PA2899
PEREIRA M., PA5308
PEREIRA M., PA4022
PEREIRA M., PA1794
PEREIRA M., PA1762
PEREIRA R., PA3354, PA3797
PEREIRA S., PA4648
PEREIRA S., PA371
PEREIRA Z., PA360
PEREIRA BARBOSA DOS SANTOS L., PA1112
PEREIRA CATARATA M., PA494
PEREIRA DA SILVA F., PA1058
PEREIRA DE MATOS CORDEIRO R., PA2844
PEREIRA VEGA A., PA1242
PEREIRA-VEGA A., PA1920
PERELLO ROSELLO S., PA1270, PA5282
PERERA C., PA3064
PÉREZ A., PA4089, PA4482
PEREZ E., PA5261
PÉREZ H., PA2743
PÉREZ J., PA1632
PEREZ T., PA4648
PEREZ BOGERD S., PA3787
PÉREZ DE ARMAS P., PA411
PÉREZ DE LLANO L., OA1413, PA1892, PA2319
PÉREZ DUBLANG A., PA4086, PA5131
PÉREZ FERNÁNDEZ S., PA4707
PÉREZ FIGUERA A., PA3012
PEREZ GARAY R., PA3951
PÉREZ GARCÍA I., PA3306, PA5069
PÉREZ GRACÍA I., PA3307
PÉREZ MÉNDEZ V., PA1808
PÉREZ MUÑANTE C., PA4029
PÉREZ PEIRÓ M., PA1078
PÉREZ PEÑATE G., PA1205
PÉREZ RAMOS S., PA3464
PÉREZ RIAL S., PA1255
PEREZ RODAS N., PA1734
PÉREZ RODRIGUEZ Á., PA5135
PÉREZ RUBIO G., PA301
PÉREZ SAGREDO J., PA1205
PÉREZ SANZ T., PA3381
PÉREZ VALENCIA M., PA4029
PÉREZ-BROCAL V., PA3364
PÉREZ-CANO C., PA4576
PEREZ-CASTRO T., PA5362
PÉREZ-DE-DIEGO R., PA2329
PEREZ-DE-LLANO L., PA1891, PA1894, PA1897, PA4106
PEREZ-FERNANDEZ S., PA5124, PA5125
PÉREZ-GARCÍA F., PA2326, PA5248
PÉREZ-GARCÍA I., PA3302, PA3305, PA3312
PÉREZ-GIL J., PA2131, PA5246
PÉREZ-GONZÁLEZ V., PA3502
PEREZ-LUZ S., PA5208
PEREZ-MARTIN A., PA1804

PEREZ-MIRANDA J., PA390
PÉREZ-OLIVEIRA S., OA783
PEREZ-PADILLA R., OA872
PEREZ-PEIRÓ M., PA1072
PÉREZ-PEÑATE G., PA3502
PEREZ-PONS M., PA2326, PA5244, PA5248
PÉREZ-RÍOS M., PA5327
PÉREZ-RUBIO G., PA1160, PA2330, PA3848
PÉREZ-WARNISHER T., PA1110
PERGER E., OA4838, OA4846
PERICLEOUS C., PA2331
PERILLO F., PA2305
PERINI A., PA4733
PERISSON C., PA420, PA423
PERISTERIS P., PA4575
PERKA J., PA3557
PERKINS A., PA3510, PA4498
PERKINS A., PA994
PERLUK T., PA2928, PA4588
PERNET E., PA4061
PERNG D., PA1891, PA1892, PA1894, PA1897, PA1906
PERNOD G., OA4829
PERNOT J., PA2186
PEROSSI J., PA2304, PA3766
PEROSSI L., PA2304, PA3766
PEROTIN J., PA611, PA1841
PEROTIN-COLLARD J., PA4114
PEROTTI C., OA4345
PEROTTO L., PA4601
PERREAULT L., PA1326
PERREM L., OA1548, PA4448, PA4996
PERRET J., OA890
PERRETTA E., PA4497
PERRIN T., PA3935
PERRONI FRIAS D., PA4057
PERROS F., PA452
PERROS F., PA440, OA3160
PERROT L., PA463
PERSHAGEN G., PA1606, OA2518, PA3674
PERSOONS R., PA3804
PERSSON H., PA3023
PERSSON L., PA561
PERTEGA S., PA5362
PERTICONE E., PA3479
PERTSEVA T., PA2060, OA4234
PERTSEVA T., PA593, PA4043, PA4382, PA5056
PERTUSI G., PA586
PESCI A., PA1725
PESENTI N., PA2123, PA2133
PESHBAHAR S., PA1909
PESL M., PA598
PESONEN I., PA2881
PESQUERA CRIADO R., PA3679
PESSOA E., PA665
PESTONI J., OA1569
PETÁK F., PA556, PA1173, PA3545, PA3547, PA3549, PA3555
PETANIDIS S., PA545
PETAT H., PA423
PETELYSKA L., PA3471
PETELYTSKA L., OA857
PETELYTSKAB L., PA2914
PETER HARTMANN J., PA3971
PETERER M., OA3255
PETERS A., PA4605
PETERS A., PA1851, PA1947
PETERS F., PA5130
PETERS J., OA2488
PETERS J., OA756
PETERS J., PA2184
PETERS M., PA4763
PETERS M., PA1170, PA1891, PA1892, PA1894, PA1897, OA4302
PETERS S., OA870
PETERS S., PA4139
PETERS V., OA4199, OA4203
PETERSEN J., PA4437
PETERS-SENGERS H., PA2199, PA3426
PETERSSON SJÖGREN M., PA2120
PETFORD N., PA1104
PETHERICK E., OA885, PA5350
PETIT A., PA5296
PETIT L., PA1841
PETIT L., OA789, PA5245
PETIT L., PA4132
PETKOVA D., PA2189
PETKOVA D., PA3372
PETKOVA V., PA3372
PETNAK T., PA1686
PETNAK T., PA1681, PA3844, PA4556
PETRARCA L., PA1647, PA2085, PA2727, PA2734, PA3984, PA4477
PETRARULO S., PA1752
PÉTRÉ B., OA1526
PETREK M., PA2719
PETRICA N., PA3963
PETRIDIS D., PA545
PETRIE T., OA1560
PETRKOVA J., PA2719
PETROIANNI A., PA2315, PA2402, PA4020, PA4025, PA4696
PETROVA G., PA2089
PETROVA G., PA3372
PETRUSHKIN H., PA1051
PETRUSKI-IVLEVA N., PA4605
PETSKY H., OA1436, PA2740
PETTA V., PA5150
PETTY H., PA4663
PEYS E., PA4568
PEZZUTO F., PA1695, PA1708, PA2210
PFEFFER P., PA2397, PA5284
PFEFFER P., PA1891
PFEFFER P., PA1892, PA1894, PA1897
PFEFFERLE P., OA4333
PFEIFER N., PA4033
PFLUGER T., PA1711
PHAM J., PA2078
PHAM N., PA1195
PHAM Q., PA1584
PHAM T., PA2778
PHAN H., PA2778
PHICHKHAIA G., PA1053, PA4545
PHIL R., OA1545
PHILIP G., OA2610, PA3035
PHILIP K., PA994, OA4229
PHILIP K., PA1879
PHILIPP A., OA785
PHILIPPE A., PA1804
PHILIPPE C., PA571
PHILIPPE E., PA2792
PHILIPPOT Q., PA4471
PHILLIP S., OA4861
PHILLIPS D., PA4650
PHILLIPS D., OA4951
PHIMISTER J., PA4143
PHUPHUAKRAT A., PA1681
PHYLAKTOU L., PA3385
PHYU S., PA3928
PIACENTINI G., PA2741
PIAMONTI D., PA4025, PA4636, PA4645
PIANIGIANI T., PA2305, OA4304, PA5277
PIANO MORTARI E., PA2734
PIAZZA M., PA2082, PA2741
PICCARI L., OA2588, PA3500, PA3502, PA5174
PICCOLO G., PA4494
PICERNO A., PA2138
PICIUCCHI S., PA430, OA3272
PICKERODT P., PA4051
PICKLE L., OA4214
PICONE D., PA4754
PIDVERBETSKA O., PA1963, PA5103
PIEBER T., PA5192
PIECYK A., PA1903
PIEDEPALUMBO F., PA1069, OA1540, PA2807
PIEL N., PA1721
PIENN M., PA1764
PIEPER M., PA2290, PA2989
PIERAGOSTINO D., PA5364
PIERANGELI A., PA2727, PA2734
PIERGENTILI L., PA1779
PIEROBON A., PA585, PA3771
PIEROLA LOPETEGUI J., PA1270
PIERUCCI P., PA991, PA2951, PA3760, PA3825, PA4662
PIETERS A., PA1074, PA1086, PA2837
PIETERSEN P., PA492, PA1814
PIETRUSZKA E., PA299
PIGEANNE T., PA581, OA3285
PIGNATTI P., PA2718, PA4741
PIHLAKAS R., PA2959
PIIRILÄ P., PA1178, PA1184, PA2075, OA3167, PA3337
PIJNENBURG M., OA1435, PA2121, PA2137
PIJUAN L., PA479
PIKE K., PA5284
PILARD M., OA4832
PILETTE C., PA1857, PA4757, PA5211, PA5295
PILLAI A., PA4737
PILLAR A., PA2818
PILLAY T., PA2832
PILLING J., PA1233
PILLOW J., PA2122
PILON A., PA3760, PA3825, PA4662
PILONI D., PA3886, PA5193, PA5197
PILORGET C., PA3345
PILUSO M., PA3528, OA4959
PILUSO V., PA4730
PIMENTA A., PA410
PIMENTA D., PA4074, PA4083
PIMENTA S., PA1031, PA1035
PIMENTEL J., PA3784
PIN C., PA2368
PIN I., PA4443
PIÑAS CEBRIAN M., PA1270
PINEDA E., PA3423
PINEL M., PA3043
PINELLI V., OA1558
PINHEIRO D., PA352
PINHEIRO D., PA3405
PINHEIRO M., PA1835
PINHEIRO M., PA1657
PINHEIRO-MENEGASSO N., OA2628
PINHO T., OA4316
PINHO CUNHA PAIVA S., PA415
PINI M., PA317
PINI S., PA3774
PINILLA L., PA1274
PINILLOS J., PA1749
PINK K., PA2757
PINKERTON J., PA1301
PINKTERTON J., PA3044
PINNOCK H., PA1624, PA3404, PA4599, PA4990, PA4992
PINO M., PA1166
PINO-YANES M., OA1437, PA2745, PA2748
PINTE L., PA2925
PINTER R., PA2690
PINTO A., PA1164
PINTO D., PA1035
PINTO D., PA1663
PINTO Í., OA1449, OA1451
PINTO L., PA297, PA2414, PA3790, PA4151, OA4935
PINTO P., PA602, PA2988, PA4042, PA4676
PINTO P., PA604
PINTO R., OA4311
PINTO T., PA4977
PINTO T., PA1034
PIOCH C., PA1073
PIOLA C., PA1667
PIONTKOVSKAYA K., PA2904
PIÓRKOWSKA A., PA3814
PIOSELLI B., PA2356
PIOTROWSKI W., PA1743
PIOTROWSKI W., PA1167, PA3482
PIOTTO M., PA2082, PA5358
PIPER A., PA1807
PIRAINO A., PA2375, PA4704
PIRAINO P., PA1595
PIRAS A., PA1301, PA3914
PIRC MAROLT T., PA4982
PIRES B., PA366
PIRES H., PA2805, PA5090
PIRES DE DIAS MARQUES A., OA4316, PA5049
PIRES DE FREITAS J., PA3796
PIRIM S., PA2731
PIRINA P., PA3811
PIRO B., PA588
PIROMPANICH P., PA2923
PIROTTE M., OA3151
PIRROTTE P., PA2273
PISANI L., PA2310
PISANO A., OA4305
PISANU L., PA1163, PA2162
PISCAER I., OA2603
PISCHEDDA S., PA2728, OA4246
PISI G., PA2147
PISKAČ ŽIVKOVIĆ N., PA1692, PA1798, PA1818
PISONI C., PA1166
PISSARRA C., PA2813
PISTELLI F., PA392, PA1961, PA3868, PA5334
PISTENMAA C., OA1460
PISTOLESI M., PA2274, PA2275
PITA G., PA5208
PITARAKI E., PA1844, PA2966, PA3437
PITCHAMUTHU H., OA1560
PITOZZI V., PA2356
PITSIDIANAKIS G., PA1872, PA2854, PA4037
PITSIOS K., PA5018
PITTA F., OA4310
PITTA F., PA1049
PITTALIS G., PA1763, PA2250, PA3974
PITTELLI M., PA2356
PITTS P., PA1273

PITZNER-FABRICIUS A., PA1298
PIUMATTI F., PA3479
PIVA G., PA1616
PIWKO A., PA2380, PA3026
PIZZICHINI E., PA1907
PIZZIMENTI S., PA4733, PA4736, PA4739
PIZZINI A., PA532
PLA RODRÍGUEZ P., PA2244
PLACHI F., PA4650
PLACKOVA M., PA4483
PLAMEN B., OA753
PLANA M., PA479
PLANA PES M., PA328
PLANAS PASCUAL B., PA4482
PLANAS-BALAGUE R., PA3919
PLANÈS C., OA4324
PLANK F., PA532
PLANK M., PA3621
PLANQUETTE B., OA790, PA1678, OA4829
PLANT R., PA3778
PLANTÉ-BORDENEUVE T., PA1857
PLANTIER L., PA3558
PLAT G., PA4612
PLATE M., OA1566
PLATIG J., OA2497
PLATT A., PA2345
PLATZER W., PA2359
PLAZA V., PA1856, PA5290
PLESSIER A., OA2580
PLETSCH-ASSUNÇÃO R., PA1794
PLETZ M., PA5130
PLEWKA-BARCIK K., PA299
PLEXOUSAKI M., PA1689
PLOUMEN E., PA515, PA1348
PLOWSAY V., PA2134
PLUCINSKI E., PA4058, OA4245
PLUM C., PA404
PLUTINSKY M., PA1339, PA4133
PO H., PA2790
POACHANUKOON O., PA4119
POBEREZHETS V., PA2911, PA2912, PA5319, PA5320
POCCARDI N., PA538
POCHETTI P., PA586
POCOCK L., PA1941
POCRNCIC S., PA1884
PODDIGHE D., OA2615, PA3388, PA3389
PODZAMCZER VALLS I., PA3008, PA5219, PA5272
POENOU G., OA4828, PA5182
POH M., PA477, PA1106, PA3415
POHL W., PA321, PA2374, PA2376, PA2377, PA2378, PA2379, PA4116
POHLE S., OA747
PÖHLKER M., OA2523
POINASAMY K., OA2491
POINCELET E., PA1614
POIRIER C., PA4488
POIRRIER A., PA4466
POLAND D., PA3810
POLAQUINI SIMÕES R., OA4932
POLAT Z., PA5329
POLEDNICZEK M., PA4979
POLESE B., OA1452
POLETTE M., PA611, PA1262, PA1841
POLETTI V., PA3825
POLETTI V., PA430, OA4198, PA5166
POLETTO S., PA4457
POLHEMUS A., PA2268
POLI G., PA2388, PA2391, PA3620
POLI DE FRIAS F., OA894
POLIANSKA M., PA295, PA3531, PA3650, PA4564
POLIDORA E., PA4573
POLINDER K., PA3013
POLINI E., OA2623
POLITI K., OA3270
POLITIS G., PA5150
POLITO C., OA4215
POLIVKA L., PA296, PA1023, PA3923
POLKE M., PA2218, PA4620, PA4623
POLKE N., PA4620
POLKEY M., PA994, PA2948
POLKEY M., PA1275
POLKEY M., OA3183
POLKOWSKA-KRAMEK A., PA2819, PA4436
POLLOCK J., PA382, PA383, OA1457, OA1462, OA2604
POLO A., OA3267
POLÓNYI G., PA1173
POLVERINO E., PA381, PA384, PA385, PA386, PA388, PA390, PA397, PA1071, OA1456, OA1457, OA1458, OA1543, PA2168, PA2841, PA2843, PA2849
POLVERINO F., PA1852, PA2343, PA2352, OA4346
POLWARTH G., PA1761
POLYCHRONAKIS T., PA1636, PA2775, PA4447
POLYTARCHOU A., OA1551
POMARES X., PA442, PA3502
POMARES AMIGO X., PA3491, PA4653
POMPE E., PA3997
POMPE E., PA2280, PA2284
POMPILIAN V., PA2925
POMPILIO P., PA2741
POMPILIO P., OA752, PA3673, OA4236
POMPILIO7 P., PA1910
PONCE-AGUILAR D., PA2330
PONNARAMBIL S., OA1417, OA1418, PA3032, PA4720, PA4722
PONS C., PA2841
PONS M., PA3920
PONS LLINARES J., PA2251
PONT ANTONA P., PA5241
PONTE M., PA4089
PONTIER S., OA4318
PONTIKIS K., PA2307
PONTIS S., PA2356
PONTOPPIDAN K., PA5123
POOLE S., PA1728
POOR T., OA2485
POOREY K., PA1801
POOT B., OA3173
POOT C., OA3184
POP L., PA3379
POPA A., PA3002
POPA V., PA2046
POPAT B., OA3256
POPE D., PA2796
POPELKOVA P., PA4133
POPESCU D., PA2924, PA2925
POPHALE H., PA1322
POPIN D., PA3379
POPOV B., PA610
POPOV T., PA1891, PA1892, PA1894, PA1897
POPOVIĆ F., PA475, PA3542
POPP F., PA3511
POPPELE I., PA2700
POPRELKA K., PA3821
PORCARELLI F., PA1748, PA1779
PORCEL J., PA4437
PORDON E., PA2221, PA2225, PA2305
PORPODIS K., PA545, PA1873, OA3152, PA4709, PA4717
PORRAS-GONZALEZ D., OA1569
PORSBJERG C., OA1415, OA1574, PA1949, OA4303, PA4722, PA4726, OA4966, OA4968
PORSBJERG C., PA4115
PORSBJERG C., PA1891, PA1892, PA1894, PA1897
PORSZASZ J., OA752, PA1760, PA2273
PORTACCI A., PA1908, PA2180, PA2429, PA4098, PA4748, PA4753, PA5287, PA5288, PA5307
PORTAS L., PA1952
PORTEL L., PA4432
PORTELA M., OA2581
PORTELA FERREÑO I., PA1670
PORTER J., OA862, OA1566, PA2920
PORTER J., PA1588, PA3851, PA4008
PORTER N., OA4237
PORTILLA V., PA1237
PORTILLO K., PA1749, OA3282, PA5154
PORTILLO CARROZ K., PA1169
PORTILLO-VASQUEZ A., PA4608
POSCHMANN J., PA4061
POSSO H., PA2776
POSTH S., PA1824, OA4826
POSTHUMA R., OA2596, OA3252
POSTIGO T., PA2326, PA5248
POSTMA K., PA5068
POSTMA M., PA524, OA3184
POSTMUS D., PA2334
POSTMUS P., PA3539
POTACZEK D., OA4333
POTAMIANOU E., PA2307
POTARI C., PA5186
POTARIS K., PA334
POTÉ N., PA1230
POTEIKO P., PA2806
POTOČNIK U., OA1437, PA2745, PA2748
POTONOS D., PA3311, PA4126, PA4738
POTT B., OA4214
POTT F., PA2334
POTT J., PA1769, PA3972
POTTER S., PA313
POTTS J., PA653, PA3339, PA3352
POTUS F., PA441, PA449, PA453, PA458, OA3161
POU SERRAMIA S., PA4076
POU-AGUILAR Y., PA4561
POUJOL DE MOLLIENS M., PA450
POULAIN M., PA952
POULET C., PA1934
POULHAZAN E., PA2245
POULIOU L., PA3586
POULSEN H., OA883
POULTER C., PA2730
POULTON A., PA3591
POUPOS S., PA5102
POURAZAR J., PA1604, OA4240
POURIER M., PA2739
POURRIAHI P., PA3589
POURZAND L., PA1130
POUWELS D., OA1525
POUWELS S., PA319, PA2355, PA5203
PÓVOA P., PA1225
POWELL L., PA603
POWELL P., PA991, PA3454
POWELL Z., PA4460
POZO K., PA3396, PA4527
POZUELO SÁNCHEZ L., PA3012
POZZAN R., PA2890, PA3505
PRABHUGHATE A., PA297
PRADA F., PA1957
PRADA L., PA4714
PRADAT P., PA288
PRADELLA M., PA2922
PRADO C., OA2628
PRADO GALA E., PA3464
PRADO ROSA M., PA3758
PRADOS C., PA3801
PRAET J., PA2915
PRAIS D., OA1542, PA1654, PA4474, PA5031
PRAKASH Y., PA2351
PRAMANIK S., PA3303
PRAPINPAIROJ C., PA2689
PRAPROTNIK M., PA3382
PRASAD A., PA616
PRASANNA M V., PA5074
PRASKO J., PA3593
PRASSE A., PA1139, PA2278, OA2623, OA4849
PRAT C., PA1064
PRAT AYMERICH C., OA4864
PRATA L., OA2583
PRAT-AYMERICH C., OA4867
PRATS SORO E., PA5345
PRATTE K., OA2497
PRAVSGAARD CHRISTENSEN J., PA1092
PRAWAN A., PA2800
PRAWIRO C., OA4970
PRAYLE A., OA1549, PA2730
PREDA L., PA2252
PREISS M., PA3965
PREISSER A., PA3799
PREITE S., PA1301
PRELLA M., PA1799
PREMUDA C., OA1540, PA2148
PRENDECKI R., OA3266
PRENDI E., PA5037
PRERERIRA DOS SANTOS D., PA2301
PRESSLER T., PA3384
PREST G., PA4497
PRESTIFILIPPO S., PA5172
PRESTON I., OA739
PREVEDONI GORONE M., PA2083
PREVEL R., OA789, PA3838, PA4061, OA4243, PA5245
PREVINAIRE J., PA4980
PREVOST B., PA2129
PRÉVOST K., PA4488
PREVOST T., PA534
PRÉVOT G., PA402, OA2580, PA3940
PREYER R., PA4576
PRIBYL J., PA598
PRICE D., PA1014, PA1319, PA1891, PA1892, PA1894, PA1897, PA3404, PA3621, PA3635, PA3777, OA4936
PRICE L., PA3488, PA3494, PA3495
PRICE R., PA630, PA632, PA646
PRICE R., PA4757
PRIEGUE CARRERA A., PA2215
PRIEUR G., PA502
PRIFTIS K., PA3925
PRIGENT A., OA3178, OA3190
PRIMEROSE D., PA2744, PA4440
PRINCE N., OA1440

PRINGUEZ H., PA1193
PRINS G., PA5190
PRINS H., PA548
PRINS J., OA2612
PRINS K., PA1609
PRIOR K., PA4120
PRIOR T., PA3818
PRIOR T., PA4060
PRISCIANDARO E., OA3271
PRIVITERA E., OA1464
PRIYARANJAN S., PA3498
PROBOSZCZ M., OA2510
PROBST V., PA4521
PROCACCIANTI C., OA1538
PROENCA C., PA317, PA620, PA972
PROENCA C., PA1197, PA3963
PROESMANS M., OA2507, PA4460
PROFITA M., PA2708, PA4038, PA4754
PROIMOS C., PA4572
PROSCH H., PA3487
PROVATAS I., PA3429
PROVENCHER S., PA441, PA449, PA453, PA458, PA1326, OA3161
PROWLE J., PA2306
PRUDENTE R., PA298, PA3314, PA4593
PRUD'HOMME A., PA4432
PRUSZYŃSKA-OSZMAŁEK E., PA4044
PRYSTUPA L., PA4411, PA5348
PRYSTUPA L., PA2317
PRZYBYLSKI G., PA3915
PRZYPASNIAK Z., PA986
PSALLIDAS I., PA1323, PA3564
PSAROLOGAKIS C., PA2307
PSIKALOVA J., PA4483
PUAN Y., PA3865
PUAN Y., PA5120
PUCHADES F., PA3840
PUDDU M., PA5051
PUELLO D., PA2776
PUENTE MAESTU L., PA988, PA2417, PA3679, PA4026, PA4102, PA4621, PA4652, PA4659
PUENTE-MAESTU L., PA1920, PA1924, PA3066, PA3822
PUEYO J., PA1110
PUGALENTHI A., PA4438
PUGGIONI F., PA3053
PUGLIA J., PA4453
PUHAN M., OA3183
PUI E., PA2094
PUJAL MONTAÑA P., PA3008
PUJARI R., PA2233
PUJOL M., PA1194
PULIDO-EXPÓSITO A., PA3919
PULIGHEDDU M., PA3808
PULITO CUETO V., PA1140
PULITO-CUETO V., PA1237, PA2321
PULMONARY VASCULAR RESEARCH INSTITUTE: PATIENT ENGAGEMENT AND EMPOWERMENT WORKING GROUP .., PA3503
PUNJABI N., OA4953
PUNYADASA D., PA4600
PUPIN L., PA1317
PUPPO G., OA1558
PURCELL H., PA517
PURCELL M., PA2816, PA2821
PUREVSUREN Y., PA4550
PURNELL T., PA1094
PUROKIVI M., PA3458
PUSCINSKA E., PA2227
PUSIAK R., PA2970
PUSTERLA O., PA3994, PA3996
PUTHUCHEARY Z., PA2306
PUTIGNANO P., PA5197
PUTOTO G., PA4457
PUTRI D., PA1259
PUTRUELE A., PA2916
PUTRUELE A., PA1166
PUTZ N., PA5233
PUVIANI V., PA1293
PUYA PÉREZ M., PA3805
PYE A., PA394
PYLE C., PA2817
PYO M., PA645

Q

QADAN A., PA3407
QAIM H., PA3600
QAISER CHOUDHARI Y., PA3388
QAYUM S., PA3004
QAZI N., OA772
QIAN C., PA1233
QIAN W., PA4584
QIAO D., OA1539, PA1583
QIAO Q., PA509
QU J., PA1834, PA5305
QUACH S., PA3478
QUADFLIEG K., PA969, PA3395, PA4532
QUADRELLI S., PA3479
QUADRI P., PA5009
QUARANTA V., PA2180, PA5307
QUARANTOTTI V., PA1233, PA5205
QUARATO C., PA974
QUARCK R., PA2710, OA3159, PA3775, PA5188, PA5295
QUARTUCCI C., PA2226
QUAST K., PA1863
QUATAERT C., OA764
QUEIROZ J., PA1907
QUEIROZ V., PA2431
QUEIROZ DE ALMEIDA BONATELLI M., PA1241
QUENTIN J., PA3341
QUERO S., OA782
QUEROL GUTIÉRREZ L., OA3144
QUETANT S., OA3157
QUEZADA REYNOSO A., PA1815
QUIGLEY A., PA4458
QUIGLEY C., PA1833, PA5332
QUIJANO T., PA618
QUINDOS B., OA4867
QUINN C., PA2781
QUINN E., PA1842
QUINN E., PA1843, PA2156
QUINN T., PA550
QUINT J., PA2397
QUINT J., OA885, PA1904, PA2382, PA4692, PA5352
QUINT J., OA858, PA3661
QUINTANA GALLEGO E., PA2155, PA3761
QUINTANA GALLEGO M., PA2390, PA4995
QUINTANA LOPEZ J., PA548
QUINTANA VILLARROEL M., PA3507
QUINTARD H., PA3546
QUINTELA DEL RÍO A., PA4518, PA4519
QUINTELLA FARAH B., PA3061
QUINTERO SANTOFIMIO V., PA3339
QUIRANT B., PA1169
QUIRCE S., OA1419, PA1920, PA1924, PA3822
QUOC HUNG N., PA2287
QURESHI T., PA4729, PA5300, PA5304
QVIST E., PA971

R

R P., PA5074
R F CARVALHO C., PA2302
R F DE CARVALHO C., PA413
R M ROCCO P., PA563
R. F. CARVALHO C., OA4219
R. JOHNSON J., OA2625, OA2629
R. KEIR H., PA1106
R. SMIT M., PA1211
RAAB A., PA5068
RABAHI M., PA2288
RABE H., PA2722
RABE K., OA1525, OA1529, PA2290, PA3662
RABE K., OA875
RABE K., PA1308, OA1523
RABE K., PA1318
RABE K., PA1593
RABEC C., OA3190
RABIEI B., PA2839
RABINOVICH R., OA3183, PA4990
RABOSO MORENO B., PA3445, PA5170
RABY K., PA552
RACIL H., PA2253, PA4565, PA5078, PA5089, PA5097, PA5112
RACZEK M., PA4763
RADCHENKO G., PA454
RÅDEGRAN G., PA3964
RADFORD K., OA1414, OA2503, PA4125, PA5294
RADHAKRISHNA N., OA4302
RADHAKRISHNAN V., PA2382
RADHIKA R., PA4695
RADHOUANI A., PA5116
RADIĆ M., PA1640
RÅDINGER M., PA2324, OA2496, PA2985, OA3167
RADNAA D., PA4550
RADOVANOVIC D., PA472, PA1682, PA3774, PA3854, PA4601
RADTKE T., OA3253
RADUNA O., OA2492
RADWAN A., PA2090
RADZIKOWSKA E., PA421
RADZINSKI P., PA2227
RAFAEL VIEIRA SOUZA SILVA B., PA3061, PA4637
RAFECAS A., PA1749, PA2784
RAFECAS CODERN A., PA5219
RAFFAELI E., OA3272
RAFTOPOULOU A., PA3330
RAGER J., PA1600
RAGHEB S., PA2802
RAGHU G., PA3921
RAGIONIERI L., OA4947
RAGNOLI B., PA586
RAGOZZINO S., PA2820
RAHAGHI F., PA3423, PA3973
RAHAGHI F., PA3491
RAHAGHI F., OA742
RAHAGHI F., PA3423, PA3489
RAHAMIM J., PA1787
RAHERISON-SEMJEN C., PA531, PA4432, PA5015
RAHIM Y., PA3870
RAHIMI P., PA4105
RAHMA B., PA2153
RAHMAN A., OA884
RAHMAN N., PA4437
RAHMAN N., OA1561, PA1827, PA3297, PA3434, PA5140
RAHMAN N., PA3435, PA3441
RAHMAN N., PA1814, PA3438
RAHULAN V., PA3498, PA4491
RAI D., PA5339
RAI K., PA2393
RAI R., PA1842, PA1843
RAI V., PA2752
RAIDT J., PA2762
RAIDULLAH E., PA4713
RAIMONDI A., PA646, PA1895, PA1907
RAIMONDI F., PA2298, PA5105
RAIMUNDO P., PA1057, PA2799, PA2810, PA4541
RAINA P., PA1922, PA4529
RAINERI G., PA1213
RAISOVA K., PA960
RAJ L., PA2245
RAJ R V., PA5074
RAJABOV K., PA1874, PA1875
RAJAI A., PA5220
RAJAN S., PA1322
RAJARAM S., OA757, PA2260, PA3490, PA4500, OA4857, OA4954
RAJASEKAR S., PA5104
RAJESH R., PA2359
RAJGOPALA S., PA2396
RAJU S., OA4953
RAKHIMOVA S., PA5092
RALSER M., PA3851
RAM J., PA2396
RAM KUMAR K., PA2946
RAMACHANDRAN P., PA1820
RAMACHANDRAN V., PA3304
RAMAKRISHNAN P., PA2738
RAMAKRISHNAN S., PA3772, PA4586
RAMAN B., OA2491
RAMANI V., PA3052
RAMASLI GÜRSOY T., OA2505, OA2507
RAMASWAMY M., PA2882
RAMASWAMY S., OA4241
RAMBALDINI B., PA965
RAMBAUD G., OA4827
RAMBAUD J., PA2129
RAMDANI I., PA2070
RAMES C., PA420
RAMESH P., PA1744
RAMÍREZ A., PA3500
RAMIREZ C., OA1537
RAMIREZ G., PA2710, PA3775
RAMIREZ K., PA5108
RAMÍREZ GALLARDO A., PA1756
RAMÍREZ MALDONADO J., PA5069
RAMÍREZ MARTÍN P., PA1205
RAMÍREZ PRIETO M., PA4026
RAMJUG S., PA495, PA2697, PA3472
RAMON L., PA2252
RAMON CLAR L., PA2251
RAMONELL R., OA4215
RAMOS B., PA389
RAMOS D., PA5108
RAMOS D., PA3396
RAMOS J., OA1413
RAMOS J., PA4502, PA4512
RAMOS R., PA1759
RAMOS ALONSO Y., PA5217
RAMOS BARBON D., PA1856
RAMOS CASALS M., PA1740
RAMOS-MARTÍNEZ E., PA1160

RAMOS-NAVARRO C., PA2131
RAMOS-RAMÍREZ P., OA4334
RAMOS-SMITH S., PA3403
RAMPHUL M., PA2730, PA4459
RAMPONI S., PA4989
RAMPURA CHINNAPPA N., PA3440
RAMSAY M., PA2940, PA2942, PA3757
RAMSDEN V., PA5253
RAMSEY K., PA2117, PA5001
RAMSUNDAR N., PA2932
RAMU S., OA4966
RAMU S., OA4968
RAN L., PA4069
RAN L., PA2217
RAN P., PA4050
RANA C., PA5088
RANASINGHE K., PA3635
RANCIATI S., OA3183
RANCIC J., PA1804
RANCIÈRE F., PA2065
RANDERATH J., PA1679
RANDERATH W., OA4844
RANDERATH W., PA1679, OA4840
RANDHAWA A., PA3013
RANDI A., PA2331
RANGANADIN P., PA3846
RANGANATHAN S., OA1434, PA1630, PA4450
RANIA H., OA4323
RANIA K., PA3048, PA5079
RANIERI G., PA1586
RANILOVIC D., PA473
RANISZEWSKA A., OA1450, PA2222, PA2339
RANJAN P., OA1432
RANJAN Y., PA1588
RANJBAR M., PA1941, PA3843, PA3845
RANKIN F., OA3289
RANKIN G., PA1604
RANKINE E., PA546
RANOT C., PA1584
RANTALA A., PA1601, PA1607, OA2520
RAO K., PA3975
RAO M., PA2260, OA4857
RAO N., PA5354
RAO S., PA2097, PA2747
RAO V., OA899
RAO Y., PA1834
RAO Y., PA1760, PA3489
RAOUZAIOU K., PA5258
RAPHAEL H., PA1279
RAPONI G., PA2100
RAPPA F., PA4684, PA4754
RAPPO U., OA1534
RAPSOMANIKI E., OA1524, PA1928, PA3622, OA4936
RAPTI A., PA545
RAPTI A., PA5186
RAPTI G., PA3586
RAPTIS C., PA2859
RAPTIS D., PA3586
RAREDON S., OA894
RÁROSI F., PA3549
RASCHI S., PA3528, OA4959
RASCOV V., PA1645
RASH B., PA4550
RASHED A., PA1580
RASHID A., PA4567
RASHID M., PA3764
RASKIN J., OA3265
RASKOPF E., PA4388
RASMUSSEN F., PA5166
RASMUSSEN H., PA2399, PA3628
RASMUSSEN M., PA1632
RASMUSSEN T., PA1125, OA3268
RASO M., PA2082
RASPE M., PA496
RASSOULI F., PA968
RASTELLI A., PA1089
RASTODER E., PA1838
RASTOGI D., PA5013
RATANAOPAS S., PA540
RATH A., PA1785
RATHANYAKE S., PA2318
RATHI K., PA5222
RATHNAYAKE S., PA1252, PA5207
RATJEN F., PA3375, PA3378, PA3995, PA4463, PA4468, PA4996
RATNAKUMAR S., OA862, PA2920
RATNAM R., PA1068
RATNASINGHAM P., PA1316
RATRUAKORN D., PA3989
RATSIHORIMANANA R., PA427
RATSIMBA F., PA1222, PA1335, PA1811, PA2272
RATTRAY N., PA2963
RAUCH K., PA419
RAUCHHAUS P., OA2604
RAUD J., PA3501
RAUH A., PA3515
RAVAGLIA C., PA430, OA4198
RAVANETTI F., OA4947
RAVASIO G., PA3548
RAVELING T., OA3194
RAVI A., OA1573, OA2625, OA2629
RAVICHANDAR S., PA5073
RAVINDRAN M., OA4215
RAY A., PA453
RAY A., PA2183, PA4759
RAY D., PA1307
RAY M., PA3019
RAYA BENÍTEZ J., PA364, PA365, PA1658, PA1669
RAYA-BENÍTEZ J., PA2238, PA2239
RAYALA-MONTANIEL E., PA4724
RAYHANE H., PA2153
RAYIS M., PA5263
RAYMENT J., PA3995
RAYWOOD E., PA1583, PA4998
RAZA M., PA3297
RAZA T., PA4567, PA5086
RAZAKAMANANTSOA L., PA2945, PA3759
REA G., PA2343
REAL F., PA659
REALE M., PA1742
REARDON J., PA967
REBAI A., OA4223
REBELLO PINHO J., PA5250
REBELO P., PA346, PA360, PA1037, OA4312, OA4316
REBER L., OA1421
REBULI M., PA1600
RECHSTEINER L., PA4140
RECIO RUFIÁN M., OA4864, OA4867
RECOQUILLON S., PA1271
RED I., PA2992
REDA M., PA4013
REDDEL H., PA1928
REDDY A., OA741
REDDY K., PA1252
REDDY K., PA2318, PA5207
REDDY S., PA3865
REDEL A., PA1676
REDENTE E., PA1162
REDL A., PA4056
REDLINE S., OA3286
REDONDO M., PA5257
REDONDO-GARCÍA F., PA4523
REED A., PA2331
REED L., OA897
REED M., PA2187
REED T., PA1289, PA1290
REES M., PA2703, OA3147
REFRE G., PA1871, PA4539
REFSGAARD B., PA1675
REFSGAARD IVERSEN B., PA2789
REGA R., PA2711, PA2952
REGAMEY N., PA5016, PA5024, PA5032
REGAN E., PA2275
REGIDOR DELGADO A., PA5217
REGINA COUTO E., PA2685
REGIS BURGEL P., PA381, PA397
REGIS-BURGEL P., OA1457, PA2843, PA2849
REGMI B., PA1222, PA1335, PA1811, PA1813, PA2272
REGMI G., PA1789
REGNAULT V., PA5251
REGOJO R., PA3801
REIBMAN J., PA985
REICHENBERGER F., PA3511
REICHMANN J., OA4942
REID D., PA2818
REID F., PA1690
REID P., OA1560
REIHANI A., PA4072
REIHILL J., PA1869
REIHILL J., PA1868
REIJER J., PA1860
REIJNDERS T., OA4872
REIJNDERS T., PA3426
REIJNDERS T., PA2199
REILLY C., PA3403
REILLY C., PA3348
REIMANN A., PA2166
REIMER R., PA1764
REIMONDO G., PA4733
REIMPELL P., OA3177
REINEKE T., PA5346
REIN-HEDIN E., PA3501
REININGER D., PA1863
REINOSO ARIJA R., PA2390, PA4995
REIS A., PA1191, PA1192
REIS E., PA1034
REIS L., PA3766
REIS M., PA1058
REIS R., OA1449, OA1451, OA3267
REIS R., PA1117, OA1449, OA1451
REISBERG S., PA588
REISETER S., PA3476
REISNER C., PA3485
REISO H., PA3414
REISS I., PA2121
REISS I., PA2137
REIßFELDER C., PA1700
REITER J., PA3383
REITSMA S., PA4605
REIX P., PA420, PA3935
REJCZAK T., PA1745
REJEB H., PA2197, PA3017, PA4569, PA4740, PA5152
REJEB S., PA2093, PA2096, PA2758, PA5360, PA5367, PA5369
REJNMARK L., PA2228
REJNÖ G., PA658, PA4426
REKALOVA O., PA4552
REKHA P., PA1004, PA4695
REMACLE C., OA1452
REMUS N., PA3377
REMUZGO MARTÍNEZ S., PA1140
REMUZGO-MARTÍNEZ S., PA1237, PA2321
REN J., PA1076
RENARD J., PA1614
RENAUD L., PA393
RENDA B., PA1783
RENDLE G., PA2108
RENNARD S., OA2497
RENNER A., PA321, PA4116
RENNER E., PA567
RENNERT-MAY E., PA2249
RENNIE D., PA5253
RENNISON-JONES C., OA850, OA855
RENOUX C., OA884
RENOUX M., PA420, PA423
RENWICK M., PA3440
RENZ H., PA4036
RENZONI E., PA404, PA3488, PA4975
RENZONI E., OA4877
REPAPI E., OA2627
REPOSSI A., PA1069, PA2807
REPUSSEAU B., PA4490
REQUENA G., PA3024, PA4688
RESANO BARRIO P., PA3005, OA4841
RESCHE-RIGON M., OA2580
RESIDE E., PA1694
RESL C., PA2209
RESQUETI V., PA1039, PA4533
RETEGUI A., PA4089
RÉTI I., PA3611
RETORY Y., PA588, PA589
RETTL R., PA4644, PA4979
RETUCCI M., PA2148
REULA A., PA2765
REUSCHL A., PA2223
REVELLI D., PA2187
REVERS M., OA789
REVILL S., PA4072
REY Y., PA5261
REY-BRANDARIZ J., PA5327
REYCHLER G., PA3412
REYES V., PA1016
REYES FRANCO M., PA3826, PA3829, PA3831, PA3832
REYES JIMENEZ R., PA5174
REYES-FRANCO M., PA3302
REYES-HERRERA A., PA4608
REYFMAN P., OA2610, PA3039, PA3040, PA3041
REYNAUD GAUBERT M., PA402
REYNAUD-GAUBERT M., OA3157, OA3280
REYNDERS T., PA1208
REYNIER P., PA4490
REYNOLDS A., PA5259
REYNOLDS C., PA1778
REYNOLDS J., PA3798
REYNOLDS P., OA4302, OA4852, OA4853
REYNOLDS P., PA4678
REZAI N., PA4471
REZELJ M., OA3169
REZELJ M., OA3174
RHATIGAN K., PA1912, PA1919, PA1923
RHEAULT T., PA1299, OA2602
RHEDIN S., PA4999, PA5359
RHEE C., PA1891, PA1894, PA2880
RHOADS S., PA1899
RHODES C., OA3154
RHODES K., PA3013
RIBAS J., PA442, PA3491
RIBBENS C., OA853,

PA2915
RIBBING K., PA3914
RIBEIRO A., OA2628
RIBEIRO A., PA3413
RIBEIRO C., PA2933, PA2934, PA2936, PA2938, PA3519, PA3520
RIBEIRO C., PA1304
RIBEIRO J., PA1058, PA1597, PA2211, PA2716
RIBEIRO J., PA1225
RIBEIRO J., PA1035
RIBEIRO R., PA2899
RIBEIRO CAMPOS D., PA3388
RIBEIRO JÚNIOR G., PA5250
RIBEIRO RESENDE M., PA1172, PA2685, OA4226
RIBERI L., PA2160
RIBET C., PA1965, PA3345, PA4430
RIBET C., PA2077
RICARDO FERNADES DE CARVALHO C., PA953
RICARDO FERNANDES DE CARVALHO C., PA1284, PA2262
RICCARDI E., PA4736, PA4739, PA5160
RICCARDI N., PA2798
RICCI A., PA2375, PA4704
RICCI F., OA4947
RICCIARDI F., PA1941
RICCIARDI L., PA1908, PA4748
RICCIARDOLO F., PA975
RICCIARDOLO F., PA2224, PA4733, PA4736, PA4739, PA5160
RICE M., PA1609
RICHA G., PA3304
RICHARD A., PA336
RICHARD J., PA288, OA4955
RICHARD DE LATOUR B., PA559
RICHARDS A., PA2062
RICHARDS C., PA603
RICHARDSON B., OA2581
RICHARDSON G., OA2587
RICHARDSON H., PA382, PA383, PA1105, OA2604
RICHARDSON K., PA2697
RICHARDSON L., OA774
RICHARDSON M., OA1529, OA2498, PA2681, PA4070, PA5350
RICHART T., PA3432
RICHELDI L., PA2375, PA2422, OA2584, PA2875, PA2902, PA3460, PA4093, PA4704, PA4730, PA4744
RICHTER A., OA889
RICHTER I., PA4620
RICHTER M., PA1770
RICKARD K., PA1299, OA2602
RICKARDS E., PA2389
RICKE E., PA4973
RICKETTS W., PA480
RIDDERSHOLM S., PA322, PA4148
RIDGERS A., OA3191, PA4651
RIDOLFO J., PA4490
RIDOUT D., PA1889
RIED M., PA1882
RIEDEMANN N., OA786
RIEDERER G., OA4329
RIEDMANN K., PA5233
RIEMEKASTEN G., OA746
RIERA J., OA782, OA788, PA2326, PA5244, PA5248
RIERA L., PA2319
RIESS J., PA4510
RIFFO-VASQUEZ Y., PA599, PA4680
RIGHETTI R., PA1304
RIGHETTI R., PA306
RIGHI I., PA3357, PA4496
RIGLER D., PA2757
RIGOTTI C., PA2125
RIGOULIA T., PA1043
RIGOUTS L., PA2176
RIGUAL J., OA3282
RIHA R., OA4837, OA4844
RIIKONEN R., PA2750, OA4943
RIJNBEEK P., PA666
RIJO A., OA4311
RIKIMARU M., OA3148, PA3776
RILEY M., OA4199, OA4203
RIM H., PA5079
RIMKUNAS A., PA2977, PA4401
RIMMER J., OA4302
RIMPA T., PA4573
RINALDO R., PA1198
RINALDO R., PA5173
RINCHAI D., PA4471
RING A., PA1637
RINGBÆK T., PA548
RINGHAUSEN F., PA2769
RINGSAHUSEN F., PA2843
RINGSHAUSEN F., PA381, PA385, PA397, PA1071, OA1457, OA1458, PA2340, PA2342, PA2849
RINGSHAUSEN F., PA1070
RINGSHAUSEN F., PA386, PA2164
RINK S., PA976
RINTOUL R., PA3434
RÍO C., PA5241
RIO RAMIREZ M., PA3445, PA5170
RIOS A., PA1840
RÍOS ASÍN I., PA365
RÍOS-CORTÉS A., PA4518, PA4519
RIOU J., PA1271, OA4318
RIPAMONTI R., PA1763, PA2250, PA3528, PA3974, OA4959
RIPARI G., PA600
RIPLEY D., PA4390
RIPOLLONE J., PA3639
RISCHARD F., PA1204
RISEBROUGH N., PA1321, PA1328, PA4698
RISI I., PA4075
RISSLER J., PA2120, PA3807
RITCHIE A., OA2607, PA2815, PA3625, PA4144, OA4931
RITCHIE A., PA4145
RITZ C., PA1806, PA5128
RIVADENEIRA F., PA1916, OA2605
RIVAS-PARDINAS C., PA1924, PA3822
RIVERA E., PA2190
RIVERA-ORTEGA P., PA404, PA1732, OA2588, PA3921, OA4195, PA4381
RIVERO-CALLE I., PA2728, OA4246
RIZZELLI S., PA3760, PA4662
RNJAK D., PA416
RO S., PA5229
ROBACH P., OA893
ROBACK J., OA4215
ROBBI E., PA4075
ROBBIANI S., PA2122
ROBERT A., PA3412
ROBERT F., PA443
ROBERT DE SAINT VINCENT M., PA5300
ROBERTO GARCÍA A., PA1756
ROBERTS A., PA5354
ROBERTS C., PA2132
ROBERTS C., PA2816, PA2821
ROBERTS F., OA1560
ROBERTS G., PA1046
ROBERTS G., OA1441, OA1527, PA3674, PA5354, PA5355
ROBERTS J., PA3434
ROBERTS N., OA3173
ROBERTS S., PA2169
ROBERTS S., PA2963
ROBERTSON A., PA3346, PA3798
ROBERTSON I., PA2336
ROBERTSON L., PA1761, PA2888
ROBERTSON N., PA959
ROBERTUS J., PA4613
ROBIN S., OA4832
ROBINETTE C., PA1600
ROBINSON D., OA1531
ROBINSON K., PA2956
ROBINSON L., PA1308, PA5286
ROBINSON P., PA1111
ROBINSON P., PA2760, PA2761
ROBINSON R., PA2156
ROBINSON R., PA2291, PA4001, OA4863
ROBLES R., PA3993
ROBLES HERNÁNDEZ R., PA2350
ROBLES-HERNÁNDEZ R., PA3302
ROBLES-OTEIZA C., OA3270
ROBSHAW M., PA1583
ROBSON E., PA1108, PA5039
ROCA C., OA3147
ROCA O., OA782
ROCCA A., PA2375, PA4704
ROCCHI A., PA5358
ROCETO RATTI L., PA2685
ROCHA C., PA444
ROCHA J., OA4222
ROCHA P., PA2201
ROCHA S., PA1663
ROCHA V., PA1663
ROCHA OLIVEIRA C., PA4670
ROCHE A., PA1193, PA1766, PA5180
ROCHE J., OA1560, PA3434
ROCHE N., PA2077, PA3345, PA3621, PA4150, PA4430, PA4607
ROCHE S., PA613, OA3146, PA3310
ROCHESTER L., PA1592, PA1595, OA3185
ROCHMAN M., PA1654
RÖCKEN J., PA1786, PA5227, PA5293
ROCKS N., PA4132
RODA X., PA3449
RODDY T., PA4562
RODENBUSCH C., PA4650
RODÉS N., PA4660
RODGERS J., PA5039
RODGERS J., PA1180
RODGERS O., OA757, PA4500, PA5039
RODGERS O., PA2260, OA4954
RODGERS-GRAY B., PA1656
RODIC M., PA1638, PA1639
RODIL RIERA M., PA1816, PA2426, PA3057, PA3595
RODITI G., PA3529
RODITIS L., PA420, PA423
RODKJAER L., PA1675
RODMAN BERLOT J., PA3382
RODO PIN A., PA5174
RODÓ-PIN A., PA5154
RODRIGO-GARCÍA M., PA2400
RODRIGUES A., PA3766
RODRIGUES A., OA2615
RODRIGUES C., PA1037
RODRIGUES D., PA4083, PA5257
RODRIGUES F., PA1031, PA1591
RODRIGUES F., PA2270
RODRIGUES F., PA5110
RODRIGUES G., PA360, PA1037, PA1835, OA4311, OA4316
RODRIGUES J., PA404
RODRIGUES P., PA2816, PA2821
RODRIGUES S., PA5071
RODRIGUES T., PA488
RODRIGUES MAIA E., PA3396
RODRIGUES SILVA FREITAS L., PA953
RODRIGUEZ A., PA1166
RODRIGUEZ A., PA4490
RODRIGUEZ A., PA3312, PA3829
RODRÍGUEZ C., PA4089
RODRÍGUEZ D., PA442, PA3502
RODRÍGUEZ I., PA3043
RODRIGUEZ L., PA1113
RODRIGUEZ L., OA1567
RODRIGUEZ M., PA2433
RODRIGUEZ R., PA3784
RODRÍGUEZ ANDONEY J., PA1772
RODRÍGUEZ ARCE I., PA1096
RODRÍGUEZ CASADO L., PA5217
RODRÍGUEZ CHIARADIA D., OA3183, PA5174
RODRIGUEZ CHIARADIA D., PA3502
RODRIGUEZ CHIARADIA D., PA3491
RODRIGUEZ FERNANDEZ M., OA3144
RODRÍGUEZ GARCÍA R., OA783
RODRÍGUEZ GÓMEZ A., PA577
RODRÍGUEZ GONZÁLEZ J., PA2167
RODRÍGUEZ GONZÁLEZ-MORO J., PA2707
RODRIGUEZ HERMOSA J., PA5208
RODRIGUEZ LLAMAZARES S., OA2590
RODRIGUEZ MARTINEZ C., PA981, PA2755
RODRÍGUEZ MEDINA A., PA3306, PA3307, PA3826, PA3831, PA3832, PA5069
RODRÍGUEZ MENÉDEZ P., PA3595
RODRÍGUEZ PERICACHO M., PA3057
RODRIGUEZ PEROJO A., PA5170
RODRÍGUEZ PORTAL J., PA3916
RODRÍGUEZ REYNA T., PA1772
RODRIGUEZ RUIZ A., OA1573
RODRIGUEZ SANZ J., PA572, PA4078
RODRIGUEZ SEVILLA J., PA5174
RODRIGUEZ-BAÑO J., OA4864, OA4867
RODRÍGUEZ-CABELLO J., PA561
RODRÍGUEZ-CHIARADIA D., PA1836, PA5154
RODRÍGUEZ-CUMPLIDO D., PA408
RODRÍGUEZ-FERNÁNDEZ S., PA1693

RODRIGUEZ-FRÍAS F., PA2371, PA3920
RODRÍGUEZ-GALLEGO C., PA2329
RODRÍGUEZ-GARCÍA W., PA3302
RODRÍGUEZ-HENRÍQUEZ P., PA1160
RODRIGUEZ-HERMOSA J., PA1920
RODRIGUEZ-MARTÍNEZ C., PA2777
RODRÍGUEZ-MARTINEZ C., OA872
RODRÍGUEZ-MARTORELL J., PA1683
RODRIGUEZ-MATUTE C., PA1683
RODRÍGUEZ-MEDINA A., PA3302, PA3305
RODRÍGUEZ-MUÑOZ C., PA2326, PA5244, PA5248
RODRIGUEZ-PONS L., PA1169
RODRIGUEZ-PORTAL J., OA3282
RODRIGUEZ-ROISIN R., OA3183
RODRIGUEZ-SEGADE ALONSO S., PA1024
ROEBUCK T., PA4087
ROEDER M., PA1272
ROEDER T., PA4041
ROEDL K., PA3972
ROEHMEL J., PA491, PA2765
ROELANT E., PA4532
ROEST A., PA2126
ROFAEL H., PA1196
ROGER A., PA1898
ROGER I., PA2365
ROGER P., PA1212, PA1214, PA1219
ROGERS A., PA1842
ROGERS A., PA1843
ROGERS K., PA2888
ROGERS L., PA3618
ROGLIANI P., PA590, PA591, PA597, PA2298, PA3610, PA4112, PA4691
ROH Y., PA1216
ROHANI-MONTEZ C., PA3964
ROHDE G., PA1171, PA2168, PA2819
ROHDE S., PA4763
RÖHMEL J., PA1861, PA4472
RÖHMEL J., PA1073
ROHR K., PA1132, PA2879
ROHRBACH A., PA1861
ROJAS A., PA1906
ROJAS C., PA2776
ROJAS M., PA1157, OA4196, OA4199, OA4203
ROJAS MORENO-TOMÉ R., PA3679
ROJAS QUINTERO J., OA4346
ROJAS-ANAYA H., PA5355
ROJAS-QUINTERO J., PA1852
ROJAS-RUIZ A., PA2702
ROJAS-SERRANO J., PA1160
ROJO R., PA3486, PA3493
ROKSANDIĆ MILENKOVIĆ M., PA3837
ROKX N., OA756
ROLAND D., PA1634, PA2099, PA2752, PA5355
ROLANDSSON ENES S., PA5236
ROLDAN N., PA3321
ROLIM J., PA1759
ROLLAND-DEBORD C., PA1678
ROLLINS S., PA3342
ROLLO M., PA2180
RÔLO SILVESTRE C., PA2810, PA4541
ROMAGNOLI M., PA4112
ROMAN A., PA286, PA2061
ROMÁN RODRÍGUEZ L., PA2155
ROMÁN RODRIGUEZ M., PA542, PA543
ROMANE B., PA393
ROMANET C., PA441, PA453, PA458
ROMANI A., PA4989
ROMANO G., PA4662
ROMANO G., PA3760
ROMANO RODRIGUEZ M., PA1655
ROMEI C., PA5334
ROMEM A., PA464, PA470, PA4625
ROMEO L., PA5268
RØMER V., PA5341
ROMERO A., PA1643
ROMERO D., PA2841
ROMERO I., PA4576
ROMERO L., PA2784
ROMERO FALCÓN A., PA4097
ROMERO MESONES C., PA3812
ROMERO PALACIOS P., PA3805
ROMERO PERALTA S., PA3005, OA4841
ROMERO PLAZA A., PA1242
ROMERO ROS X., PA1853
ROMERO-MESONES C., PA3802
RONCAGLIA S., PA1643
RONCATO R., PA1917, PA1926
RONCELLA S., OA1558
RONCO L., PA2735, PA3380
RONCO R., PA2845, PA4725
RONEN R., PA1261, PA4670
RÖNMARK E., PA655, OA888, PA1958, PA2064, PA2072, OA2515, OA3167, PA3328, PA3337, PA3668, PA4431
RØNN C., PA1838, PA4703
RØNN C., PA1017
RÖNNEBJERG L., PA2324
RONY F., PA2388, PA2391
ROODENBURG S., PA4614
ROONEY C., PA3529
ROONEY K., PA3763
ROONEY L., PA2930
ROOS A., PA3655
ROOS B., PA2351
RÖÖSLI M., OA4940, OA4941
ROPARS C., OA3178
ROQUE M., PA2744, PA4440
ROQUELAURE Y., PA3345
ROQUENCOURT C., OA2486, OA3145, PA5274
ROQUETA-RIVERA M., OA4202
ROS LUCAS J., PA3916
ROSA C., PA2952
ROSA I., PA1233
ROSA J., PA5071
ROSA P., PA2813
ROSA R., PA528
ROSA S., PA3766
ROSAIN J., PA4471
ROSAS I., OA894
ROSAS I., PA4558
ROSAS L., OA4199, OA4203
ROSAS TRUJILLO A., PA3826, PA3829, PA3831, PA3832
ROSAS-TRUJILLO A., PA3312
ROSCANI M., PA4516
ROSCIGNO R., OA742
ROSCIOLI E., PA4678
ROSE J., PA2368
ROSE K., PA523, OA2509
ROSE M., PA620, PA972
ROSELL A., PA1113, PA1898, PA4576
ROSELL GRATACÓS A., PA479, PA1169, PA1221
ROSEMFFET M., PA2917
ROSEN RAMEY D., PA1195
ROSENBERG L., PA1233
ROSENDAHL E., PA3484, PA3501
ROSENKRANZ S., PA1764
ROSETA L., PA2936, PA2938, PA3519, PA3520
ROSI E., PA467, PA3469, PA4590
ROSIER K., PA1716
ROSKAMS T., OA1572
ROSMARK O., PA551
ROSOSINSKA K., PA3970
ROSS C., PA1778
ROSS J., PA1955, PA3672
ROSS J., OA1460
ROSS K., PA2090, PA5298
ROßBERG S., PA5372
ROSSDALE J., PA3504
ROSSEL A., PA1807, PA2942
ROSSETTI V., PA3357, PA3367, PA4494, PA4496
ROSSI A., PA2908
ROSSI A., PA554
ROSSI E., PA1804
ROSSI S., PA2917
ROSSITER H., PA1187, PA2273
ROSSITER H., PA1795, PA1802, PA2267
ROSSOLINI G., OA4321
ROSSOLINI G., PA4590
ROTARU-COJOCARI D., PA1645
ROTENBERG C., PA1739
ROTHE T., PA1877, PA1903, PA4743
ROTHMAN A., PA3490
ROTHNIE K., PA2393
ROTHNIE K., PA2392, PA3024, PA4688
ROTHSTEIN V., OA790
ROTREKL V., PA598
RÖTTING M., PA4620
ROTTOLI P., PA3921
ROTUNDO F., PA1310
ROUATBI S., PA3991, PA3992, PA4455
ROUCHIÉ B., PA588, PA589
ROUGHI M., PA5260
ROUIS H., PA995, PA1082, PA2048, PA2407, PA2865, PA3659, PA3875, PA3930, PA5116
ROUKA E., PA1100, PA1103, PA1844, PA2966, PA3437
ROUKAS K., PA5102
ROUKEMA J., PA2739
ROUMI A., PA1182
ROURKE L., PA3823
ROUSSAKIS N., OA3275
ROUSSEAU A., PA1678
ROUSSEAU C., PA1148
ROUSSEL A., PA3368
ROUSSEL C., PA1212, PA1214, PA1219, PA4980
ROUSSELLE M., PA2975
ROUSSIS I., PA2851
ROUSSOS A., PA3635
ROUSSOULIÈRES A., PA3959
ROUTES J., PA436
ROUX A., PA3368
ROUX E., OA4955
ROUX P., PA4114
ROVERE-QUERINI P., PA557
ROVIEZZO F., PA554, PA1852, PA2343
ROVINA N., OA3152
ROVINA N., PA2348, PA4121, PA4717
ROVINA N., PA4709
ROVIRA S., PA1194
ROVIRA RIBALTA N., PA3839
ROVIRA-AMIGO S., PA2743, PA2760, PA2761
ROVIRA-RIBALTA N., PA5115
ROWAN C., PA404
ROWAN N., PA2910
ROWBOTHAM N., PA2730
ROWE P., OA1416, PA2090, PA2091, PA2101, PA3607, PA3618, PA5290
ROWLANDS R., PA2752
ROWLEY V., OA768
ROY H., PA3334
ROY J., OA2584
ROY M., PA3817
ROY P., OA4827, OA4829
ROY S., PA2139, PA4579, PA4992
ROZE H., PA2299, PA4490
ROZENBERG D., PA3399
ROZENBERG S., PA2092
ROZMAN A., PA4437
ROZY A., PA2344
ROZYNSKA R., PA299
RUANO-RAVINO A., PA5327
RUARO B., PA1742, PA2890, PA3505
RUBBO B., PA2760, PA2761, PA2769
RUBENS M., PA1334
RUBENS M., PA1336
RUBENSTEIN J., PA4616
RUBIL T., PA1861
RUBINOS CUADRADO G., PA2426, PA3595
RUCHIWIT P., PA4119
RUCKES C., PA2164
RUCKH T., PA4726
RUCKINGER S., OA786
RUDAS L., PA1173
RUDD S., PA3855
RUDILLA D., OA3293
RUDNYK V., PA1685
RUDOVA N., PA4553
RUE R., OA3279
RUEHLAND W., OA3191, PA4501, PA4651
RUFFIN M., OA2631, PA5006
RUFFLES T., PA2722
RUGGIERI M., OA4864, OA4867
RUGGIERO A., PA3484, PA5177, PA5191
RUGGIERO C., PA1728, PA2900
RUGGININI B., PA1912
RUGIERRO A., OA741
RUIJGROK E., PA2098
RUIZ E., OA2487
RUIZ V., PA3364, OA4344
RUIZ ALBERT Y., PA2314
RUIZ ÁLVAREZ I., PA1816, PA3595
RUIZ BERNAL A., PA4097
RUIZ ESTEBAN P., PA1341, PA5297
RUIZ ITURRIAGA L., PA5124, PA5125
RUIZ SERRANO DE LA ESPADA M., PA2243
RUIZ-ALZOLA J., PA1823
RUIZ-ASCENCIO D., PA4608
RUÍZ-CABELLO OSUNA J., PA1255
RUIZ-CANOVAS E., PA2365
RUIZ-CUBILLAN J., PA2321
RUIZ-DIAZ M., PA1957

RUIZ-FERRERAS R., PA4106, OA4301
RUIZ-HERNÁNDEZ J., PA2329
RUIZ-SERRANO DE LA ESPADA M., PA4995
RUIZ-SERRANO DE LA ESPADA R., PA2390
RULLANDER A., PA356
RUMBLE Y., PA5051
RUNNSTROM M., OA4215
RUNOLD M., PA2793, PA2904
RUNSTRÖM G., PA3350
RUPANI H., PA4724
RUPP J., OA2523, PA4412
RUPPERT C., PA555, PA2369
RUSCITTI F., PA2356
RUSCONI F., OA1435, PA2082
RUSIBAMAYILA N., PA3630, PA3777
RUSS M., PA4051
RUSSELL A., PA368
RUSSELL A., PA368
RUSSELL B., PA5253
RUSSELL R., PA534, PA548, PA2374, PA2376, PA2377, PA2378, PA2379, PA3019, OA4325, PA4586, PA4723
RUSSELL R., OA761
RUSSIER M., PA4114
RUSSO M., PA5009
RUSTAGI N., PA1587
RUSU D., PA400
RUTH MARIA U., PA5299
RUTJES N., PA2084
RUTKOWSKA A., PA4520
RUTKOWSKA E., OA1450, PA2222, PA2339
RUTKOWSKI S., PA4520
RUTTENS D., PA969, PA3395, PA4532
RUTTEN-VAN MOLKEN M., PA3783
RÜTTIMANN C., OA4940, OA4941, PA5026
RUUD E., PA4454
RUWISCH J., PA1139
RYAN C., OA3289
RYAN D., OA763
RYAN D., PA1582
RYAN S., OA3287, OA4844
RYDE M., PA2955, PA2973, PA5201
RYDWIK E., PA2793
RYERSON C., PA1135
RYERSON C., OA1430, OA2588
RYRSØ C., PA4478, PA5128
RYU S., PA383
RYU Y., PA3056
RZEPECKI P., OA1450, PA2222, PA2339

S

S G., PA5074
S S., PA1587
S LAL N., PA339
S LEME P., PA563
S. ERJEFÄLT J., PA4417
S. FLORAS J., PA584
S. HAWORTH C., PA2844
S. HIEMSTRA P., OA2625, OA2629
S. MOREIRA I., PA3599
S. SILVA B., PA1817
S. Y. THONG M., OA2612
SAAD A., PA341
SAAD C., PA5267
SAAD M., PA472, PA3774, PA4601
SAADAOUI O., PA1176, OA4960
SAADI A., PA533, PA2418
SAARESRANTA T., OA4837
SAARI E., PA3458
SAARIKALLIO S., OA4943
SAAVEDRA M., PA1633
SAAVEDRA S., PA513
SABATÉ A., PA3409
SABATER C., PA3502
SABATER RIERA J., PA3922
SABATO R., PA3598
SABBE M., PA989
SABBOUR H., PA414
SABER CHERIF L., PA611
SABIL A., OA3285
SABRINE L., PA2096, PA5369
SABUNCUOGLU S., PA3322, PA5045
SACANELL J., PA3364
SACCHI M., PA4494
SACCOMANNO J., PA3046, PA4615
SACHDEVA I., PA1613
SACHER J., PA2846
SACKS H., OA1416, PA2091, PA2101, PA3607, PA3618, PA5290
SADAFI H., PA2277, PA3553
SADAKA A., PA2921
SADATSAFAVI M., PA1891, PA1892, PA1894, PA1897, PA3622, PA3630
SADDOK B., PA3316
SADEGHI M., PA4061
SADERI L., PA2718, PA2798
SADI S., PA2070
SADLER A., PA3965
SADOFSKY L., PA2972
SADOK B., PA2804
SADOVENKO O., PA609
SADRAS I., PA3383
SADUSHI-KOLICI R., PA3487, PA3968, PA5175
SAE CHEN W., PA2689
SAEED EL-HOUSHY M., PA1826
SAEI M., PA3834
SAEKI T., OA2513
SAETTA M., PA1089, PA1708
SAEY D., OA2618, PA4984
SAEZ B., PA3364
SAÉZ LÓPEZ M., PA3812, PA4660
SAEZ-GIMENEZ B., OA4344
SÁEZ-PÉREZ J., PA1077
SAFA M., PA628
SAFAYEV H., PA2814
SÄFHOLM J., PA595, PA1303, OA4209, PA4404, PA4405
SAFIOTI G., PA3661, PA3779
SAFONT G., PA1064
SAFONT-GONZALEZ G., PA4576
SAFRANEK P., PA1339
SAGALOVICH K., PA3779
SAGAN C., PA1731, PA2975
SAGE E., PA3368
SAGE E., OA1560
SAGGAR R., PA4033
SAGGESE S., PA3631
SAGLAM M., PA1038, OA2614, OA2616, PA3392, PA3393, PA3398, PA4525, PA4535, PA5044, PA5046, PA5047
SAGLANI S., OA1442
SAHA D., PA2926
SAHA S., PA1584
SAHASRABUDHE S., PA2907, PA3975
SAHAY S., OA742, PA3960
SAHEBSHARIF-ASKARI F., PA4410
SAHEBSHARIF-ASKARI N., PA4410
SAHIN E., PA1610
ŞAHIN Ü., PA993
SAHLIN C., PA5264
SAHNOUN I., PA2847, PA3538, PA3874, PA5325
SAHOTA J., PA4008
SAHU D., PA1785, PA4587
SAHUNTA H., OA1549
SAID J., PA520
SAID N., OA4303
SAIDANE A., PA642, PA4755, PA4760
SAIDANI A., PA583, PA1283
SAIDANI W., PA3538
SAIN GUVEN G., PA4535
SAINDOY E., OA4324
SAINI G., PA404
SAINT RAYMOND C., PA4114
SAINT-PIERRE M., PA3981, PA4383
SAIPHOKLANG N., PA4119
SAITO A., PA3895
SAITO H., PA2357
SAITO J., OA3148, PA3776
SAITO M., PA626
SAITO M., OA3148
SAITO Z., PA3891
SAITOU M., PA5117
SAIZ M., PA3043
ŠAJNIĆ A., PA374, PA375, OA3173, OA3174, PA4607
SAK K., PA3343
SAKA S., PA3406
SAKAGUCHI T., PA2898
SAKALIS G., PA2812
SAKAMOTO K., PA2410, PA3447
SAKAMOTO K., PA1236
SAKAO S., PA2281
SAKATA T., PA3857, OA4860
SAKELLARIDIS T., PA1699
SAKELLAROPOULOU A., PA2851, PA4709
SAKULVORAKITTI T., PA2923
SALA E., PA2251, PA3502
SALAI G., PA473, PA5136
SALA-LLINÁS E., PA2252, PA5241
SALAM BAYRAM O., PA4410
SALAS A., PA2728, OA4246
SALAS C., PA5246
SALAS PÉREZ A., PA3924
SALATHE M., OA2601
SALAÜN M., PA409, PA1212, PA1214, PA1219
SALAUN P., OA4827
SALAZAR R., PA2683, PA2693
SALAZAR LOZANO I., PA4086
SALAZAR LOZANO M., PA5131
SALCEDO LOBERA E., PA1238, PA1239
SALCEDO VALENCIANO R., PA3323
SALCEDO-PARRA M., PA4577
SALCICCIOLI J., PA2063
SALDITT T., OA4942
SALEEM M., PA3444
SALEH K., PA414
SALEH-GUILLO H., PA2111
SALEHI M., PA2885
SALEHIAN S., OA1442
SALEM A., OA4323
SALEM M., PA441, PA449, PA453, PA458, OA3161
SALEM Y., PA3996, PA5023
SALEPCI B., PA3333, OA4232
SALES R., PA412
SALGADO F., OA4301
SALGADO F., PA4106, PA5362
SALGADO R., PA2783
SALGE J., PA413
SALHI B., OA777, PA4568
SALHÖFER L., PA1131
SALIBA K., PA1803, PA3985
SALIBA W., PA5098
SALIMATH S., PA339
SALINA A., PA1786, PA5227
SALIS F., OA3185
SALISBURY C., PA3830, PA5158
SALIU F., PA2171, PA2178
SALLA E., PA3311
SALLENT I., PA5237
SALMA C., OA4323
SALMA K., OA4323
SALMAN J., OA2508
SALMAN R., PA5265, PA5279
SALOBIR B., PA5175
SALOMIDOU M., PA3879, PA4592
SALORD OLEO N., PA3464
SALTON F., PA2890, PA3505
SALVADOR-CORRES I., PA1169
SALVADORI M., PA3620
SALVATI E., PA4685
SALVATOR H., OA2486, OA3145, PA5274
SALVI B., PA507, PA510
SALVI S., PA1897, PA2396, PA2907, PA3602, PA3637, PA4117, PA4434, PA4683, PA4747, PA5339
SALZBERGER B., OA785
SAM W., PA1842
SAMARA D., PA4572
SAMARA K., PA1292, PA5164
SAMARANAYAKA M., PA3472
SAMARANAYAKE C., PA3488, PA3495
SAMARELLI A., PA1213
SAMARIA K., PA3637, PA4747
SAMARIYA U., PA1322
SAMARŽIJA M., PA314, PA416, PA475, PA1701, PA3542
SAMBATARO G., PA2892
SAMBUCO F., PA1819
SAMI K., PA3048, PA5079
SAMIOTIS I., PA337
SAMIR A., PA4013
SAMITAS K., PA3420, PA4121, PA4581, PA4709, PA4717
SAMMELS S., PA2361
SAMORO R., PA1871, PA4130
SAMPAIO L., PA4082
SAMPAIO CHIARANTANO R., PA1112
SAMPATH M., PA615
SAMPEDRO M., PA5362
SAMPERE-AYMERICH M., PA3919
SAMPOL G., PA4660
SAMPOL J., PA4660
SAMPOL SIRVENT J., PA1161
SAMPSONAS F., PA422, PA1782, PA1790, PA4397
SAMSON M., PA2213
SAMSON R., PA2415
SAMUELS M., PA2108
SAN JOSE ESTEPAR R., OA1460, PA3355, PA3491
SAN JOSÉ ESTEPAR R., OA1460, PA3491

SANA A., PA2153, PA3640
SANA F., PA2429, PA5288
SANA R., PA4485
SANAPALA S., PA3770
SANCHES I., PA389
SANCHEZ C., OA1538
SANCHEZ E., PA1696
SANCHEZ G., PA4482
SANCHEZ O., OA790, OA4827, OA4829
SANCHEZ R., PA3829
SANCHEZ T., PA3319
SANCHEZ ÁLVAREZ E., PA3453
SÁNCHEZ BARÓN A., PA1270
SANCHEZ CABRAL O., PA471
SÁNCHEZ CARRETERO L., PA1255
SÁNCHEZ CHAPARRO M., PA1341
SANCHEZ DAFUN A., PA4682
SANCHEZ DE LA PUERTA LAGUNA C., PA4995
SÁNCHEZ DE LA TORRE M., OA3292, OA4841
SÁNCHEZ FERNÁNDEZ C., PA988, PA3066, PA3446, PA4621, PA4659
SANCHEZ GONZALEZ M., PA1734
SANCHEZ HERRERO M., PA646
SANCHEZ JAREÑO M., PA1920, PA1924, PA3822
SÁNCHEZ LÓPEZ V., PA2243, OA4831, PA5181
SÁNCHEZ MARTIN S., PA5313
SÁNCHEZ MASA J., PA4086, PA5131
SÁNCHEZ SANTILLÁN R., PA3306, PA3307, PA3826, PA3831, PA5069
SANCHEZ SEVILLA URUCHURTU A., PA2815
SÁNCHEZ TORIL F., PA5285
SÁNCHEZ VÁZQUEZ E., PA1816, PA2426, PA3057, PA3595
SÁNCHEZ VERA A., PA4728
SÁNCHEZ ZEBALLOS M., PA3057
SÁNCHEZ-CABÚS S., PA1856
SANCHEZ-COVISA J., PA3013
SÁNCHEZ-DE-LA-TORRE A., OA3292
SÁNCHEZ-DE-LA-TORRE M., PA1274, OA3290
SÁNCHEZ-DÍEZ S., PA2365, PA3802, PA3812
SÁNCHEZ-FONT A., PA2201
SÁNCHEZ-GUERRI I., PA2201
SANCHEZ-LASTRES J., PA5362
SÁNCHEZ-LUNA M., PA2131
SANCHEZ-ORTIZ D., PA5246
SANCHEZ-RAMIREZ D., PA2683, PA2693
SÁNCHEZ-SÁNCHEZ-SANTILLÁN R., PA3302
SÁNCHEZ-SANTILLÁN R., PA3305, PA3312
SÁNCHEZ-SANTOS A., PA2976, PA4719
SÁNCHEZ-SIMÓN TALERO R., PA4622
SANCHIS-GILABERT H., PA3919
SANCHO CHINESTA J., PA1815, PA2950
SANCHO MUÑOZ A., PA5202
SANCI V., PA1163, PA2162
SAND J., PA4060
SAND J., PA2355
SAND J., PA5249
SANDAU C., OA4938
SANDE M., PA2430, PA2848
SANDÉN C., OA780, OA2489, PA4416, PA4417
SANDERCOCK G., PA4522
SANDERMAN I., PA3503
SANDIUMENGE CAMPS A., PA4482
SANDLUND M., PA2416
SANDS S., PA1274, PA3594, PA3597
SANDSTRÖM T., PA356, PA1604
SANDUZZI ZAMPARELLI A., OA1539, PA2298
SANDVIK R., PA3384, PA4993
SANESTEBAN HERMIDA Y., PA4518, PA4519
SANGEETH PRIYADARSHAN V., PA1067
SANGKANUPARPH S., PA1686, PA3844
SANGÜESA J., OA886
SANIERE L., OA1569
SANINA N., PA593, PA4043, PA4382
SAN-JOSE M., PA5362
SANKARAN P., PA3600
SANKARAN P., PA2946
SANNA A., PA4096, PA4110, PA4128
SANO A., PA3443
SANO E., PA1585
SANO H., PA3443
SANO M., PA1697
SANSCHEZ C., PA989
SANSEN S., PA3948
SANSEVERINO W., PA3449, PA4681
SANSONE F., PA2737
SÁNTA B., PA1018, PA3611, PA4578
SANTA CLARA E., PA4083
SANTAELLA F., PA4593
SANTAMARIA S., PA2180
SANTAMARÍA VALENCIA C., PA433
SANTANA I., PA1241
SANTANA I., OA1449, OA1451
SANTANA P., PA1794
SANTARELLI L., PA3436
SANTELLO V., PA1089
SANTHANAKRISHNAN K., PA4484, PA4492
SANTIAGO A., PA3364
SANTIAGO R., PA2213
SANTIAGO RECUERDA A., PA4026
SANTIAGO-PÉREZ M., PA5327
SANTIBAÑEZ MARGÜELLO M., PA3043
SANTILLAN DIAZ C., PA471
SANTIN M., PA5285
SANTISTEVE S., OA788, PA3409, PA4583, PA5109
SANTISTEVE LOSTES S., PA372
ŠANTL-TEMKIV T., OA2517, PA4424
SANTORO A., PA974
SANTORO D., PA1293, OA1538
SANTOS B., PA3599
SANTOS C., PA1037
SANTOS C., PA1591
SANTOS E., PA360
SANTOS E., OA4222
SANTOS I., PA306, PA2431
SANTOS J., PA1034
SANTOS M., PA298, PA3314
SANTOS M., OA851, PA1152
SANTOS M., PA1154
SANTOS M., PA1225, PA1665, OA3171
SANTOS M., PA1591
SANTOS M., PA2131
SANTOS R., OA854, PA1164
SANTOS S., PA442, PA3013, PA3502
SANTOS V., PA410, PA1164
SANTOS NUNES A., PA1591, PA4541
SANTOS PÉREZ S., PA328, PA479, PA1710, PA2314, PA3464, PA3491, PA3922, PA5345
SANTOS ZORROZUA B., PA3951, PA5309
SANTOS-ERICE N., PA3461
SANTOS-PÉREZ S., OA3282, PA3461
SANTOS-SILVA R., PA4670
SANTTIA F., PA2916
SANTU M., PA4696
SANTUS P., PA472, PA1069, PA1682, PA2807, PA3774, PA3854, PA4601
SANTYR G., PA3995
SANVER M., PA3398
SANZ I., OA4215
SANZ HERRERO F., PA3840
SANZ RUBIO D., PA2953
SANZ SANTOS J., PA2192, PA2194
SANZ-FRAILE H., PA1077, PA2838
SAOTOME M., PA626
SAPELNIK N., PA4553
SAPEY E., OA878, PA3986, PA3988, PA4144, PA4145
SAPPA B., PA1667
SAQIB F., PA4092
SARACINO L., PA5133
SARAFIDIS P., PA1812
SARAI M., PA1768, PA1771
SARAIVA C., PA3413
SARAIVA E., PA4974
SARAIVA I., PA1042
SARAIVA J., OA786
SARAIVA M., OA854, PA1164
SARAIVA-ROMANHOLO B., PA2431
SARALAYA D., PA4094
SARALIDZE T., PA4067
SARASATE AZKONA M., PA5345
SARAYA T., PA626
SARBANDI K., PA4615
SARDA S., OA4214
SARDELIS Z., PA3420, PA4581
SARDINE A., PA3500
SARDÓN-PRADO O., OA1437, PA2745, PA2748
SARI S., PA4379
SARI HASSOUN M., PA426
SARINHO E., PA3061
SARIPALLI K., PA3644
SARIPALLI K., PA982, PA5120
SARJOMAA M., PA3414
SARK A., PA5107
ŠARKANJI GOLUB R., PA1640
SARKAR M., PA2396, PA3602, PA5339
SARKAR R., PA3578
SÁRKÖZI A., PA1735, PA2831
SARMA L., PA4124
SARMAH K., PA2396
SARNA S., PA971
SARNO G., PA312, PA1961, PA3803, PA3811
SAROGLOU M., PA3518
SARON J., PA1342
SARRAT R., PA3409
SARSENGALIYEV T., PA3532
SARTORIO A., PA3563
SASAHARA Y., PA2887
SASAKI J., PA2403, PA3063
SASAKI Y., PA5231
SASAMURA T., PA4673
SASANO H., PA401, PA1723, PA3499
SÁ-SOUSA A., PA488
SASSEK M., PA4044
SASSMANN T., PA1755, PA1770
SAßMANNSHAUSEN Z., PA454
SATIA I., PA1913, PA1922, PA1925, PA1927, PA1931, PA1932, PA1941, OA2610, PA3033, PA3036
SATO J., PA2705
SATO K., PA468
SATO K., PA5151
SATO K., PA2705
SATO M., PA2357
SATO M., PA527
SATO R., OA3148, PA3776
SATO S., PA1300, PA3908
SATO Y., PA1768, PA1771
SATO Y., OA3148, PA3776
SATO BARROS DO AMARAL C., PA4633
SATOH H., PA2705, PA2706, PA5306
SATOURI W., PA583
SATPATI A., PA1228
SATTA G., OA864
SATTIN A., PA1089
SATUR C., PA5066
SATURNINO DA SILVA L., PA1039
SAULEDA J., PA1840, PA2251, PA2252
SAUNDERS J., PA592
SAUNDERS L., OA757, PA1180, PA4500, OA4857, OA4952, OA4954
SAUNDERS P., PA1133, PA1728, PA2900, PA3928
SAUNDERS R., PA4070
SAUNDERS T., OA1462
SAUTER W., PA2852
SAUVAGE F., PA2127
SAUVAGET M., OA3161
SAUZEAU V., PA2975
SAVADKOUHI E., PA298, PA3314
SAVAGE M., PA2380, PA3026
SAVAI R., PA555
SAVAL L., PA1678
SAVALE L., PA443, PA1191, PA1193, PA1202, PA1766, OA3160, PA5180
SAVARAJ N., PA1712
SAVAŞ S., PA5012
SAVELIKHINA I., PA621, PA1306, PA2266, PA3027, PA4976, PA5075
SÄVENDAHL L., PA5030
SAVI D., OA1539, PA2143
SAVIC S., PA3936, OA4204
SAVIC PRINCE S., PA2922
SÄVMAN K., PA2130
SAVOURÉ M., PA1965
SAVRAN O., PA4433
SAWA K., PA468
SAWAI S., PA3891
SAWALHA S., PA1958
SAWANT S., PA1322
SAWYER C., PA1918
SAXENHOFER M., PA2703, OA3147
SAXER S., PA1774
SAYAD R., PA1688
SAYAS CATALÁN J., PA4653
SAYER J., PA1846

SAYERS I., PA5275
SAYHI A., PA3991, PA3992, PA4455
SAYMAN H., PA3525
SBERRO LIVNAT H., OA1534
SBRANA A., PA2246
SCAFFIDI ARGENTINA U., PA2375, PA4704
SCAGNOLARI C., PA2734
SCALERA E., OA4947
SCALLAN C., OA1430
SCALVENZI F., PA1695
SCANSANI S., PA3367
SCARANO P., PA2310, PA4096, PA4110, PA4128
SCARAVILLI V., PA3366, PA3367
SCARFFE A., OA768
SCARLATA S., PA1819
SCARPA M., OA3281
SCARPAZZA P., OA3189, PA3528, OA4959
SCELO G., PA1891, PA1892, PA1894
SCHAAF H., PA2801
SCHAARSCHMIDT B., PA1131
SCHABER C., OA893, PA1941
SCHAEFER D., PA5072
SCHAEFER T., PA3787
SCHAEFER-PROKOP C., PA2278, OA4849
SCHAEFFER M., OA2615, OA4871
SCHAEFFER M., OA4870
SCHAFAUSER N., PA4530
SCHÄFER J., PA4623
SCHAFF Z., PA1023
SCHALLER M., PA2937
SCHALLY A., PA1266
SCHAMBERGER A., OA1445, PA1702
SCHAMINEE D., PA4571, PA4574
SCHAMS A., OA3275
SCHANG G., PA450
SCHARDONG J., PA2302
SCHARLACK VIAN B., PA1172, PA2685, OA4226
SCHARM S., PA2278, OA4849
SCHAUB A., PA2703, OA3147
SCHAUB B., OA1443
SCHAUB J., OA899
SCHAUPP L., PA5299
SCHEFFEL J., PA4051
SCHEFFER V., PA1304
SCHELFHOUT J., PA1915
SCHELLENBERG M., OA2597, PA4623
SCHELTEMA R., OA772
SCHELTEMA R., OA2626
SCHENK S., PA3454
SCHERER T., PA1903
SCHERMER T., PA524
SCHERMULY R., PA448
SCHERPENISSE P., PA309
SCHIAVI E., PA596, PA601
SCHIAVI E., PA2422
SCHICKINGER S., PA1098
SCHIEB J., PA4036
SCHIEVANO S., PA575
SCHIFFERS C., PA647, PA2394, PA2425, PA3670, PA3673, PA3782, PA4146, OA4236
SCHIKOWSKI T., OA2519, PA3674
SCHILFARTH P., OA900, PA2216
SCHILLEBEECKX E., OA1557, OA1559, OA3265
SCHILLER H., OA772, OA2624, PA3937
SCHILLER H., OA2485, OA2626
SCHILLER H., OA1569
SCHINDERA C., PA2774
SCHINO P., PA2375, PA4112, PA4704
SCHIÖLER L., OA879, PA2720
SCHIPPERS F., PA529
SCHIPPERS J., PA2297
SCHITTNY D., PA3561, OA4948
SCHITTNY J., PA3561, OA4948
SCHIZA S., PA1876, OA4837, OA4843
SCHIZA S., PA1872, PA4091, OA4844, PA5223, PA5258
SCHLADT D., PA2142
SCHLANGE T., PA1144, PA1146, PA1147
SCHLECHTE J., PA3571
SCHLEDERER T., PA656
SCHLEGTENDAL A., OA2506, PA2761
SCHLEICH F., PA989, OA1526, PA1934, PA1943, OA3151
SCHLEMMER F., PA5251
SCHLEPÜTZ C., PA3561, OA4948
SCHLESINGER T., PA2700
SCHLÜNSSEN V., PA659, PA1281, PA1598, PA2073, OA2517, PA3335, PA3674, PA4423, PA4424
SCHMID C., PA3001
SCHMID J., PA631, PA636, PA4716
SCHMID J., PA4749, PA5273, PA5326, PA5335
SCHMID R., PA1147, OA2584
SCHMID-SCHERZER K., OA3146
SCHMIDT A., PA588, PA589
SCHMIDT B., OA785
SCHMIDT B., OA2595, PA3046
SCHMIDT F., PA1272
SCHMIDT J., OA4827, OA4829
SCHMIDT J., PA1678
SCHMIDT K., PA1098
SCHMIDT O., PA629, PA635, PA3605, PA4752
SCHMIDT O., PA639
SCHMIDTHALER K., PA4467
SCHMITT A., OA3177
SCHMITT L., PA1700
SCHMITZ C., OA3178
SCHMUDDE I., PA2989, PA4412
SCHNEEBERGER E., PA2917
SCHNEEBERGER T., OA4217, PA5052
SCHNEER S., PA1730, PA2889, PA2928
SCHNEIDE S., PA1774
SCHNEIDER A., PA485, PA486, PA3581
SCHNEIDER C., OA2626
SCHNEIDER C., PA2774
SCHNEIDER M., PA3876
SCHNEIDER S., OA747, PA1773
SCHNEIDER S., OA748
SCHNELL A., PA2703, OA3147
SCHNEPPER A., PA1102
SCHNEPPER A., PA1152
SCHOELERMANN J., PA450
SCHOENENBERGER ARNAIZ J., PA372
SCHOFIELD L., PA5039
SCHOLAND M., PA2893
SCHÖLCH S., PA1700
SCHOLS A., PA4571, PA4574
SCHOLZ M., PA2334
SCHÖN P., PA4656
SCHÖN T., PA1929
SCHØNBERG-MOE A., PA3634
SCHOORL M., PA5118
SCHOOS A., PA1632
SCHOOS A., OA4331
SCHRAGEL F., PA2209
SCHRANC Á., PA3545, PA3546
SCHRECK L., PA2763, PA2764
SCHRECK L., PA2767
SCHRECK L., PA2766, PA3386
SCHREUDER A., PA2278, OA4849
SCHRÖDER S., PA1882
SCHROEDER J., PA4112
SCHUBERT B., PA2141
SCHUBERT M., PA5068
SCHUBERT-HAACK J., PA485, PA3581
SCHUETZ P., PA548, PA2247
SCHULER S., PA4620
SCHULTZ A., PA2088
SCHULTZ H., PA461
SCHULZ C., PA629, PA635, PA639, PA1882, PA3605
SCHULZ H., PA1947
SCHULZE I., PA2703, OA3147
SCHULZ-HILDEBRANDT H., PA2290, PA2989
SCHULZKE S., OA1443, OA4940, OA4941, PA5026
SCHUMACHER B., OA4329
SCHUMANN C., OA2594
SCHUMANN D., PA977, PA2820, PA3864, PA4002, OA4862
SCHUOLER C., PA1903
SCHUPP J., OA4942
SCHUPP J., PA3369
SCHURGERS L., OA2603
SCHÜRMANN D., OA4940, OA4941
SCHUSTER S., PA2188
SCHÜTZ K., OA2508
SCHUURMAN A., PA3426
SCHUURMAN L., PA4571, PA4574
SCHWANZER J., PA2992
SCHWARTZ A., PA1280
SCHWARTZ J., OA893
SCHWARTZ J., PA3319
SCHWARTZ R., OA4231
SCHWARZ C., PA5127
SCHWARZ E., OA748, PA1272, PA1773, PA1774
SCHWARZ E., PA582, PA1884, PA2939
SCHWARZ S., PA2909, PA2935, PA4152, PA4655, PA4657, PA4666
SCHWARZE J., PA3824
SCHWEGMANN K., PA2828
SCHWEIKERT A., PA3941
SCHWEIKERT A., PA483, OA1570, PA3475, PA3954
SCHWEINOCH D., PA4059
SCHWEITZER C., PA420
SCHWERK N., PA424, PA1146, OA2507, OA2508, OA4942
SCHWERTBERGER J., PA4634
SCHWICK B., OA2594, OA2595
SCHWIENING M., OA3155
SCHYNKEL T., OA777
SCIACCA E., PA2892
SCIACQUA A., PA1310
SCIARABBA C., OA1540
SCIASCIA T., PA3456
SCICHILONE N., PA4098, PA4748, PA4753, PA4988
SCILD STUDY GROUP S., PA5001
SCIOSCIA G., PA974, PA1908, PA3584, PA3598, PA3902, PA4098, PA4748, PA4753
SCIRICA C., PA649
SCITA G., PA596
SCIUCA S., PA1645
SCIURBA F., OA4937
SCOPELLITI N., PA2160
SCORDARI M., PA1149
SCOTO M., PA2128
SCOTT A., PA579
SCOTT D., PA534
SCOTT G., PA2983
SCOTT I., PA1690
SCOTT K., PA3529
SCOTT K., OA3185
SCOTT S., OA4203
SCOTTON C., OA4200
SCOTTON C., PA368
SCOTTON C., PA404
SCOUBEAU C., PA3787, PA4635, PA4647
SCREATON N., PA5177, PA5191
SCREATON N., OA741, PA2920
SCUDERI G., PA2109
SCULLION J., PA4607
SCUREK M., PA598
SEBASTIÁN MORA-GIL M., PA1140, PA1237, PA2321
SEBASTIANI J., PA3479
SEBBANE M., OA4829
SEBRI I., PA2312
SECALL L., PA3616
SECCOMBE L., PA1170
SECEN N., PA1347
SECK F., OA788
SECK-MBOUP F., PA3409
SEDDA G., OA3271
SEDDON P., PA2722, PA5010, PA5355
SEDHOM N., PA3835
SEDIARI M., PA1779
SEDKAOUI K., OA4318
SEDLÁK R., PA2903
SEDLÁK V., PA2903
SEE K., PA1120, PA1121
SEEAR P., PA5004
SEEBACHER C., PA5197
SEEGER A., PA1171
SEEGER W., PA2369, PA3065, OA4329
SEELEUTHNER Y., PA4471
SEELIGER B., PA1139
SEESEEQUASIS J., PA5253
SEESEQUASIS W., PA5253
SEGARRA CASAS A., OA3144
SEGEL M., PA2889
SEGHAYE M., OA3151, PA4466
SEGURA C., PA1096
SEGURA AYALA D., PA407
SEGURA ROMERO M., PA5313
SEHGAL A., PA2132
SEHGAL I., PA2229
SEHMI R., OA1414, PA1913, PA1925, PA1927, PA1931, PA1932, PA3036, PA3843, PA3845
SEIDEL K., PA1861
SEIDL E., PA424, OA2507
SEIF M., PA2393, PA4688
SEIFERT M., PA3946
SEIJGER C., OA3195
SEIJO L., PA1110, PA1255
SEIJO MACEIRAS L., PA1242

SEITHER P., OA4199, OA4203
SEIWERTH F., PA3542
SEJDIC A., PA5128
SEKAR R., PA4570
SEKI K., OA1453
SEKIMOTO Y., PA425, PA2292, PA3944, PA3950
SEKINE A., PA2358
SEKIYA K., PA4406
SELAMOGLU M., OA4233, PA5321
ŠELB J., PA4982
SELBERG S., PA363, PA2754, PA5283
SELCUK A., PA3424
SELÇUK M., PA2107, PA4465, PA5003, PA5007, PA5008
SELIM A., PA1596
SELLAMI M., PA628
SELLAMI R., PA285, PA957
SELLARES J., PA442, PA1157, PA1740, PA1749, OA2487, OA3282, OA4196, PA5154
SELLARES TORRES J., PA1734, PA3491
SELLE J., OA4329
SELLITRI F., PA1787
SELVAKUMAR B., PA4410
SELVARAJAH B., PA3851
SELZLER A., PA1047
SEMENOVA A., OA2485
SEMENZATO U., PA1089, PA1708, PA2894
SEMIANIV I., PA1963, PA2958
SEMIANIV M., PA2958
SEMITEKOLOU M., PA623
SEMPLE S., PA3352
SEMPLE T., PA3494
SEMPRICH C., OA774
SEMPRINI A., PA2071, OA3187
SEMPRINI R., OA3187
SEN E., PA3454
SEN S., PA3037
SEN S., PA3070
SEN S., PA615
SEN V., PA2731, PA3374, PA5012
SENARATNA C., PA659, PA1281
SENDA D., PA5369
SENDA K., PA5132
SENDEREK T., PA3915
SENEVIRATNE S., PA2099
SENGUPTA A., PA3321
SENGUPTA S., PA2926
SENJYU H., PA2177
SENNA G., PA1917, PA1926, PA4112
SENOL M., PA1222, PA1335, PA1811, PA2272
SENTELER L., PA1615
SEO M., PA2709
SEOANE-PILLADO M., PA5362
SEOL C., PA1085
SEPHTON J., PA1199, PA5185
SEPULVEDA C., PA3568
SEPULVEDA F., PA4471
SEPÚLVEDA-LOYOLA W., PA4521
SEQUEIRA T., PA2211
SERAFIM T., PA3396, PA4527
SERAFINI A., PA1926
SERAINA W., PA4585
SERAMONDI R., PA4490
SERBES M., PA5012
SERENIUS F., PA2130
SERGEANT M., OA2627
SÉRGIO SILVA A., PA3061
SERHANE H., PA287, PA303, PA395, PA489, PA637, PA2412, PA2811, PA2895, PA3329, PA5324
SERINO F., PA1926
SERIZAWA R., OA2500
SERMET-GAUDELUS I., OA3145, PA3377
SERNA PASCUAL M., PA3897
SERNA VALVERDE A., OA897
SERON P., PA347
SERPA I., PA2682
SERRA P., PA479
SERRAJ M., PA2079
SERRAJ M., PA4147
SERRA-MITJÀ P., PA1169
SERRANO A., PA5205
SERRANO L., PA1096
SERRANO FERNANDEZ L., PA5124, PA5125
SERRANO VEGUILLAS C., PA4518, PA4519
SERTOGULLARINDAN B., PA3462
SERTTAŞ GÜVEN G., PA358
SESE L., PA498, PA3465, PA3953, OA4324
SESKAITE G., PA2977
SESSA A., PA2824, PA2832
ŠESTÁKOVÁ Z., OA3263, PA4010
SETA N., PA2065
SETEMBRE BATAH S., OA778
SETESMBRE BATAH S., PA1102, PA2961
ŠETINA ŠMID S., PA3382
SETNIKAR KIMOVEC G., PA3382
SETUBAL J., PA5250
SEVELSTED A., PA5363
SEVIK A., PA1615, PA3804
SEVINÇ C., PA1902
SEWALD K., PA4051
SEYEDPOUR S., PA4471
SEYS L., OA777
SFAR H., PA1176, OA4960
SFIKA M., PA5102
SFIKAKIS P., PA2878
SGARBOSSA T., OA2595, PA3046
SGRAZZUTTI L., PA2737, PA5364
SHAABAN L., PA3791
SHAFIEK H., OA1413, PA2319, PA2921
SHAFRAN I., PA3487, PA3968
SHAFUDDIN E., PA548
SHAH A., PA575
SHAH A., PA1843, PA2181, PA2331, PA3769
SHAH A., PA2396, PA3602
SHAH A., PA2396
SHAH D., PA1321, PA1328, PA4698
SHAH H., PA2885
SHAH M., PA3578
SHAH N., PA2942, PA5038
SHAH N., PA2940
SHAH N., PA3948
SHAH P., PA5224
SHAH P., PA4613, PA4671
SHAH R., PA4558
SHAH GUPTA R., PA2834
SHAHBAKHTI H., PA2815
SHAHBAKHTI H., PA3625, OA4931
SHAHBAZI KHAMAS S., OA1437, PA2748
SHAHDAB N., PA1253
SHAHEEN S., OA889
SHAHEEN S., PA1626, PA1952
SHAHI R., PA1789
SHAHID P., PA3372
SHAHID S., PA1087
SHAHRI S., PA305
SHAHROOEI M., PA4471
SHAIKH N., PA1195
SHAILESH H., PA5356
SHAKER S., PA4060
SHAKER S., PA1143, PA4007
SHAKESPEARE J., PA4507, PA4511, PA4513, PA5059, PA5065
SHAKIEV N., PA2698
SHAKYA R., PA659, PA1281
SHALA F., PA3042, PA3045
SHALMON T., PA435, PA1730, PA2928
SHAN M., PA4069
SHANG S., PA3815
SHANKAR D., PA1067, PA5104
SHANKAR-HARI M., PA550, PA2397
SHANKS S., PA5039
SHANMUGANATHAN A., PA2186
SHANMUGASUNDARAM K., PA5311
SHANMUGASUNDARAM M., OA775
SHANNON H., PA4998
SHAO G., PA3480
SHAO J., PA1700
SHAO P., PA1101
SHAO Z., PA1265, PA4402, PA4403
SHAPERA S., OA1430
SHAPIRO S., PA1203
SHAPIRO S., OA742
SHARIFAN A., PA2738
SHARKEY M., PA3490
SHARMA A., PA1052, PA4546, PA5081
SHARMA A., PA3635
SHARMA A., PA4991
SHARMA A., PA3637, PA4747
SHARMA A., PA4434
SHARMA B., PA3637, PA4747
SHARMA K., PA3637, PA4747
SHARMA K., PA2229
SHARMA L., PA5339
SHARMA M., PA4491
SHARMA N., PA1607
SHARMA P., OA4940, OA4941
SHARMA P., PA1233
SHARMA P., PA603
SHARMA R., PA542, PA543, PA2392, PA4688
SHARMA R., PA1215
SHARMA S., PA3010
SHARMA S., PA1231
SHARMA S., PA1228, PA1648
SHARMA S., OA4215
SHARMA V., PA2309
SHARMAN K., PA2427
SHASTRI N., PA1801
SHATTOCK E., PA396
SHATZMAN STEUERMAN R., PA1654
SHAUKAT M., PA454
SHAVIT A., OA1420, PA4109, PA4131
SHAW D., PA437
SHAW D., PA5275
SHAW E., OA893
SHAW J., PA2998
SHAW J., PA1912
SHAW M., PA3807, PA4143
SHAW M., PA4463, PA4468
SHAW S., PA2817
SHAW T., PA965
SHAWQI M., PA2738
SHEA M., PA500
SHEAHAN D., PA1727
SHEAHAN-PARRY M., OA1549
SHEARD S., PA2184
SHEARES K., PA5177, PA5191
SHEARS K., OA741
SHEEHAN C., PA4024
SHEEHY B., PA2292, PA2930
SHEERAN PURCELL E., PA5332
SHEHADEH S., PA1654
SHEIKH A., PA546, OA889, PA2397, OA4325
SHEIKH E., PA5330
SHEIKH S., OA1541, PA1625, PA3370
SHEKARNABI M., OA4955
SHELDON A., PA3404
SHELTON R., OA3165
SHEN E., PA1203, PA3489
SHEN H., PA1933
SHEN H., PA1257, PA4400, PA4402, PA4403
SHEN H., PA1265
SHEN J., PA1265
SHEN Q., PA4403
SHEN W., OA4242
SHEN Y., PA1930
SHEPARD A., PA2824
SHEPHERD E., PA2794
SHEPPARD A., PA2832
SHER L., PA2101
SHER M., OA2609
SHERBANY H., OA4868
SHERIDAN C., PA376
SHERIDAN S., PA2942
SHERIDAN S., OA1560
SHERINGHAM J., PA3404, PA4599
SHERMAN E., OA4945
SHERMAN G., OA4868
SHETTY D., OA2620
SHETTY P., PA3858
SHEVCHUK-BUDZ U., PA1306, PA4976, PA5075
SHI S., PA3934
SHI W., PA1946
SHIANG T., PA3519, PA3520
SHIBATA Y., OA3148, PA3776
SHIBLI M., PA4983
SHIBUYA J., PA2059
SHICHINOHE T., PA5215, PA5228
SHIDA MARINHO R., PA4141
SHIGDEL R., PA659, PA1281, OA2517
SHIGEMURA M., PA3065
SHIGEOKA H., PA3391, PA3567
SHIH V., PA4130, PA4131
SHIH V., PA4109
SHIIBA R., PA1697
SHIM H., PA3898
SHIM H., PA645
SHIM J., PA2055, PA2822, PA3575, PA4142
SHIM Y., PA2283
SHIMA K., OA3276
SHIMADA A., PA2358
SHIMAUCHI T., PA441, PA449, PA453
SHIMODA M., PA626
SHIN B., PA2174
SHIN D., PA996, PA1025
SHIN H., PA2278, OA4849
SHIN H., PA1062, PA2303, PA3018
SHIN H., PA5119
SHIN J., PA5271
SHIN J., PA3898, PA3913
SHIN K., PA3665
SHIN M., PA3898
SHIN S., PA3651
SHINAGAWA N., PA5215, PA5228
SHINOHARA Y., PA1697
SHINOHARA Y., OA898
SHINOMIYA S., PA633
SHINOZAKI S., PA4399

SHINOZAKI Y., PA2059
SHIOTA A., PA4399
SHIOZAWA A., PA5080
SHIRAI T., PA2409, PA3666, PA4727
SHIRAI Y., PA3900
SHIRAISHI M., PA3391, PA3567
SHIRASAKI Y., OA2501
SHIRATORI Y., OA1424
SHIRDEL S., PA4412
SHITOV V., OA1569
SHITRIT D., PA387, PA464, PA470, PA1165, PA1730, PA2373, PA2889, PA2928, PA4625
SHIYUE L., PA4071, PA4415
SHKONDIN S., PA2911, PA2912
SHLOBIN O., PA3488
SHMUELI E., PA5031
SHOEMARK A., PA382, PA383, PA385, PA386, PA491, PA1070, PA1071, PA1075, OA1456, OA1457, OA1458, OA1459, PA1842, PA1843, PA2279, PA2293, PA2340, PA2342, PA2762, PA2769, PA2827, PA3841
SHOJI T., PA5215
SHORT P., OA1560
SHORT P., OA2604
SHORTMAN R., PA2920, PA4008
SHRESTHA S., PA4690
SHRIMANKER R., PA3976, PA4675
SHROSBERY F., PA566
SHTEINBERG M., PA381, PA383, PA384, PA385, PA386, PA388, PA397, PA1071, PA1074, PA1086, OA1456, PA2340, PA2342, PA2769, PA2843, PA2849, PA2852, PA5098, PA5099
SHTEPA O., PA3326
SHU C., PA2165
SHU D., PA1959
SHU FENG T., PA3433
SHUHUA C., PA1217
SHUKER S., PA4507, OA4830, PA5059, PA5065
SHUKLA S., PA1744
SHURESH KUMAR A., PA3403
SHUTO S., PA2357
SHUTO T., PA4667
SHUTTLEWORTH M., PA2340, PA2342, PA2827
SHVACHKO V., PA2834
SHVETS K., PA1306, PA2266, PA3027, PA4976
SHYAMALI D., OA881
SIA L., PA477, PA3415
SIACHPAZIDOU D., PA3586
SIADOUS N., PA4658, PA4664
SIAMPANI R., PA4573
SIBBALD S., OA768
SIBILA O., PA382, PA383, PA384, PA385, PA386, PA388, PA1071, PA1075, OA1459, OA2487, PA5098, PA5194
SIBILA-VIDAL O., PA1077
SIBILLE A., OA1452
SIBLEY S., PA2389, PA4699
SIBLIA O., PA2340, PA2342
SICCARDI G., PA2315
SICILIANO M., PA3598
SICKER N., PA496
SICRE DE FONTBRUNE F., OA2580
SIDDAIAH J., PA4434
SIDDALL J., PA2062
SIDDHARTHAN T., OA4953
SIDDHURAJ P., OA780, OA2489, PA4416, PA4417
SIDDIQUE R., PA3889
SIDDIQUI R., PA2392
SIDDIQUI S., OA1523, OA1525, OA1529, PA2397, PA2956, PA3556, PA3662, PA4723, OA4970
SIDEBOTHAM D., OA787
SIDERFIN J., PA5249
SIDERI S., PA3821
SIDHAYE V., PA2370, OA4241, OA4945
SIDOROV A., PA4693, PA4694
SIDOROVA J., PA442
SIEBERT K., PA429
SIEFKER D., PA419
SIEGERT E., OA746
SIEOW N., PA982
SIEOW N., PA3644
SIERRA GARZON L., PA4538
SIERSMA V., PA1120, PA1121
SIEVERDING L., PA4640
SIEVI N., OA3146
SIEVI N., PA1272, OA3253, OA3255, OA3259
SIEW J., PA2762
SIGALA I., PA4602
SIGAUD F., OA4955
SIGGINS G., PA2946
SIGNES-COSTA MIÑANA J., PA1815, PA2950, PA3916
SIGNORINI M., PA2143
SIGSGAARD T., PA311, PA1598, OA2517, PA3668, PA3674, PA4424
SIGURDSSON S., PA2965
SILATHAPANASAKUL K., PA5218
SILBERBRANDT A., OA4968
SILEO C., PA420, PA423, PA426, PA2129, OA4944
SILGADO MARTÍNEZ L., PA3005, OA4841
SILIBELLO C., PA304, PA3811
SILVA C., PA444
SILVA C., PA1034
SILVA E., PA1129, PA2871, PA3519, PA3520, PA3883
SILVA F., PA1035, PA2716
SILVA F., PA3314
SILVA I., PA1854
SILVA J., PA5239
SILVA J., PA1597
SILVA J., PA5090
SILVA J., PA2685
SILVA L., PA1664, PA1665, PA1668, OA3171
SILVA M., PA3544, OA4852, OA4853
SILVA M., PA4074
SILVA R., PA366
SILVA V., OA1449
SILVA QUEIROZ D., PA413
SILVA SOUSA M., PA2214
SILVA-REIS A., PA1261, PA4670
SILVEIRA J., PA3765
SILVEIRA P., PA1225
SILVERA G., OA4324
SILVERMAN E., OA2497, OA4937
SILVERMAN E., PA2275
SILVESTRE C., PA1057, PA2799
SILVI P., PA312, PA1961, PA3803, PA3811
SIM D., PA3034
SIMÃO P., PA1664, PA1835
SIMAS RIBEIRO A., PA2146, PA2157
SIMEIRE ALBERTINI C., PA3758, PA3765
SIMEÓN-AZNAR C., OA746
SIMILOWSKI T., PA502, PA958
SIMIOLI F., PA2850, PA2951, PA4580
SIMIONICA I., PA1645
SIMKOVA I., PA5175
SIMMACO M., PA2110
SIMMONDS N., PA2156
SIMMONDS N., OA1538
SIMMS- WILLIAMS N., PA3569
SIMMS-WILLIAMS N., PA1623, PA4600
SIMÕES A., PA1037
SIMÕES F., PA4060
SIMÕES P., PA488
SI-MOHAMED S., OA3280
SIMON D., PA2245
SIMON M., PA288
SIMON M., PA3483
SIMON T., PA1678
SIMON-CAMPOS J., OA786
SIMONDS A., PA495
SIMONELLI C., PA1802
SIMONETTA E., PA399
SIMONETTI J., PA2902
SIMONIČ A., PA4982
SIMONNEAU G., OA3160
SIMONNEAU Y., PA4612
SIMONOVIC I., PA5310
SIMONS S., PA2289, PA3013, PA5067
SIMONS S., PA548
SIMOU A., PA3311
SIMPSON A., PA404
SIMPSON A., OA2587, PA3642
SIMPSON A., PA973, PA1307, OA1441, PA3642, PA3652, PA3674, OA4214
SIMPSON K., PA4731
SIMPSON R., PA4597
SIMPSON S., OA1439, PA1867, PA2140, PA4451, PA4452, PA4453
SIMPSON S., PA4048
SIMPSON S., PA954
SIMPSON T., PA1726
SIMSEK S., PA5045
SIN D., OA2497, PA3013
SIN D., PA3411
SIN S., PA1080, PA2049
SIN V., PA3551
SINANI O., PA3586
SINCLAIR M., PA573
SINDEAUX R., PA4061
SINDELAR R., PA2130
SINGANAYAGAM A., PA2331
SINGAPURI A., OA2491
SINGER L., PA3399
SINGH A., PA3637, PA4747
SINGH A., PA537, PA1012
SINGH D., PA624, PA1307, PA1308, PA1311, PA1323, OA1523, OA1525, OA1529, PA1690, OA2607, OA2608, PA3051, PA3620, PA3662, PA4065, PA4144, PA4145, OA4298, PA4414, PA4503, PA4687
SINGH D., PA4992
SINGH G., PA2183, PA4759
SINGH G., PA3557
SINGH K., PA3068
SINGH M., PA4434, PA4994
SINGH M., PA3068
SINGH N., PA3637, PA4434, PA4747
SINGH P., PA3408
SINGH P., PA2309, PA5221
SINGH S., PA3064
SINGH S., PA4994
SINGH S., PA959, PA961, OA2588, PA2686, PA2698, PA3772, PA4985, PA4987, PA4991, PA5039
SINGH S., PA2691
SINGH S., PA1181, PA1797, PA2681, PA2687, PA2692, PA2694, OA3254, OA3260
SINGH S., PA954
SINGH S., PA622
SINGH S., PA1338
SINGH S., PA1322, PA3637, PA4434, PA4747
SINGH T., PA3637, PA4747
SINGH U., PA4434
SINGH V., OA4877
SINGH V., PA2396, PA3602, PA3637, PA4434, PA4747
SINGH V., PA4991
SINGHERA G., PA2336
SINGHERA G., PA2346
SINGLETON D., PA1595
SINHA I., PA523, PA1621, PA2749, PA5370
SINHA S., PA2183, PA4434, PA4759
SINHARAY R., PA1778
SINIS S., PA1844, PA2966, PA3437
SINNING C., PA1769, PA3972
SINOMIYA S., PA1938
SINSAMALA R., PA311
SINUES P., OA4940, OA4941
SIOGA A., OA3152
SIONIDOU M., PA2150, PA2812
SIOPI D., PA545
SIOUTAS A., PA3023
SIOUTAS C., PA1612
SIOZOS P., PA5102
SIPILÄ K., PA1618
SIQUEIRA A., OA1449, OA1451
SIRARD J., PA2200
SIRAYDER U., PA284
SIRENKO Y., PA454
SIRICHANA W., PA2689
SIRINO MONTEIRO J., PA5250
SIRNES P., OA4833
SIROIS C., PA1326
SIROKHA D., PA1702, PA3937
SIROL AFLAH S., PA3481
SIROLI B., OA3272
SIROUX V., PA656, OA882, PA3341, OA4955, PA5017
ŞIŞMANLAR EYÜBOĞLU T., PA1646, OA2505, PA5012
SISON-SAN LUIS J., PA3417
SIT G., PA3340, PA3345
SIT N., PA4434
SITBON O., PA317, PA443, PA1191, PA1192, PA1193, PA1197, PA1202, PA1766, OA3160, PA3957, PA3963, PA5180
SIVAKUMARAN P., OA4302
SIVAN M., PA5265
SIVANANDARAJAH A., OA1549
SIVAPALAN P., PA1017, PA1022, PA1295, PA1838, OA2608, PA5098, PA5099, PA5341, PA5363
SIVARAMAN K., PA4679
SIVASUBRAMANIAM G., PA3961
SIVEPALAN P., PA4703
SIVORI M., OA1558
SIWIK D., PA3038
SIYUE M., PA1891, PA1894
SIYUE KOH M., PA1106, PA1897
SJÖBERG F., PA3501
SJODING M., PA1215
SJÖLANDER A.,

OA1530
SKALISTI P., PA1873
SKENDERAJ K., PA2147
SKENDULI I., PA3431
SKENE I., PA5284
SKEOCH S., PA3504
SKIADAS J., PA5127
SKIECEVICIENE J., PA2206
SKINNER D., PA1014, PA1319
SKIPP P., PA1862
SKIPPER N., PA3757
SKIVILD V., PA2788
SKJODT N., PA4084
SKJOLD T., PA631, PA636, PA4716
SKJØNSBERG O., PA2159, PA4052
SKOGBERG G., PA553
SKÖLD C., PA2971
SKÖLD M., PA2337, PA2881, PA5157
SKOMRO R., PA5253
SKONTZOU E., PA3420, PA4581
ŠKORO M., PA2158
SKORO-SAJER N., PA3487, PA3968, PA5175
SKOURIDES P., PA1859
SKOUVIG PEDERSEN O., OA860
SKOV M., PA3384
SKOWASCH D., PA629, PA635, PA639, OA2594, PA3605, PA4708, PA4752
SKRAHINA A., PA2803
SKREDE B., PA2159
SKRGAT S., PA976
ŠKRINJARIĆ-CINCAR S., PA1337
SKYLLBERG E., PA1052, PA4546, PA5081
SLADE D., PA3024
SLAMA R., OA882
SLAVIN J., OA1560
SLAWINSKA R., PA2377
SLEBOS D., PA319, OA1525, PA1855, OA2596, OA3252, PA3543, PA4611, PA4613, PA4614, PA5203
SLEEMAN M., PA2983, PA4408
SLEEMAN M., OA2489
SLEEP DISORDERED BREATHING GROUP S., PA4449
SLEPCHENKO N., PA4693, PA4694
SLETTENGREN O., PA3914
SLEVOGT H., PA3924
SLIM A., PA1741, PA2191, PA2264, PA3325, PA3513, PA4542, PA4758
SLIM T., OA4323
SLOOTHAAK B., PA4135
SLOUGH J., PA5279
SLY P., PA1630
SMADHI H., PA335, PA2197, PA3833, PA4740
SMADHI H., PA3017, PA4569, PA5152
SMADJA D., PA1804
SMALCHUK D., PA4576
SMALDONE G., PA3609
SMALL M., PA1190, PA2062, PA3024, PA3966, PA3969
SMAOUN I., PA1026
SMEELE P., PA2296
SMEENK F., PA482
SMEETS D., PA2915
SMELAN J., PA4057
SMETS D., OA4340
SMEW A., PA4427
SMEW A., PA4999
SMEW A., PA658, PA5030
SMIDT-HANSEN T., PA631, PA636, PA5273
ŠMIGOC SCHWEIGER D., PA3382
SMIRNOV S., PA3504
SMIRNOVA N., PA2152, OA4215
SMIT L., PA1609, OA4946
SMIT L., PA1605, OA2516
SMIT M., PA5189
SMITH A., PA4024
SMITH A., OA2604
SMITH B., PA3557
SMITH C., PA3810
SMITH D., PA4671
SMITH D., PA3932
SMITH E., OA1560
SMITH E., OA1439, PA4451, PA4452, PA4453, PA5040
SMITH E., PA4501
SMITH I., PA2260
SMITH J., PA1915, PA1918, PA3037
SMITH J., PA1911, PA1913, PA1925, PA1927, OA2609, PA2964, PA3036
SMITH J., PA3932, OA4195
SMITH J., OA2610
SMITH J., PA1199, PA5185
SMITH L., OA4952
SMITH L., PA592, PA5298
SMITH L., OA757, PA1180, PA2260, PA4500, OA4857, OA4954, PA5039
SMITH M., PA3823
SMITH M., PA2249
SMITH O., PA4975
SMITH R., PA1046
SMITH R., PA4584
SMITH S., OA3173
SMITH S., PA954
SMITH V., PA3474
SMOLINSKA A., PA1941
SMONDACK P., PA502
SMYTH H., PA2187
SMYTH R., PA4650
SMYTH R., OA4951
SMYTH S., OA1560
SNEISTRUP L., PA1666
SNELL E., PA4021
SNENE H., PA980, PA1007, PA3643, PA5331
SNFMI S., PA402
SNIJDERS D., PA483, OA2507
SNKAR A., PA1702
SNOECKX A., PA2366, OA3265
SNOUBER A., PA2052
SNOUSSI H., PA300, PA1285, PA2043
SNYDER L., PA3455
SNYDER M., PA3756
SO C., PA5229
SO R., PA305, OA2521
SOARES C., PA1907
SOARES F., PA2288
SOARES M., PA1717
SOARES M., OA854
SOBHANI S., PA3327
SOBIECKA M., PA421, PA3422
SOBRADILLO ECENARRO P., PA5309
SOBRAL REBELO P., OA4311
SOCCAL S., PA2160
SOCCIO P., PA974, PA3584, PA3598, PA3902
SOCIAS L., PA2326, PA5248
SOCORRO ÁVILA I., PA433
SODERBERG S., PA2998, PA3958
SÖDERHÄLL C., PA1619
SÖDERLUND Z., PA561
SÖDERSTRÖM J., PA1323
SOELLNER J., PA1147
SØFTELAND E., PA4524
SOGANI S., PA3028
SOHAL S., PA2336, PA2346, PA4066
SOHEL N., PA1922
SÖHLER S., PA1318, PA1947
SOHN M., PA1216
SOIPETKASEM P., OA784
SOKHATSKA O., PA410, OA854, PA1155, PA1164
SOKOL G., PA5041
SOKOŁOWSKI R., OA1450
SOLA IDÍGORA N., PA2243
SOLA-MARTÍNEZ J., PA1924
SOLÀ-MORALES O., OA2524
SOLANES GARCÍA I., PA1242
SOLANO PÉREZ E., PA3005, OA4841
SOLAR M., PA1339
SOLARAT B., PA1075
SOLDAINI R., PA4702
SOLDATI T., OA4850, OA4855
SOLER A., PA5115
SOLER M., PA1749
SOLER X., OA1416, PA3607, PA3618, PA5290
SOLER-COMAS A., PA1096, PA3839
SOLER-MONTALVO D., PA3312
SOLÉ-VIOLÁN J., PA2329
SOLIMAN R., PA2762
SOLINAS S., PA5180
SÖLING C., PA3576
SOLIS A., PA1898
SOLIS NAVARRO L., PA1740
SOLÍS-DÍAZ L., PA4561
SOLODIANKIN O., PA4553
SOLOMON J., OA858
SOLOMON M., PA4463, PA4468
SOLOMON S., OA3165
SOLOMON S., PA3904
SOLOMONS R., PA1126
SOLONGO B., PA643
SOLORZANO EGURBIDE J., PA2868, PA3890, PA4707, PA5309
SOLOZABAL-COLL M., OA2524
SØLTOFT D., PA2869
SOLYMOSI D., OA4854
SOMA T., PA633, PA1938
SOMALWAR S., PA3835, PA5294
SOMAY G., OA4307
SOMMA J., OA1539
SOMOGYI P., PA556, PA3547, PA3549, PA3555
SOMOGYI V., PA3454
SON E., PA5165, PA5199
SON E., PA4101
SON K., PA2405
SON K., OA1414, OA2503
SONBAHAR ULU H., PA5046, PA5047
SØNDERGAARD F., PA2842
SONDERMEIJER B., PA4571, PA4574
SØNDERSKOV DAHL L., PA5335
SONG C., PA3457
SONG J., PA1145
SONG J., PA3663
SONG J., PA2049
SONG J., PA1130, PA2874, PA3450, PA3463, PA5156
SONG W., PA3034, PA3619, PA4765
SONGRIN M., PA4015
SONIA H., PA2264
SONIA M., PA995, PA1314, PA1870
SONNAPPA S., PA1649
SONNE T., PA2947
SONT J., PA524, PA976, PA1896
SOO C., PA477, PA3415
SOOD N., OA742
SOOMETS U., PA2959
SOON E., OA3155
SOORONBAEV T., PA2698
SOORONBAEV T., PA1809
SOORONBAYEV T., PA1021
SOOTLEK J., PA3427
SOPIADOU A., PA2150
SORANGELO S., PA3598
SORANNA D., OA4846
SORANO A., PA467
SØRENSEN D., PA1673
SØRENSEN K., OA3166
SØRENSEN R., PA1838
SORETE-ARBORE A., PA2809
SOREZE Y., PA2129, PA3938
SOREZE-SMAGGHUE Y., OA4944
SORIANO A., PA2273
SORIANO J., PA2400, OA2484, OA2524
SORIL L., PA2249
SORKNÆS A., PA1666, PA2785
SOROHAN M., PA2401
SORRENTINO L., PA2727, PA2734
SOSSALLA S., OA3289
SOTGIU G., OA860, PA2718, PA2798, PA3864
SOTIROPOULOU A., PA4575
SOTIROPOULOU V., PA1296, PA3606
SOTIROPOULOU V., PA422, PA1782, PA1790, PA4397
SOTIROPOULOU Z., PA4526, PA5102
SOTO J., PA4058
SOTO ABÁNADES C., PA1205
SOUDÉE C., PA4471
SOUHA K., PA3048, PA5079
SOUILAH S., PA533, PA2418
SOUISSI F., PA330
SOULOUNTSI V., PA2307
SOUMA R., PA5306
SOUMAGNE T., OA790
SOUMAYA B., PA4544
SOUREN T., OA750, PA4634
SOURS A., PA450
SOUSA A., PA5354
SOUSA C., PA2214
SOUSA P., PA1663
SOUSA-PINTO B., OA1526, PA4499
SOUTHWOOD M., OA3155
SOUTHWORTH T., PA3918
SOUTO FERRAZ M., PA1117
SOUTO FERRAZ M., PA1112
SOUTO MOURA C., PA410, OA854, PA1164, PA2214
SOUTO-CAMBA S., PA4518, PA4519
SOUTO-MIRANDA S., PA1042, OA4316
SOUTO-MOURA C., OA1449, OA1451, PA2919
SOUZA H., PA5110
SOUZA H., PA3766
SOUZA J., PA3405
SOUZA SCHAFAUSER N., OA4932
SOVANI M., PA332, PA4389
SOVIJÄRVI A., PA2075, PA3337
SOVILJ GMIZIĆ S., PA2240
SOVTIC A., PA1638, PA1639
SOYEZ B., PA571
SPAAS J., PA1796

SPADARO G., PA4098, PA4753
SPAGGIARI L., OA3271
SPAGNOLO P., PA1149, PA1752, PA3847
SPAGOULAKIS D., PA499
SPAHN J., OA1419
SPAIN N., PA534
SPALLEK R., PA4640
SPALLETTI M., PA2219
SPALLUTO C., PA4766
SPALLUTO C., PA2345
SPANEVELLO A., PA2718, PA4741
SPANNELLA F., PA548
SPARKS J., PA3604
SPARKS L., PA5171
SPARREMAN-MIKUS M., PA634, OA2495, OA2499
SPAZIANO G., PA2352, PA4685
SPEARS M., PA4011
SPECCHIA C., OA3274
SPECTOR S., PA1712
SPEICHER T., PA1318
SPEKMAN J., PA2126
SPENCER L., PA3473
SPENCER L., PA404, OA4195
SPENGLER C., PA4656
SPERANDIO P., PA1759
SPERLING S., PA3867, PA5335
SPETSIOTI S., PA499
SPIES C., PA4051
SPIESSHOEFER J., PA1222, PA1335, PA1811, PA1813, PA2272
SPIKES L., OA742
SPINELLI S., PA2711
SPINICCI M., PA4590
SPINOU A., PA385, PA1071, PA2340, PA2342, PA5051
SPITALERI A., PA2178
SPITALERI D., PA3774
SPITALERI D., PA472
SPITERI G., PA304
SPITHOVEN J., PA309
SPITTLE D., PA394
SPOLETINI G., PA2712
SPOORTHI F., OA3276
SPOSITO F., OA4962
SPROOTEN R., PA548
SPRUIT M., PA347, PA964, PA1032, PA1050, PA2289, OA4218, OA4225, OA4312, OA4833
SPRUIT M., PA2424, PA3516
SPRUIT M., PA548, PA969, PA1042, PA1796, OA2596, OA3252, OA3259, PA3395, PA3397, PA4574
SPYRATOS D., PA1873
SQUARZONI G., PA2210
SQUILLACIOTI G., PA3811
SQUILLANTE F., PA1220
SQUIRES J., PA2960, PA4639
SRDIĆ D., PA475
SREEDEVI K., PA1067
SRIBAIBOONKIJ P., PA3349
SRICHAROENCHAI T., PA4015
SRICHATRAPIMUK S., PA1681
SRINATHAN T., PA3843, PA3845
SRINIVASAN K., PA3444
SRIPRASART T., PA476, PA5218
SRIVASTAVA A., PA2208, PA4547
SRIVASTAVA S., PA2940, PA2942, PA3757
SRIVATSAN S., PA2983
SROKA-SAIDI K., PA1136
ST. PIERRE C., PA4105
STA. MARIA P., PA3069
STAAB-WEIJNITZ C., PA560
STAALI M., PA531
STACEY S., OA4199
STACEY T., PA4389
STACH T., PA3411
STACHETZKI B., PA2218
STACHOWICZ N., PA3677
STADDON L., OA1556
STADLER S., PA2997
STADON L., OA1563
STAEHLER G., PA5184
STÆHR JENSEN J., PA1022, PA5341
STAELS F., PA1716
STAES A., OA1557
STAFLER P., PA5031
STAFLER S., PA4474
STAFOGGIA M., PA304, OA2518, PA3811
STAHL M., PA1073, PA4472, PA5005
STAHL T., PA1680
STAICU (MIHAI) A., PA2714
STAINER A., PA399
STAINSBY V., OA1549
ŠTAJDUHAR A., PA2158
STALDER SIEBENEICHLER A., PA977, PA5293
STALLARD R., PA1941
STÄLLBERG B., PA612, PA1028
STAMATATOS I., PA337, PA3429
STAMOU M., PA3045
STAMPANONI M., PA3561, OA4948
STAMPFLI M., PA1946
STANDL M., OA2519, PA3674
STANEL S., PA4381
STANEL S., PA3921
STANFOCA CASAGRANDE G., PA1112
STANISCI I., PA312, PA1961, PA3803, PA3811
STANKOVIĆ I., PA4745
STANLEY B., PA546
STANNEK K., PA4657
STANOJEVIC S., OA872, OA1436, PA2740, PA3375, PA4998
STANSEN W., PA2875
STANZEL F., OA2595, PA3046
STANZIOLA A., PA1750, PA1751, PA1753, PA4103
STAPLES K., PA2286, PA2345, PA4766
STAPLES K., PA2986
STARCEVICH E., PA2725
STARCHENKO P., PA3454
STARY G., PA4056
STASTNA N., PA465
STATHAKIS G., PA1872
STATHAKIS G., PA4091
STATHOPOULOS G., OA1445, PA1702
STAUDINGER H., OA4296
STAVEM K., PA1962, PA3397, OA4833
STEAD R., PA4731
STEED L., PA3404, PA5284
STEELE V., PA1736
STEENACKERS K., OA4859
STEENBRUGGEN I., PA4509
STEENHUIS L., PA4604
STEENSTRA C., OA3192
STEER J., PA548, PA616, OA1462, PA4390
STEFANATOU M., PA3821
STEFANIDIS E., PA3330
STEFANIDIS K., PA3429
STEFANO B., PA2225
STEFANOVA CHAKMA M., PA4701
STEFANSDOTTIR S., PA1659
STEFFANINA A., PA4096, PA4110, PA4128
STEGBAUER M., PA2700
STEHLING F., PA2164, OA2507
STEIER J., PA1275, PA1276, PA1277, PA1807, PA2940, PA2942, PA3592, PA3757, PA4514, PA5269
STEIN M., PA1654, OA4868
STEIN N., PA5098
STEIN N., PA1915
STEIN Y., OA895
STEINBERG E., PA3540, PA4480
STEINBERG R., PA2733, OA4940, OA4941, PA5001, PA5026
STEINBERG Z., PA1654
STEINCHEN C., OA2624
STEINDAL S., OA3166
STEINDOR M., PA2164
STEINE K., OA4833
STEINER M., PA1181, PA1797, PA2681, OA3256
STEINER M., OA885, OA3254, PA5350, PA5352
STEINFORT D., PA1120, PA1121
STEINFÜHRER K., PA5368
STEINIER C., OA4829
STEINKE E., PA5005
STEINWENDER M., PA3483
STEIROPOULOS P., PA1876, PA4123, PA4709, PA4717, OA4837
STELLA B., OA4201
STELLA F., OA3272
STELLA G., PA1163, PA3886, PA5133, PA5197
STELLARI F., OA4958
STELMACH R., PA352, PA1284, PA2257, PA2262, OA4219
STELZMÜLLER I., PA321, PA2826
STENBERG G., PA1036
STENEJHEM E., PA3857
STENFORS N., PA1958, PA4431
STENLÖF K., OA4839
STENSRUD T., PA4454, PA5064
STENZEL N., PA1721, PA3454
STEPHAN S., OA4329
STEPHAN-FALKENAU S., PA3924
STEPHENS T., PA2306
STEPHENSON K., PA1853
ŠTERCLOVÁ M., PA4483
STERGIAKOULI E., PA1626
STERINGER-MASCHERBAUER R., PA5175
STERK P., PA5354
STERRANTINO S., OA3272
STETTLER M., PA1603
STEUER G., PA4474, PA5031
STEURER S., PA2290
STEURER-STEY C., PA4743
STEVEN C., PA4617
STEVENS C., PA1941
STEVENS D., PA969, PA3395
STEVENS S., OA4302
STEVENS W., OA742
STEVES C., PA963
STEWARD A., OA3147
STEWARD C., PA3757
STEWART A., PA2703
STEWART D., PA3635
STEWART G., OA893
STEWART H., PA550
STEWART I., OA3182, OA4857
STEWART I., OA858
STEWART N., OA757, PA4500, OA4857, OA4954
STEWART R., PA2759
STEYAERT N., PA4555
STICK S., PA1677, PA2088, PA2094, PA2725
STICKLAND M., OA879, PA3557
STICKLAND M., PA2249
STICKLAND M., PA3823
STIROPOULOS P., OA3152
STISTRUP RASMUSSEN S., PA380
STJEPANOVIC N., PA4726
STJERNBORG L., PA5205
STOBO D., PA3529
STOBO J., PA2827
STOCH S., PA1208
STOCK J., OA3276
STÖCKLEIN S., PA2141
STOCKLEY R., PA4144
STOCKLEY R., PA4145
STOCKLEY R., PA3050
STOCKTON M., PA3764
STOEGER T., PA567
STOFFELS A., PA1050
STÖHR S., PA424
STOIMENOVA P., PA3055, PA4563
STOJANOVIC G., PA1116, PA1330, PA1347, PA1968, PA2860
STOJANOVIC Z., PA1064, PA4576
STOKER N., OA3184
STOKHOLM J., OA1440, PA1627, PA1632, PA2721, OA4330, OA4331
STOLERIU M., PA1235
STOLERIU M., PA560, OA1569, OA2626
STOLESKI S., PA3353, PA3813
STOLK J., PA1866, PA3050
STOLLBERG K., PA5130
STOLT D., PA977
STOLTEFUß S., PA5161
STOLZ C., PA5144
STOLZ D., PA1786, PA1903, PA2226, PA2820, PA2922, PA2978, PA2979, PA2980, PA3360, PA3483, PA3864, PA4002, PA4479, PA4617, PA4619, PA4720, PA4721, PA4726, PA4761, PA4764, OA4862, PA5196, PA5198, PA5200, PA5227, PA5293
STONE E., PA1120, PA1121
STONE H., PA404, PA4009, PA5066
STONE J., OA1528
STONE M., PA3503
STONHAM C., OA3174
STOOS VEIC T., PA473, PA5136
STORME N., OA3264
STORNELLI S., OA752
STORRER K., PA3517
STORTI M., OA4947
STOSHIKJ S., PA321, PA635, PA639, PA3605, PA4752
STOUP T., PA4648
STOURNARA L., PA1119, PA1699, PA2855
STOUSTRUP A., PA2424
STOWASSER S., PA2875, PA3460
STOWELL J., PA3769
ST-PIERRE J., PA2118

STRAKOSHA F., PA5102
STRAND M., OA4937
STRANGE C., PA3778
STRANKS L., PA404, PA4381
STRANZINGER E., PA2774, PA3996
STRASSBERGER C., OA4839
STRATAKOS G., PA5223
STRATAKOS G., PA462
STRAZDA G., PA289
STREBA C., PA2406, PA2714
STRECKER K., PA4576
STREIBEL C., PA2116, PA3994, PA3996
STRETTI F., OA4947
STRICKER B., OA2605
STRICKER H., OA747
STRICKLAND S., PA1180
STRIDSMAN C., PA363, PA1340, PA1958, PA2064, PA2072, OA2515, PA2754, OA3167, PA3624, PA4118, PA4431, PA5283
STRINGARIS A., PA1689
STRINGER K., PA1215
STRINGER W., PA1187, PA2273
STRIPARI SCHUJMANN NOGUEIRA D., PA2301
STRIZZI S., PA1682, PA3854
STROBEL W., PA1786, PA2820, PA5227
STROBL K., PA2141
STRODEL J., PA4495
STRODTHOFF C., PA3552
STRÖKER L., PA3799
STRUMAN I., OA1452
STUBBS H., PA1201, PA3956, PA3962
STUCKI J., PA2186, PA3321
STUDNIČKA F., PA2903
STUMBLES E., OA4319
STURESSON A., PA2072
STURKENBOOM M., PA4551
STURM E., PA2992
SU F., PA3342
SU J., PA1608
SU K., PA5163
SU K., PA5357
SU T., PA1244
SU Z., OA2598
SUANSAN K., PA2068
SUAREZ Á., PA4482
SUAREZ M., PA372
SUAREZ V., PA1786, PA5227
SUAREZ CASTILLEJO C., PA2251, PA2252
SUAREZ CUARTIN G., PA3922
SUÁREZ RUBIO M., PA3679
SUAREZ-CAUSADO A., PA1957
SUBBARAO P., PA5014
SUBIZA J., PA1107, PA4476
SUBRAMANIAN A., PA5340, PA5343
SUBRAMANIAN V., PA630
SUCCONY L., PA3313
SUCENA M., PA389, PA3309, PA5107
SUDA E., PA5033, PA5036
SUDA T., PA434, PA1136, OA1424
SUDRA M., PA1919
SÜDY R., PA3545, PA3546
SUEHS C., PA5296
SUETAKE R., PA2410, PA3447
SUGA K., PA1331, PA4000
SUGA T., PA5228
SUGGETT J., PA504, PA2383, PA3614
SUGITATE K., PA2706
SUGIYA R., PA3391, PA3567
SUGIYAMA H., PA5080
SUGIYAMA S., PA3666
SUGIYAMA Y., PA2877
SUH E., OA2586, PA2940, PA2942, PA3757
SUH I., PA1223
SUH M., PA2944
SUHLING H., PA629, PA3605, PA4708
SUICO M., PA4667
SUIGO G., PA1725
SUJEAN LIM C., PA4080
SUKKAR S., PA1725
SUKUMARAN P., PA1004, PA4695
SUKUMARAN T., PA4434
SULAIMAN 4., PA5029
SULAIMAN I., PA2401, PA5266
SULAIMAN N., PA3481
SULDOVA H., PA4483
SULLIVAN A., OA1462
SULLIVAN J., PA4737
SULTAN S., PA437
SULTANA N., PA2184
SULTANA S., PA614
SULZER T., PA3426
SUN B., PA1138, PA1141, PA1158, PA1653, PA1940, PA3410, PA3836, PA4385, PA4582
SUN B., PA2787
SUN D., PA4130
SUN D., PA2234, PA2235
SUN J., OA2598
SUN J., PA5142
SUN K., OA1430
SUN L., PA1076
SUN L., PA1334
SUN X., PA445, PA451
SUN X., PA4058
SUN Y., OA1523, PA3674
SUN Y., PA1076, PA1834, PA3663, PA5305
SUNAGA N., PA2357
SUNANTA O., PA3673, PA4146, OA4236
SUNAVALA A., PA297
SUND M., PA5264
SUNDARALINGAM A., OA1561, PA1827, PA3441
SUNDAY S., PA5323
SUNDBOM F., PA4726
SUNDH J., OA3294, PA3762
SUNDRAM F., PA2294, OA4856
SUNDSTRÖM J., PA3786
SUNDSTRÖM L., PA1849
SUNDVALL P., PA3328
SUNGKANUPARPH S., PA1681
SUNGNAK W., OA774
SUNJAYA A., PA534, PA3509
SUNJAYA A., OA762, PA3522
SUNMAN B., PA1644, PA2771, PA3322, PA4462, PA5226
SUNTHARALINGAM J., PA3504
SUNYER R., PA1269
SUOJALEHTO H., PA3344
SUPPINI N., PA5053
SUPPLE D., PA5354
SUPPLI ULRIK C., PA2374, PA2376, PA2377, PA2378, PA2379, PA5013, PA5371
SUR ROY A., PA2151
SURAJ K., PA3637, PA4747
SURATT B., OA4296
SURAY TAN N., PA5294
SURCIN J., PA1614
SURETTE M., PA4125
SURJAN G., PA1023
SURJAN O., PA1023
SURMONT V., PA969, OA1559, PA3395, PA3432
SUSAI N., PA3895
SUSSUCHI DA SILVA L., OA3267, OA3269
SUTHAR M., OA4215
SUTHAR N., PA1587
SUTHARSAN S., OA4332
SUTHERASAN Y., OA784, PA1681, PA1686, PA3844
SUTINEN E., OA2579
SUTOYO D., PA3418
SUTRADHAR R., PA3887
SUTTER O., PA5024
SUTTORP N., PA4051
SUZUKI A., PA4391
SUZUKI E., PA2281, PA2358
SUZUKI M., PA2358
SUZUKI T., PA1890
SUZUKI T., PA2281, PA2358, OA3276
SUZUKI T., PA5117
SUZUKI Y., OA3148, PA3776
SUZUKI Y., PA2281
SUZUKI Y., PA2898
SVANES C., PA311, PA659, PA1281, PA2073, OA2517, PA3072, PA3335, PA3977, PA4423
SVANIDZE T., PA4067
SVÄRD R., PA1849
SVENDSEN C., PA5204
SVENNINGSEN H., PA2785
SVENNINGSEN S., OA1414, PA2283, PA3835, PA4125
SVENSSON A., PA2793
SVENSSON J., PA5264
SVENSSON-RASKH A., PA2793
SVERDLOV O., PA1595
SVERRILD A., OA4968
SVERRILD A., PA1949, OA4303, OA4966
SVERZELLATI N., PA2147, OA4958
SVETLIZA G., PA4480
SVILAROV I., PA3526, PA3527, PA3530
SVOBODA M., PA610, PA1339, PA4133
SVORRE JORDAN A., PA1022
SWABY C., OA4241
SWALE J., PA1732
SWALES C., PA4027
SWAMI M., PA2699
SWAMINATHAN A., PA2882
SWAN F., OA2587
SWANEPOEL R., PA2801
SWANEY J., OA2581
SWANN J., OA4239
SWARNAKAR R., PA1322, PA2396, PA3602
SWART E., PA1705, PA3884
SWARTE R., PA2137
SWENSON C., OA4215
SWERLICK R., OA4215
SWIETLIK E., PA1775
SWIFT A., OA4952
SWIFT A., PA3490, OA4857
SWIFT A., OA757, PA2260, PA2885, PA4500, OA4954
SXINI P., PA5102
SYAMLAL G., PA5169
SYDYKOV A., PA448
SYED ABDULLAH 1., PA2723
SYK J., PA1939, PA4499
SYKES D., PA378, OA2587, PA2876, PA5289
SYKES R., PA3529
SYKOROVA L., PA4483
SYLVAIN M., OA753
SYLVESTER K., OA751, OA755, PA3509, PA5063
SYME-GRANT J., OA1549
SYMERSKY P., PA5173, PA5183
SYMON F., PA4675
SYMONDS J., OA1556
SYNDA D., PA2096
SYNENKO T., PA2806
SYRIGOS N., PA2855
SYRINE A., PA3048
SYSTROM D., PA2960, PA4639
SZABÓ A., PA1808
SZABO A., PA2364
SZARVAS Z., PA2690
SZCZEGIELNIAK J., PA4520
SZCZEPANKIEWICZ A., PA1854, PA4044
SZCZEPANKIEWICZ D., PA4044
SZECSENYI J., PA485, PA486, PA3581
SZEFLER S., OA1436, PA2740
SZEKANECZ Z., PA1023
SZÉL V., PA3809
SZEMRAJ J., PA2322
SZÉNÁSI G., PA3608
SZEPFALUSI Z., OA2507, PA4467
SZIGETI S., PA1226
SZILÁGYI F., PA1226
SZLAVIK J., PA1023
SZLUBOWSKI A., PA474, OA3263
SZNAJDER J., PA3065
SZOLKOWSKA M., PA1245
SZOLLOSI G., PA4578
SZPECHCIŃSKI A., PA1245, PA2344
SZTURMOWICZ M., PA3422
SZULCEK R., PA459
SZWEBEL T., OA4829
SZYMCZYK A., PA474

T

T BOS S., PA2991
T HILL A., PA4460
T WEISS S., PA1596
T YERKOVICH S., PA4460
T. BURGE A., OA2617
T. LE T., PA1892
T.KUTTY J., PA5057
T.PEDERSEN C., OA4330
TAALAIBEKOVA A., PA1809, PA2698
TAALBERG E., PA2959
TABAJ G., PA3479, PA3921
TABBÌ L., PA1213
TABE C., PA5162
TABELING C., PA4051
TABERNERO HUGUET E., PA2868, PA3951, PA5309
TABIRA K., PA3567
TABKA O., PA955, OA4323
TABOADA D., OA741, PA5177, PA5191
TABONI A., PA4632
TABORDA BARATA L., PA488
TABUCHI T., PA998
TABUSADANI M., PA2177
TACHEVA T., PA1839
TACHFOUTI N., PA525, PA2079, PA2873
TACHIBANA H., PA3891
TADA K., PA2705
TADAO WADA D., OA778
TADE A., PA5339
TADOLINI M., PA2798
TAE Y., PA3570
TAFELMAIER M., PA3001
TAFURO F., PA1753
TAGGART C., OA1536
TAGGART C., PA2335

TAGHAVI J., OA741
TAGLIAFERRO S., PA312, PA3803, PA3811
TAGUCHI O., PA2898
TAHA A., PA3428
TAHIR B., OA757, PA2260, PA4500, OA4954
TAHIRAH F., PA4990
TAHIRI K., PA2127
TAHMAZ T., PA5043
TAI A., PA5040
TAILLE C., PA1678, PA4114, PA4648, PA4750
TAIMA K., PA5162
TAIVANS I., PA289
TAJIRI T., PA978
TAK N., PA3467, PA3468
TAKACS S., PA5042
TAKAGI R., PA644
TAKAHASHI D., PA3402
TAKAHASHI H., PA5215
TAKAHASHI H., OA2513
TAKAHASHI K., PA3347, PA4706
TAKAHASHI N., PA4667
TAKAHASHI S., PA1331, PA4000
TAKAHASHI T., PA2706
TAKAKI M., PA1059
TAKALA J., PA3058
TAKAMATSU K., PA5333
TAKASAKI J., PA5080
TAKASHIMA Y., PA5215, PA5228
TAKATA S., PA626
TAKATA S., PA2887
TAKATS Z., PA2956
TAKAYAMA M., PA3402
TAKEDA T., PA3900
TAKEDA Y., PA3900
TAKEI R., PA401, PA1723, PA3499
TAKEKOSHI D., OA4299, PA5238
TAKEMURA M., PA978
TAKEYAMA T., PA5228
TAKIDZE V., PA3387
TAKIGAWA Y., PA1697
TAKIGUCHI H., PA2362
TALAEI M., OA889
TALAEI PASHIRI M., PA1626, PA1952
TALIMTZI P., PA5002
TALKER L., PA1596
TALLMAN K., OA4237
TAL-SINGER R., PA542, PA543, OA2483, OA2497, PA2823
TALUKDAR M., PA1313
TALWAR A., PA615, PA4649, PA5311
TALWAR D., PA1322, PA4983
TAM H., PA1122
TAM L., PA2074
TAM T., PA3062, PA3551, PA4594
TAMARIT J., PA3840
TAMAYO LOMAS L., PA2326, PA5248
TAMBLAY C., PA5108
TAMBORINO S., PA4497
TAMISIER R., PA2996, PA2999, OA3288, PA4088, OA4337, OA4845
TAMM M., PA547
TAMM M., OA747, PA977, PA1786, PA2820, PA2922, PA3864, PA3936, PA4002, OA4204, PA4617, PA4619, PA4761, PA4764, OA4862, PA5196, PA5198, PA5200, PA5227, PA5293
TAMM R., PA2959
TAMMIA M., PA5205
TAMOSIUNAS A., PA2998
TAMPLIN J., PA351
TAN 6., PA2723
TAN C., PA4669
TAN D., PA3865, PA5120
TAN H., OA4341
TAN H., PA4445
TAN J., PA4438
TAN J., PA4081
TAN J., PA3415
TAN J., PA477
TAN N., PA3835
TAN P., PA5158
TAN S., PA4438
TAN S., PA1792, PA1793, PA2054, PA3830, PA5158
TAN W., OA879, PA2265, PA2285, PA3667, PA4642, OA4933, OA4934
TAN W., PA1032
TAN W., PA1224
TAN Y., PA3865, PA5120
TAN Y., PA4438
TANA A., PA4613
TANA ASLAN A., PA5012
TANAKA H., PA3859
TANAKA H., PA5162
TANAKA K., PA2877
TANAKA N., PA3402
TANAKA N., PA2358
TANAKA S., PA2059
TANAKA T., PA1059
TANAKA Y., PA626
TANAKA Y., OA746
TANAKA Y., PA5162
TANASH H., PA4398, PA5107
TANCK K., PA485
TANCK M., OA4850
TANCREDI G., PA4684
TANDOC G., PA1183
TANG C., OA2598
TANG C., PA1803, PA3985
TANG D., PA2981
TANG S., PA1930
TANG W., PA649
TANG X., PA3410
TANG Z., PA2062
TANGEDAL S., PA5204
TÅNGEFJORD S., PA1860
TAN-HELERA B., PA1016
TANIGUCHI Y., PA5179
TANINO Y., OA3148, OA3277, PA3776
TANNI S., PA298, PA3314, PA4593
TANNINEN T., PA2751
TANQUE A., PA519
TAPIA MANTILLA N., PA4029
TARABISHI J., PA2738
TARANENKO A., PA4552
TARANTINI F., PA2122
TARANTINO F., PA1783
TARAZONA-MEZA C., PA1957
TARIGHT S., PA533, PA2418
TARLING E., PA1162
TÁRNOKI Á., PA1282
TÁRNOKI Á., PA2207
TÁRNOKI D., PA1282
TÁRNOKI D., PA2207
TARRANT R., PA5265
TARREGA CAMARASA J., PA5050
TARSIA P., PA1220, PA4665
TASAKA S., PA5162
TAŞÇI C., PA2931
TASHER D., PA1654
TASHEVA V., PA2189
TASHIRO H., PA3347
TASHIRO K., OA1453
TASHKIN D., OA870
TASHMETOV K., PA3331
TASHMETOV X., PA999
TASHMETOVA G., PA999, PA2347, PA5303
TAŞKIN B., PA3392
TASSANEYASIN T., PA1681, PA3844, PA4556
TASTAN G., PA5007, PA5008
TATA A., OA2626
TATA P., OA2626
TATE M., OA1560
TATKOV S., PA4017
TATLER A., OA897
TATON O., PA4635
TATOPOULOS A., PA420
TATOUSEK J., PA964
TATSIS K., PA1724, PA3311, PA4709
TATSUMI K., PA2281, PA2358
TAUBE C., PA629, PA635, PA639, PA2883, PA3605, PA3946, OA4332, PA4708, PA4752
TAUBER R., PA3351
TAURINO E., PA585
TAUZIN M., PA2127
TAVANO S., PA3505
TAVANTI L., PA5334
TAVARES E., PA4486
TAVARES M., PA1058
TAVENDALE R., PA2722
TAVERNA S., PA1631, PA3947, PA4676
TAVERNARAKI K., PA5186
TAVERNIER G., PA4729, PA5300, PA5304
TAVOLY M., PA3397, OA4833
TAVORNSHEVIN P., PA476
TAWARA Y., PA3391, PA3402, PA3567
TAWFIKE A., PA1941
TAY J., PA3823
TAY T., PA982, PA1580, PA3644
TAYLOR A., PA3622
TAYLOR B., PA1941
TAYLOR J., PA2108
TAYLOR R., PA954
TAYLOR R., PA961
TAYLOR S., PA534
TAYLOR S., PA3404
TAYLOR S., OA2627
TAYTARD J., PA2105, PA4443
TAZAWA R., OA3277, OA4322
TAZI-MEZALEK R., PA479
TCHERAKIAN C., PA4114
TCHKONIA T., OA2583
TEAGUE J., OA3266
TEAGUE J., PA2233
TEAR V., PA1691
TEBBUTT S., PA1135
TEBÉ C., OA3282
TEBÉ-CORDOMÍ C., PA408, PA3461, PA3919
TEBET M., PA3517
TEBOUL J., PA1678
TEČER J., PA1798, PA1818
TECHERA M., PA3031
TEDONE M., PA2180
TEE A., PA3026
TEE A., PA2188
TEE J., OA775
TEGAMI I., OA3267, OA3269
TEGAMI I., OA1449, OA1451
TEGHI HEIBA M., PA525
TEICHMANN S., OA774
TEIXEIRA A., OA4311
TEIXEIRA G., OA2623
TEIXEIRA ALVES L., PA2334
TEIXEIRA LOPES F., PA362, PA370
TEJERO GARCIA S., PA3761
TEKGÖZ E., PA2931
TEKIN A., PA4562
TEKIN M., OA2505, PA5226
TEKIN M., PA1650
TELATAR T., PA992, PA993, PA2395
TELINI W., OA851, PA1152, PA1154
TELLES FREITAS P., PA1225
TELLEZ D., PA315
TELLI ATALAY O., PA353
TELLO K., PA1770
TELLO S., PA429
TELLO MENA S., PA1140
TELLO-MENA S., PA2321
TEMPERTON B., PA2846
TEN BRINKE A., PA979, PA1579, PA1896
TEN HAVE L., PA1896
TENBUSCH M., PA4763
TENERO L., PA2082, PA2741
TENES A., PA3502
TENG A., PA5120
TENIENTE-SERRA A., PA1169
TEO D., PA1016
TEO M., PA2237
TEO W., PA2367
TEOH O., PA4438
TEPER A., OA1459, OA1537, PA2835
TEPPAN J., PA2992
TEPWIMONPETKUN C., PA574
TER HAAR E., PA319
TER HAAR E., PA2092
TER WAARBEEK H., PA3516
TERADA K., OA3258
TERADA M., PA1059
TERAI J., PA4673
TERAMACHI R., PA434, PA1236, OA1424
TERAMOTO S., PA5132
TERANISHI S., OA1453
TERCÉ G., PA4980
TEREBESSY E., OA768, PA1945, OA4231, PA4429, PA5014, PA5021, PA5022
TERHEGGEN-LAGRO S., PA2084
TERPSTRA L., PA5118
TERRA-FILHO M., PA3796
TERRAS A., PA1155
TERRAS ALEXANDRE A., PA410, OA854, PA1164, PA2919
TERRIN G., PA2736
TERRIOU L., OA2580
TERROVITOU C., PA5127
TERSCHLUSE C., PA2226
TERSTEEG-ZIJDERVELD M., PA309
TERZI N., OA4955
TERZIS G., PA506, PA1800
TERZOLO M., PA4733
TESCH M., PA3423
TESSARZ P., OA4329
TESSIER S., PA2134
TESTELMANS D., OA2615, OA4837
TESTI I., PA1051
TETIKKURT C., PA1754, PA2231
TETIKKURT M., PA3525
TETLEY T., PA1603
TETLEY T., PA3042
TETT N., PA1941
TEULIER M., OA3178
TEUNISSEN S., PA1718, PA1719
TEVES J., PA4014
TEXEREAU J., OA3178
THABUT G., PA538
THAKOR M., PA4991
THAKRAR D., PA2414, PA4151
THAKRAR R., PA1111

THALAMY A., PA5182
THAM K., PA3428
THAMMASUDJARIT R., PA3844
THAMMAVARANUCUPT K., PA1681, PA1686
THÅNELL K., OA2632
THANGAKUNAM B., PA1067, PA1885, PA4570, PA5104
THANING P., PA4478
THANOS L., PA5186
THANTHITAWEEWAT V., PA476, PA3427
THAPA S., PA2370, OA4241
THAVAGNANAM S., PA1641
THAXTON C., PA2762
THAYAKARAN R., PA1623, PA3569, PA3988, OA4335, PA4600
THE PROVIDING MULTIDISCIPLINARY ILD DIAGNOSES [PROMISE] STUDY GROUP .., OA1424
THEA PAMELA C., PA1183
THEAKER H., PA2169
THÉBERGE C., PA453, OA3161
THEE S., PA1073, PA1861, PA4472
THEEGARTEN D., PA2883
THEERAWIT P., OA784, PA3844
THEIS F., OA772, OA2624
THEIS F., OA1569, OA2626
THEIß S., PA454
THEKKINKATTIL M., PA2396, PA3602, PA5339
THEOCHARI E., PA422, PA1782, PA4397
THEODORAKIS E., PA5223
THEODORAKOPOULOS I., OA1438
THEODORAKOPOULOU M., PA1812
THEODORE G., PA1712
THEODORIDOU A., PA545
THEODOROU A., PA337
THEOFANI E., PA2348
THEOHARI E., PA1296, PA3606
THEONI K., PA337
THEORELL HAGLÖW J., PA3762
THEORELL-HAGLÖW J., PA3585, PA5259
THÉPAULT F., PA3780
THÉVENIN R., PA409, PA1212, PA1219
THIBON C., PA3412
THIELERT C., OA786
THIEN F., OA4956
THIENEL U., PA608
THIENEMANN F., OA861, PA5087
THIERIE S., PA1716
THIERRY P., OA753
THIEUX M., PA1888
THIJS W., PA5118
THILESEN C., PA3414
THILLAI M., PA2888, PA3484, OA4195
THIRUMARAN M., PA4028
THIRUVARUDCHELVAN A., PA3800
THISSEN S., PA2696
THNG K., PA1106, PA2196
THOGESAN M., PA5144
THÖLKEN C., OA4333
THOMAS B., PA4695, PA5096
THOMAS B., OA4969
THOMAS B., PA4438
THOMAS D., PA603
THOMAS D., OA4302
THOMAS F., OA1545
THOMAS J., PA1004
THOMAS J., PA1201
THOMAS K., PA1687
THOMAS M., PA3669
THOMAS M., OA876, PA3646, PA4737
THOMAS M., PA2161, PA4567, PA5086
THOMAS N., PA1846
THOMAS P., OA890
THOMAS S., PA1180
THOMAS S., PA2762
THOMEER M., PA969, PA3395, PA4532
THOMPSON A., OA4952
THOMPSON A., PA3842
THOMPSON A., OA4857
THOMPSON B., OA890, OA4956
THOMPSON C., PA405, OA2582
THOMPSON J., PA1846
THOMPSON R., PA1180, PA3490
THOMPSON S., PA1941
THOMPSON S., PA3557
THOMSEN C., OA882
THOMSON F., OA1560
THOMSON K., PA2840
THOMSON L., PA3373
THOMSON W., PA2306
THOMSON. L., OA1560
THÖNE P., PA3480
THONG L., PA4554
THORARINSDOTTIR H., OA2517, PA4424
THORMEN R., PA2283
THORN A., PA2949
THORNTON C., PA460, PA3571
THORNTON D., PA5300, PA5304
THORNTON J., PA4613
THORNTON T., PA5347
THORSEN J., PA2721
THORSTEINSSON T., PA1599
THOULD H., PA404, PA2840
THOUVENIN G., PA2760, PA2761
THROOSTERS T., PA1595
THUILLET R., PA443
THUMEREL M., OA4243, PA4490
THUMERELLE C., PA420, PA423
THUNNISSEN E., OA4850
THUNSTRÖM E., OA3292
THURNHEER R., PA547
THURSFIELD R., OA2509
THUY DUONG LE M., PA1092
THWAITES R., PA2223, PA2815
THWAITES R., PA4070
TIAHLO S., PA2806
TIAN D., PA1195
TIAN H., PA1244
TIAN X., PA1914
TIBA M., PA1215
TIBBITT C., OA2502
TIBBITT C., OA2495, PA4407
TIBERI S., PA1052, PA4540, PA4546, PA5081
TIBÉRIO I., PA1304
TIBÉRIO I., OA2628
TIBÉRIO I., PA306, PA2431
TIBERIO L., PA600
TIDDENS H., PA2098
TIDDENS H., PA3384
TIDDENS H., PA2280, PA2284, PA3997, PA4993
TIDDENS H., PA2769
TIDDENS H., PA1074, PA1086
TIDEMANDSEN C., OA2500
TIDMARSH B., PA3649
TIE S., PA4080, PA4626
TIEL GROENESTEGE E., PA4135
TIELEMANS B., OA3159
TIENG E., OA4945
TIEW P., PA2188
TIEW* P., PA2196
TIKKAKOSKI A., PA1618
TIKKAKOSKI A., PA1618, PA3648, OA4943
TILAK S., PA3790
TILE L., PA3945
TILLINGHAST J., PA3680
TILQUIN F., PA3780
TIMBERMONT L., PA2199
TIMENS W., PA1250, PA2351, PA2360, PA2372, PA5203, PA5209
TIMMERMANN H., PA629, PA2378
TIMPSON N., PA3674
TINDLE G., PA391
TINDOC J., PA439, PA5095
TINÈ M., PA1089, PA1149, PA1695, PA1708, PA2210, PA2894
TINE JESS T., PA1027
TING J., PA4094
TING M., PA3632
TINNERBERG H., PA3350
TIOTIU A., PA4750
TIPPLES K., PA480
TIPTON C., PA1636
TIRAN B., PA2928, PA3014
TISEKAR O., PA3498, PA4491
TISI M., OA874
TISI S., OA3266
TITZ A., OA747, PA1774
TIYAKI ITO A J., PA2257
TJEŠIĆ-DRINKOVIĆ D., PA2145, PA2158, PA3376
TO K., PA1777
TO M., PA4756
TO T., OA768, PA1945, OA4231, PA4429, PA5014, PA5021, PA5022
TO Y., PA4756
TOBIN J., OA3165
TOBINO K., PA2887
TODD J., PA1144
TODD J., PA1147, PA3455
TODERIKA Y., PA1963
TODO BOM F., PA528, PA3638, PA5071
TODORIĆ I., PA3376
TODORIKO L., PA1963, PA2958, PA5103
TODOROVIC FABRO A., OA778
TOENGES G., PA3474
TOENNESEN L., PA5363
TOENNESEN L., PA1017
TOFFART A., PA494
TOFOLEAN D., PA3926
TOGAWA R., OA3148, PA3776
TOGONIDZE T., OA865
TOH K., OA868
TOH T., PA3865, PA5120
TOHAMI A., PA3791
TOHDA Y., PA3443
TOKARENKO O., PA3006
TOKATLI G., PA2282, PA3998
TOKE S., PA3602
TOKI S., PA5233
TOKITA S., PA4762
TOKITA S., PA5306
TOKUNAGA S., PA2887
TOKUNAGA Y., PA1913
TOLEDO A., PA3031
TOLEDO N., PA1840, PA2252
TOLEDO R., PA3314
TOLEDO DO NASCIMENTO E., PA5250
TOLEDO PONS N., PA2251, PA5282
TOLEDO-PONS N., OA1413
TOLIĆ E., PA1701
TOLNAI J., PA556, PA3547, PA3555
TOLOSA-WRIGHT M., PA2223
TOMA C., PA1156
TOMARELLI I., PA3357
TOMÁS L., OA3282
TOMAS-CORDERO B., OA864
TOMASELLI S., PA5133
TOMASELLO A., PA4098, PA4753
TOMASETTI M., PA3436
TOMASSETTI S., PA467, PA478, PA2354, PA3469, OA4198, PA4590, PA5214
TOMASZEWSKI E., PA1904
TOMBS L., OA4929
TOMER Y., OA1567
TOMEZZOLI S., PA2144
TOMIKO YAMADA DA SILVEIRA L., PA2301
TOMIOKA H., PA434, OA1424
TOMISA G., PA3608, PA4578
TOMISHIMA Y., PA5229
TOMITA H., OA3148, PA3776
TOMKOWSKI W., PA3422
TOMLINSON G., PA1287, OA3289
TOMLINSON G., OA1566
TOMMESANI C., PA2106
TOMMOLA M., PA5278
TOMOS I., PA1687, PA3943
TOMOS P., PA1699
TOMSA C., PA4020
TONAMI R., PA527
TONCHEVA A., OA1437, PA2745
TONDELLI M., OA4305
TONDO P., PA974, PA3598
TONELLI R., PA1213
TONETTI T., PA2310
TONG A., PA3454
TONG C., PA3442
TONGE P., PA2684
TONIA T., PA3454
TÖNJES A., OA4338
TONKIN J., PA4613, PA4671, PA5224
TØNNESEN P., PA2947
TOOR S., PA404, PA4027
TOOTH G., PA2853
TOOVEY S., OA2623
TOP M., PA1901
TOPAL E., PA5012
TOPALOVIĆ M., PA4745
TOPALOVIC M., PA534, PA536, OA764, OA871, PA3483, PA3508, PA3664, PA3677
TOPCU A., PA5335
TOPCUOĞLU C., OA2616
TOPIRCEANU A., PA3003
TOPRAK S., PA4396
TOPRAK S., PA4446
TORAN P., OA3183
TORBICKI A., PA1192
TORCHIA B., OA773
TORDEUR C., PA4647
TORÉN K., PA4499
TOREYIN Z., PA3454
TORII A., PA1697
TORLASCHI V., PA585, PA3771
TORLOT H., PA2920
TÖRNBERG A., PA2793
TORNLING G., PA3501
TÖRNQVIST M., PA3948

TORO M., OA4214
TORP-PEDERSEN C., PA1010, PA5371
TORRACCHI S., PA3469
TORRE A., OA4315
TORRE O., OA3274
TORREALBA C., PA1778
TORRE-BOUSCOULET L., OA872
TORREGIANI C., PA1742
TORREGO A., PA479, PA2784
TORREGO FERNÁNDEZ A., PA5219
TORRENT A., PA1194
TORRENT-VERNETTA A., PA2743
TORRES A., PA381, PA397, PA548, OA782, OA788, PA1096, OA1457, OA1458, PA2326, PA2838, PA2843, PA2849, PA3839, PA3850, PA4436, PA5093, PA5244, PA5248
TORRES G., PA2326, OA3292, PA5244, PA5248
TORRES M., PA3309
TORRES R., PA2683, PA2693
TORRES CASTRO R., PA1205, PA1740, PA1756, PA3500
TORRES DURÁN M., PA2215, PA5208
TORRES GÓMEZ D., PA3826, PA3829, PA3831, PA3832
TORRES MARTÍ A., PA5124
TORRES SÁNCHEZ I., PA4531, PA5101
TORRES SILVA A., PA410
TORRES* A., PA1084, PA1662, PA5115
TORRES-CASTRO R., PA347, PA349, PA512, PA513, PA4518, PA4519
TORRES-DUQUE C., PA1891, PA1892, PA1894, PA1897, PA4714
TORRES-GÓMEZ D., PA3305
TORRES-LACOMBA M., PA4523
TORRONI L., PA304
TORTOP D., OA2505
TOSHNER M., OA741, PA1206, PA1761, PA3955, PA5177, PA5191
TOSHNIWAL S., PA1620, PA2057, PA2327, PA2333
TOSI A., PA2124
TOSI D., PA3357
TOSO A., OA2623
TOSOLINI A., PA1073
TOSOLINI J., PA1187
TOSSAN P., OA753
TOST J., OA4333
TOTAH T., PA5270
TOTH A., PA2364
TÓTH E., PA1765
TÓTH I., PA556, PA3547, PA3549, PA3555
TOUAHRI R., PA432
TOUBLANC A., PA4616
TOUBOUL A., PA3551
TOUIL A., PA5078, PA5089, PA5112
TOUIL A., PA2253, PA4565, PA5097
TOUIL I., PA4090, OA4323
TOUILLOUX B., PA310, PA3365
TOUJANI S., PA628, PA983, PA1268, PA1315, PA1964, PA2264
TOUMBIS M., PA5127
TOUMPANAKIS D., PA2307, PA3049
TOUSSAINT M., OA2621
TOUVIER M., PA3340
TOUW D., PA3359
TOUW D., PA4551
TOWNEND J., PA1319, PA1897
TRABATTONI D., PA1682, PA3854
TRABELSI B., PA5094
TRABELSI H., PA2742, PA4129
TRABELSI Y., PA955
TRACLET J., OA3157, OA3280
TRAILA D., PA418, PA5053
TRAKADA G., OA4837
TRAMICE A., PA4108
TRAMONTANO A., PA2310, PA2315, PA4025
TRAMPER J., PA5183
TRAN A., PA4443
TRAN K., PA4061
TRAN M., PA2778
TRAN M., PA2778
TRAN T., PA1288
TRAN T., PA2819, PA4436
TRAN T., PA3564, PA4726
TRAN T., PA1892, PA1897, PA2382
TRAN T., PA1891, PA4109, PA4131
TRAN T., PA1894
TRAPASSO R., PA2398, PA5105
TRAPMAN L., PA1718, PA1719
TRAPNELL B., OA3276, PA4471
TRASSL L., OA1445, PA1702
TRAVAGLINO F., PA1819
TRAVERSI L., PA390, OA1458, OA1543, PA2841
TRAVES D., PA2779
TREGIDGO L., PA3757
TREGOUËT D., PA3838
TRELEAVEN O., PA4125
TREMBLAY G., PA450
TREMBLAY-LABRECQUE P., PA4984
TREML M., PA1679, OA4840
TRENNERY C., PA3024
TREPIĆ N., PA3671
TREPTOW E., OA3288
TRÉSORIER R., PA5182
TRETHEWEY S., PA548
TREVIÑO BENAVENTE J., PA4076
TREVISANI M., PA594, PA2356
TRIAN T., OA4243
TRIANDAFILOU J., PA2265, OA3261
TRIANTAFYLLIDIS C., PA5127
TRIAS SABRIA P., PA479
TRIAS-SABRIÀ P., PA328
TRIGGIANI M., PA4098, PA4748, PA4753
TRIGIANI M., PA467, PA478, PA5214
TRIGUEIRO ROCHA BARBOSA M., PA2211
TRIKI L., PA2742
TRIKI M., PA2993, PA2994, PA2995, PA3978, OA4326, PA5365
TRIKI S., PA4559
TRIMANDILI M., PA337
TRIMECH S., PA5325
TRIMECH S., PA2847, PA3874
TRIMPERT J., PA2334
TRINCIANTI C., PA2082
TRINDADE DA SILVA N., PA4521
TRINGALI G., PA3563
TRINIDAD T., PA291, PA1016, PA1342, PA3794
TRINKMANN F., OA875, PA2376, PA5213, PA5316
TRIOCHE-EBERSCHWEILER P., PA420
TRIPATHI S., PA3602, PA5339
TRIPATHI S., PA2396
TRIPTO GOLAN I., PA1654
TRISÁN ALONSO A., PA3617
TRISOLINI R., OA3263
TRITAR F., PA1741, PA2191, PA3325, PA3513, PA4542, PA4758, PA5078
TRITTON T., PA3024
TRIVEDI S., PA2396, PA3602, PA5339
TROESTER L., PA4743
TROJAK R., PA4522
TROJAN T., OA4329
TROJNAR A., PA2863
TRÖLTZSCH L., PA1073
TROMBETTA LIMA M., PA2991
TROMEUR C., PA2245, OA4827
TROMPETTE A., PA2186
TROOSTERS T., PA355, PA359, PA361, PA1033, PA2268, OA3183, OA3185, OA4308, OA4309, OA4314, OA4870, OA4872
TROPEA F., PA1310
TROUSSIER F., PA420
TROVATO C., PA2100
TROXLER S., PA2733
TRUCCO F., PA1889
TRUCHETET M., OA746
TRUDO F., PA5292
TRUDZINSKI F., PA486, OA2592, PA3581, PA3970, PA4618, PA4623
TRUDZINSKI F., PA1318
TRUJILLO CASTILLA J., PA2167
TRUJILLO MARTÍN E., PA411
TRUM M., PA3001
TRUMP-DURBIN L., OA3276
TRUONG M., PA310
TRUSHELL-POTTINGER D., OA1425
TRUYEN L., PA2415
TRYFON S., PA3021, OA3152, PA3324
TRZASKOMA B., PA4558
TRZEPIZUR W., PA581, PA1271, OA3190, OA3285
TSAGOULI S., PA1119, PA2855
TSAI C., PA2320
TSAI L., PA4558
TSAI M., PA5357
TSAI M., PA1714
TSAI P., PA1781
TSAI Y., PA1781
TSAI Y., PA4134
TSAKONA A., PA2150, PA2812
TSANAKAS J., PA490, PA4997
TSANEVA-ATANASOVA K., PA404
TSAVLIS D., PA3324
TSCHENETT H., PA1590
TSELEPI H., PA1724
TSELIOS K., PA3835
TSENG C., PA1864
TSENG H., PA3574
TSIAKOS K., PA5186
TSIAOUSIS M., PA3543
TSIAVIA T., PA2077, PA4430
TSIKRIKA S., PA3330
TSILIGIANNI I., OA770, PA5258
TSILINGIRIS D., PA3573, PA3577
TSIM S., OA1560, PA3434
TSIMIHODIMOS V., PA5127
TSIMOURIS D., PA1043, PA4606
TSIOUDA T., PA545
TSIOUPROU I., OA3152
TSIPA C., PA3320, PA5318, PA5328
TSIRI P., PA422, PA1296, PA1782, PA1790, PA3606, PA4397
TSIRIKOS G., PA1296, PA1782, PA1790, PA3606, PA4397
TSOI M., PA4594
TSOLAKIS N., PA1939
TSOLIA M., PA5002
TSOUKALAS D., PA5102
TSOUKALAS G., PA5102
TSUBOSHIMA K., PA326
TSUBOUCHI H., OA4247
TSUBOUCHI K., PA1232, PA2887
TSUCHIDA A., PA5231
TSUCHIDA T., PA466, OA2591, PA5137
TSUCHIHASHI Y., PA1059
TSUDA T., PA2887
TSUI C., PA4594
TSUI S., OA741, PA5177, PA5191
TSUJI K., OA4207
TSUJI K., PA5215
TSUKAGOSHI T., PA5228
TSUKITA S., PA4399
TSUNEYOSHI S., PA2403, PA3063
TSURUMAKI H., PA2357
TSURUOKA H., PA2059
TSUZUKU A., PA5231
TSYBEN M., PA2911, PA2912
TSYMBALIUK N., PA4693, PA4694
TU C., OA4866, PA5141
TU L., PA443
TUBIG C., PA1000, PA3308
TUBIO PEREZ R., PA2215
TUDOR SMITH C., PA523
TUDORACHE V., OA2492
TUFAIL M., PA3313
TUFAIL M., PA4713
TUFANOĞLU B., PA3401
TUFFET S., PA1678
TUFFIER S., PA305, OA2521
TUFMAN A., PA1711
TUFTS J., PA5340
TUFVESSON E., PA1948, PA2120, PA2955, PA2973, PA5201
TUGAY D., PA1901
TUINMAN P., OA786
TULA J., PA3431
TUM P., PA367
TUMENULZII G., PA643
TUMMOLO M., PA2180
TUNA T., PA3451
TUNCER D., PA3406
TUNDO M., PA1763, PA2250, PA3974, OA4838
TUNNEY M., OA1536
TUNNEY M., OA1461, OA4320
TUNSTALL T., PA2223
TUOMILEHTO J., PA2998
TUOMISTO L., PA2075, OA2496, PA3054, PA3058, PA5278
TURA CEIDE O., OA4831
TURA-CEIDE O., PA442
TURAN B., PA5176
TURAN M., PA1001, PA3462

TURAN P., PA1001
TURAREN GONZALEZ J., PA1734
TURCHIARELLI V., PA2180
TURCONI G., PA3367
TURGUT B., PA3390
TÜRKDOĞAN D., PA2107
TURKI C., PA2048, PA2407, PA3659
TURKOGLU A., OA4214
TÜRKTAŞ H., PA1901
TURKUT A., PA1651
TURLYUN T., PA4382
TURNER A., PA2071, PA3639, PA3669, PA5107
TURNER A., PA394, PA548
TURNER B., PA1289, PA1290
TURNER C., OA1566
TURNER E., PA5171
TURNER P., PA3037
TURNER R., PA1919, PA1923
TURNER S., OA899, OA1423, PA2969
TURNER S., PA523, OA1436, PA2740, PA3674
TURNER S., PA1634, PA1635
TURTLE L., PA4070
TURTON H., PA3842
TUSN J., OA4967
TÜTÜN YÜMIN E., OA2616
TUTUNEKEN Y., PA501, PA511, PA3767
TUVIM M., PA1093
TVETEN Y., PA3414
TWIDDY M., OA2587
TWIGG H., PA5298
TYAGI M., PA1788
TYAGI R., PA3067, PA4547, PA5088
TYAGI V., PA3602
TYAGI V., PA1788
TYKHOLAZ O., PA2773
TYRONE D., PA1183
TYSHKO M., PA2803
TYTARENKO N., PA1064
TZANAKIS N., PA417, PA1872, PA2854, PA4037, PA4709, PA4717, PA5187
TZATZADAKI E., PA337, PA3429
TZATZADAKIS N., PA337, PA3429
TZELIS D., PA522
TZORTZAKI E., PA4709, PA4717
TZOUVELEKIS A., PA422, PA1296, PA1782, PA1790, PA3606, PA4397
TZUR Y., OA1534

U

UBAGS N., PA494, PA495, PA2186
UBAYDULLAEVA N., PA999, PA3331
UCAR M., OA4233
UCERO LEON M., PA4995
UÇGUN H., PA348, PA354
UCHIDA T., PA633, PA1938
UCHIDA Y., PA633, PA1938
UCHIDA Y., PA5302
UCHIMURA K., PA466, OA2591, PA5137
UCKUYU N., PA3454
UDDIN A., PA2808, PA4557
UDDIN M., PA5354
UDJUS C., PA4052
UDOMDECH W., PA2800
UDRESCU L., PA2713, PA3003
UDRESCU M., PA2713, PA3003
UDWADIA Z., PA297
UEDA N., PA3900
UEDA N., PA4762
UEKI J., PA1585
UEMURA T., PA978
UFUK ALTINTAŞ D., PA5012
UHL F., PA4638
UHLAND C., PA1204
UL MUNAMM S., PA2839
ÜLGEN Ö., PA2732, PA2753, PA4446, PA5083
ULIŃSKI R., PA2866, PA2867
ULLAH R., PA290
ULLDEMOLINS A., PA1269, PA5234, PA5235
ULLER L., OA4303, OA4968
ULLER L., OA4966
ULLMAN N., PA2760
ULLMANN N., OA2507, PA3947
ULRICH S., PA582, OA747, OA748, PA1615, PA1773, PA1774, PA1809, PA2432, PA2939, PA5192
ULRICH S., PA1809
ULRICH T., OA748, PA1773
ULRIK C., PA1017, PA1838
ULRIK C., PA548, OA2500, OA4315, PA4433, OA4938, PA5363
ULUSAN Ş., PA4591
UMANETS T., PA2332
UM-BERGSTRÖM P., PA5025
UM-BERGSTRÖM P., PA2130
UMEDA M., OA2513
UMUTLU L., PA1131
ÜNAL G., PA1646, PA1651, OA2505, PA5011, PA5012
UNAT O., PA3454
UNGER K., PA2759, PA4458
UNGER S., PA4458
UNGVARI Z., PA4578
UNO T., PA633, PA1938
UNTERMAN A., PA435, OA895, PA1137, PA1730, PA2889, PA2928, PA4560
UNTERSCHEMMANN A., PA4618
ÜNVER O., PA2107
UNWIN J., PA4473
UPADAYA N., OA4945
UPHAM J., OA4302
UPPE A., PA5339
UPPERTON S., PA3313
UR RASOOL M., PA2839, PA3600
URANGA S., PA1713
URANGA ECHEVERRIA A., PA5124
URBANSKI H., PA4726
URBANTAT R., PA1861
URDANETA E., OA2610, PA3035
URESHINO R., OA2628
URQUHART D., PA2115
URQUIZA J., OA882
URRUTIA A., OA4841, PA5261
URRUTIA GAJATE A., PA5125
URS R., OA1439, PA4453
URUSOV S., PA4670
USAI P., PA3528, OA4959
USANDIVARAS M., PA3479
USANSKY H., OA1537
USEMANN J., PA2774, OA4940, OA4941, PA5024
USENKO G., PA4394
USKI O., PA1604
USLU N., PA1081
USMANI O., PA522, PA4607
USMANI O., PA3049, PA4701
USMANOVA R., PA2814
USTIAN A., PA2046
UTAGE Y., PA1620
UTANO K., PA5117
UTANO Y., PA5117
UTENS C., PA548
UUSITALO A., PA1178, PA1184
UYAN Z., OA2505, PA2731, PA3374
UYAROGLU O., PA4535
UYTUN S., OA2505, PA3374, PA5012
UZAN SHVARTZMAN S., PA2095
UZASLAN E., PA2269
UZUNHAN Y., PA402, PA1739, OA4324
UZUNOGLU B., PA5007, PA5008
UZZAMAN N., PA4599, PA4990

V

V. MATIAS M., OA4838, OA4846
VAARST J., PA3867
VACA R., OA788
VACCARO V., PA3454
VACHIER I., PA606, OA892, PA5206, PA5240, PA5296, PA5300
VACHIÉRY J., PA3959
VADÁSZ I., PA3065
VADEL A., PA1230
VADHAVKAR S., PA5164
VAEL R., OA1436
VAES A., PA1032, PA1050, OA4225
VAES A., OA2596, OA3252, OA3259, PA4574
VAFAI-TABRIZI F., PA1590
VAFEIADI M., OA882
VAGHI A., PA4718
VAGO H., PA1023
VAGO M., PA1822
VÄHÄTALO I., PA2075, OA2496, PA3054, PA3058, PA5278
VAIA R., PA1917, PA1926
VAIDYA A., PA1322
VAILLANT G., PA571
VAINBERG SLUTSKIN I., OA1534
VAJAUSKAS D., PA1329
VAKOUFTSI V., PA3518
VAL F., PA4633
VALACH C., OA752, PA3673, OA4236
VALAEE S., OA874
VALDERRÁBANO C., OA872
VALDERRÁBANO SALAS B., PA3306
VALDERRÁBANO-SALAS B., PA3312
VALDERRAMA M., PA2100
VALDÉS-MORENO M., PA3305
VALDIMARSDOTTIR B., PA2965
VALE FERNANDES A., PA1225
VALENCIA AZCONA B., PA3617
VALENCIA-HERNANDEZ C., OA2519
VALENCIA-PÉREZ REA D., PA301
VALENT A., PA2388, PA2391
VALENTA R., PA656
VALENTI G., PA4098, PA4748, PA4753
VALENTIN J., OA887
VALENTIN S., PA2299, PA5251
VALENTINO A., PA1725
VALENTINO M., PA2952
VALENTOVA-BARTAKOVA L., PA4483
VALENZA M., PA364, PA365, PA377, PA1658, PA1669, PA2238, PA2239, PA4531, PA5101
VALENZA PEÑA G., PA364, PA377
VALENZUELA C., PA1136, OA1423, PA2400, OA3282, PA3460, PA3463, PA3467, PA3468
VALERA J., PA1840, PA2319
VALERA FELICES J., PA4518, PA4519, PA5282
VALERIO N., PA3760
VALERIO-PASCUA F., PA3423
VALEYRE D., PA3465
VALIPOUR A., PA610, OA2593, OA2594
VALKENBORGHS S., PA1045
VALLADARES R., PA1907
VALLEJOS E., PA2916
VALLIANOU N., PA3573, PA3577
VALLIANT S., PA4711, PA4712
VALLIANT S., PA1890
VALSECCHI C., OA4342
VALSECCHI L., PA2160
VALVASON R., PA1089
VALVERDE C., PA5261
VALVERDE MOLINA J., OA1435
VALYI-NAGY I., PA1023
VAN AALDEREN W., PA5372
VAN AKKER B., PA2279, PA2293
VAN AMSTEL R., PA3426
VAN AS - JANSSEN A., PA5061
VAN BAELEN L., PA4517
VAN BEURDEN W., PA3641
VAN BEURDEN W., PA515
VAN BILSEN C., PA3516
VAN BLEYENBERGH P., PA2170, PA2176, PA4555
VAN BOVEN J., PA1579, PA1580, OA3181, PA3359, PA4604, PA4607
VAN BOVEN J., PA524, OA3184, PA3661
VAN BRAECKEL E., PA2176, PA3015, PA4568
VAN BURK L., PA3013
VAN CLEEMPUT J., PA3432
VAN DAM A., PA5014
VAN DE BEEK D., OA786
VAN DE HEI S., OA3181
VAN DE HEI S., PA524, OA3184
VAN DE MAAT A., PA4135
VAN DE POL M., PA4571, PA4574
VAN DE VEN A., PA436
VAN DE VEN G., PA3539
VAN DE WERKEN M., PA4674
VAN DEN BERG J., OA766
VAN DEN BERG J., PA2837
VAN DEN BERGE M., PA1250, OA1523, OA1525, OA1529, PA1847, PA2318, PA2372, PA3662, PA3668, PA3674, PA3777, OA4300, PA5207, PA5209
VAN DEN BERGE M., PA1252
VAN DEN BERGH J., PA4571, PA4574
VAN DEN BERGH O., PA5072
VAN DEN BERK I., OA4850
VAN DEN BORST B., OA756, PA1050
VAN DEN BOSCH W., PA2098

VAN DEN HENGEL J., PA5061
VAN DEN WIJNGAART L., PA2739
VAN DER AALST C., PA1114
VAN DER BORST B., OA3252
VAN DER BURG N., PA1948, PA2973, PA5201
VAN DER DOES A., OA1573
VAN DER EERDEN M., PA2837
VAN DER EERDEN M., PA1074, PA1086
VAN DER GIESSEN J., PA1609
VAN DER HEIJDEN E., PA482
VAN DER HORST F., PA1207
VAN DER LAAN R., PA2166, PA2835
VAN DER LEE I., PA4571, PA4574
VAN DER MOLEN M., OA2596, OA3252, PA3543
VAN DER MOLEN T., OA1523, OA1525, PA4135
VAN DER PALEN J., PA3641
VAN DER PALEN J., PA3793
VAN DER PALEN J., PA515, PA1348
VAN DER PLAS M., PA5060
VAN DER POLL T., PA1211, PA2199, PA2200, PA3426
VAN DER SAR I., OA852, OA1427
VAN DER STEDE T., PA1796
VAN DER VAART H., OA3252
VAN DER VALK P., PA3641
VAN DER VALK P., PA1348
VAN DER VEER T., PA3997
VAN DER VEER T., PA1074, PA1086, PA2280, PA2284, PA2837
VAN DER WATT M., PA4143
VAN DER WEKKEN A., PA3885
VAN DER WEL T., PA3539
VAN DER WIELEN M., OA4859
VAN DER ZALM M., PA2801
VAN DIEPEN S., PA3557
VAN DIEVOET M., PA1715
VAN DIJK M., PA4611
VAN DIJK S., PA3641
VAN DIJK S., PA515, PA1348
VAN DIJK Y., OA1437, PA2084
VAN DRUNEN C., PA4674
VAN ENGELEN T., PA2199
VAN ES J., PA5183
VAN EWIJK B., PA2084
VAN EYNDHOVEN S., PA2915
VAN GAEVER F., OA777
VAN GEER I., PA4135
VAN GEFFEN C., PA4036
VAN GEFFEN W., PA1705, PA3884, PA3885
VAN GOGH C., PA2765
VAN GOSLIGA D., OA4300
VAN HAGE M., PA1619
VAN HEES H., PA1050
VAN HEES H., OA756
VAN HEIJST E., PA4135
VAN HELVOORT H., OA756
VAN HERCK M., PA647, OA2612, PA3516
VAN HEUMEN S., PA4005
VAN HOEK M., PA1954
VAN HOEY C., PA3015
VAN HOLLEBEKE M., OA2615, PA3388, PA3389
VAN HOOF E., PA1716
VAN HOOREN B., OA750
VAN HOORENBEECK K., PA2092, PA2103
VAN INGEN J., PA2168
VAN IPEREN P., PA1903
VAN KAN C., PA5183
VAN KERSEN W., PA1605, PA1609, OA2516
VAN KLINK J., PA2126
VAN KUIJK H., PA4459
VAN LINGE C., PA3426
VAN LINGE C., PA2200
VAN MAELE C., PA1099
VAN MEERBEECK J., OA1557, OA1559, PA2415, PA3434
VAN MEERBEECK J., OA3265, PA3432
VAN MONTFRANS J., PA436
VAN MOOK W., PA482
VAN MUYLEM A., PA3787, PA4111
VAN NIJNATTEN J., PA5209
VAN NUIJS S., PA2092
VAN OLMEN J., PA2092
VAN OORT P., PA2962, PA2963
VAN ORSHOVEN K., PA534, OA764, PA3483
VAN OSTAEYEN A., PA2103
VAN OVERBEKE M., OA4314
VAN PAASSEN P., OA786
VAN RAEMDONCK D., PA2710, PA3775, OA4346, OA4348, PA4487, PA5188
VAN RAEMDONCK I., PA1716
VAN RANST D., OA3252
VAN ROMPAY J., PA3467
VAN ROSSEM C., PA2092
VAN SCHIL P., PA2366
VAN SCHOOR J., PA1943
VAN SLAMBROUCK J., OA1535, OA3159, OA4343, OA4346
VAN STEIJN S., PA2092
VAN 'T HUL A., PA1032, PA2696
VAN 'T HUL A., OA756, OA3259
VAN 'T WOUT E., PA3050
VAN TONGEREN M., PA3354, PA3797
VAN UDEN C., OA4860
VAN USSEL I., PA2092
VAN VAERENBERGH F., PA4692
VAN WEERDT I., PA1579
VAN WEZENBEEK J., PA5173
VAN ZELLER C., PA1276
VAN ZELLER M., PA4083, PA5257
VAN ZELST C., PA3783
VAN ZUTPHEN T., PA979
VANAUDENAERDE B., OA1572, OA2623, PA2710, PA3775, OA4343, OA4346, OA4348, PA5159, PA5211
VANAUDENAERDE B., OA1535, OA3159
VANBUIS J., PA3589
VANCHEESWARAN R., PA3645
VANCHERI C., PA2892, PA3921, PA5172
VANDE VELDE G., OA3159
VANDE WEYGAERDE Y., PA2176, PA4568
VANDEKERCKHOVE O., PA4555
VANDEMHEEN K., PA3651
VANDEN BOSSCHE L., OA4314, OA4870, OA4871
VANDENBROUCKE J., PA3414
VAN-DEN-RYM A., PA2329
VANDERHELST E., OA4340
VANDERSCHAEGHE E., PA2092
VANDERSTICHELEN G., OA1452
VANDOROU K., PA5102
VANEGAS N., OA4199, OA4203
VANEK J., PA3593
VANETTI C., PA1682, PA3854
VANFLETEREN L., OA888, PA1340, OA3167
VANFLETEREN L., PA495
VANFLETEREN L., OA2596, OA3179, OA3252, PA3624
VANFLETEREN L., PA1951
VANG GUNDERSEN B., PA1295
VANHEES J., PA2103
VANHEULE V., OA764
VANHOUTTE F., PA2391
VANIK P., PA1339
VANKUIJK H., PA2730
VANNACCI A., PA4702
VANNUCCI D., PA5280
VANOIRBEEK J., OA4212
VANOVERSCHELDE A., PA3015, PA4692
VANSTAPEL A., OA4346
VANZELLER M., PA3519, PA3520
VARAS DE LA FUENTE A., PA4518, PA4519
VARDALOGLU I., PA3343, PA3647
VARDAR YAGLI N., PA1038, PA3393, PA3398, PA3401, OA4307, PA4535, PA5046, PA5047
VARDAR-YAGLI N., OA2614, PA3392, OA4307, PA4525, PA5044
VARELA B., PA3479, PA3921
VARGA F., PA1226
VARGA J., PA2690, PA3608, PA4578
VARGA R., PA1282, PA2207
VARGA Z., PA1173
VARGAS J., PA5246
VARGAS P., PA4471
VARGAS DUQUE P., PA981, PA2755
VARGAS ZAMBRANO J., PA3866
VARGHESE D., PA1624
VARGHESE M., PA4570
VAROL Y., OA4930
VARONE F., PA2874
VARRASO R., PA3340, PA3341, PA3345, PA5015, PA5017
VART P., PA3816
VARTIAINEN V., PA2381, PA2385
VARUGHESE R., PA3823
VARUNKIV O., PA621, PA1306, PA2266, PA3027, PA4976, PA5075
VARVARÁ N., OA788
VASARMIDI E., PA417
VASCO C., OA3274
VASCONCELLO-CASTILLO L., PA347
VASCONCELOS I., PA444
VASELLI M., OA4850, OA4855
VASILAKI E., OA3154
VASILATOU K., PA3807
VASILEVA A., PA3945
VASSILEVA S., OA4855
VASYLE E., PA2977, PA4401
VATHIOTIS I., PA1119
VATRELLA A., PA1310, PA4748
VAUTERIN D., PA4692
VAVOURANAKIS E., PA1188
VAZQUEZ F., PA1117
VÁZQUEZ N., PA1084, PA1662, PA5115
VÁZQUEZ LÓPEZ M., PA2426, PA3595
VAZQUEZ SANCHEZ R., PA3761
VAZQUEZ-ARMENDARIZ A., OA4329
VÁZQUEZ-BURGOS N., PA1096
VÁZQUEZ-LÓPEZ S., PA4561
VÁZQUEZ-MERA S., OA4301
VECCHIONE A., PA4408
VECELLIO L., PA3412
VEDDER N., PA4036
VEDRENNE-CLOQUET M., PA2102
VEERANKI P., PA4122
VEERARAGHAVAN S., PA2882
VEEVÄLI K., PA2959
VEGA D., PA3656
VEGA G., PA3540, PA4480
VEGA LIZARAZO D., PA5313
VÉGVÁRI Á., PA2220
VEHRESCHILD M., PA1171
VEIGA A., PA5110
VEIGA G., PA349
VEILLON R., PA2216
VEISS-PEDERSEN P., PA2399, PA3628
VEITCH E., PA1170
VEJBY THORNDAL S., PA1332
VEKENS K., OA4340
VELASCO C., PA2744, PA4440
VELASCO J., PA3656, PA5285
VELASCO GARRIDO J., PA3453, PA3615
VELASCO RIESTRA P., OA2590
VELAZQUEZ-PIMENTEL D., PA986
VELDMAN C., OA766, PA4540
VELDSTRA C., PA3052
VELIDAKIS A., PA4091
VELIKJ-STEFANOVSKA V., PA5353
VELLA R., PA3635
VELOSO P., PA2157
VELTKAMP M., OA3283
VELUCHAMY A., OA2604
VELUTHAT C., PA1820
VENA D., PA3597
VENDITTI M., PA2315
VENDITTO L., PA2741
VENDRELL M., PA381, PA397, OA1457, OA1458, PA2843, PA2849
VENEGAS C., PA4125
VENEGAS J., PA5108
VENEGAS-GARRIDO C., OA1414
VENERONI C., OA752, PA1910, PA2122, PA2124, PA2741, PA3673, OA4236
VENKATESWARAN R., PA4484, PA4492
VENKATNARAYAN K., PA1820
VENKEN K., OA777
VENTO G., PA2736

VENTURA L., PA2122
VENTURA M., PA2125
VENTURA V., PA2219, PA2225, PA2305
VENTURELLI M., PA510, PA1802
VENUGOPAL K., PA1004, PA4695
VERA TAPIA P., PA514
VERBAKEL J., PA3388
VERBAKEL J., PA536
VERBANCK S., OA4340
VERBEKE K., OA4871
VERBEKEN E., PA5159
VERBELEN T., OA3159, PA5188
VERCALSTEREN E., PA664
VERCIANO PEREIRA R., PA5250
VERDIER R., PA3866
VERDURI A., PA3301
VERDY G., PA4490
VERGANI M., PA4449
VERGARA M., OA1537
VERGARA-DAGOBETH E., PA1957
VERGÈS S., PA1810, PA3804, PA4631
VERGHESE P., OA3266
VERGNENEGRE C., PA4616
VERGNON J., PA427, PA463
VERHAEGEN I., PA4532
VERHAEGEN J., OA3159, PA5295
VERHAMME K., PA4692
VERHAMME K., PA1916
VERHULST S., PA2092, PA2103
VERIN E., PA3768
VERLATO G., PA304, PA3811, PA5268
VERLEDEN G., OA4348, PA4487, PA5188
VERLEDEN G., OA3159
VERLEDEN S., PA2366
VERLEDEN S., PA1716
VERMA A., PA537, PA1012, PA3067, PA5088
VERMA A., PA1789
VERMA M., PA3621
VERMA R., PA4469
VERMA R., OA863
VERMA S., PA1338
VERMA S., OA896
VERMANT M., PA1716, PA2710, PA3775, OA4343, PA5159, PA5295
VERMAUT A., OA1535, PA2710, OA3159, PA3775, OA4343, OA4346, PA5295
VERMEER S., PA1716
VERMEERSCH K., PA548
VERMEULEN C., PA5209
VERMEULEN F., OA1436
VERMEULEN F., PA2084
VERMEULEN R., PA3339
VERMEULEN R., PA3674
VERMOESEN R., OA776
VERNARDIS S., PA3851
VERNAZA V., OA872
VERNET R., PA656
VERNHET L., PA559
VERNON B., PA3918
VERONESI G., OA3270
VERONEZ V., PA1762
VERPLANCKE V., PA2366
VERRESEN S., PA2415
VERSCHAKELEN J., PA1716, PA5159
VERSCHRAEGEN S., OA777, PA4568
VERSCHUEREN P., PA5159
VERSI A., PA1933
VERSTRAETE K., PA4689
VERTUI V., OA4342
VERYKAKIS E., OA3275
VESENTINI R., PA5268
VESTBO J., PA1013, PA1838, PA2427, OA2607, OA2608, PA3021, PA3625, PA4144, PA4145, OA4298, OA4936
VESTERGAARD M., PA1637
VETHANAYAGAM D., PA2913
VETTER C., PA4036
VETTORETTI M., PA2894
VEYT N., PA1716, PA5159
VEZIRIS N., PA2168
VHORA H., PA3975
VIACROZE C., PA4980
VIAL-DUPUY A., PA4750
VIALLON A., OA4828
VIANA A., PA4530
VIANA MANCUZO E., PA415, PA1717
VIANELLO A., PA1019
VIANI M., PA2221
VICCICA A., PA288
VICENS ANTÓN M., PA5282
VICENS ZYGMUNT V., PA328, PA408, PA3464, PA3919, PA3922
VICENS-ZYGMUNT V., OA3282, PA3461, PA5154
VICENTE I., PA4076
VICENTE SERRANO S., PA1112
VICENZI M., OA1464, PA3367
VICTOR DEGANUTTI KRAUSE M., PA3765
VIDAL A., PA1248
VIDAL S., PA3902
VIDAL GRELL A., PA1633
VIDAL-CORTÉS P., PA2326, PA5248
VIDALES SEPÚLVEDA Z., PA5345
VIDELA S., OA3282
VIDELA TORO L., PA5272
VIDYA N., OA4852, OA4853
VIEGAS P., PA3519, PA3520
VIEGI G., PA304, PA312, PA1616, PA1961, PA3803, PA3811
VIEIRA A., PA4074
VIEIRA D., PA4095
VIEIRA E., PA1759
VIEIRA L., PA4593
VIEIRA M., PA3517
VIEIRA NAIA J., PA4083
VIEIRA PASSINI V., PA1284, PA2262
VIEIRA REIS R., PA1112, PA1241
VIEJO AYUSO M., PA3005, OA4841
VIENNEAU D., OA4941
VIERA L., PA456
VIERHOUT A., OA1435
VIERHOUT M., PA4072
VIETRI L., PA1142
VIGIER C., PA420, PA423
VIGLINO D., OA4829, OA4864
VIGO B., PA5173
VIGORÈ M., PA585, PA3771
VIINANEN A., PA662
VIJAYA V., PA2747
VIJAYABARATHY R., PA2839
VIJAYAKUMAR B., PA4613, PA4671
VIJAYAKUMAR U., OA775
VIJAYASARATHA K., PA4095
VIJVERBERG S., PA2084
VIJVERBERG S., PA2745
VIJVERBERG S., PA2748
VILARINHO R., PA962
VILARIÑO POMBO C., PA2215
VILARÓ J., PA347, PA4518, PA4519
VILAVERDE M., PA488
VILELLA SABATE M., PA2772
VILLA E., PA1823
VILLA M., PA2109, PA2110
VILLACORTA SOTO A., PA5131
VILLALVA O., PA3784
VILLAMAGUA N., PA3323
VILLAMAGUA ARIAS N., PA5135
VILLAMONTE S., PA3794
VILLANUEVA M., PA5115
VILLAR A., PA1749
VILLAR S., PA3955
VILLAR GARCIA J., PA5174
VILLAR GOMEZ A., PA1161
VILLAR-HERNÁNDEZ R., PA1064, PA4576
VILLARI P., PA4025
VILLARROEL SILVA G., PA514, PA2136
VILLASIS M., PA3784
VILLASMIL-HERNANDEZ N., PA3960
VILLCA-ALÁ N., OA872
VILLEGAS B., PA1130
VILLEGAS R., PA1957
VILLENA PORTELLA C., PA5241
VILLENEUVE L., OA789
VILLENEUVE L., OA4828
VILLENEUVE T., PA4419
VILLETTI G., PA600, PA601, PA975, OA4305, OA4947, OA4958
VILLIOT-DANGER E., PA952
VILTSANIUK O., PA2058
VIÑAS O., OA2487
VINAY PADEY R., PA4056
VINCENT S., OA4951
VINCLAIR C., PA5245
VINCZE K., PA1018
VINEETA B., PA4585
VINISKO R., PA1147
VIO S., PA3795
VIOLA S., PA3756
VIRBEL-FLEISCHMAN C., PA588, PA589
VIRCHOW J., OA1418, PA4722
VIRDEE S., PA2285
VIRGILI F., PA2727, PA3984
VIRJI M., PA3342
VIRSOLVY A., PA606, PA1804
VISCA D., PA2718, PA4741
VISCONTI L., PA5334
VISEKRUNA J., PA1638, PA1639
VISSER E., PA979, PA1896
VISSERS D., PA4532
VITACCA M., PA507, PA510, PA1802
VITALE G., PA467
VITALI G., PA557
VITERI V., PA3937
VITOONPONG T., PA2689
VITRI B., PA404
VITTORAKIS S., PA4709
VITTORAKIS S., PA4717
VITULO P., PA406
VIVALDI G., OA889
VIVANCO A., PA5212
VIVERO F., PA3479
VIZIRIANNAKI S., PA1872
VIZ-LASHERAS S., PA2728, OA4246
VIZZA C., PA1190, PA3966, PA3969
VIZZARI G., PA2133
VIZZUSO A., OA3272
VLAAR A., OA786
VLACHANTONI I., PA3420, PA4581
VLADU M., PA2714
VLAHAKOS V., PA4573
VLAHOS R., PA2233
VLASHKI E., PA5353
VLASMA J., PA1855
VLASOVA N., PA3650, PA4564
VLASSI L., PA3420, PA4581
VLAYKOVA T., PA1839
VLIEGENTHART R., PA1079
VLIEGENTHART R., PA3543
VOCOS M., PA2744, PA4440
VOET H., PA2366
VOGEL-CLAUSSEN J., OA744, PA2276
VOGELMEIER C., PA1308, PA1947, OA2603, PA3013, PA3668
VOGELMEIER C., PA1318
VOGIATZAKIS E., PA3573, PA3577
VOGIATZIS I., PA506, PA1188, PA1592, PA1800, PA2268, PA2780, OA3183, OA3185, PA4526, PA4981
VOGIAZTIS I., OA4221
VOGT B., PA3552
VOHLEN C., OA4329
VOIRIOT G., PA1678
VOISIN T., PA559
VOISINE P., PA441
VOLAKOVA E., PA2719, PA4133
VOLCKAERTS T., PA4532
VOLFSON E., OA2503
VOLK A., PA5184
VOLLAND S., PA4679
VÖLLER M., PA5299
VOLLMER S., PA1849, PA5205
VOLLMER TORRUBIANO I., PA3491
VOLLSÆTER M., OA2621
VOLOVAYA M., PA3897
VÖLP A., PA4388
VOLPATO E., PA3825, OA4874
VOLPATO M., PA5300
VOLPI S., PA2144, PA2148
VOLPIANO L., PA1763, PA2250, PA3974
VOLPINI L., PA3436
VOLTA R., PA2356
VON BERNUTH H., PA4472
VON DER THÜSEN J., OA3263
VON GARNIER C., PA547
VON GARNIER C., PA310, OA773, PA2186, PA4743
VON GRUENEWALDT A., PA1189
VON HAM M., PA3924
VON HARDENBERG S., OA4942
VON LEUPOLDT A., OA4314, OA4870, OA4871, OA4872
VON MUTIUS E., OA875, OA1443
VON WEIHE S., PA2290
VON WERDEN D., PA5072
VON WULFFEN W., PA3511
VONDER M., PA4003
VONK J., OA1529,

PA3668, OA4300
VONK J., PA3674
VONK J., PA5027
VONK NOORDEGRAAF A., OA743
VONK NOORDEGRAAF A., PA1207, PA1765, PA5173, PA5183, PA5189
VONTETSIANOS A., PA1188, PA4526
VORSELAARS A., OA3283
VOS A., PA5173
VOS R., PA359, OA1535, PA2710, OA3159, PA3775, OA4308, OA4343, OA4346, OA4348, PA4487, PA5188, PA5211, PA5295
VOSKREBENZEV A., PA2276
VOß A., PA1098
VOSS C., PA567
VOTRUBA J., OA3263, PA4010
VOTTO M., PA2083
VOUIS T., PA4091
VOULGARELI I., PA623
VOULGARIS A., PA1876, OA3152
VOZORIS N., OA4231, PA4429
VRIJHEID M., OA882, OA886
VU H., PA2778
VUCKOVIC D., PA2328
VUILLERMIN P., OA1434, PA1630
VUJASINOVIC G., PA1330
VUJIČIĆ E., PA3459
VUJOVIC I., PA2240
VUKIĆ DUGAC A., PA2145
VUKIC DUGAC A., PA314, PA374, PA2158, PA3376
VUKOJA M., PA1330, PA1347, PA3671, PA4562
VULPI M., PA5287
VULTAGGIO A., PA4112
VUONG V., PA315, PA1578, PA1608, OA4876
VUPPUSETTY C., OA2627
VYAS A., PA350, PA4120

W

W ORME M., PA2907
W WERLE R., PA2302
W. M. MURIS J., OA2612
WACHINOU A., PA5270
WACKER F., OA744, PA2276, PA2278, OA4849
WADA D., PA1102
WADA D., OA851, PA1152, PA1154
WADA H., PA1002, PA1585
WADE R., PA455
WADE R., OA4929
WADELL K., PA2416, PA3762
WADHANE I., PA5256
WAEIJEN-SMIT K., PA548
WAELSCHER J., PA3946
WAFA B., PA2153, PA3640
WAGERS S., PA5354
WAGNER D., PA1854
WAGNER D., PA2168
WAGNER W., PA3906
WAHAB M., PA1913, PA1925, PA1927, PA1941, PA3033, PA3036
WAI S., PA4661
WAIN L., PA2056, OA4325
WAIN L., PA1181, PA1797, PA2397, OA2491, PA2681
WAIN L., OA858, PA4070
WAKAYAMA T., PA5306
WAKIM J., PA4746
WAKULINSKI J., PA421
WALHA M., PA2861
WALHA O., PA3047, PA3541
WALI S., PA4061
WALKER E., PA2427
WALKER N., PA3434
WALKER P., OA1462
WALKER S., OA1531, PA2397, OA3176
WALKER S., PA3298
WALKER W., PA2760
WALKER W., PA1846
WALLACE K., PA4981
WALLBANKS S., OA876, PA3646, PA4737
WALLEN NIELSEN E., PA2430
WALLER M., PA2156
WALLIS L., PA2757
WALLSTRÖM O., PA1340
WALLY A., OA4945
WALLYN F., PA463
WÄLSCHER J., PA496, PA2883
WALSH K., PA4629
WALSH S., PA3544, OA4852, OA4853
WALSHAW M., PA2905
WALSTED E., PA1879
WALTER J., PA1711
WALTERS A., PA2056, OA4224
WALTERS G., PA3346, PA3348, PA3798
WALTERS G., PA404
WALTERS H., OA890
WALTERS R., OA3154
WALUM J., PA1625
WALZ L., PA4420
WAN H., PA3952
WAN H., PA4069
WAN J., PA2241
WAN N., PA5213
WAN Y., OA1412
WAND O., PA387, PA1165, PA1730, PA2889, PA2928, PA4560, PA4588, PA4589
WANDAEL V., PA392
WANDTKE T., PA3915
WANG B., PA3435
WANG B., PA2858, PA3636
WANG B., PA4435
WANG B., PA3921
WANG C., PA1933
WANG C., PA2858, PA3636
WANG C., PA1011, PA2242
WANG C., PA2833
WANG C., PA3815
WANG D., PA4064
WANG D., PA2241, PA2242, PA3022
WANG D., PA539
WANG E., PA1892, PA1897
WANG F., PA3934
WANG F., PA4069
WANG F., OA2598
WANG F., PA1946
WANG F., PA3960
WANG G., PA664, PA3674, PA5025, PA5027
WANG H., PA1093
WANG H., PA1831, PA5163
WANG H., PA2081
WANG H., OA2598
WANG H., PA4071
WANG H., PA5163
WANG J., OA867, PA1066
WANG J., PA3496
WANG J., PA1959
WANG J., PA1256
WANG J., PA1703
WANG J., PA1263
WANG J., PA1141
WANG J., PA469
WANG J., PA2234, PA2235
WANG J., PA2205, PA4134
WANG J., PA1076
WANG J., PA1076
WANG K., PA1260
WANG K., PA4045, PA4047
WANG K., OA1455, OA4206, PA5247
WANG L., OA3163
WANG L., PA1959
WANG L., PA1256
WANG L., PA1703
WANG L., PA4081
WANG L., PA1277, PA4514, PA5269
WANG M., OA4206, PA5247
WANG N., PA3934
WANG P., PA2163
WANG Q., OA2630
WANG R., PA973, PA1307, PA3021, PA3642, PA3652
WANG R., PA2981
WANG R., PA3905
WANG S., PA3497
WANG S., PA1244
WANG S., PA3544
WANG S., PA2787
WANG S., OA4239
WANG S., OA3289
WANG T., PA617, PA4045, PA4047
WANG T., PA1632, OA4330
WANG T., PA307, PA657, PA2080
WANG W., PA3896
WANG W., OA889
WANG X., OA2598
WANG X., PA5213
WANG X., OA2598
WANG Y., OA4967
WANG Y., OA4866
WANG Y., OA3163, PA5286
WANG Y., OA4197, OA4239
WANG Y., PA3587, PA3588
WANG Y., PA1093
WANG Y., PA1653
WANG Y., OA4297
WANG Z., PA2142
WANG Z., PA1946
WANG Z., PA3338
WANG Z., OA772
WANG Z., OA856
WANG-JAIRAJ J., PA4059
WANGPAICHITR M., PA1266, PA1712
WARBURTON D., PA1146
WARD C., PA1253, OA1431, PA3452
WARD E., PA2401
WARD J., PA2986
WARD K., PA404
WARD K., PA1215
WARD M., PA5081
WARD S., PA4987
WARD T., OA3254
WARD T., PA2692, OA3260
WARDEN D., PA313
WARDMAN H., PA3642
WARE L., PA5233
WARK P., PA1091, PA1837, PA2818, PA3425, OA4302
WARK P., PA4066
WARM K., PA2064
WARNATZ K., PA436
WÄRNBERG GERDIN S., PA1619
WARNER M., PA542, PA543
WARPMAN BERGLUND U., PA1247
WARREN A., PA5237
WASAMOTO S., PA1960
WASEDA Y., OA2513
WASERMAN S., PA4125
WASHKO G., PA3973
WASNICK R., PA1235
WASSERSTEIN M., OA3281
WASTLHUBER A., PA2700
WAT D., PA2389
WAT D., PA4699
WATANABE H., PA2705, PA2706, PA5306
WATANABE M., PA626
WATANABE N., OA4299, PA5238
WATANABE N., OA3148, PA3776
WATANABE T., PA468
WATAYA H., PA2887
WATCHORN D., PA2295
WATERS M., OA3180, PA4558
WATERS S., OA3281
WATERS S., PA1952
WATKINS L., PA1900, PA4100, PA4113, PA5291
WATKINSON O., PA3504
WATKINSON R., PA2094
WATNE T., OA4347
WATSON A., PA4021
WATSON C., OA779
WATSON E., OA1549
WATT K., PA3562
WATT M., PA4109, PA4131
WATTIE J., PA1913, PA1925, PA1927, PA1931, PA1932, PA1941, PA3036, PA3843, PA3845
WATZ H., OA875, PA1299, PA1318, PA1593, PA1947, OA2602, PA2852, OA3183, OA3185, PA5316
WAXMAN A., PA3489, PA3973
WAXMAN A., OA739
WEATHERALD J., PA2249
WEATHERALL M., PA1893, PA2386, PA3604
WEATHERLEY L., PA5038
WEATHERLEY N., PA2260
WEAVER C., PA3961
WEAVER S., PA3489
WEBB P., PA1334
WEBER H., PA4066
WEBER J., PA3355
WEBER P., PA4632
WEBSTER C., PA2712, PA2794
WECHSLER M., PA1891, PA1894, PA1899, PA3779
WECHSLER M., OA1415, OA1418, PA3032
WECHSLER M., PA1897, PA3607, PA3618, PA4722
WED ELADHAM M., PA4410
WĘDROWSKA E., PA3915
WEDZICHA J., PA1029, PA1030, PA2815, PA3625, PA3668, PA4144
WEDZICHA J., PA1334, PA1336, OA2607, PA3674, PA4145, OA4931
WEDZICHA J., PA2193
WEE W., PA3995
WEEKS J., PA4766
WEERATUNGA P., OA2627
WEERSINK E., PA1579
WEERSINK E., PA4571, PA4574
WEHLTE L., PA1711
WEHR M., PA1273
WEHRMEISTER F., PA4593
WEI H., PA3029
WEI Q., PA1277, PA1278, PA3592
WEI Y., PA3497
WEI Y., PA1327

WEICHERT T., PA5372
WEICHHART T., PA4056
WEIDENFEL S., PA5242
WEIDINGER D., PA4763
WEIGEL W., OA2495, OA2502
WEIGT S., PA1130
WEINBERG M., PA5292
WEINBERGER M., PA1654
WEINER I., OA1534
WEINGARD B., PA3970
WEINKAUF A., PA3557
WEINREICH U., PA2424
WEINREICH U., PA4658, PA4664
WEINREICH U., PA322, PA2399, PA3628, PA4148
WEIR E., PA2087
WEISS G., PA532
WEISS L., PA420
WEISS S., OA1440
WEISS T., OA4864, OA4867
WEISS T., PA1195
WEISSMAN D., PA5169
WEISSMANN N., PA448, PA4051, OA4329
WEISSMANN S., PA2729
WELCH H., OA1563, PA4437
WELCKER M., PA3511
WELDON S., PA2335
WELFLEY H., OA4964
WELHAM B., PA2294, PA2413, OA4856
WELK V., PA4682
WELLAM H., PA4607
WELLENS-MENSAH J., PA4011
WELLER D., PA318
WELLMAN A., PA1274, PA1275, PA3592, PA3594, PA3597
WELLMAN D., PA4514
WELLMANN N., PA3596
WELLS A., PA3488, PA3544, PA3921, OA4852, OA4853
WELLS A., PA404
WELLS J., PA455, PA456
WELLS J., PA3778
WELSH L., PA4450
WELSNER M., OA4332
WELTE T., PA2849
WELTE T., PA381, PA384, PA385, PA386, PA388, PA397, OA786, PA1071, PA1139, PA1318, OA1456, OA1457, OA1458, PA2340, PA2342, PA2843, PA3369, PA3876, PA4058, OA4245, PA4679, OA4942
WELTERS I., PA2962, PA2963
WEMEAU L., OA3280
WEN C., PA2249
WEN F., PA617
WEN F., PA1930, PA3663, PA4045, PA4047
WEN J., OA3182
WEN S., PA2872
WEN Y., OA1455
WEN-CHENG C., PA3579
WENDT A., PA2378
WENER R., OA3265
WENG C., PA641, PA2987
WENNBERG T., PA553
WENNERGREN G., OA888
WEN-SIN H., PA3597
WENSING M., PA3581
WERKSTRÖM V., PA4130
WERMERT D., PA427
WERNER A., PA4152
WERNZ M., PA2276
WERTHEIM D., PA1104, PA5010
WESOLOWSKI S., PA667
WESSELS J., OA743
WESSELS J., PA5173
WESSENDARP M., OA3276
WEST A., PA404, PA405, PA1726, PA1733, OA2582, OA2586, OA4195
WEST N., OA2483
WEST N., PA5039
WESTALL G., PA2346
WESTERDAHL E., PA1040, PA3394
WESTERGREN-THORSSON G., PA551, PA561, PA2337, OA2632, PA2955, PA5201
WESTHÖLTER D., OA4332
WESTOBY J., OA4195
WESTON E., PA3009
WESTRUPP N., PA4450
WETZKE M., PA424, OA2507
WEYNAND B., OA1535, OA3159, PA5159, PA5295
WHEATLEY C., OA893
WHEATLEY-GUY C., PA500
WHEEELOCK C., OA2499
WHEELOCK Å., PA2971, PA3521, PA5342
WHEELOCK Å., PA2220
WHEELOCK Å., PA2904, PA2967
WHEELOCK C., OA1440, OA1531, OA1532
WHEELOCK C., PA1632
WHELAN M., PA2692, OA3260
WHETSTONE C., PA1913, PA1931, PA1932, PA3843, PA3845
WHETSTONE C., PA1941
WHEWAY G., PA1846
WHITE C., PA4988
WHITE I., PA2963
WHITE J., PA2802
WHITE L., PA4387
WHITE L., PA987, PA4737
WHITE P., PA4437
WHITE P., PA3976
WHITE R., PA1190, PA3966, PA3969
WHITE R., OA742
WHITE S., OA2483, PA2823
WHITE V., PA1052, PA4546, PA5081
WHITEHEAD N., PA2846
WHITEHOUSE A., PA1628, PA1641, PA5372
WHITEMAN M., OA4200
WHITFIELD C., PA4724
WHITMORE G., PA3651
WHITTAMORE A., PA4988
WHITTINGTON A., OA864
WIATR E., PA421
WICKERSON L., PA3399
WICKRAMASINGHE S., PA3918
WICKREMASINGHE M., PA404
WIDMANN M., OA3162
WIECZOREK K., PA986
WIEDEMANN K., OA2624
WIELPÜTZ M., PA3906, PA5005
WIENKER J., OA4332
WIERSINGA W., PA3426
WIERTZ M., PA1579
WIESEL V., OA1542
WIESSNER A., PA4615
WIEST C., OA785, PA1882, PA2997
WIFFEN L., PA1596, PA2384
WIFFIN L., PA3820
WIG N., PA2183, PA4759
WIGGANS R., PA3354, PA3797
WIGGE L., PA5205
WIGGINS C., PA1233, PA5205
WIIG R., PA1824
WIIG NIELSEN R., OA4826
WIJKSTRA P., PA2420, OA3194, OA3195, PA3999
WIJMANS L., PA4005
WIJNANT S., PA1954, OA2605
WIJSENBEEK M., OA3283
WIJSENBEEK M., PA2218, PA2230, PA2875, PA2896, PA3467, PA3468, OA4195
WIJSENBEEK M., PA3460
WIJSENBEEK M., OA852, OA1427, PA3456
WIJSENBEEK-LOURENS M., PA429
WIJSMAN P., OA4855
WIJSMAN R., OA3192
WIKENHEISER-BROKAMP K., OA3276
WIKMAN Å., PA1036
WIKSTRÖM A., PA658
WILBREY-CLARK A., OA774
WILBURN A., PA4412
WILCKE J., PA1017, PA2947
WILD G., OA1462
WILD J., OA4952
WILD J., OA757, PA1180, PA2260, PA3490, PA4500, OA4857, OA4954, PA5039
WILD J., PA2283
WILD R., PA3024
WILKE R., OA4329
WILKENS F., PA438
WILKENS F., PA2218, PA2230
WILKENS H., PA438, PA3970
WILKINS C., PA4628
WILKINS J., PA5164
WILKINS M., OA3154
WILKINSON A., PA2381
WILKINSON A., PA2382
WILKINSON J., PA1130
WILKINSON M., PA4981
WILKINSON R., PA1869
WILKINSON S., PA1843
WILKINSON T., PA1690
WILKINSON T., PA1691, PA2286, PA2294, PA2345, PA2413, PA2816, PA2821, PA4144, PA4145, PA4766, OA4856
WILKINSON T., PA2986
WILKINSON T., PA1594
WILLAERT S., PA536
WILLEMS L., OA1535, PA1716, PA2710, PA3775, OA4343, OA4346, PA5295
WILLEMS* L., OA3159
WILLERS C., PA3994
WILLERS C., PA3996, PA5023
WILLIAMS C., PA1915
WILLIAMS C., PA1290
WILLIAMS K., OA4949
WILLIAMS K., PA967
WILLIAMS P., PA994, OA4229
WILLIAMS S., OA763, OA770
WILLIAMS T., PA2087, OA4214
WILLIAMS T., PA5340
WILLIAMS Z., PA1879
WILLIAMSON P., PA4011
WILLIAMS-SIMMS N., OA4335
WILLINGER B., PA4467
WILLISON K., PA4039
WILLIXHOFER R., PA1758, OA4220, PA4641, PA4644, PA4979
WILLOWSON K., PA1309
WILLS C., PA3763
WILMSEN K., OA4945
WILSON A., PA3914
WILSON A., PA4451, PA4452
WILSON A., PA404
WILSON C., PA4460
WILSON D., OA1548, PA4448
WILSON E., PA2970, PA4053
WILSON R., PA2184
WILSON R., PA381, PA397
WILTSHIRE L., PA1913, PA1925, PA1927, PA1931, PA1932, PA1941, PA3036, PA3843, PA3845
WIMALASEKERA S., PA3064
WIN A., PA2078
WIN T., PA2920, PA4008
WINCK J., OA3190
WINDERS T., PA1292, PA4607
WINDISCH W., PA2909, PA2933, PA2934, PA2935, PA4152, PA4655, PA4657, PA4666, PA4974
WINGFIELD DIGBY J., PA1918, PA3037
WINIARSKI S., PA1245
WINKEL D., PA2922
WINKELMAN T., PA5183
WINKELMAN T., PA5173
WINNICA D., PA2990
WINSA LINDMARK S., PA4431
WINSLOW M., OA3270
WINTER H., OA2597
WINTERKAMP S., PA5052
WINZEN A., PA5368
WIQVIST K., PA1248
WIRGUES A., PA4977
WIRTH L., OA2495, OA2502
WIRTZ H., PA4019, OA4338
WIRZ M., PA3515
WISE M., OA2492
WISE R., OA4953
WISE R., PA985
WISEMAN D., PA2815, PA3625, OA4931
WISEMAN D., PA4145
WISEMAN R., PA3635
WISMAN M., PA1855
WISNIEWSKI P., PA1245
WISSENBACH D., PA5130
WISSER O., PA3321
WISSMÜLLER M., PA1764
WISTUBA I., OA1451
WITHAM M., PA2681
WITT C., PA3351
WITTERT G., PA5259
WITZENRATH M., OA786, PA1098, PA2334, PA3046, PA4051, PA4615, PA4669, PA5130
WOEHRLE H., PA1279, PA2996
WÖGRATH M., OA1569
WÖHRLE H., OA4845
WOJCIECH T., OA4318
WOLDHUIS R., PA1250
WOLDHUIS R., PA2372
WOLF C., PA567
WOLFF C., OA1437, PA2745, PA2748
WOLLEY N., PA522
WOLLIN L., PA1863
WOLLMER P., PA2120, PA3786
WOLLSCHING- M., PA4655

WOLLSCHING-STROBEL M., PA2909, PA2935, PA4152, PA4657, PA4666
WOLMARANS K., OA861, PA5087
WOLTERS P., OA899
WOLTMANN G., OA863
WON H., PA4765
WON S., PA2300
WONG A., OA1430
WONG A., PA4404
WONG B., OA4967
WONG C., PA3442
WONG C., PA477, PA3415
WONG E., PA3551
WONG E., PA3823
WONG G., PA5020
WONG L., PA1093
WONG N., OA2617
WONG W., PA2367
WONG W., OA775
WONG Y., PA369, PA2782
WONGCHAN R., PA574
WONGHIRUNDECHA N., PA2929
WONGKARNJANA A., PA2689
WONGSRICHANALAI V., PA476, PA5218
WOO A., PA4481
WOO A., PA3898
WOO J., PA1251
WOO K., PA2738
WOO S., PA4506
WOOD J., PA5040
WOOD M., PA5300
WOOD N., PA404, PA2886
WOOD N., OA3162
WOOD R., PA3024
WOOD R., PA2393
WOOD R., PA2392, PA4688
WOODCOCK A., OA1531
WOODHEAD F., PA405, OA2582, PA3485, PA4027
WOODLAND T., PA1941
WOODMAN R., OA3292
WOODRUFF M., OA4215
WOODRUFF P., OA870
WOODRUFF P., PA4139
WOOLF W., OA1545
WOOLHOUSE I., PA3313
WOOTEN M., PA3960
WOOTTON S., PA541
WORGALL S., PA5356
WORKMAN L., OA1547
WORLEY L., PA2762
WORLOCK K., OA1566
WORRALL V., PA2749
WORRELL J., PA1094
WORT J., PA1197, PA3488, PA3494, PA3495, PA3956, PA5177, PA5191
WORT S., PA452
WORTH H., PA4421, PA4428
WORTLEY M., PA3037, PA3045
WORTLEY M., PA3042, PA3044
WOSNIOK J., OA1538
WOUTERS A., PA2092
WOUTERS E., PA320, OA2603, PA3670, PA3673, PA3782, OA4225, OA4236, PA4422
WOUTERS E., PA3667
WOUTERS E., PA1318
WOUTERS E., PA2424
WOUTERS E., PA2425
WOUTERS E., PA308, PA1910
WOUTERS I., PA309
WOUTERS I., PA1605
WRAITH D., PA5343
WREDE C., OA4942
WRENCH C., PA1233
WRENGER S., PA4679
WRIGHT A., OA2498
WRIGHT C., OA2587
WRIGHT J., OA882
WRIGHT M., PA2738
WRIGHTSON J., PA4437
WRIGHTSON J., OA1561, PA5140
WRING S., PA1200, PA1209
WROTEK A., PA2726
WU C., PA657, PA2080
WU C., PA1712
WU D., PA2074
WU H., OA4215
WU H., PA1831
WU J., PA652
WU J., OA874
WU J., PA3945
WU L., PA1275, PA3592
WU N., PA2235
WU P., PA5163
WU P., PA3363
WU S., PA1264
WU S., OA2598
WU S., PA1011, PA3022
WU W., PA641, PA2987
WU W., PA457
WU W., PA3967
WU X., OA2625, OA2629
WU Y., OA4242
WU Y., PA1265
WU Y., PA617
WU Y., PA1265
WU Y., PA1277, PA3592
WU Y., OA1455
WU Y., PA455
WU Y., PA3566
WU Y., PA3897
WU Y., OA3154
WU Z., OA2586, PA3932, OA4195
WUYTS M., PA355, PA359, PA1033, OA4308, OA4309, OA4314
WUYTS W., OA772, OA2623, PA2710, PA3454, PA3775
WUYTS W., OA1423, PA1716, PA2874, PA2875, PA2878, OA3281, PA3948, PA5159
WUYTS W., OA1569, OA1572
WYLER E., PA2334
WYLER F., OA1550, PA2117, PA5023
WYNANDS Q., PA606
WYPASEK E., PA3915
WYROSTKIEWICZ D., PA3422

X

X PATEL A., PA1596
XANTHOU G., PA2348
XANTHOULI P., PA454
XAVERIUS IVAN F., PA1106
XAVIER R., PA4977
XENAKI D., PA1252, PA2318, PA5207
XENOPHONTOS E., PA5019
XESS I., PA2183, PA4759
XHEMALAJ D., PA997, PA3431
XIA C., OA1416, PA2090, PA2101, PA5290
XIA K., PA3781
XIA T., PA4136
XIA X., OA3163
XIANG X., PA5269
XIANG Y., PA1303, PA4404
XIAO L., PA3934
XIAO W., PA2701, OA4244
XIAO W., PA2960
XIAO X., PA1959
XIAO X., PA3587, PA3588
XIE E., PA2163
XIE J., PA1937
XIE L., PA3781
XIE S., PA2858, PA3636
XIE Y., OA1451
XIN J., OA4346
XING D., PA455, PA456
XING E., PA3889
XING X., PA3544
XING Y., PA2074, PA5020
XIROMERISIOU G., PA3586
XIROUCHAKI N., PA2307
XU C., PA1925, PA1927
XU D., OA1455
XU H., PA2188
XU J., OA2610
XU J., PA1937
XU L., PA5342
XU L., PA5213
XU S., PA1598, PA1602, PA1611
XU X., PA2241
XU X., PA1316, PA1906
XU X., PA456
XU Y., PA2382, PA5289
XU Y., PA4081
XU Z., PA419
XU Z., OA4197
XU Z., PA1957
XUE C., PA2234
XUE J., PA1263
XUE L., PA1937
XUE M., PA1138, PA1141, PA3410, PA3836, PA4385
XUE Y., PA5205
XUE Y., PA1101, PA4409

Y

YAACOUB A., PA2312, PA4023
YACINE M., PA2798
YADAV S., PA4543
YAHYAOUI A., PA3991, PA3992, PA4455
YAKOUB M., PA1700
YAKOUBI R., PA2408
YAKOVENKO O., PA295, PA3871, PA3931, PA5252
YAKOVENKO T., PA3931, PA5252
YAKUSHIJI A., PA4762
YAKUTIS E., PA1608
YALÇIN E., PA1642, PA1644, PA1878, OA2505, OA2614, PA2770, PA2771, PA3322, PA4462, PA5012, PA5226
YAM L., PA3442
YAMADA A., PA1768, PA1771
YAMADA A., PA1697
YAMADA K., PA468
YAMADA R., OA3148, PA3776
YAMAGISHI M., OA2501
YAMAGUCHI R., OA2628
YAMAJI Y., PA1331, PA2410, PA3447, PA4000
YAMAMOTO H., OA2513
YAMAMOTO K., PA2830
YAMAMOTO K., PA2358
YAMAMOTO M., PA3554
YAMAMOTO M., OA1453
YAMAMOTO M., OA2513
YAMAMOTO T., PA2410, PA3447
YAMAMOTO Y., OA898, PA3891
YAMANO T., PA1168
YAMANO Y., PA401, PA1723, PA3499
YAMASHITA Y., PA1059
YAMASHITA Y., PA1300, PA3908
YAMMINE S., OA1550, PA2117, PA2733, PA3996, OA4940, PA5023, PA5026
YAN F., PA1265
YAN X., OA856, OA894
YANAGAWA M., PA3900
YANAGI N., PA3554
YANAGI S., OA4247
YANAGISAWA S., PA1960
YANAKA K., PA5179
YANARDAG E., PA1754, PA2231
YANARDAG H., PA1754, PA2231
YANAZ M., PA2107, PA3374, PA4465, PA5003, PA5008
YANG B., PA2179
YANG C., PA1855, PA3411
YANG C., PA1714
YANG C., PA4068
YANG F., PA1858, PA2063
YANG G., PA3544, OA4852, OA4853
YANG H., PA1244
YANG H., PA3597
YANG I., OA4302
YANG J., PA3411
YANG J., PA1946
YANG J., PA2822
YANG K., PA4052
YANG K., PA649
YANG L., PA3882
YANG L., PA2217
YANG L., OA1569, OA2626
YANG L., PA1244
YANG M., PA1930
YANG P., PA2241
YANG R., PA1911, OA2609
YANG R., PA2081
YANG S., PA1244
YANG S., PA1257, PA1265
YANG T., PA1011, PA3022
YANG W., OA2494
YANG Y., PA1066
YANG Y., OA775
YANG Y., OA4242
YANG Y., PA1946
YANGUI F., PA2993, PA2994, PA2995, OA4326, PA5365
YANGUI I., PA1127, PA2864, PA4384
YANO K., PA5137
YANO R., PA2403, PA3063
YAO B., PA4403
YAO L., OA4210
YAO L., OA4239
YAO R., PA3039, PA3040, PA3041
YAO W., PA1959
YAO X., OA4210
YAO X., PA3435
YAO Y., PA4130
YAQUB H., PA3019
YARHAM E., PA3889, PA4700
YARITA M., PA2392
YARNALL A., PA1592
YASACI Z., PA5043
YASAMAMOTO N., PA4399
YASAR A., PA4986
YASAR M., PA3440
YASINSKA V., PA634, OA2495
YASIR S., PA4552
YASUDA I., PA1059
YASUI H., PA2898
YATA N., PA2070
YATERA K., PA2887
YATES D., PA3800
YATES W., PA4033
YATOMI M., PA2357
YATSKEVICH N., PA2803
YATSU S., PA584, PA1287
YATSYSHYN R., PA1159
YAZAN H., PA5012
YAZBECK L., PA404, PA3932
YE A., PA2062
YE L., PA1959
YE Q., PA2234, PA2235

YE S., PA2990
YE Z., PA4003
YEDES A., PA5094
YEDILBAYEV A., PA667, PA2803
YEH K., PA5357
YEHLE D., PA1760
YEKELER E., PA357
YEN A., OA1460
YEN H., PA4031
YENDE S., PA3319
YENGUI F., PA3978
YEO C., PA1128, PA1698, PA1706, PA3881
YEO H., PA3570
YEREMENCHUK I., PA1963
YEUNG L., PA3439
YEUNG S., PA3756
YEUNG-LUK B., PA2370, OA4241, OA4945
YI D., PA963
YI E., PA4050
YI J., PA4003
YI M., PA3029
YI Q., PA3029
YI KONG X., PA4052
YIALLOUROS P., PA2760, PA2761, PA2765, PA3385
YIALLOUROS P., PA1859
YIALLOUROS P., PA3987, PA5018, PA5019
YIGIT S., PA4149
YIGITLILER B., PA2269
YII A., PA982, PA3644
YILDIRIM A., OA1445
YILDIRIM A., PA560, OA2485, OA2626, PA3937
YILDIRIM A., PA555, PA567, PA1235, PA4054
YILDIRIM H., PA3299, PA4380
YILDIZ A., PA1581
YILDIZ E., PA497
YILDIZ F., PA3333, OA4232
YILDIZELI B., PA1880, PA5176
YILMAZ A., OA2505, PA5011, PA5012
YILMAZ A., PA353
YILMAZ H., PA3369
YILMAZ YEGIT C., PA2107, PA5003, PA5007, PA5008
YILMAZ YELVAR G., PA501, PA4986
YIN C., PA2713
YIN J., PA4425
YING S., PA1265, PA4400, PA4402, PA4403
YIOE V., PA3473
YIP K., PA5020
YIP W., PA1777, PA1780
YIU K., PA4031
YLISAUKKO-OJA T., PA662
YOKOKAWA T., PA453
YOKOTA H., PA2281
YOKOYAMA A., PA5333
YOKOYAMA T., PA401, PA1723
YONG G., PA3572
YONG M., PA4080, PA4626
YONIS H., OA4955
YOO C., PA1251
YOO D., PA3570
YOO H., OA1428
YOO J., PA1216
YOO K., PA2076, PA2323, PA4142
YOO Y., PA4765
YOON H., PA5156
YOON H., PA2055, PA5113
YOON S., OA4957
YOON Y., PA1145, PA3619
YOOSEFI M., PA1861
YOOSEFI MORIDANI M., PA1073
YORDANOV P., PA2189, PA2313
YORKE J., PA1918
YÖRÜK B., PA2731, PA2732, PA2753, PA4446, PA5083
YOSHIDA H., PA5228
YOSHIDA K., PA451
YOSHIDA M., PA2887
YOSHIDA M., OA1566
YOSHIDA M., PA5080
YOSHIDA Y., PA451
YOSHIDA Y., PA626
YOSHIDA Y., PA4706
YOSHII C., PA2887
YOSHIMATSU Y., PA5132
YOSHIOKA T., PA3895
YOSRA B., PA2804, PA3316
YOSRI M., PA5085
YOSUF A., PA1291
YOU C., PA1141
YOUBI M., PA525
YOUN J., PA1054
YOUN Y., PA1629
YOUNG H., PA961
YOUNG J., PA1253
YOUNG L., PA4471
YOUNG L., PA1146
YOUNG R., PA1052, PA4546, PA5081
YOUNG S., PA4066
YOUSEF A., PA570
YOUSSEF I., PA638, PA3332, PA3336, PA3660
YOUSUF A., OA2498
YRLID L., PA1301, PA1849
YSERBYT J., PA1716, PA5159
YU C., PA1780
YU C., PA4137, PA5163
YU C., PA4087
YU E., PA419
YU I., PA3571
YU M., PA2112
YU M., PA2112
YU Y., PA2701
YU Z., OA2518
YU LEE-MATEUS A., OA2599, PA4629
YUAN P., PA457, OA3163, PA3497
YUAN T., PA1305, PA3909
YUCEL S., OA773
YUE J., PA3934
YUEN H., PA2112
YUJEN C., PA1217, PA2311
YÜKSEL H., PA5012
YÜKSEL YAVUZ M., PA3356
YULDASHEV S., PA2814
YUMRUKUZ ŞENEL M., PA2395
YUNG E., PA5020
YUNG L., PA4031
YUNQING L., OA894
YUSTE-SÁNCHEZ M., OA4313, PA4523
YUSUF F., PA4763
YZERMANS J., PA1609

Z

ZABICKA M., PA299
ZACHARASIEWICZ A., PA4460
ZACHARIOU A., PA3879, PA4592
ZACKS N., PA4560, PA4588
ZADI M., PA5082
ZADI M., PA3878
ZAFAR A., PA2724
ZAFEIRIDIS A., PA1812
ZAFFANELLO M., PA2741, PA4449
ZAGKLA S., PA1073
ZAGOREC N., PA1692
ZAHID M., PA2151
ZAIATS L., PA1159
ZAIBI H., PA294, PA302, PA619, PA627, PA2248, PA2254
ZAIDI S., PA2135
ZAIEN I., PA571
ZAIER C., PA2847, PA3874
ZAIGHAM S., OA1530, PA3786
ZAIMI R., PA336
ZAINUDDIN 1., PA2723
ZAIRI S., PA323, PA329, PA331, PA335, PA338, PA340, PA341, PA342, PA3538, PA5148
ZAJACOVA A., PA3362
ZAKARYA R., PA5207
ZAKHAMA L., PA2994, PA2995
ZAKHAMA L., PA2993
ZAKI S., PA3852
ZAKIS K., PA1732
ZAKLOUTAL J., PA4987
ZALACAIN JORGE R., PA5124, PA5125
ZALDIBAR M., PA5261
ZAŁĘSKA M., PA421
ZALEWSKA A., PA5039
ZAMANIAN R., OA742
ZAMARRÓN E., PA2329, PA3801
ZAMARRÓN DE LUCAS E., PA4026
ZAMBON A., PA1889
ZAMBON A., OA4846
ZAMORA GARCÍA E., PA4026
ZAMPOGNA E., PA2718
ZANELI S., PA4526
ZANELLA A., PA4494
ZANETTE B., PA3995
ZANNIN E., PA2125, PA4457
ZANOLIN M., PA1021
ZAOUALI M., PA955
ZAPATA M., OA4346
ZAPATA T., PA1898
ZAPATA COMAS T., PA4076
ZAPATA-ORTEGA M., PA3364, OA4344
ZAPPA M., PA2718, PA4741
ZAPPACOSTA B., PA5037
ZAR H., OA1547
ZARAGKAS S., PA337
ZARCHIN Y., OA1534
ZARGOUNI A., PA1315, PA1964
ZARIC B., PA1116, PA1968, PA2860
ZARIF N., PA4724
ZARIPOVA L., PA3532
ZARIWALA M., PA2762
ZARKADI E., PA422, PA1782, PA1790, PA4397
ŽARKOVIĆ M., PA2774
ZAROGIANNIS S., PA1100, PA1103, PA1844, PA2966, PA3437, PA3586
ZAROGOULIDIS K., PA545
ZASŁONA Z., PA1745
ZATLOUKAL J., PA2719, PA4133
ZAVAGLIA KABBACH E., OA4932
ZAWANI N., PA4990
ZAYTOUN H., PA1764
ZDRAL A., PA2344
ZDRAVESKI D., PA3813
ZDRAZILOVA-DUBSKA L., PA4751
ZEA OBANDO C., PA463
ZEB S., PA1345
ZECH A., PA2212
ZEDER K., PA1755, PA1770
ZEGHMAR S., OA3157
ZEHETMAYER S., PA635, PA647, PA2212, PA4624
ZEIGER R., PA985
ZEKIS T., PA1043
ZELIC L., PA3354
ZEMAITIS M., PA2206
ZEMAN F., PA2996, PA3001, OA4845
ZEMEDIKUN D., PA5340
ZEMZEM S., PA1283
ZEMZEMI A., PA3643
ZENDAH I., PA1082, PA2048, PA2407, PA2865, PA3659, PA3930, PA5116
ZENG S., OA870
ZENG W., PA2836
ZENG Y., PA1138, PA3410, PA3836
ZENG Z., PA4045, PA4047
ZENNER D., PA367, PA1063
ZENON F., PA3479
ZERAATKAR D., PA3033
ZERBIB R., OA786
ZEREMSKI M., OA3165
ZEREN M., PA348
ZERVAS D., PA1301
ZERVAS E., PA3320, PA5318, PA5328
ZERVAS E., PA3420, PA4581, PA4709, PA4717
ZERVOU E., PA2851
ZETOS A., PA5150
ZEYU Q., PA2786
ZHADAN V., PA4552
ZHAI Z., PA2241, PA2242
ZHANG B., PA1233, PA5205
ZHANG C., PA1265, PA4402
ZHANG C., PA3414
ZHANG C., PA2787
ZHANG C., PA5342
ZHANG G., PA1257
ZHANG G., OA3165
ZHANG H., PA2713
ZHANG H., PA313, OA1441, PA1950
ZHANG H., PA3903
ZHANG J., PA4435
ZHANG J., PA3029
ZHANG J., PA3029
ZHANG J., PA305, OA2521
ZHANG K., PA2259
ZHANG K., OA1414, OA2503, PA3835
ZHANG K., PA2760, PA2761
ZHANG K., OA768, PA1945, OA4231, PA4429, PA5014, PA5021, PA5022
ZHANG L., PA1834
ZHANG M., PA373, PA378
ZHANG M., PA1101, PA1257, PA1914, PA4409, PA4425
ZHANG N., OA2598
ZHANG P., OA1440, OA1532
ZHANG P., OA2483
ZHANG Q., PA1933
ZHANG Q., PA1933, PA1937, PA5286
ZHANG R., PA5314
ZHANG R., PA2896
ZHANG R., PA1109, OA1455
ZHANG S., PA3544
ZHANG S., PA1211
ZHANG S., PA646, PA1890, PA1895, PA1906, PA3024, PA4711, PA4712
ZHANG T., PA1138, PA3410, PA3836
ZHANG T., OA4297
ZHANG X., PA3836
ZHANG X., OA2598
ZHANG X., PA4063
ZHANG X., PA1257
ZHANG X., PA1904
ZHANG X., PA1914
ZHANG Y., PA4130
ZHANG Y., PA3934, PA4402, PA4403
ZHANG Y., PA1959
ZHANG Y., PA4425
ZHANG Y., PA2787
ZHANG Y., PA3952
ZHANG Y., PA3903, PA5305
ZHANG Y., PA1937

ZHANG Z., PA3438
ZHANG Z., OA1455
ZHANG Z., PA2249
ZHAO A., OA894, OA4198
ZHAO D., PA3781
ZHAO F., PA3755
ZHAO H., PA457, PA3497, PA3967
ZHAO J., OA894
ZHAO L., PA4409, PA4425
ZHAO M., OA4870
ZHAO Q., PA3410
ZHAO T., OA2522
ZHAO X., PA1195
ZHAO Y., PA1709
ZHAO Y., OA2630, PA3435, PA3438, OA4297
ZHAO Y., PA1265, PA4400
ZHENG B., PA1135, OA1430
ZHENG C., PA2259
ZHENG G., PA4081
ZHENG J., PA2846
ZHENG J., OA3163
ZHENG J., PA3663
ZHENG P., PA1138, PA1940, PA3410, PA4385
ZHENG W., PA4130
ZHENG X., PA1267
ZHI LI P., OA879, PA1032, PA4642
ZHONG C., OA2598
ZHONG N., PA1933
ZHONG N., PA617, PA1937, PA1946, PA3663, PA4130, PA4136, OA4297, PA4435
ZHONG P., PA3934
ZHOU B., PA3377
ZHOU C., PA3624
ZHOU C., PA3029
ZHOU C., PA5342
ZHOU D., PA3496
ZHOU H., PA3029
ZHOU I., PA3551
ZHOU J., PA3905
ZHOU J., PA1092
ZHOU L., PA3880
ZHOU L., PA3836
ZHOU M., PA2971
ZHOU M., PA1215
ZHOU Q., PA1232, PA4069
ZHOU S., OA1569, OA2624, OA2626
ZHOU X., PA4425
ZHOU X., PA3585, PA5259
ZHOU Y., OA4239
ZHOU Y., OA2630, OA4297
ZHOU Z., PA649
ZHOU-SUCKOW Z., PA3561, OA4948
ZHU H., PA1244
ZHU H., PA2112
ZHU J., PA1945, OA4231, PA4429, PA5021, PA5022
ZHU J., PA5014
ZHU J., OA862
ZHU L., PA1700
ZHU M., OA1412, PA3952
ZHU P., PA4630, PA5138
ZHU Y., OA2630
ZIARNIAK K., PA4044
ZIAS N., PA4709
ZIEGAHN N., PA1073
ZIEGLER B., OA893
ZIEL J., OA3162
ZIELONKA J., OA856
ZIĘTKIEWICZ E., PA2762
ZIJP T., PA3359
ZIKIC A., PA4448, PA4469
ZILBERMAN-ITSKOVICH S., PA548
ZILIANTI C., PA3548
ZILIO B., PA3949
ZILLIKENS M., PA1954
ZIMERMAM H., OA778, PA1102
ZIMERMAM H., OA851, PA1152, PA1154, OA1449, OA1451, PA3806
ZIMMERMANN M., PA4655, PA4657
ZIMMERMANN S., PA5161
ZIMMET P., PA2998
ZIMNA K., PA3422
ZINDR V., PA610
ZINKIN E., PA4143
ZINS M., PA1965, PA2077, PA3345, PA4430
ZIQING Z., PA4415
ZIREK F., PA1650, OA2505, PA5226
ZISMAN D., PA3489
ZISMAN L., OA742
ZISSEL G., PA2226
ZITOUNI A., PA1942, PA5276
ZITOUNI I., PA494
ŽIVANOVIĆ D., PA3459
ZIVKOVIĆ D., PA4682
ZIVOTIC I., PA5310
ZOBOLI M., OA4947
ZOELLNER S., OA3187
ZÖHRER B., PA2220
ZÖLLEI É., PA1173
ZOLTY R., OA742
ZOMPATORI M., OA3274
ZONNEVELD M., PA4135
ZORGATI H., PA1124, PA1176, PA1185, PA1186, PA2308, PA2312, PA2862, PA4023, OA4960
ZORPIDOU D., PA3879, PA4592
ZORRILLA LORENZO V., PA3951
ZOU D., OA4839, OA4842
ZOU Y., PA2283, OA4851
ZOU Z., PA3815
ZOUARI F., PA3551
ZOUARI H., PA2742, PA4129
ZOUGLOS A., PA5186
ZOUNEMAT KERMANI N., PA2328
ZOUNEMAT-KERMANI N., PA3668
ZOUR J., PA3052
ZOZ D., PA3460
ZRIBI H., PA323, PA329, PA331, PA335, PA338, PA340, PA341, PA342, PA1776, PA3538, PA5145, PA5148
ZRNIĆ M., OA3169
ZSIRAY M., OA4854
ZU Y., PA4562
ZUBAIR S., PA3870
ZUBAN A., PA621, PA1306, PA3027, PA5075
ZUBERI F., PA1055, PA3873
ZUBKE M., PA2276
ZUCCARINO F., PA5174
ZUCCATOSTA L., OA1429, PA1748, PA1779, PA3436
ZUCCHETTI S., PA2185
ZUCCON U., PA1917, PA1926
ZUCCOTTI G., PA1643, PA4601
ZUCOLOTO A., PA3571
ZUFFELLATO M., PA1089
ZÜGNER E., PA5192
ZUIL M., PA372, OA788
ZUIL MORENO M., PA3409
ZUJOVIC D., PA3837
ZULFIKAR S., PA404
ZULIANI E., PA4475
ZUNIC S., PA569
ZUNIC S., PA569
ZUO W., OA2630, OA4297
ZUPAN M., PA1672
ZUREL F., PA5300, PA5304
ZURKOVA M., PA3593, PA4483
ZUWALLACK R., PA967
ZUYUAN G., PA4415
ZVAVAMWE C., PA2294, OA4856
ZVER A., PA3382
ZVOL I., PA295, PA3650
ZWAR N., PA541
ZWIJSEN K., OA3265, PA3432
ZWINDERMAN A., OA2494
ZYSMAN M., PA498, OA900, PA2216, OA4243, PA4616
., PA1249