ERS

INTERNATIONAL CONGRESS 2022

BARCELONA Spain, 4 - 6 September

PROGRAMME

Pre-congress content Session 2 00:00 - 23:59

Statements and technical standards: Syndrome of combined pulmonary fibrosis and emphysema ATS/ERS/JRS/ALAT research statement

Aims : to identify the syndrome of combined pulmonary fibrosis and emphysema (CPFE) and recognise the main pathophysiology components. Participants will be able to identify the main clinical, radiological, functional and pathological features characteristic of CPFE and distinguish it from idiopathic pulmonary fibrosis. They will be able to choose the best management options based on recent evidence, and to individualise the monitoring of this condition through an improved understanding of the comorbidities and the risk of complications, especially pulmonary hypertension.

Disease(s) : Interstitial lung diseases | Pulmonary vascular diseases | Thoracic oncology

Method(s) : Epidemiology Imaging Pulmonary function testing

Tag(s) : Clinical

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

00:00	**Syndrome of combined pulmonary fibrosis and emphysema** Vincent Cottin (Lyon, France)	**5**

Pre-congress content Session 3 00:00 - 23:59

Statements and technical standards: ERS/ATS updated pulmonary function test interpretation technical standard

Aims : to summarise the recommendations for pulmonary function test (PFT) interpretation; to explain the uncertainty in PFT interpretation; to review the changes from the 2005 interpretation standards.

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, Nurse, Paediatrician, Physician in Pulmonary Training, Physiologist, Respiratory therapist

00:00	**ERS/ATS updated pulmonary function test interpretation technical standard** Sanja Stanojevic (Halifax (NS), Canada)	**6**

Pre-congress content Session 4 00:00 - 23:59

Statements and technical standards: ERS technical standards for scoring respiratory events using Type III devices for the diagnosis of sleep disordered breathing in adults and children

Aims : to present an update on the use of Type III devices for investigating sleep disordered breathing in children and adults with discussion of the advantages, limitations and research needs in each of the following areas: 1. technical specifications for Type III devices, 2. scoring criteria for sleep-related breathing disturbances using Type III devices, 3. utility of Type III devices compared with polysomnography (PSG) for investigating sleep disordered breathing in adults, 4. Type III devices for diagnosing sleep disordered breathing in children, 5. patient perspective.

Disease(s) : Sleep and breathing disorders

Method(s) : General respiratory patient care

Tag(s) : Clinical

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

00:00	**ERS technical standards for scoring respiratory events using Type III devices for the diagnosis of sleep disordered breathing in adults and children** Renata L. Riha (Edinburgh (Edinburgh), United Kingdom)	**7**

Pre-congress content Session 5 00:00 - 23:59

Statements and technical standards: ERS statement for defining respiratory exacerbations in children and adolescents with bronchiectasis for clinical trials

Aims : to explain the burden and effect of pulmonary exacerbations in children and adolescents with bronchiectasis; to describe the importance of exacerbations in children and adolescents with bronchiectasis; to list the recommendations for defining severe and nonsevere exacerbations for clinical trials, and how these differ from those for clinical care.

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

Method(s) : Epidemiology | General respiratory patient care

Tag(s) : Clinical

Target audience : Clinical researcher, General practitioner, Paediatrician, Patient, Physician in Pulmonary Training, Respiratory physiotherapist

00:00	**ERS statement for defining respiratory exacerbations in children and adolescents with bronchiectasis for clinical trials** Anne Bernadette Chang (Brisbane (QLD), Australia)	**8**

Pre-congress content | Session 7 | 00:00 - 23:59

Statements and technical standards: ERS guidelines for the management of hospitalised patients with COVID-19

Aims : to discuss the latest recommendations from the ERS COVID-19 living guidelines; to review evidence for immunomodulatory, antiviral and anticoagulant treatments for COVID-19.

Disease(s) : Respiratory critical care | Respiratory infections

Method(s) : General respiratory patient care | Public health | 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, Paediatrician, Patient, Physician in Pulmonary Training, Radiologist, Respiratory physiotherapist, Scientist (basic, translational), Respiratory therapist

00:00	**ERS guidelines for the management of hospitalised patients with COVID-19** James D. Chalmers (Dundee (Angus), United Kingdom)	**10**

Pre-congress content | Session 8 | 00:00 - 23:59

Statements and technical standards: ERS statement on long COVID-19 follow-up

Aims : to identify optimal strategies for follow-up care that will positively impact the COVID-19 patient's quality of life who frequently experience symptom burden postacute infection or posthospitalisation; to review the consequences on quality of life, symptom burden, disability and home care follow-up; to answer eight clinical questions: 1. Are there features of the acute disease that predict long-term consequences? 2. Which follow-up strategies relate to thromboembolic events? 3. Which follow-up strategies relate to pulmonary physiology? 4. Which follow-up strategies relate to imaging? 5. Which follow-up strategies relate to infection control? 6. Which follow-up strategies relate to cognitive, psychological and quality-of-life consequences? 7. Which follow-up strategies relate to disability? 8. Which follow-up strategies relate to home care follow-up (telemedicine/telerehabilitation)?

Disease(s) : Interstitial lung diseases | Pulmonary vascular diseases | Respiratory infections

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

Tag(s) : COVID

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Respiratory critical care physician, Paediatrician, Pathologist, Patient, Physician in Pulmonary Training, Radiologist, Respiratory physiotherapist, Respiratory therapist

00:00	**ERS statement on long COVID-19 follow-up** Antonio Spanevello (Milano, Italy)	**11**

Pre-congress content | Session 9 | 00:00 - 23:59

Statements and technical standards: The ERS core outcome set for clinical trials evaluating the management of COPD exacerbations

Aims : Clinical trials evaluating the management of COPD exacerbations assess heterogeneous outcomes, often omitting those that are clinically relevant or more important to patients and health professionals. A core outcome set is a consensus-based minimum set of important outcomes that should be evaluated in all trials to improve their quality and comparability. This session will explain the importance of core outcome sets, and will describe the ERS COPD exacerbations core outcome set and how it was developed.

Disease(s) : Airway 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, Patient, Physician in Pulmonary Training, Respiratory physiotherapist

00:00	**The ERS core outcome set for clinical trials evaluating the management of COPD exacerbations** Alexander Mathioudakis (Stockport, United Kingdom)	**12**

Pre-congress content Session 10 00:00 - 23:59

Clinical Research Collaboration: Lung disease in primary immunodeficiency

eGLILDnet CRC

Aims : to provide an update on lung disease in primary immunodeficiency; to consider the following: 1. the critical importance of excluding primary immunodeficiency in people presenting with acute and chronic respiratory illness, 2. the spectrum of primary immunodeficiency, 3. lung manifestations of primary antibody deficiency, 4. and granulomatous-lymphocytic interstitial lung disease: state of the art.

Disease(s) : Interstitial lung diseases

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

Tag(s) : Clinical

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

00:00 **Lung disease in primary immunodeficiency** **13**
John R Hurst (London, United Kingdom)

Pre-congress content Session 11 00:00 - 23:59

Clinical Research Collaboration: An ERS clinical research collaboration to advance research in alpha-1 antitrypsin deficiency

EARCO CRC

Aims : to identify the main research projects under development by the European alpha-1 antitrypsin research collaboration (EARCO). EARCO was founded in 2018 with the objective of developing an international prospective registry of patients with AATD. The registry includes more than 1000 patients and has produced several manuscripts presenting the results of the research projects, such as the survey on unmet needs for research in AATD, the survey on criteria for augmentation therapy and the study on the impact of COVID-19 in patients with AATD. One of the objectives of the presentation is to attract new participants to the EARCO consortium.

Disease(s) : Airway diseases

Method(s) : Epidemiology General respiratory patient care

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Patient, Scientist (basic, translational)

00:00 **ERS clinical research collaboration to advance research in alpha-1 antitrypsin deficiency** **14**
Christian F. Clarenbach (Zürich, Switzerland)

Pre-congress content Session 12 00:00 - 23:59

Clinical Research Collaboration: Global Lung Function Initiative: Is it time for an update?

GLI CRC: addressing the challenges of using ethnic specific reference equations

Aims : to review the rationale and recommendations for using multiethnic reference equations; to describe the potential challenges and bias that may be introduced if we normalise the effects of social disparities on lung function; to propose interim solutions to the interpretation of lung function test results.

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, Paediatrician, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist, Respiratory therapist

00:00 **Global Lung Function Initiative: Is it time for an update?** **15**
Brendan Cooper (Edgbaston (Birmingham), United Kingdom)

Pre-congress content Session 13 00:00 - 23:59

Clinical Research Collaboration: Lessons learnt and updates from the CADSET clinical research collaboration

CADSET CRC

Aims : To provide an overview of the lessons learnt and outputs of CADSET; to present a discussion with different highly involved CADSET members; to present the audience with the following specific learning outcomes: 1. challenges and benefits of large collaborative studies, views from early-career and well-established ERS researchers; 2. update on early life origins of chronic respiratory diseases; 3. early life spirometric phenotypes, prevalence and associated factors; 4. factors influencing lung function across the ages; 5. similarities and differences between asthma with fixed airflow limitation and COPD and 6. challenges ahead.

Disease(s) : Airway diseases Paediatric respiratory diseases

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

Tag(s) : Translational

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Respiratory critical care physician, Paediatrician, Physiologist, Scientist (basic, translational)

00:00 **Lessons learnt and updates from the CADSET clinical research collaboration** **16**
Rosa Faner Canet (Barcelona, Spain)

Pre-congress content Session 14 00:00 - 23:59

Clinical Research Collaboration: Pulmonary haemodynamics during exercise: Research Network registry

PEX-NET CRC

Aims : From a theoretical perspective, pulmonary haemodynamics during exercise may be suitable for detecting early forms of cardiac and pulmonary vascular disease. This concept is supported by data from several small studies. However, the prognostic and differential-diagnostic relevance and additive value of exercise vs. resting haemodynamics has not been evaluated in a large study. PEX-NET is an international registry with a retrospective and a prospective cohort, enrolling patients with exercise pulmonary haemodynamics. An international steering committee has defined the inclusion and exclusion criteria. Detailed clinical and haemodynamic data derived from clinically indicated exercise right heart catheterisations of patients with suspected or manifest pulmonary hypertension have been transferred into a central database. Participants of this session will learn how resting and exercise haemodynamics may affect survival, why this is important and what the open questions are. This will explain why a large study investigating the prognostic parameters was needed.

Disease(s) : Pulmonary vascular diseases

Method(s) : Epidemiology Physiology Pulmonary function testing

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Patient, Physiologist

00:00 **Pulmonary haemodynamics during exercise: Research Network registry** **17**
Gabor Kovacs (Graz, Austria)

Pre-congress content Session 15 00:00 - 23:59

Clinical Research Collaboration: Severe heterogenous asthma research collaboration, patient-centred

SHARP CRC

Aims : to advertise severe heterogeneous asthma research collaboration (SHARP) as a research community to members of ERS and other congress participants; to increase awareness about the specific unmet needs of patients with severe asthma and the solutions that the research conducted by SHARP can provide; to ensure the following learning outcomes: What are the ambitions and strategy of the SHARP CRC? Who is involved? What are the key achievements of SHARP? How are patients involved in SHARP? What are the plans for the coming years in SHARP? How can you get involved in SHARP?

Disease(s) : Airway diseases

Method(s) : Cell and molecular biology Epidemiology General respiratory patient 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, Journalist

00:00 **Severe heterogenous asthma research collaboration, patient-centred** **18**
Ratko Djukanovic (Southampton (Hampshire), United Kingdom)

Pre-congress content Session 16 00:00 - 23:59

Clinical Research Collaboration: EU-wide consensus of clinical experts and patients on key parameters to be measured during and after a severe exacerbation of COPD

CICERO CRC

Aims : to present the EU-wide consensus obtained from clinical COPD experts and patients on the key process and outcome parameters to be measured during and after a severe exacerbation requiring hospitalisation; to highlight and discuss the results obtained from the following: 1. the Delphi Expert Survey and 2. the ELF-CICERO Patient Survey; to help the congress participants understand, in the context of key process and outcome parameters in severe COPD exacerbations, the following issues: 1. the importance of an EU-wide consensus, 2. the necessity of complementing an expert clinical opinion with in-depth patient perspective, 3. the results obtained from the Delphi Expert and Patient Survey and 4. how the obtained results can improve the future management and patient outcomes of severe COPD exacerbations; to provide the opportunity for interested stakeholders to reference the accompanying publications and interact with the lead young investigators during the 2022 ERS congress.

Disease(s) : Airway diseases | Respiratory critical care | Respiratory infections

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

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Respiratory critical care physician, Patient, Physician in Pulmonary Training, Respiratory therapist, Journalist

00:00	**EU-wide consensus of clinical experts and patients on key parameters to be measured during and after a severe exacerbation of COPD** Mona Bafadhel (London, United Kingdom)	**19**

Pre-congress content — Session 17 — 00:00 - 23:59

Clinical Research Collaboration: Precision medicine for bronchiectasis

EMBARC CRC

Aims : to discuss the clinical and biological heterogeneity of bronchiectasis; to discuss recent data showing the overlap between bronchiectasis, COPD and asthma; to discuss recent data showing that there are different inflammatory subtypes of bronchiectasis that may require different treatments.

Disease(s) : Respiratory infections

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

Tag(s) : Translational

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

00:00	**Precision medicine for bronchiectasis** Eva Polverino (Barcelona, Spain)	**20**

Pre-congress content — Session 18 — 00:00 - 23:59

Clinical Research Collaboration: New understanding in the treatment of cough

NEuroCOUGH CRC

Aims : to provide an update of the initiatives of the NEuroCOUGH CRC and include the following topics: 1. the NEuroCOUGH initiative together with ERS & FIRS to relabel chronic cough (ICD-11 proposal), 2. the ERS CRC NEuroCOUGH clinic survey results, 3. the currently available and unpublished data from the NEuroCOUGH registry and 4. the interaction with industrial partners in facilitating the development of new chronic cough treatment options.

Disease(s) : Airway diseases

Method(s) : Epidemiology | General respiratory patient care

Tag(s) : Clinical

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

00:00	**New understanding in the treatment of cough** Lorcan McGarvey (Belfast, United Kingdom)	**21**

Pre-congress content — Session 19 — 00:00 - 23:59

Statements and technical standards: Main highlights in the management of pleural infection

ERS/ESTS 2022 clinical statement on the management of pleural infection

Aims : to discuss the main highlights of the 2022 clinical statement on the management of pleural infection

Disease(s) : Respiratory infections

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician

00:00	**Main highlights in the management of pleural infection** Eihab Bedawi (Oxford (Oxfordshire), United Kingdom)	**22**

Pre-congress content Session 20 00:00 - 23:59

Year in review: Biologics in asthma: do we need so many and who do we miss?

Aims : to summarize the immunology of asthma, the cytokines or receptors currently targeted, the possible mechanisms of sub-optimal responses, and the importance of determining the immune make-up of individual patients prior to prescribing mAb therapy, in the age of precision medicine for asthma.

Disease(s) : Airway diseases

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

Tag(s) : Clinical

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

00:00 **Biologics in asthma: do we need so many and who do we miss?** **23**
Guy Brusselle (Ghent, Belgium)

Pre-congress content Session 21 00:00 - 23:59

Year in review: Treatable traits in COPD rehabilitation

Aims : Chronic obstructive pulmonary disease (COPD) is a heterogenous and complex disease with respiratory and extrapulmonary characteristics (also known as treatable traits). Identification and treatment based on treatable traits in multiple settings may ensure for a greater personalized approach in COPD treatment including pulmonary rehabilitation both in stable phase and acute exacerbations. Emerging evidence suggests that treatable traits model (based on symptoms beyond dyspnea and physical, emotional and social manifestations) may improve relevant outcomes in patients with COPD. Interdisciplinary pulmonary rehabilitation may improve treatable traits and ensure more personalized approach for the treatment of COPD.

Disease(s) : Airway diseases

Method(s) : Pulmonary rehabilitation

Tag(s) : Clinical

Target audience : Clinical researcher, General practitioner, Physician in Pulmonary Training

00:00 **Treatable traits in COPD rehabilitation** **24**
Alda Sofia Pires De Dias Marques (Aveiro, Portugal)

Pre-congress content Session 22 00:00 - 23:59

Year in review: The positive downside of COVID pandemic on advances in thoracic surgery in 2021

Aims : to present the evolution of minimally invasive surgery for complex and extended lung resections during COVID pandemic; The advances in anaesthesiologic techniques has brought to perform non-intubated video-assisted thoracoscopic surgery under combination of erector spinae plane block and thoracic paravertebral block. Comparative efficacy of stereotactic body radiotherapy (SBRT) and surgery in the treatment of patients with non–small cell lung cancer (NSCLC) remains a hot topic in thoracic oncology. Immune checkpoint inhibitors in metastatic NSCLC are being rapidly tested in clinical trials for the treatment of early-stage NSCLC in combination with surgery. The care of patients with surgically resectable epidermal growth factor receptor-mutated lung adenocarcinomas shows the deep collaboration between medical and surgical thoracic oncology in the neoadjuvant setting. In lung trasnplantation the available pool of donor lungs could be expanded , using ex-vivo lung perfusion (EVLP). Shorter length of stay following minimally invasive thymectomy for stage I through III thymoma, compared with open thymectomy, without increased rates of margin positivity, perioperative morbidity, or decreases in overall survival has been demonstrated.

Disease(s) : Respiratory critical care Thoracic oncology

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

Tag(s) : Clinical

Target audience : Medical Student, Nurse, Respiratory critical care physician, Pathologist, Radiologist, Respiratory physiotherapist, Thoracic oncologist, Thoracic surgeon

00:00 **The positive downside of COVID pandemic on advances in thoracic surgery in 2021** **25**
René Horsleben Petersen (Copenhagen, Denmark)

Pre-congress content Session 23 00:00 - 23:59

Year in review: Obstructive sleep apnea associated with different pulmonary comorbidities

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

Method(s) : General respiratory patient care

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Technical Assistant, Nurse, Respiratory critical care physician, Thoracic oncologist

00:00 **Obstructive sleep apnea associated with different pulmonary comorbidities** **26**
Walter McNicholas (Dublin, Ireland)

Pre-congress content Session 24 00:00 - 23:59

Year in review: Antibiotics in lower respiratory tract infections in children

Antibiotics for CAP: how much, how long?

Aims : Respiratory tract infections are extremely frequent in (young) children and are amongst the key reasons for outpatient clinic and ER visits, and hospital admissions.
Its is not always easy to differentiate between uncomplicated lower respiratory tract infection and community acquired pneumonia and between viral and bacterial infections. Frequently antibiotics are prescribed, which may always be useful and may cause increased antibiotic resistance.
Recently, 2 RCT on antibiotic use in lower respiratory tract infections and CAP in children addressed the question if antibiotics are useful (for lower RTI) and if prescribed (in case of suspicion of CAP) what would be the best dose and duration of treatment. In this year in review recent literature, including these 2 RCTS, will be discussed.

Disease(s) : Paediatric respiratory diseases

Method(s) : Epidemiology General respiratory patient care

Tag(s) : Clinical

Target audience : Clinical researcher, Medical Student, Paediatrician

00:00 **Antibiotics in lower respiratory infections in children** **27**
Julia Bielicki (London, United Kingdom)

Pre-congress content Session 25 00:00 - 23:59

Year in review: Air pollution and interstitial lung diseases

Aims : to describe the association between air pollution and various diseases and research on the topic; To understand how air pollution actually impacts health by modulating several important cellular functions; to present some recently, discovered evidence about air pollution-induced epigenetic changes, which are linked with the aetiology of various human diseases. Among several epigenetic modifications, DNA methylation represents the most prominent epigenetic alteration underlying the air pollution-induced pathogenic mechanism. Several other types of epigenetic changes, such as histone modifications, miRNA, and non-coding RNA expression, have also been found to have been linked with air pollution.

Tag(s) : Translational

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

00:00 **Air pollution and interstitial lung diseases** **28**
Katerina Antoniou (Heraklion, Greece)

Pre-congress content Session 26 00:00 - 23:59

Year in review: Confocal endomicroscopy in thoracic malignancy: seeing is believing?

Aims : to summarize recent, cutting edge data on live, intra procedure endoscopic imaging as related to thoracic oncology. The novel area of confocal endomicroscopy is opening potential "live assessment" of tissues at the microscopic level, and with parallel developments in thoracic intervention, the possibility of better diagnostics, targeted biopsy and potentially treatment.

This technique has been used in the diagnosis of pulmonary nodules at navigation bronchoscopy, mediastinal lymph node sampling in possible lung cancer and in pleural disease / mesothelioma.

As data emerges, this technique promises to be a new procedures to enrich diagnostic algorithms in Thoracic Oncology

Disease(s) : Thoracic oncology

Method(s) : Endoscopy and interventional pulmonology Imaging Palliative care

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Medical Student, Radiologist, Scientist (basic, translational), Thoracic oncologist, Thoracic surgeon

00:00 **Confocal endomicroscopy in thoracic malignancy - seeing is believing?** **29**
Jouke T. Annema (Amsterdam, Netherlands)

Pre-congress content Session 27 00:00 - 23:59

Year in review: Pre-clinical discovery and testing of new approaches to lung repair

Aims : to provide an overview of some key recent publications that have identified and tested novel therapeutic targets in pre-clinical models. A variety of pulmonary diseases will be covered. Hereby the clinical audience can foresee and debate potential of translation into the clinical and receive insight into novel strategies taken in the laboratory to identify and test targets. Studies can serve as examples for basic and translational scientists and can instigate further mechanistic research.

Disease(s) : Airway diseases | Interstitial lung diseases | Paediatric respiratory diseases

Method(s) : Cell and molecular biology

Tag(s) : Basic science

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

00:00 **Pre-clinical discovery and testing of new approaches to lung repair** **30**
Reinoud Gosens (Groningen, Netherlands)

Pre-congress content Session 28 00:00 - 23:59

Year in review: The transforming growth factor beta/BMP axis in pulmonary arterial hypertension: from screening to treatment

Aims : to provide an overview of recent insights into the role of the TGFbeta/BMP signaling axis in the pathophysiology and management of pulmonary arterial hypertension. This will encompass new molecular insights, developing knowledge around genetic testing and screenings, and new possibilities for targeted treatment

Disease(s) : Pulmonary vascular diseases

Method(s) : Cell and molecular biology

Tag(s) : Translational

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

00:00 **The transforming growth factor beta/BMP axis in pulmonary arterial hypertension: from screening to treatment** **31**
Harm Jan Bogaard (Amsterdam, Netherlands)

Pre-congress content Session 29 00:00 - 23:59

Year in review: What is new in tuberculosis: from prevention to treatment

Aims : to present new achievements in tuberculosis diagnostics, new drugs and new regimens, biomarkers and the use of artificial intelligence in clinical trials.

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, Physician in Pulmonary Training, Physiologist, Radiologist, Respiratory physiotherapist, Scientist (basic, translational), Journalist

00:00 **What is new in tuberculosis: from prevention to treatment** **32**
Christoph Lange (Borstel, Germany)

Pre-congress content Session 30 00:00 - 23:59

Year in review: Health effects of novel tobacco and nicotine products

Aims : to present research and studies on health effects of using electronic nicotine delivery systems (ENDS) and heated tobacco products (HTP); to start a discussion on changes in the tobacco products related policies and regulations.

Disease(s) : Airway diseases

Method(s) : Epidemiology

Tag(s) : Translational

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Paediatrician, Physician in Pulmonary Training

00:00	**Health effects of novel tobacco and nicotine products** Elif Dagli (Istanbul, Turkey)	**33**

Pre-congress content Session 31 00:00 - 23:59

Year in review: The emerging role of helmet noninvasive ventilation in treatment of patients with acute hypoxemic failure

Aims : to provide an update on the role of helmet CPAP and helmet NIV in treatment of patients with acute hypoxemia failure.
At the end of this presentation audience with be familiar with the indication for helmet CPAP and Helmet NIV and the optimal way to use the helmet in patients with acute hypoxemia failure.

Disease(s) : Respiratory critical care Respiratory infections

Method(s) : General respiratory patient care Physiology Respiratory intensive care

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Medical Student, Nurse, Respiratory critical care physician, Paediatrician, Patient, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist, Respiratory therapist

00:00	**The emerging role of helmet noninvasive ventilation in treatment of patients with acute hypoxemic failure** Domenico Luca Grieco (Rome, Italy)	**34**

Pre-congress content Session 32 00:00 - 23:59

Year in review: Treatment of cT1 lung cancer: novel perspectives

Aims : to discuss the different treatment option for cT1 lung cancer: surgical segmentectomy, bronchoscopic ablation of lung tumour including robotic bronchoscopic, stereotactic ablative radiotherapy (SABR); to discuss leaving the concept of lobectomy and opt for segmentectomy?; to discuss if the focus should be on non-invasive stereotactic radiotherapy or should patients be treated bronchoscopically?

Disease(s) : Thoracic oncology

Method(s) : Endoscopy and interventional pulmonology Imaging Surgery

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Medical Student, Thoracic oncologist, Thoracic surgeon

00:00	**Treatment of cT1 lung cancer: novel perspectives** Felix J.F. Herth (Heidelberg, Germany)	**35**

Pre-congress content Session 33 00:00 - 23:59

Year in review: Preserved ratio impaired spirometry (PRISm): recent insights and clinical implications

Learn about the most recent and clinically relevant insights in subjects with preserved ratio impaired spirometry (PRISm)

Aims : to update the audience about the epidemiology, temporal stability and long-term health outcomes of the lung function trait PRISm (preserved ratio impaired spirometry). Secondary, for those that are not yet familiar with PRISm, the definition of this condition will be introduced and the associations between PRISm, respiratory symptoms and the chronic obstructive pulmonary disease (COPD) will be highlighted. Also, the audience will learn about the relationship between PRISm and extrapulmonary comorbidities and about latest insights into the long-term lung function trajectories of PRISm.

Disease(s) : Airway 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, Nurse, Patient, Physician in Pulmonary Training, Physiologist, Scientist (basic, translational), Journalist

00:00	**Preserved ratio impaired spirometry (PRISm): recent insights and clinical implications** Yunus Çolak (Herlev, Denmark)	**36**

Pre-congress content Session 34 00:00 - 23:59

Professional development: Lung Cancer: Improving discussions about the resuscitation status

Aims : To offer attendees the opportunity to develop the following skills: To discuss options with patients and support informed decision making throughout the entire pathway; to manage patients' and families' resuscitation expectations throughout the pathway; To address emotional factors impacting on resuscitation decisions

Target audience : Physician in Pulmonary Training, Nurse

Chairs : Georgia Hardavella (Athens, Greece), Anne-Claire Toffart (Grenoble, France)

	Patient testimonial Merel Hennink (Groningen, Netherlands)	**37**
	Presenting information about 'not for resus' status: The oncologist's/lung cancer specialist's perspective Georgia Hardavella (Athens, Greece)	**38**
	Presenting information about 'not for resus' status: The intensivist's perspective Stefano Nava (Bologna (BO), Italy)	**39**
	Oncologist and intensivist join forces – How to deliver the conversation together as an MDT (complementary roles) Anne-Claire Toffart (Grenoble, France)	**40**
	Communicating the withdrawal of care - Tips to minimize the psychological impact on patient and carer Yves Libert (Brussels, Belgium)	**41**

Pre-congress content Session 35 00:00 - 23:59

Professional development: Time to team up! Shared decision making in the pulmonary paediatric care

Aims : 1) To describe the process of shared decision making in an academic children's hospital;
2) To show the experience of both patients, parents and medical professionals in shared decision making;
3) To emphasize the effect of shared decision making on patient and therapy adherence;
4) Provide tips and tricks in shared decision making, based on patient and professional experience.

Chairs : Martijn Den Dekker (Rotterdam, Netherlands)

	Time to team up! Shared decision making in the pulmonary paediatric care Martijn Den Dekker (Rotterdam, Netherlands), Patricia Kalkman (Rotterdam, Netherlands), Annelies Kok (Rotterdam, Netherlands)	**42**

Zoom Session 36 11:00 - 12:00

Assembly members' meeting: Assembly 3: Basic and translational sciences

Aims : To receive the latest assembly updates, including information on funding opportunities, upcoming deadlines, and ongoing projects. To register to attend this meeting, please use this Zoom webinar link

Chairs : Catherine Greene (Dublin 9, Ireland), Niki L. Reynaert (Maastricht, Netherlands), H. Irene Heijink (Groningen, Netherlands), Agnes Boots (Maastricht, Netherlands), Arnaud Mailleux (Paris, France), Niki Ubags (Epalinges, Switzerland)

No Room Session 37 10:30 - 16:00

Patient: ELF Patient organisation networking day 2022

Aims : This event focused on self-management will help patient organisations explore how they can support their patient communities to self-manage their health conditions

Chairs : Kjeld Hansen (Oslo, Norway)

10:30	**Session 1** Kjeld Hansen (Oslo, Norway)	**43**
10:50	**Session 2** **ERS President, Professor Marc Humbert** **ERS President-elect, Professor Carlos Robaldo Cordeiro** Marc Humbert (Le Kremlin-Bicêtre, France), Carlos Robalo Cordeiro (Coimbra, Portugal)	**44**
11:00	**Session 3 - Keynote speakers**	**45**
11:50	**Break 1**	**46**
12:05	**Session 4 - Patient organisation talks**	**47**
13:20	**Lunch break**	**48**
14:05	**Session 5 - Breakout groups**	**49**
15:05	**Break 3**	**50**
15:20	**Session 6 - Plenary feedback**	**51**
15:50	**Session 7 - Closing words** Kjeld Hansen (Oslo, Norway)	**52**

Zoom Session 38 13:30 - 14:30

Assembly members' meeting: Assembly 14: Clinical techniques, imaging and endoscopy

Aims : To receive the latest assembly updates, including information on funding opportunities, upcoming deadlines, and ongoing projects. To register to attend this meeting, please use this Zoom webinar link

Chairs : Jouke T. Annema (Amsterdam, Netherlands), Walter De Wever (Leuven, Belgium), Elżbieta Magdalena Grabczak (Warszawa, Poland), Mohammed Munavvar (Preston (Lancashire), United Kingdom), Ádám Domonkos Tárnoki (Budapest, Hungary), Christian B. Laursen (Odense, Denmark), Daniela Gompelmann (Vienna, Austria)

Zoom Session 39 13:30 - 14:30

Assembly members' meeting: Assembly 10: Respiratory infections

Aims : To receive the latest assembly updates, including information on funding opportunities, upcoming deadlines, and ongoing projects. To register to attend this meeting, please use this Zoom webinar link

Chairs : Eva Polverino (Barcelona, Spain), Michael Loebinger (London, United Kingdom), Raquel Duarte (Porto, Portugal), Alberto Garcia-Basteiro (Maputo, Mozambique), Holly R. Keir (Dundee (Angus), United Kingdom)

Zoom Session 40 17:00 - 18:00

Assembly members' meeting: Assembly 12: Interstitial lung diseases

Aims : To receive the latest assembly updates, including information on funding opportunities, upcoming deadlines, and ongoing projects. To register to attend this meeting, please use this Zoom webinar link

Chairs : Katerina Antoniou (Heraklion, Greece), Michael Kreuter (Heidelberg, Germany), Karen Moor (Rotterdam, Netherlands), Marlies S. Wijsenbeek (Rotterdam, Netherlands), Elena Bargagli (Siena, Italy), Paolo Spagnolo (Padova (PD), Italy), Maria Molina Molina (Barcelona, Spain), Wim A Wuyts (Leuven, Belgium), Antoine Froidure (Bruxelles, Belgium), Marcel Veltkamp (De Meern, Netherlands), Cormac McCarthy (Dublin 4, Ireland)

Zoom Session 42 11:00 - 12:00

Assembly members' meeting: Assembly 1: Respiratory clinical care and physiology

Aims : To receive the latest assembly updates, including information on funding opportunities, upcoming deadlines, and ongoing projects. To register to attend this meeting, please use this Zoom webinar link

Chairs : Hilary Pinnock (Edinburgh (Edinburgh), United Kingdom), Ioannis Vogiatzis (Blyth, United Kingdom), Frits M.E. Franssen (Horn, Netherlands), Shailesh Balasaheb Kolekar (Herlev, Denmark), Guido Vagheggini (Volterra (PI), Italy), Miguel Román Rodriguez (Palma De Mallorca, Spain), Vitalii Poberezhets (Vinnytsia, Ukraine), Sam Bayat (Grenoble, France), Thomas Gille (Bobigny, France)

Zoom Session 43 11:00 - 12:00

Assembly members' meeting: Assembly 2: Respiratory intensive care

Aims : To receive the latest assembly updates, including information on funding opportunities, upcoming deadlines, and ongoing projects. To register to attend this meeting, please use this Zoom webinar link

Chairs : Leo Heunks (Amsterdam, Netherlands), João Carlos Winck (Vila Nova de Gaia, Portugal), Christian Karagiannidis (Cologne, Germany), Marieke L. Duiverman (Groningen, Netherlands), Maxime Patout (Paris, France)

Zoom Session 45 12:30 - 13:30

Assembly members' meeting: Assembly 4: Sleep disordered breathing

Aims : To receive the latest assembly updates, including information on funding opportunities, upcoming deadlines, and ongoing projects. To register to attend this meeting, please use this Zoom webinar link

Chairs : Winfried J. Randerath (Solingen, Germany), Sophia E. Schiza (Heraklion, Greece), Manuel Sanchez De La Torre (Lleida, Spain), Dries Testelmans (Leuven, Belgium), Matteo Bradicich (Zollikerberg, Switzerland)

Zoom Session 46 12:30 - 13:30

Assembly members' meeting: Assembly 7: Paediatrics

Aims : To receive the latest assembly updates, including information on funding opportunities, upcoming deadlines, and ongoing projects. To register to attend this meeting, please use this Zoom webinar link

Chairs : Marielle W.H. Pijnenburg (Rotterdam, Netherlands), Alexander Möller (Zürich, Switzerland), Nicole Beydon (Paris, France), Angela Zacharasiewicz (Wien, Austria), Stojka Fustik (Skopje, North Macedonia), Marijke Proesmans (Leuven, Belgium), Anna Lavizzari (Milano (MI), Italy), Myrofora Goutaki (Bern, Switzerland), Dirk Schramm (Düsseldorf, Germany), Rory Morty (Heidelberg, Germany), Cristina Ardura-Garcia (Bern, Switzerland)

Zoom Session 47 14:00 - 15:00

Assembly members' meeting: Assembly 8:Thoracic surgery and transplantation

Aims : To receive the latest assembly updates, including information on funding opportunities, upcoming deadlines, and ongoing projects. To register to attend this meeting, please use this Zoom webinar link

Chairs : Stefano Elia (Roma (RM), Italy), Federica Meloni (Pavia (PV), Italy), Marcello Migliore (Catania (CT), Italy), Robin Vos (Leuven, Belgium), Merel Hellemons (Rotterdam, Netherlands)

Zoom Session 48 14:00 - 15:00

Assembly members' meeting: Assembly 9: Allied respiratory professionals

Aims : To receive the latest assembly updates, including information on funding opportunities, upcoming deadlines, and ongoing projects. To register to attend this meeting, please use this Zoom webinar link

Chairs : Daniel Langer (Leuven, Belgium), Jellien Makonga-Braaksma (Woudenberg, Netherlands), Karl Sylvester (Cambridge (Cambridgeshire), United Kingdom), Deniz Inal-Ince (Ankara, Turkey), Andreja Sajnic (Zagreb, Croatia), Joana Cruz (Leiria, Portugal)

Zoom Session 49 14:00 - 15:00

Assembly members' meeting: Assembly 6: Epidemiology and environment

Aims : To receive the latest assembly updates, including information on funding opportunities, upcoming deadlines, and ongoing projects. To register to attend this meeting, please use this Zoom webinar link

Chairs : Charlotte Suppli Ulrik (Virum, Denmark), Ane Johannessen (Bergen, Norway), Om Prakash Kurmi (Coventry, United Kingdom), Rafael E. de la Hoz (New York, United States), Elif Dagli (Istanbul, Turkey), Orianne Dumas (Villejuif, France)

Zoom Session 50 15:30 - 16:30

Assembly members' meeting: Assembly 13: Pulmonary vascular diseases

Aims : To receive the latest assembly updates, including information on funding opportunities, upcoming deadlines, and ongoing projects. To register to attend this meeting, please use this Zoom webinar link

Chairs : Anton Vonk Noordegraaf (Amsterdam, Netherlands), Olivier Sitbon (Le Kremlin-Bicêtre, France), Silvia Ulrich (Zurich, Switzerland), Laurent Bertoletti (Saint Etienne Cedex, France), Mona Lichtblau (Zürich, Switzerland)

Zoom Session 51 15:30 - 16:30

Assembly members' meeting: Assembly 11: Thoracic oncology

Aims : To receive the latest assembly updates, including information on funding opportunities, upcoming deadlines, and ongoing projects. To register to attend this meeting, please use this Zoom webinar link

Chairs : Torsten Gerriet Blum (Berlin, Germany), Najib M. Rahman (Oxford, United Kingdom), Georgia Hardavella (Athens, Greece), Kevin Blyth (Glasgow (Glasgow), United Kingdom), Maria Joana Pereira Catarata (Porto, Portugal)

Zoom Session 52 15:30 - 16:30

Assembly members' meeting: Assembly 5: Airway diseases, asthma, COPD and chronic cough

Aims : To receive the latest assembly updates, including information on funding opportunities, upcoming deadlines, and ongoing projects. To register to attend this meeting, please use this Zoom webinar link

Chairs : Omar S. Usmani (London, United Kingdom), Apostolos Bossios (Stockholm, Sweden), Lena Uller (Lund, Sweden), Florence Schleich (Liège, Belgium), Marco Idzko (Wien, Austria), Carolina Maria Gotera Rivera (Madrid, Spain)

08:00-09:15
INDUSTRY EARLY MORNING SYMPOSIUM SEE PAGE 1

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

8D Session 60 08:00 - 10:20

Skills workshop: SW1 Exercise, muscle and sleep assessment and interpretation: tips and pitfalls

Tips and pitfalls in exercise, muscle and sleep assessment

Aims : To describe "typical" patterns of responses to exercise, muscle and sleep and to determine methods to distinguish these responses from "anomalous" response profiles that can cause misinterpretation of test results.

Disease(s) : Sleep and breathing disorders

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

Tag(s) : Clinical

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

Chairs : Samuel Verges (Grenoble, France)

08:00	**Introduction**	**106**
08:00	**Cardiopulmonary exercise testing: breathing patterns and dynamic hyperinflation** Pierantonio Laveneziana (Paris, France)	**107**
08:00	**Respiratory and locomotor muscle testing in clinical practice** Daniel Langer (Leuven, Belgium)	**108**
08:00	**From different pathophysiological traits revealed by polysomnography to treatment indications or combination of therapies** Manuel Sanchez De La Torre (Lleida, Spain)	**109**
08:00	**Implementation, titration and follow-up of positive airway pressure in patients with obstructive sleep apnoea** Athanasia Pataka (Thessaloniki, Greece)	**110**

8N Session 62 08:15 - 09:30

Oral presentation: Lung physiology throughout life: applicability and assessment

Disease(s) : Airway diseases Interstitial lung diseases

Method(s) : Epidemiology Physiology Pulmonary function testing Imaging

Chairs : Rachel Ong-Salvador (Amsterdam, Netherlands), Laurie Smith (Sheffield (South Yorkshire), United Kingdom)

OA119	**The longitudinal impact of body compartments on lung function in children, adolescents, and adults** Alina Ofenheimer (Zürich, Switzerland), Marie-Kathrin Breyer, Emiel F.M. Wouters, Caspar Schiffers, Sylvia Hartl, Otto C. Burghuber, Florian Krach, Frits M.E. Franssen, Tobias Mraz, Patricia Puchhammer, Robab Breyer-Kohansal
OA120	**Impact of the ERS/ATS 2021 guidelines for lung function interpretation** Marko Topalovic (Kessel-lo, Belgium), Paul Desbordes, Julie Maes, Karl Sylvester, Frans De Jongh, Wim Janssens
OA121	**Long term pulmonary function of infants born moderate-late preterm – A systematic review and meta-analysis** Cassidy Du Berry (Melbourne, Australia), Christopher Nesci, Jeanie Cheong, Tara Fitzgerald, Sarath Ranganathan, Rheanna Mainzer, Lex Doyle, Elianne Vrijlandt, Liam Welsh
OA122	**Comparison of conventional and rapid gas analyzer-based assessment of single-breath DLCO in COPD patients** Christian Buess (Zürich, Switzerland), Andreas Piecyk, Rudolf Jörres, Helgo Magnussen
OA124	**Safety of different types of loaded breathing in adult Fontan patients** Patrick Schön (Zurich, Switzerland), Kyle G. Boyle, Matthias Greutmann, Christina M. Spengler
OA125	**A verification-acceptability process for onboarding new PFT systems in a Canadian provincial accreditation program.** Carl D. Mottram (Rochester, United States), Teresa Mccaskill, Francis Ervin, Navdeep Rakhra

OA126	**Gas exchange after Covid-19 pneumonia** Salma Mokaddem Mohsen (Tunis, Tunisia), Khouloud Kechaou, Molk Maalej, Asma Chaker, Nadia Ben Lazreg, Saloua Ben Khamsa Jameleddine
OA127	**Annual lung function change in PIZZ α_1-antitrypsin deficiency (A1ATD).** Mark Howlett-Foster (Cambridge, United Kingdom), Ben Knox-Brown, Matthew Rutter, Karl Sylvester, Ravi Mahadeva
OA128	**Late Breaking Abstract - Physiological assessment of patients with airways dysanapsis using 129Xe MRI** Laurie Smith (Sheffield (South Yorkshire), United Kingdom), Helen Marshall, Demijade Jakymelen, Alberto Biancardi, Guilhem J Collier, Ho-Fung Chan, Paul J C Hughes, Martin L Brook, Joshua Astley, Ryan Munro, Smitha Rajaram, Andrew J Swift, David Capener, Jody Bray, James Ball, Olly Rodgers, Ian Smith, Bilal A Tahir, Madhwesha Rao, Graham Norquay, Nick D Weatherley, Leanne Armstrong, Latife Hardaker, Titti Fihn-Wikander, Rod Hughes, Jim M Wild
OA129	**Discussion** All Speakers

8F Session 63 08:15 - 09:30

Oral presentation: Best abstracts in pulmonary rehabilitation and chronic care

Disease(s) : Interstitial lung diseases Airway diseases

Method(s) : General respiratory patient care Pulmonary rehabilitation Endoscopy and interventional pulmonology

Chairs : Guido Vagheggini (Volterra (PI), Italy), Rachael A. Evans (Leicester (Leicestershire), United Kingdom)

OA130	**Understanding the effectiveness of different aerobic training modalities in COPD: a component network meta-analysis** Thomas Ward (Leicester, United Kingdom), Charles Plumptre, Thomas Dolmage, Amy Jones, Ruth Tretheway, Pip Divall, Sally Singh, Martin Lindley, Michael Steiner, Rachael Evans
OA131	**Exercise tolerance and limiting symptoms 5 and 12 months after hospital discharge from COVID-19** Molly M Baldwin (Leicester, United Kingdom), Enya Daynes, Urvee Karsanji, Hamish Mcauley, William D Man, Rachael A Evans, Sally J Singh, P Hosp-Covid Collaborative Group
OA132	**Anxiety and Depression in IPF and response to pulmonary rehabilitation (PR)** George D Edwards (Ilford, United Kingdom), Oliver Polgar, Suhani Patel, Ruth E Barker, Jessica Walsh, Jennifer Harvey, Willam D-C Man, Claire M Nolan
OA133	**Improving the well-being in caregivers of patients with COPD using a home-based pulmonary rehabilitation program** Sarah Gephine (Pérenchies, France), Olivier Le Rouzic, Cécile Chenivesse, Jean-Marie Grosbois
OA134	**Quality of ventilation in patients on home NIV included in a telemonitoring programme - TELVENT study** Sandrine Pontier-Marchandise (Toulouse Cedex 9, France), Joelle Texereau, Arnaud Prigent, Claudio Rabec, Jésus Gonzalez-Bermejo, Frédéric Gagnadoux, Alexia Letierce, Joao Carlos Winck
OA135	**Impact of an online breathing and wellbeing programme (ENO Breathe) in people with persistent symptoms following COVID-19: a randomised controlled trial** Keir Philip (, United Kingdom), Harriet Owles, Stephanie Mcvey, Tanja Pagnuco, Katie Bruce, Harry Brunjes, Winston Banya, Jenny Mollica, Adam Lound, Suzi Zumpe, Amiad A M Abrahams, Vijay Padmanaban, Thomas H Hardy, Adam Lewis, Sarah Elkin, Nicholas S Hopkinson
OA136	**Reduction of lung hyperinflation improves cardiac preload, contractility, and output in emphysema** Marieke van der Molen (Groningen, Netherlands), Jorine Hartman, Lowie Vanfleteren, Huib Kerstjens, Joost Van Melle, Tineke Willems, Dirk-Jan Slebos
OA137	**Feasibility and effectiveness of eccentric training on limb muscle function and functional performance in patients with COPD: a pilot study** Simone Pancera (Manerbio, Italy), Nicola Francesco Lopomo, Roberto Porta, Antonella Sanniti, Riccardo Buraschi, Luca Nicola Cesare Bianchi
OA138	**Surfactant protein-A (SP-A) is a novel marker of lung disorders in patients discharged after COVID-19 pneumonia** Olha Shchudro (Dnipro, Ukraine), Lyudmyla Konopkina
OA139	**Discussion** All Speakers

8L Session 64 08:15 - 09:30

Oral presentation: Early childhood risk factors for wheezing and later asthma

Disease(s) : Airway diseases

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

Chairs : Sejal Saglani (London, United Kingdom), Christiane Lex (Goettingen, Germany)

OA140	**Early food intervention and skin emollients to prevent preschool asthma** Anine Lie (Bekkestua, Norway), Marissa Leblanc, Martin Färdig, Riyas Vettukattil, Sigve Ådalen, Ingebjørg Skrindo, Sabina Wärnberg Gerdin, Berit Granum, Hrefna Kathrin Gudmundsdottir, Gunilla Hedlin, Angela Hoyer, Christine Monceyron Jonassen, Björn Nordlund, Eva Maria Rehbinder, Anne Cathrine Staff, Cilla Söderhall, Sandra Ganrud Tedner, Hilde Aaneland, Karin Cecilie Lødrup Carlsen, Håvard Ove Skjerven
OA141	**Identification of oropharyngeal microbiome-driven asthma and wheezing clusters in children** Mahmoud Ismael Abdel-Aziz (Amsterdam, Netherlands), Jonathan Thorsen, Simone Hashimoto, Susanne J. H. Vijverberg, Anne H. Neerincx, Paul Brinkman, Wim Van Aalderen, Jakob Stokholm, Michael Roggenbuck-Wedemeyer, Nadja Hawwa Vissing, Martin Steen Mortensen, Asker Daniel Brejnrod, Louise J. Fleming, Clare S. Murray, Stephen J. Fowler, Urs Frey, Andrew Bush, Florian Singer, Gunilla Hedlin, Björn Nordlund, Dominick E. Shaw, Kian Fan Chung, Ian M. Adcock, Ratko Djukanovic, Charles Auffray, Aruna T. Bansal, Ana R. Sousa, Scott S. Wagers, Bo Lund Chawes, Klaus Bønnelykke, Søren Johannes Sørensen, Aletta D. Kraneveld, Peter J. Sterk, Graham Roberts, Hans Bisgaard, Anke H. Maitland-Van Der Zee
OA142	**Pollen exposure is associated with risk of respiratory symptoms during the first year of life** Jakob Usemann (Basel, Switzerland), Amanda Gisler, Marloes Eeftens, Kees De Hoogh, Danielle Vienneau, Yasmin Salem, Sophie Yammine, Julian Jakob, Olga Gorlanova, Fabienne Decrue, Regula Gehrig, Urs Frey, Philipp Latzin, Oliver Fuchs
OA143	**Virus-specific airway immune response in early life is associated with childhood asthma** Mathias Elsner Melgaard (København S, Denmark), Bo Lund Krogsgaard Chawes, Signe Kjeldgaard Jensen, Jakob Stokholm, Ann-Marie Malby Schoos, Susanne Brix, Anders Eliasen, Casper-Emil Tingskov Pedersen, Hans Bisgaard, Klaus Bønnelykke
OA144	**Viral co-detection in severe bronchiolitis and lung function, allergic sensitization and asthma prevalence in school-aged children** Maria Fernanda Gonzalez German (Madrid, Spain), Sara Ruiz-Gonzalez, Sonia Alcolea, Francisco Pozo, Inmaculada Casas, Cristina Calvo, Maria Luz Garcia-Garcia
OA145	**Risk factors and age-related patterns of asthma-like symptoms in early childhood** Julie Nyholm Kyvsgaard (Gentofte, Denmark), Bo L. Chawes, David Horner, Laura M. Hesselberg, Mathias E. Melgaard, Signe K. Jensen, Jonathan Thorsen, Nicklas Brustad, Klaus Bønnelykke, Hans Bisgaard, Jakob Stokholm
OA146	**Longitudinal effects of prenatal exposure to plastic-derived chemicals and their metabolites on asthma and lung function** Francesca Sanna (Perth, Australia), Rachel Foong, Peter Franklin, Graham Hall, Peter Sly, Eric Thorstensen, Dorota Doherty, Jeffrey Keelan, Roger Hart
OA147	**Establishing a paediatric airway epithelial model of acute wheezing illness** Rebecca Watkinson (Clarkson, Australia), Samuel Montgomery, Kevin Looi, Ingrid Laing, Anthony Kicic
OA148	**Late Breaking Abstract - Bacterial airway colonization in neonates reveals a specific childhood asthma endotype** Rikke Bjersand Sunde (Gentofte, Denmark), Jonathan Thorsen, Ann-Marie Malby Schoos, Jakob Stokholm, Klaus Bønnelykke, Bo Chawes, Hans Bisgaard
OA149	**Discussion** All Speakers

TP-1 in thematic poster area — Session 66 — 08:30 - 09:30

Thematic poster: Clinical problems in respiratory medicine: 1

Disease(s) : Airway diseases Interstitial lung diseases

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

Chairs : Jan Willem Duitman (Lelystad, Netherlands), Tiziana Patrizia Cremona (Bern, Switzerland)

PA151	**Persistent interstitial involvement in relation to the severity of SARS CoV-2 infection** Ana Roca Noval (Madrid, Spain), Rocío García García, Miguel Jiménez Gómez, Eduardo Catalinas Muñoz, Julia Diaz Miravalls, Layla Diab Cáceres

PA152	**Modification of the Rheumatoid Arthritis (RA) Patient Reported Experience Measure (PREM) for patients with Interstitial Lung Disease (ILD)** Jessica Mandizha (Exeter, United Kingdom), Anna Duckworth, Howard Almond, Graham Brown, Sarah Lines, Ana Jorge Da Ponte, Rebecca Shuttleworth, Joe Lanario, Matthew Steward, Ross Sayers, Chris Scotton, Michael Gibbons, Anne-Marie Russell
PA153	**Late-onset noninfectious pulmonary complications after allogeneic hematopoietic stem cell transplantation- risk factors, prognosis** Özlem Isik (Ankara, Turkey), Güldane Cengiz Seval, Serhat Erol, Selami Koçak Toprak, Özlem Özdemir Kumbasar
PA154	**Immunoglobulin G4-related thoracic disease: clinical and radiological findings of an eastern mediterranean cohort** Asli Alkan Oncel (Ankara, Turkey), Gamze Durhan, Gozde Kubra Yardimci, Umran Ozden Sertcelik, Bayram Farisogullari, Macit Ariyurek, Omer Karadag, Deniz Koksal
PA155	**COVID-19 patients : predictive factors for home therapy oxygen** Nouha Guediri (Tunis, Tunisia), Islam Mejri Lajili, Nouha Boubaker, Selsebil Dabboussi, Samira Mhamdi, Chiraz Aichaouia, Zied Moatameri
PA156	**COVID-19 and comorbidity: possible complications of the complex pharmacotherapy** Kateryna Gashynova (Dnipro, Ukraine), Olena Y. Kovalenko, Olena N. Kovalenko, Vladyslava Rudakova
PA157	**The examination of the second-line chemotherapy in SCLC patients with interstitial lung disease** Ryohiko Ozaki (Tokushima, Japan), Hiroshi Nokihara, Youhei Yabuki, Atsushi Mitsuhashi, Hiroto Yoneda, Kenji Otsuka, Hirokazu Ogino, Yasuhiko Nishioka
PA158	**Service evaluation of cardiac MRI imaging in patients presenting with an undiagnosed eosinophilia** Hnin Wint Aung (Market Harborough, United Kingdom), Kay Kyaw, Mohammad Bilal Habib, Shamsa Naveed, Salman Siddiqui
PA159	**Distribution of sequelae in post-covid patients according to previous need of respiratory support** Enrico Buonamico (Bari (BA), Italy), Andrea Portacci, Fabrizio Diaferia, Paola Pierucci, Esterina Boniello, Ilaria Iorillo, Cristian Locorotondo, Sara Quaranta, Ernesto Lulaj, Giovanna Elisiana Carpagnano
PA160	**Long-term symptoms in patients with EVALI (e-cigarette or vaping associated lung injury) compared with people who vape** Denitza Blagev (Salt Lake City, United States), Sean Callahan, Dixie Harris, Dave Collingridge, Mona Hopkins, Jackie Eve, Lindsey Waddoups, Valerie Aston, Samuel Brown, Michael Lanspa
PA161	**Bacterial Etiology of Slow Resolving Pneumonia in adults:Study of 138 cases** Muhammad Irfan (Lahore (Punjab), Pakistan), Syed Amir Gilani, Ejaz Qureshi, Abdul Rasheed Qureshi
PA162	**Predictive factors for Long COVID in adults previously hospitalized for COVID-19** Leila Douik El Gharbi (Ariana, Tunisia), Ines Moussa, Tasnim Znegui, Imen Sahnoun, Maroua Bougacha, Asma Allouche, Chiraz Ksouri
PA163	**Idiopathic Pulmonary Fibrosis in Australia: A cost of illness study.** Ingrid A. Cox (Bellerive (TAS), Australia), Barbara De Graaff, Hasnat Ahmed, Julie Campbell, Petr Otahal, Tamera Corte, Yuben Moodley, Nicole Goh, Peter Hopkins, Sacha Macansh, Haydn Walters, Andrew Palmer
PA164	**Gender differences in frequency-based parameters of COVID-19 cough at varying levels of disease severity** Clare Davidson (Barcelona, Spain), Oswaldo Antonio Caguana, Manual Lozano-García, M Arita, Luis Estrada-Petrocelli, Ignasi Ferrer-Lluis, Yolanda Castillo-Escario, P Ausín, Joaquim Gea, Raimon Jané
PA165	**Comparing patient outcomes from COVID-19 infection across three separate waves** Paren Chohan (BROMSGROVE, United Kingdom), Andrew Crawford, Muhammad Zafar, Ellepola Wijayasinghe, Mazhar Chaudri
PA166	**Prone positioning procedure in COVID-19 radiological phenotypes** Pasquale Tondo (Foggia, Italy), Giulia Scioscia, Filomena Simone, Giulio Giganti, Michela Salvemini, Antonella Giuliani, Anela Hoxhallari, Maria Pia Foschino Barbaro, Donato Lacedonia
PA167	**Younger Age as a Predictor of Mortality from COVID-19 in Hematological Patients** Kateryna Gashynova (Dnipro, Ukraine), Hanna Usenko
PA168	**Intra-hospital complications during SARS-CoV2 infection** safa marzouki (ben arous, Tunisia), Sabrine Louhaichi, Besma Hamdi, Jamel Ammar, Agnes Hamzaoui
PA169	**Interstitial lung abnormalities – real-world evidence** Carina Rôlo Silvestre (S. João das Lampas, Portugal), Catarina Custódio, Susana Clemente, Silvia Rodrigues, Sofia Furtado, Rui Maio

PA170	**Differencies between former smokers and non-smokers during post-Covid period** Darjan Ranilović (Zagreb, Croatia), Ivan Marasović, Ivona Kovačević, Đivo Ljubičić, Jasna Tekavec-Trkanjec

TP-10 in thematic poster area — Session 67 — 08:30 - 09:30

Thematic poster: Chronic cough, airway diseases and methods

Disease(s) : Airway diseases Interstitial lung diseases

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

Chairs : Augusta Beech (Manchester, United Kingdom), Mikael Adner (Stockholm, Sweden)

PA171	**IMPALA: efficacy measures in patients who required whole lung lavage** Yoshikazu Inoue (Osaka, Japan), Badrul Chowdhury, Jack Bennett, Dhaval Desai
PA172	**Assessing human lung pharmacokinetics using exhaled breath particles (PEx)** Jens Hohlfeld (Hannover, Germany), Olaf Holz, Muhammad Waqas Sadiq, Julian Nehrig, Birthe Ellinghusen, Nadja Struß, Ulf G Eriksson, Markus Fridén, Stina Stomilovic, Anders Lundqvist
PA173	**Improvements in Awake Cough Frequency in SOOTHE, A Phase 2b Trial of BLU-5937 in Refractory Chronic Cough** Jaclyn Smith (Manchester (Greater Manchester), United Kingdom), Lorcan Mcgarvey, Alyn H. Morice, Surinder S. Birring, James Hull, Sylvain Lanouette, Ronghua Yang, Kristin Bartholomew, Laurent Harvey, Margaret Garin, Catherine M. Bonuccelli
PA174	**The Effect of Inhaled Salbutamol on Mannitol Evoked Cough Responses: A Double-Blind Randomized Placebo Controlled 2-way Cross-Over Study** Mustafaa Wahab (Hamilton, Canada), Ruth Cusack, Caitlin Obminski, Karen Howie, Abbey Schlatman, Kieran Killian, Paul Obyrne, Imran Satia, Gail Gauvreau
PA175	**Real World Effectiveness and Tolerability of low-dose opiates for Refractory/Unexplained Chronic Cough (RCC/UCC) in a tertiary clinic** James Wingfield Digby (Manchester (Greater Manchester), United Kingdom), Jenny King, James Wingfield-Digby, Sarah Hennessey, Ashley Woodcock, Jaclyn Smith, Paul Marsden
PA176	**Safety and tolerability of inhaled molgramostim in autoimmune pulmonary alveolar proteinosis (aPAP)** Francesco Bonella (Düsseldorf, Germany), Jack Bennett, Badrul Chowdhury, Dhaval Desai
PA177	**Efficacy in SOOTHE, A Phase 2b Trial of BLU-5937 In Refractory Chronic Cough, Was Not Dependant of Taste Disturbance Adverse Events** Surinder S. Birring (London, United Kingdom), Jaclyn A. Smith, Lorcan Mcgarvey, Alyn H. Morice, Alan Goldsobel, Sylvain Lanouette, Ronghua Yang, Anna Levengood, Margaret Garin, Catherine M. Bonuccelli
PA178	**Characteristics of Participants with Refractory Chronic Cough Enrolled in A Phase 2b Trial of BLU-5937** Alyn Hugh Morice (Cottingham, United Kingdom), Jaclyn A. Smith, Surinder S. Birring, Lorcan Mcgarvey, Peter Dicpinigaitis, Mandel Sher, Sylvain Lanouette, Ronghua Yang, Margaret Garin, Catherine M. Bonuccelli
PA179	**Suicidal ideation, depression and anxiety in chronic cough** Barnaby Hirons (london, United Kingdom), Katie Rhatigan, Anna Simpson, Harini Kesavan, Richard Turner, Jim Hull, Mary Docherty, Caroline Jolley, Surinder S Birring, Peter S P Cho
PA180	**Health-related quality of life and its determinants in patients with chronic cough: a case-control study** Noeul Kang (Seoul, Republic of Korea), Ha-Kyeong Won, Ji-Hyang Lee, Ji Su Shim, Min-Hye Kim, Sung-Yoon Kang, Han-Ki Park, Eun Jung Jo, Seung Eun Lee, Sang-Heon Kim , Sae-Hoon Kim, Yoon-Seok Chang, Byung-Jae Lee, Min-Woo Jo, Woo-Jung Song
PA181	**IMPALA-2: choice of DLCO as a primary endpoint in aPAP** Bruce Trapnell (Cincinnati, United States), Dhaval Desai, Badrul Chowdhury
PA182	**Canadian health care professionals' perceptions on the management and effectiveness of treatment of chronic cough – results from a healthcare sample survey** Nermin Diab (Toronto, Canada), Elena Kum, Mustafaa Wahab, Theodore Abraham, Sevag Sahakian, Paul Hernandez, Harold Kim, Maxime Cormier, Peter Lin, Anne Ellis, Louis-Philippe Boulet, Alan Kaplan, Stephen Field, Imran Satia
PA183	**Analysis of transport mechanisms of substances applied to the airways in a transparent airway model** Christian Cornelissen (Aachen, Germany), Anja Lena Thiebes, Michael Dreher, Stefanie Gürzing, Manuel Reddemann

PA184	**The effect of the COVID-19 pandemic on severe asthma care in Europe - will care change for good?** Katrien A.B. Eger (s-Gravenhage, Netherlands), Paroczai Dora, Bacon Alison, Schleich Florence, Sergejeva Svetlana, Bourdin Arnaud, Vachier Isabelle, Zervas Eleftherios, Katsoulis Konstantinos, Papapetrou Dimosthenis, Kostikas Konstantinos, Csoma Zsuzsanna, Heffler Enrico, Giorgio Walter Canonica, Grisle Ineta, Bieksiene Kristina, Palacionyte Jolita, Ten Brinke Anneke, Simone Hashimoto, Smeenk Frank Wjm , Braunstahl Gert-Jan, Van Der Sar Simone, Mihălţan Florin, Nenasheva Natalia, Peredelskaya Marina, Zvezdin Biljana, Čekerevac Ivan, Hromiš Sanja, Ćupurdija Vojislav, Lazic Zorica, Milenkovic Branislava, Dimic-Janjic Sanja, Yasinska Valentyna, Dahlén Barbro, Bossios Apostolos, Lazarinis Nikolaos, Aronsson David, Egesten Arne, Munir Abdul Kashem Mohammad, Ahlbeck Lars, Janson Christer, Škrgat Sabina, Edelbaher Natalija, Leuppi Joerg, Jaun Fabienne, Rüdiger Jochen, Pavlov Nikolay, Gianella Pietro, Fischer Reta, Charbonnier Florian, Chaudhuri Rekha, Smith Steven James, Doe Simon, Fawdon Michelle, Masoli Matthew, Heaney Liam, Haitchi Hans Michael, Kurukulaaratchy Ramesh, Fulton Olivia, Frankemölle Betty, Gibson Toni, Needham Karen, Howarth Peter, Djukanovic Ratko, Bel Elisabeth, Hyland Michael
PA185	**EVALUATION OF INCIDENCE AND COMPLICATIONS DURING COVID-19 DESEASE IN PATIENTS WITH ASTHMA** Jaime Pavon Guede (Madrid, Spain), Paul Kent Ernesto Freund, Ricardo Antonio Camperos Moreno, Isamar De Agrela Mendes, Katherine Pose, Inés Fernández Concha Llona, Daniel Laorden Escudero, Carlos Javier Carpio Segura, Javier Domínguez Ortega, David Romero Ribate, Itsaso Losantos García, Santiago Quirce, Rodolfo Álvarez-Sala Walther
PA186	**The perspective of clinical pharmacologist: what is the safety of complex polypharmacy in hospitalized COVID-19 patients?** Kateryna Gashynova (Dnipro, Ukraine), Olena Kovalenko, Vladyslava Rudakova, Kseniia Suska, Natalya But
PA187	**Validity of a pathological score in the assessment of severe uncontrolled asthma** Hanaa Shafiek (Alexandria, Egypt), Cristina Gomez, Amanda Iglesias, Mar Mosteiro, Ana Gonzalez-Piñeiro, Marta Rodríguez, Mónica García-Cosío, Eladio Busto, Javier Martin, Melchor Saiz, Bairon Paz, Amparo Benito, Luis Mejías, Laura Lopez Vilaro, Borja G. Cosio
PA188	**A case of excavated pneumopathy after bronchial thermoplasty** Nicolas Migueres (Strasbourg, France), Mathilde Steger, Naji Khayath, Mickael Ohana, Christophe Marcot, Frederic De Blay
PA189	**Formoterol exerts anti-cancer effects modulating oxidative stress and EMT processes in CSE exposed lung adenocarcinoma cells** Maria Ferraro (Palermo (PA), Italy), Serena Di Vincenzo, Simona Taverna, Elisabetta Pace

TP-11 in thematic poster area — Session 68 — 08:30 - 09:30

Thematic poster: Exacerbations in COPD: biomarkers and management

Disease(s) : Airway diseases

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

Chairs : Bernardino Alcazar Navarrete (Cájar, Spain), Chair to be confirmed

PA190	**Sputum rheology in stable and exacerbated chronic obstructive pulmonary disease** Abdulmalik Abdi (, Switzerland), Desiree Schumann, Léo Franchetti, Wei-Chih Chen, Michael Tamm, Daiana Stolz
PA191	**Variability of fractional exhaled nitric oxide may predict acute exacerbations in COPD** Eleni Papakonstantinou (Basel, Switzerland), Desiree Schumann, Konstantinos Kostikas, Leticia Grize, Michael Tamm, Daiana Stolz
PA192	**Symmetric Projection Attractor Reconstruction: Analysis of waveform morphology predicts COPD exacerbations** Miquel Serna Pascual (London, United Kingdom), Rebecca D'Cruz, Ying Huang, Philip Aston, Caroline Jolley, Gerrard Rafferty, Joerg Steier, Manasi Nandi
PA193	**Clinical characteristics of eosinophilic and noneosinophilic exacerbations of COPD: relationship with sputum eosinophils and FENO** Balazs Antus (Budapest, Hungary), Csilla Paska, Imre Barta
PA194	**Respiratory reactance is related to future COPD exacerbations** Andrei Malinovschi (Uppsala, Sweden), Karin Lingman, Christer Janson, Kristina Bröms, Karin Lisspers, Björn Ställberg, Marieann Högman
PA195	**Clinical consequences of health measures and lock down for covid-19 in exacerbations in patients with chronic obstructive pulmonary disease (COPD)** Carlos Manzano Senra (Lleida, Spain), Laura Alcarraz, Anna Moncusí, Sally Santisteve, Jessica Gonzalez, Ferran Barbé

PA196	**SYSTEMIC PROTEOMIC PROFILES OF COPD PATIENTS AT CLINICAL STABILITY AND EXACERBATION** César Jessé Enriquez-Rodríguez (Barcelona, Spain), Carme Casadevall, Sergi Pascual-Guardia, Rosa Faner, Germán Peces-Barba, José Luis López-Campos, Eduard Monsó, Alvar Agustí, Joaquim Gea Guiral
PA197	**Relationship between the microbiome and the GOLD Stage during exacerbations** Laia Fernandez Barat (Barcelona, Spain), Ruben Lopez-Aladid, Leticia Bueno-Freire, Adrian Ceccato, Arturo Huerta, Nestor Soler, Antoni Torres
PA198	**Heart Rate Recovery After Cardiopulmonary exercise test Predicts Acute Exacerbation in COPD** Shan Nie (Beijing, China), Ailin Yang, Wei Yuan, Bo Xu, Nan Jia, Haoyan Wang
PA199	**Modifiable factors associated with acute exacerbations in patients with chronic obstructive pulmonary disease** Shehanaaz Begum (Trivandrum, India), Reshmi Nair, Kamala R, Anithakumari K
PA200	**COVID-19 incidence and hospitalization in routine clinical practice among COPD patients in England in 2020** Kieran Rothnie (London, United Kingdom), Theo Tritton, Xu Han, Tim Holbrook, Beade Numbere, Alexander Ford, Lucy Massey, Qinggong Fu, Fiona Hutchinson, Helen Birch, David Leather, Raj Sharma, Chris Compton, Afisi Ismaila
PA201	**Impact of rs16969968 polymorphism (SNPα5) on epithelial differentiation in COPD patients** Lynda SABER CHERIF (REims, France), Zania Diabasana, Jeanne-Marie Perotin, Julien Ancel, Phillipe Gosset, Uwe Maskos, Gaetan Deslée, Valerian Dormoy
PA202	**COPD and COVID-19: a dangerous association?** Lucía Méndez González (Santa Maria da Feira, Portugal), Jorge Ferreira, Cátia Caneiras
PA203	**Are neutrophil to lymphocyte ratio and platelet to lymphocyte ratio a useful markers to predict the severity of COPD and future acute exacerbation?** Aissa Sana (Sousse, Tunisia), Omrane Asma, Knaz Asma, Benzarti Wafa, Ben Jazia Rahma, Kacem Ameni, Gargouri Imene, Abdelghani Ahmed, Hayouni Abdelaziz
PA204	**A visual and innovative representation of the clinical trajectory of patients after an acute exacerbation of COPD. Results of the COHERENT-COPD study** Gema Maria Siesto Lopez (AVILA, Spain), Joaquín Sánchez-Covisa Hernández, Clara Goñi Echeverría, Héctor Bueno Zamora, José Luis Bernal Sobrino, Mónica Juarez Campo, Maria Piñeiro Roncal, Maria Teresa Tejedor Ortiz, Carlos José Álvarez Marínez
PA205	**Utility of echocardiographic measurement in assessing pulmonary arterial hypertension (PH) in COPD and correlation with severity and potential risk of acute exacerbation within 30 days** Aissa Sana (Sousse, Tunisia), Omrane Asma, Benzarti Wafa, Knaz Asma, Ben Jazia Rahma, Kacem Amani, Gargouri Imene, Abdelghani Ahmed, Hayouni Abdelaziz
PA206	**Mortality according to age, sex, or congestive heart failure after an acute COPD exacerbation. COHERENT-COPD study.** Maria Piñeiro Roncal (Madrid, Spain), Eduardo Catalinas Muñoz, Joaquín Sánchez-Covisa Hernández, Clara Goñi Echevarría, Héctor Bueno Zamora, Jose Luis Bernal Sobrino, Mónica Juarez Campo, Maria Teresa Tejedor Ortiz, Gema María Siesto López, Carlos José Álvarez Martínez
PA207	**Applying machine learning to telehealth care data to predict acute COPD exacerbations.** Petra Jacobson (LINKÖPING, Sweden), Marina Santini, Leili Lind, Hans Lennart Persson
PA208	**Blood eosinophil counts during severe exacerbations do not reflect stable state inflammatory phenotype in COPD** Arun Prasad (Newcastle Upon Tyne, United Kingdom), Carlos Echevarria, John Steer, Stephen C Bourke
PA209	**Hyperhomocysteinemia as the main thrombophilic risk marker in COPD** Elnorahon Abduganieva (Tashkent, Uzbekistan), Irina Liverko

TP-12 in thematic poster area — Session 69 — 08:30 - 09:30

Thematic poster: Interest of PROMS in chronic airway diseases

Disease(s) : Airway diseases

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

Chairs : Manlio Milanese (Pietra ligure (SV), Italy), Chair to be confirmed

PA210	**Expiratory flow limitation in association to symptoms and quality of life in asthma, COPD and healthy subjects** Abir Nasr (Teckomatorp, Sweden), Georgia Papapostolou, Kerstin Romberg, Linnea Jarenbäck, Jaro Ankerst, Alf Tunsäter, Leif Bjermer, Ellen Tufvesson
PA211	**Baseline characteristics associated with change in COPD symptoms over 2 years** Andrei Malinovschi (Uppsala, Sweden), Christer Janson, Andreas Palm, Maria Hårdstedt, Amir Farkhooy, Karin Lisspers, Kristina Bröms, Björn Ställberg, Marieann Högman
PA212	**The evaluation of patients' life quality, spirometry parameters and level of exercise tolerance in case of asthma-COPD overlap and diabetes mellitus type 2 (DM2)** Valeriia Halytska (Chernivtsi, Ukraine), Ganna Stupnytska, Oleksandr Fediv
PA213	**Burden of disease in both asthma and COPD: one questionnaire?** Liz Cuperus (Rotterdam, Netherlands), Cathelijne Van Zelst, Gert-Jan Braunstahl, Johannes In 'T Veen
PA214	**Assessment of dyspnea in severe exacerbation of chronic obstructive pulmonary disease using the Multidimensional Dyspnea Profile (MDP)** Alexander Stump (Essen, Germany), Ulrike Domanski, Maik Schröder, Georg Nilius
PA215	**Evaluation of bronchial hyperreactivity in patients after Covid-19 infection** Gunta Strazda (Riga, Latvia), Marta Ieviņa, Olga Madaja, Normunds Jurka, Valentina Gordjusina, Immanuels Taivans
PA216	**Functional capacity testing of citizens with COPD in limited settings - a feasibility study** Anders Løkke (Højbjerg, Denmark), Jeppe Gabriel Spence, John Brincks, Line Neustrup, Elisabeth Bomholt Østergaard
PA217	**Role of Asthma School in disease management** Martina Zappa (Tradate, Italy), Dina Visca, Patrizia Pignatti, Francesco Ardesi, Rosella Centis, Elisabetta Zampogna, Francesca Cherubino, Federico Mattia Oliva, Laura Saderi, Giovanni Sotgiu, Giovanni Battista Migliori, Antonio Spanevello
PA218	**Asthma Impairment and Risk Questionnaire (AIRQ) Performance in US Minority Patients** Maureen George (New York, United States), David A. Beuther, Kevin R. Murphy, Robert S. Zeiger, Robert A. Wise, Joan Reibman, Bradley Chipps, Ileen Gilbert, James M. Eudicone, Hitesh N. Gandhi, Karin S. Coyne, William Mccann
PA219	**Prevalence of depression and anxiety among COPD patients and association with CAT Score:Findings from a lower-middle income country** Manahil Malik (Al Khobar, Saudi Arabia), Taymmia Ejaz, Mahmood Iqbal Malik, Andleeb Raja
PA220	**Clinical implication of DLCO to reflect disease control in patients with COPD** Sun-young Yoon (Sejong-si, Republic of Korea), Ock-Hwa Kim, Jae Young Moon
PA221	**Anxiety-depressive syndrome in multi-hospitalized chronic obstructive pulmonary disease patients** KHALED DEGHDEGH (Annaba, Algeria), Lyemna Belaid , Besma Terra , Randa Yakoubi , Feriel Atoui, Rachid Benali, Fouad Khalloufi
PA222	**"Life-changing"- the experience of super-responders to biologics in severe asthma** Ross Sayers (Exeter, United Kingdom), Joseph Lanario, Lucy Cartwright, Rupert Jones, Michael E. Hyland, Matthew Masoli
PA223	**Predictors of poor disease control and impaired quality of life (QOL) in patients with severe asthma (SA) in the Wessex Severe Asthma Cohort (WSAC)** Vipula Bataduwaarachchi (Portsmouth, United Kingdom), Thomas Brown, Laura Wiffen, Thomas Jones, Clair Barber, Peter Howarth, Chauhan Anoop
PA224	**The usability of app-based spirometry tests for detection of exercise-induced bronchoconstriction in athletes** Martine Isachsen (Hägersten, Sweden), Tonje Reier-Nilsen, Julie Stang, Hanne Flatsetøy, Henrik Ljungberg, Björn Nordlund
PA225	**The value of ventilation-perfusion scintigraphy in severe asthma control characterisation** Diogo Miguel Monteiro Canhoto (Coimbra, Portugal), Cláudia Chaves Loureiro
PA226	**Identification of new spirometric indices predicting severe COPD** Rim Kammoun (Sfax, Tunisia), Sana Sallemi, Fatma Elleuch, Sana Ben Jmeaa, Ines Kammoun, Kaouthar Masmoudi
PA227	**Systematic literature review of the impact of asthma control on patient outcomes** Alexandrosz Czira (Brentford, United Kingdom), Xuan Wang, Shivaprasad Singuru, Christos Papagiannopoulos, Kieran Rothnie, Claire Trennery, Shiyuan Zhang

PA228 **Late Breaking Abstract - Real-world retrospective database analysis of COPD exacerbations before and during the COVID-19 pandemic in Europe (REACT)**
Dmitry Galkin (Apex, United States), Alessandro Guasconi, Joseph Imperato, Ruben Hermans, Stefania Pirondi, George Georges

PA229 **Late Breaking Abstract - Health status relationship with exacerbations in a real-world cohort of patients with physician-assigned COPD in NOVELTY**
Hana Müllerová (Cambridge, United Kingdom), Stefan Franzén, Laura Belton, Clement Erhard, Clementine Nordon, Rod Hughes, Mohsen Sadatsafavi, Christer Janson

TP-13 in thematic poster area — Session 70 — 08:30 - 09:30

Thematic poster: Miscellaneous: biomarkers for the management of chronic lung diseases

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

Method(s) : Epidemiology | Public health | Pulmonary function testing | Physiology

Chairs : Nikoletta Rovina (Athens, Greece), Ane Johannessen (Bergen, Norway)

PA230 **Characteristics of medication errors among respiratory drugs within the Food and Drug Administration's Adverse Event Reporting System**
Katia Mc Verhamme (Rotterdam, Netherlands), Victor Pera, Peter Rijnbeek, Johan Van Der Lei, Jan Kors, Rowan Parry, Erik Van Mulligen, Marcel De Wilde, Guy Brusselle, Guy Brusselle

PA231 **Abdominal and general obesity: associations with asthma and COPD in women and man.**
Marta Alina Kisiel (Uppsala, Sweden), Andrei Malinovschi , Eva Lindberg, Mathias Holm, Thorarinn Gislason, Vivi Schlunssen, Karl Franklin, Ane Johannessen, Christer Janson

PA232 **Programmatic advantage of cost-effective and highly sensitive rapid COVID-19 diagnostic with two-step screening strategy for airport quarantine in Bangladesh**
Farzana Zaman (Dhaka, Bangladesh), Muhammad Asaduzzaman

PA233 **Spatial assessment of disease surveillance during the first wave of the COVID-19 pandemic**
Florence Tydeman (glasgow, United Kingdom), Kim Kavanagh , Chris Robertson

PA234 **Incidence of dyspnea and hyperventilation syndrome after COVID-19**
Sabrine Majdoub Fehri (Nabeul, Tunisia), WAFA MADI, Rahma Sellami, Ahmed Dhiaa Eleuch, Racem Ammar, Imen Ketata, Hamida Kwas

PA235 **Tuberculosis in healthcare workers of Ukraine**
Artemii Bogomolov (Vinnytsia, Ukraine), Sergii Zaikov, Oksana Litvinyuk

PA236 **Characterisation and burden of eosinophilic granulomatosis with polyangiitis: a European retrospective study**
Rupert Jakes (London, United Kingdom), Namhee Kwon, Lynn Huynh, Jeremiah Hwee, Lee Baylis, Rafael Alfonso-Cristancho, Shawn Du, Anamika Khanal, Mei Sheng Duh

PA237 **Reference values for respiratory impedance in adult men and women: data from the Austrian LEAD Study.**
Christoph Valach (Vienna, Austria), Emiel F. M. Wouters, Alina Ofenheimer, Patricia Puchhammer, Pasquale P. Pompilio, Alessandro Gobbi, Marie K. Breyer, Sylvia Hartl, Otto C. Burghuber, Robab Breyer-Kohansal

PA238 **Respiratory symptoms and lung function in Women**
Nadia Hammache (Alger, Algeria), Salim Nafti, Rachid Abdellaziz

PA239 **Association of tuberculosis infection with asthma in a european multinational cohort**
Sanjay Gyawali (Bergen, Norway), Juan Pablo López Cervantes, Tehmina Mustafa, Cecilie Svanes, Rajesh Shigdel

PA240 **Treatment with oral anticoagulants and risk of mortality in COVID-19 patients**
Sarah Altaraihi (Copenhagen, Denmark), Peter Kamstrup, Josefin Eklöf, Pradeesh Sivapalan, Jens Ulrik Stæhr Jensen

PA241 **Associations for food and carbohydrate intake with asthma in young Chinese adults from Singapore and Malaysia**
Qi Yi Ambrose Wong (Singapore, Singapore), Jun Jie Lim, Jun Yan Ng, Praneeth Malipeddi, Wei Yi Teo, Yi Ying Eliza Lim, Yi Ru Wong, Keng Fu Teh, Smyrna Moti Rawanan Shah, Kavita Reginald, Yee How Say, Sri Anusha Matta, Yang Yie Sio, Fook Tim Chew

PA242 **The many diseases associated with dyspnoea: a MeSH term and semantic analysis of the PubMed literature**
Troy Cross (Forest Lodge, Australia), Sarah Morris, Hayley Lewthwaite

PA243	**Association between candidate gene polymorphisms and total IgE in adult subjects with asthma: preliminary results from the GEIRD study** Valentina Lando (Verona, Italy), Lucia Calciano, Giovanni Malerba, Cristina Bombieri, Marcello Ferrari, Nicola Murgia, Morena Nicolis, Mario Olivieri, Simone Accordini
PA244	**Adipokines in restrictive spirometric pattern** Ulf Nilsson (Umeå, Sweden), Hermon Amman, Stefan Söderberg, Anders Blomberg, Helena Backman, Anne Lindberg
PA245	**Second primary lung cancer, an increasingly recognised entity in cancer survivors.** Hardeep Singh Kalsi (London, United Kingdom), Des Campbell, Nick Low, Richard Lee
PA246	**Bronchiectasis and pneumonia-hospitalization risk: The impact of social distancing measures – A cohort study** Valdemar Rømer (Copenhagen, Denmark), Martina Bjørka Fosgaard, Pradeesh Sivapalan, Josefin Eklöf, Mohamad Isam Saeed, Louise Lindhardt Tønnesen, Alexander Svorre Jordan, Rikke Sørensen, Tina Gissel, Ulla Weinreich, Sofie Johansson, Jens-Ulrik Stæhr Jensen
PA247	**Late Breaking Abstract - Real world endotype stability and exacerbation rates in T2low asthma** Arja Viinanen (Paimio, Finland), Juhani Aakko, Gunilla Telg, Kaisa Nieminen, Mariann Lassenius, Hannu Kankaanranta, Lauri Lehtimäki
PA248	**Late Breaking Abstract - Race/ethnic, social, environmental, and genetic correlates to lung function decline: the Multi-Ethnic Study of Atherosclerosis (MESA) Lung Study** R. Graham Barr (New York, United States), Arielle Elmaleh-Sachs, Daniel Malinsky, Pallavi Balte, Norrina B. Allen, Aaron Baugh, Alain G. Bertoni, Jana A. Hirsch, Eric A. Hoffman, Joel Kaufman, Ani Manichaikul, Elizabeth C. Oeslner, James S. Pankow, Wendy S. Post, Tess Pottinger, Stephen S. Rich, Benjamin Smith, Karol Watson
PA249	**Late Breaking Abstract - α1-Antitrypsin deficiency associated with increased risk of heart failure in two large populations** Sine Winther (København S, Denmark), Eskild Landt, Børge Nordestgaard, Niels Seersholm, Morten Dahl

TP-14 in thematic poster area — Session 71 — 08:30 - 09:30

Thematic poster: Occupational asthma and upper airway diseases

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

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

Chairs : Orianne Dumas (Villejuif, France), Xavier Munoz Gall (Barcelona, Spain)

PA250	**Utility of spirometry, metacholine test, induced sputim, exhaled NO and exhaled breath condensate pH for the diagnosis of work-related asthma: a real-life study** David Soler Segovia (Barcelona, Spain), María Jesús Cruz Carmona, Miquel De Homdedeu, Sílvia Sánchez Díez, Íñigo Ojanguren, David Espejo, Xavier Muñoz Gall
PA251	**Occupational asthma from welding fumes, all irritant?** Vicky Moore (Birmingham (West Midlands), United Kingdom), Alastair Robertson, Christopher Huntley, Gareth Walters, Sherwood Burge
PA252	**Household use of green and home-made cleaning products, wipe form and asthma** Emilie PACHECO DA SILVA (Villejuif, France), Guillaume Sit, Marcel Goldberg , Benedicte Leynaert , Rachel Nadif , Celine Ribet, Nicolas Roche, Marie Zins, Raphaelle Varraso, Orianne Dumas, Nicole Le Moual
PA253	**Longitudinal associations of household use of cleaning agents and asthma symptoms** Emilie PACHECO DA SILVA (Villejuif, France), Melanie Ngutuka, Orianne Dumas, Laurent Orsi, Pierre Lemire, Joane Quentin, Isabelle Pin, Raphaëlle Varraso, Valerie Siroux, Nicole Le Moual
PA254	**Preliminary findings of volatile organic compounds, alkaline dusts and formaldehyde exposure in hospital workers and evaluating their relationship with genototoxicity and oxidative stress biomarkers** Ayşe Coşkun Beyan (Izmir, Turkey), Gamze Tuna, Esra Emerce, Gül Işlekel, Yucel Demiral
PA255	**Occupational exposures, asthma and asthma control in the NutriNet-Santé cohort** Guillaume Sit (Paris, France), Raphaëlle Varraso, Léopold Fezeu, Pilar Galan, Florence Orsi, Emilie Pacheco Da Silva, Mathilde Touvier, Serge Hercberg, Christophe Paris, Nicole Le Moual, Orianne Dumas
PA256	**Work-related symptoms in students first exposed to laboratory animal after 10 months of follow-up** Elcio Dos Santos Oliveira Vianna (Ribeirao Preto (SP), Brazil), Isabel Bricoleri, Ivana Labadessa
PA257	**Occupational asthma, rhinitis and contact urticaria in greenhouse workers** Irmeli Lindström (Helsinki, Finland), Pirjo Hölttä, Liisa Airaksinen, Katri Suuronen, Sari Suomela, Hille Suojalehto

PA258	**Occupational exposure to cleaning agents and respiratory health in healthcare professionals** Behzad Heibati (Oulu, Finland), Maritta S. Jaakkola, Taina K. Lajunen, Inês Paciência, Ali Karimi, Jouni J.K. Jaakkola
PA259	**Clinical features and risk factors of intermediate-onset asthma.** Martina Turrin (CORDENONS, Italy), Chiara Contin, India Sofia Dalla Rosa, Matteo Bonato, Erica Bazzan, Micaela Romagnoli, Manuel G. Cosio, Marina Saetta, Simonetta Baraldo
PA260	**Allergic rhinitis in the work environment** Ons Grissa (Tunis, Tunisia), Nihel Khouja, Jihen Hsinet, Emna Baraketi, Saloua Ismaïl, Aida Benzarti, Abdelmajid Ben Jemaa
PA261	**Respiratory allergies to thermal degradation products of plastic** Ons Grissa (Tunis, Tunisia), Emna Baraketi, Nihel Khouja, Touka Yahyaoui, Salouaa Ismaïl, Aida Benzarti, Jihen Hsinet, Abdelmajid Ben Jemaa
PA262	**Occupational respiratory allergies to tobacco leaves (About 3 cases)** Ons Grissa (Tunis, Tunisia), Amani Dallagi, Jihen Hsinet, Nihel Khouja, Emna Baraketi, Saloua Ismaïl, Touka Yahyaoui, Aida Benzarti, Abdelmajid Ben Jemaa
PA263	**Work-related dysphonia in subjects with sensitizer-induced occupational asthma is associated with neutrophilic inflammation** Nicolas Migueres (Strasbourg, France), Olivier Vandenplas, Jolanta Walusiak-Skorupa, Marta Wiszniewska, Xavier Munoz, Hille Suojalehto, Irmeli Lindstrom, Vera Van Kampen, Rolf Merget, Paola Mason, Piero Maestrelli, Joaquin Sastre, Santiago Quirce, Catherine Rifflart, Julien Godet, Frédéric De Blay
PA264	**Relationship between sleep quality and occupational asthma control** Amen MOUSSA (sousse, Tunisia), Asma Chouchane, Lynda Mahjoub, Maher Maoua, Wafa Benzarti, Sana Aissa, Marwa Bouhoula, Asma Aloui, Imen Kacem, Aicha Brahem, Houda Kalboussi, Olfa El Maalel, Souheil Chatti, Abdelaziz Hayouni, Nejib Mrizak
PA265	**Impact of occupational activity on the development or the exacerbation of asthma** Dorra BRAHIM (Tunis, Tunisia), Dorra BRAHIM, Najla Mechergui, Imen Youssef, Hanene Ben Said, Mariem Mersni, Nizar Ladhari
PA266	**Impact of gender on work productivity loss and activity impairment in asthmatic patients** yosra braham (Monastir, Tunisia), Imen Touil, A Hamdi, Jihen Ayeb, Amira Omrane, R Rhomdhani, Soumaya Bouchareb, S Boujneh, Eya Zaara, T Khalfallah, Leila Boussoffara, Jalel Kneni, Nadia Boudawwara
PA267	**Assessing asthma control and severity of work-related asthma cases in the NutriNet-Santé cohort** Louis Khan (Rennes, France), Raphaëlle Varraso, Nicole Le Moual, Orianne Dumas, Mathilde Touvier, Léopold Fezeu, Pilar Galan, Serge Hercberg, Christophe Paris
PA268	**Late Breaking Abstract - Inflammatory endotype before and after specific inhalation challenge in patients with work -related asthma** Paola Mason (Padova (PD), Italy), Diletta Arcidiacono, Eleonora Rachele Paccagnella, Marco Biasioli, Piero Maestrelli, Filippo Liviero, Anna Chiara Frigo

TP-15 in thematic poster area — Session 72 — 08:30 - 09:30

Thematic poster: Paediatric sleep disorders and management in various diseases

Disease(s) : Sleep and breathing disorders

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

Chairs : Hui Leng Tan (London, United Kingdom), Cristina Ardura-Garcia (Bern, Switzerland)

PA269	**Feasibility of wearable respiratory monitoring in paediatric sleep medicine: early insights** Ross Langley (Glasgow, United Kingdom), Elise Buchan, Hannah Gibson, Bruce Henderson, Osian Meredith, Christopher Truemen, Philip Davies
PA270	**Sleep outcomes in spinal muscular atrophy and role of disease-modifying treatments.** Daryl Butler (Dublin, Ireland), Ioannis Makariou, Mariacristina Scoto, Vasantha Gowda, Miguel Fernandez, Elizabeth Wraige, Heinz Jungbluth, Francesco Muntoni, Hui-Leng Tan, Federica Trucco
PA271	**Sleep disturbances in children with cystic fibrosis and primary ciliary dyskinesia at the beginning and in the first year of COVID-19 pandemic** Tuğba Şişmanlar Eyuboglu (Ankara, Turkey), Ayse Tana Aslan, Tugba Ramasli Gursoy, Pelin Asfuroglu, Azime Sebnem Soysal, Dilek Yapar, Mustafa Necmi Ilhan

PA272	**Orofacial myofunctional evaluation in children with Down Syndrome and obstructive sleep apnea** Suzana Erico Tanni (Botucatu (SP), Brazil), Suzana Tanni, Silke Anna Theresa Weber, Daniela Barreto E Silva Pitta, Camila De Castro Correa, Karina A Santos, Jefferson L De Barros, Antonio Carlos Marão, Catia Fonseca
PA273	**Respiratory evolution of children with Spinal Muscular Atrophy Type 1 under gene therapy** Rosário Ferreira (Lisbon, Portugal), Ana Saianda, Joana Coelho, Teresa Moreno
PA274	**Need for establishment of multi-disciplinary management guidelines for children with CHARGE syndrome on respiratory support; 10 years' experience in Cambridge University Hospital (CUH)** Sarah Nethercott (Cambridge (Cambridgeshire), United Kingdom), Laura Baird, Louise Edwards, Donna Mcshane, Doxa Kotzia
PA275	**Every breath you take, we'll be watching you!** Neha Mohan Rao (Birmingham, United Kingdom), Ciaran Mcardle, Joanna Bennett, Benjamin Davies, Satish Rao, Priti Kenia
PA276	**Home cardiorespiratory sleep studies in children: single-centre experience and caregiver opinions.** Kanwal Jehanzeb (Birmingham, United Kingdom), Nikoletta Lofitou, Roisin Kay, Ciaran Mcardle, Fiona Robinson, Benjamin Davies, Satish Rao, Priti Kenia
PA277	**Home mechanical ventilation in children: The experience of pediatric pulmonology divisions in Istanbul** Mürüvvet Yanaz (Istanbul, Turkey), Fusun Unal, Evrim Hepkaya, Hakan Yazan, Sinem Can Oksay, Ebru Kostereli, Cansu Yilmaz Yegit, Azer Kilic Baskan, Zeynep Reyhan Onay, Aynur Gulieva, Aslinur Soyyigit, Mine Kalyoncu, Hanife Busra Kucuk, Yetkin Ayhan, Almala Pinar Ergenekon, Emine Atag, Selcuk Uzuner, Nilay Bas Ikizoglu, Ayse Ayzit Kilinc, Pinar Ay, Ela Erdem Eralp, Yasemin Gokdemir, Sedat Oktem, Erkan Cakir, Saniye Girit, Zeynep Seda Uyan, Haluk Cokugras, Refika Ersu, Bulent Karadag, Fazilet Karakoc
PA278	**Continuous positive airway pressure therapy in children with Down syndrome and obstructive sleep apnoea: outcome and predictive factors.** Inez Vanholder (Edegem, Belgium), Sophie Installé, Anse Van Ostaeyen, Stijn Verhulst, An Boudewyns, Kim Van Hoorenbeeck
PA279	**4-year experience of nurse-led non-invasive ventilation (NIV) clinic at a specialist paediatric respiratory centre.** Joanna Bennett (Birmingham , United Kingdom), Neha Rao, Laura Morris, Satish Rao, Benjamin Davies, Priti Kenia
PA280	**How do we determine successful non-invasive ventilation (NIV) success in children: Carer and Clinician opinion** Kim Lund (Newcastle, United Kingdom), Christopher Grime, Liam Durkin
PA281	**Development of a new nurse-led non-invasive ventilation (NIV) initiation pathway for children and young people (CYP)** Neha Mohan Rao (Birmingham, United Kingdom), Joanna Bennett, Laura Morris, Satish Rao, Benjamin Davies, Priti Kenia

TP-16 in thematic poster area — Session 73 — 08:30 - 09:30

Thematic poster: Cystic fibrosis in children and adolescents

Disease(s) : Airway diseases

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

Chairs : Stojka Fustik (Skopje, North Macedonia), Annelies M. Zwitserloot (Groningen, Netherlands)

PA282	**"Early" Pseudomonas aeruginosa colonization in cystic fibrosis patients** ECE OCAK (ANKARA, Turkey), Gökçen Dilşa Tuğcu, Sanem Eryılmaz Polat, Güzin Cinel, Nagehan Emiralioğlu, Ebru Yalçın, Nural Kiper, Velat Şen, Derya Ufuk Altıntaş, Haluk Çokuğraş, Ayşe Ayzıt Kılınç, Hakan Yazan, Gökçen Ünal, Aslı Imran Yılmaz, Ebru Damadoğlu, İlim Irmak, Esen Demir, Gökçen Öztürk, Abdurrahman Erdem Başaran, Ayşen Bingöl, Nihat Sapan, Ayşe Tana Aslan, Pelin Asfuroğlu, Koray Harmancı, Mehmet Köse, Melih Hangül, Ali Özdemir, Gizem Özcan, 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 Pekcan, Nazan Çobanoğlu, Erkan Çakır, Uğur Özçelik, Deniz Doğru Ersöz
PA283	**Respiratory outcomes at 6 months follow up after SARS-Cov-2 infection in people with cystic fibrosis** Paola Medino (Milano, Italy), Chiara Rosazza, Maria Serena Boraso, Fabiana Ciciriello, Marco Cipolli, Andrea Gramegna, Vincenzina Lucidi, Arianna Biffi, Erica Nazzari, Gianfranco Alicandro, Carla Colombo
PA284	**The concentration of hCAP-18/LL-37 and hBD-2 in cystic fibrosis patients** Oksana Ishchenko (Kamyanske, Ukraine), Dmytro Stepanskyi

PA285	**Eradication treatment of Pseudomonas Aeruginosa in pediatric patients with Cystic Fibrosis.** Aynur Gulieva (İstanbul, Turkey), Cansu Yılmaz Yeğit, Muruvvet Yanaz, Mıne Kalyoncu, Merve Selcuk, Gamze Tastan, Burcu Suzer, Pınar Ergenekon, Ela Erdem Eralp, Yasemin Gokdemir, Fazilet Karakoc, Bulent Karadag
PA286	**Experience with the use of inhaled carbapenems in a Spanish Cystic Fibrosis Unit** Marta Bascuas Arribas (Madrid, Spain), Patricia Fernández García, Verónica Sanz Santiago, Sofía Martín Hernández, Alejandro López Neyra, Belén Hernández Millán, Javier Alvarez-Coca, María Camino Serrano, Francisa Romero Ándujar, José Ramón Villa Asensi, Rosa María Girón Moreno
PA287	**Clinical features of SARS-CoV-2/COVID-19 infection in children with cystic fibrosis (CF): A Qatari experience** Khalid Zahraldin (Doha, Qatar), Sara G. Hamad, Hiba Kammouh
PA288	**Cystic fibrosis competence check: A educational tool for paediatric patients with CF** Stefanie Diemer (Lund, Sweden), Karolina Wallin, Kristel Björkman
PA289	**The association between the cumulative dose of aminoglycoside exposure and hearing loss in children with cystic fibrosis** Cansu Yilmaz Yegit (Istanbul, Turkey), Pinar Ergenekon, Muruvvet Yanaz, Aynur Guliyeva, Mine Kalyoncu, Ozge Meral, Merve Selcuk, Gamze Taştan, Burcu Uzunoglu, Nezafet Ozturk, Fatma Toktas, Ahmet Atas, Halide Cetin Kara, Abdulhamit Collak, Nilufer Bal, Ozge Gedik, Yesim Oruc, Melda Acar, Remzi Dogan , Emine Deniz Gozen Tan, Hale Molla Kafi, Nesibe Karasu, Yetkin Ayhan, Ali Cemal Yumusakhuylu, Ayse Ayzit Kilinc Sakalli, Erkan Cakir, Saniye Girit, Yasemin Gokdemir, Ela Erdem Eralp, Pınar Ata, Ayca Ciprut, Fazilet Karakoc, Bulent Karadag
PA290	**Ciliary dyskinesia might be secondary to chronic inflammation in cystic fibrosis** Romane Bonhiver (Liege, Belgium), Noemie Bricmont, Maud Pirotte, Marc-Antoine Wuidart, Jessica Pirson, Hedwige Boboli, Renaud Louis, Marie-Christine Seghaye, Céline Kempeneers
PA291	**CFTR function in respiratory epithelial cell cultures: step to individualize treatments in cystic fibrosis?** Joerg Grosse-Onnebrink (Münster, Germany), Vanessa Mete, Heymut Omran, Wolf Michael Weber
PA293	**Prolonged exposure to heat does not affect clinical and biochemical characteristics in patients with cystic fibrosis** Pinelopi Anagnostopoulou (Nicosia, Cyprus), Panayiotis Kouis, Katerina Pantavou, Antonis Michanikou, Andreas Matthaiou, Kalliopi Ioakim, Louisa Sophocleous, Georgios Nikolopoulos, Panayiotis Yiallouros
PA294	**Search for airway-derived miRNA biomarkers in pulmonary exacerbation in children with cystic fibrosis** Zuzanna Stachowiak (Poznan, Poland), Beata Narożna, Wojciech Langwiński, Irena Wojsyk Banaszak,, Katarzyna Jończyk Potoczna, Anna Bręborowicz, Aleksandra Szczepankiewicz
PA295	**Evaluation of performance of Dutch newborn screening program for cystic fibrosis (2016-2020)** Karin M. De Winter - De Groot (Culemborg, Netherlands), Marelle J. Bouva, Kitty P.B. Van Der Ploeg, Rendelien K. Verschoof - Puite, Vincent A.M. Gulmans, Johannes J.P. Gille, Bernadette S. Jakobs, Marie-Louise Heijnen
PA296	**Evaluation of factors affecting bone mineral density in CF patients through CF registry of Turkey** Sule Selin AKYAN SOYDAŞ (ANKARA, Turkey), Gökçen Dilşa Tuğcu, Murat Yasin Gençoğlu, Güzin Cinel, Nagehan Emiralioğlu, Ebru Yalçın, Nural Kiper, Velat Şen, Derya Ufuk Altıntaş, Haluk Çokuğraş, Ayşe Ayzıt Kılınç, Hakan Yazan, Gökçen Ünal, Aslı Imran Yılmaz, Hanife Tuğçe Çağlar, Ebru Damadoğlu, Ilim Irmak, Esen Demir, Gökçen Kartal Öztürk, Ayşen Bingöl, Erdem Başaran, Nihat Sapan, Ayşe Tana Aslan, Pelin Asfuroğlu, Koray Harmancı, Mehmet Köse, Melih Hangül, Ali Özdemir, Gizem Özcan, Zeynep Gökçe Gayretli, Özlem Keskin, Hasan Yüksel, Şebnem Özdoğan, Erdem Topal, Gönül Çaltepe, Demet Can, Pervin Korkmaz Ekren, Mehmet Kılıç, Tuğba Şişmanlar Eyüboğlu, Sevgi Pekcan, Nazan Çobanoğlu, Erkan Çakır, Uğur Özçelik, Deniz Doğru
PA297	**Title: Benzbromarone for the treatment of cystic fibrosis (CF) lung disease: a pilot clinical trial.** Leonardo Pinto (Porto Alegre (RS), Brazil), Frederico Frederico Friedrich, Laura De Castro E Garcia, Lucas Montiel Petry, Marina Pieta, Amanda Da Silva Menezes, Luana Braga Bittencourt, Luiza Xavier, Marcos Brum Antunes, Karl Kunzelmann
PA298	**Late Breaking Abstract - Diagnostic testing in people with primary ciliary dyskinesia around the world: where do we stand?** Leonie Daria Schreck (Bern, Switzerland), Eva Sophie Lunde Pedersen, Isabelle Cizeau, Catherine Kruljac, Jane S Lucas, Myrofora Goutaki, Claudia E Kuehni

TP-17 in thematic poster area — Session 74 — 08:30 - 09:30

Thematic poster: Thoracic surgery: different perspectives of the field

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

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

Chairs : Nuria Novoa Valentin (Salamanca, Spain), Sara Ricciardi (Rome, Italy)

PA299	**Incidence, risk factors and outcome of COVID19 patients affected by pneumothorax or pneumomediastinum: what do we know so far.** Arianna Farronato (Florence, Italy), Chiara Travaglia, Alice Ravasin, Vittorio Aprile, Elisa Sicolo, Stefano Romagnoli, Adriano Peris, Roberto Corzani, Piero Paladini, Marco Lucchi, Luca Voltolini, Alessandro Gonfiotti
PA300	**Pulmonary sequestration in adult patients: a single-center retrospective study** Yan Hu (Changsha, China), Siying Ren, Lulu Yang, Ying Xiao, Zhongyi Tong, Wenliang Liu, Fenglei Yu
PA301	**Anatomical lung resections for lung hydatidosis: indications and results** Abdessalem Hentati (Sfax, Tunisia), Zied Chaari, Aymen Ben Ayed, Walid Abid, Imed Frikha
PA302	**Does emphysema severity reflect lung perfusion in patients undergoing lung volume reduction?** Periklis Perikleous (London, United Kingdom), Ewa Nowosinska, Ralitsa Baranowski, David Waller
PA303	**Primary Spontaneous Pneumothorax in late adolescents. Are we treating our patients in the best possible way?** Dimitris Lioumpas (Athens, Greece), Sylianos Michelis, Evangelos Fergadis, Theoni Kiknadze, Dimitris Paschalinos, Fragkiskos Tsagkarakis, Antonios Antoniadis, Ilias Samiotis, Ioannis Stamatatos, Efstathios Metaxas, Georgios Benakis, Stylianos Zaragkas, Nikolaos Tzatzadakis
PA304	**Thoracic trauma profile: what changed with covid-19** Mouad Gourti (Agadir, Morocco), Said Bassil, Fahd Ouchen, Mouhsine Makloul, Elmehdi Maidi
PA305	**Long-term cardiorespiratory outcomes in Congenital Diaphragmatic Hernia** Leonie Lewis (Liverpool, United Kingdom), Ian Sinha, Sok-Leng Kang, Joyce Lim, Paul Losty
PA306	**Introducing new instruments for prediction of postoperative pulmonary complications in patients undergoing lung resection.** Kristian Brat (Brno, Czech Republic), Ivan Cundrle Jr, Andrej Mazur, Pavel Homolka, Zdenek Chovanec, Monika Bratova, Ladislav Mitas, Zdenek Merta, Michal Svoboda
PA307	**Surgical Management of Superior Sulcus Tumors: A Twenty-Year Experience of an Oncological Referral Centre** Luca Bertolaccini (Milan, Italy), Lorenzo Spaggiari
PA308	**To what extent does oxidized regenerated cellulose reinforcement during video-assisted thoracoscopic blebectomy prevent postoperative recurrent pneumothorax?** Masao Naruke (Tokyo, Japan)
PA309	**The value of finer medical thoracoscope in "APC-plus" for the treatment of primary spontaneous pneumothorax(PSP)** Hua Zhang (Rizhao (Shandong), China), Guangwei Xue, Zhongmei Sun, Wei Zhang, Weiwei Xu, Zongtao Liu, Changsheng Ge, Zhigang Zheng
PA310	**The clinical efficacy of blood patch pleurodesis in persistent air leak. Our experience.** Efstathios Metaxas (Ano Liosia - Athens, Greece), Dimitrios Lioumpas, Dimitrios Paschalinos, Antonios Antoniadis, Teona Kiknadze, Panagiota Pantoula, Ioannis Stamatatos, Evangelos Georgios Fergadis, Georgios Benakis
PA311	**Impact of Inspiratory Muscle Training on sleep quality and lung function after coronary artery bypass graft surgery** Andre Luiz Cordeiro (Feira De Santana (BA), Brazil), Bruna Reis, Emily Almeida, André Guimarães
PA312	**Do we really need a chest-CT in Primary Spontaneous Pneumothorax?** Sara Ricciardi (Rome, Italy), Delia Giovanniello, Francesco Carleo, Marco Di Martino, Massimo O. Jaus, Sara Mantovani, Luigi Carbone, Maria Teresa Aratari, Alessia De Massimi, Lorenzo Salvadori, Stefano Treggiari, Giuseppe Cardillo
PA313	**Emphysema bubbles: Which patients to operate?** Abdessalem Hentati (Sfax, Tunisia), Olfa Sassi, Najla Bahloul, Walid Abid, Zied Chaari, Imed Frikha
PA314	**Congenital cystic adenomatoid malformation of lung in adults: A report of 7 cases** amina abdelkbir (ben arous, Tunisia), Nouha Boubaker, Mahdi Abdennadher, Hazem Zribi, Amina Abdelkabir, Imen Bouacida, Sarra Zairi, Ayda Ayadi, Sonia Ouerghi, Adel Marghli
PA315	**Lung volume reduction surgery in patients with mild to moderate pulmonary hypertension and non-heterogeneous emphysema** Claudio Caviezel (Zürich, Switzerland), Rita Costa, Gian-Marco Monsch, Isabelle Opitz
PA316	**Pulmonary large cell neuroendocrine carcinoma: about 8 surgical cases.** amina abdelkbir (ben arous, Tunisia), Mahdi Abdennadher, AHMED BAKHTI, Hazem Zribi , Imen Bouacida, Sarra Zairi, Mouna Mlika, Sonia Ouerghi, Adel Marghli

PA317 **Women and lung cancer: what are the particularities? Labidi a, Abdelkbir A, Bouassida I, Zribi h, Abdennadher M, MarghliA**
Aymen Labidi (tunis, Tunisia), Amina Abderlkbir, Imen Bouassida, Hazem Zribi, Mehdi Abdennadher, Adel Merghli

TP-18 in thematic poster area — Session 75 — 08:30 - 09:30

Thematic poster: Extrapulmonary traits and respiratory physiotherapy

Disease(s) : Airway diseases | Thoracic oncology | Pulmonary vascular diseases

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

Chairs : Andre Nyberg (Umeå, Sweden), Elena Gimeno Santos (Barcelona, Spain)

PA318 **Functional status and impact of the disease in people with COPD according to symptoms' burden**
Ana Filipa Machado (Senhora da Hora, Porto, Portugal), Joana Antão, Sara Souto-Miranda, Vânia Rocha, Ana Alves, Joana Cruz, Cristina Jácome, M Aurora Mendes, Vitória Martins, Paula Simão, Chris Burtin, Alda Marques

PA319 **Pain and fatigue inference in patients with severe COPD refraining from PR attendance: A cross-sectional multicenter study**
Henrik Hansen (Dragør, Denmark), Jeanette Hansen, Stig Mølsted, Charlotte Suppli Ulrik, Nina Godtfredsen

PA320 **Investigation of the relationship between cognitive function and upper extremity exercise capacity in COPD- a pilot study**
Elvan Felekoglu (Izmir, Turkey), Bedriye Dag, Ilknur Naz, Melissa Kopruluoglu, Hulya Sahin

PA321 **Effect of physical effort on postural balance in COPD and OSA**
Caroline Maschio de Censo (São Paulo, Brazil), Viviane Vieira Passini, Bárbara Aparecida Teodoro Alcantara Verri, Regina Maria De Carvalho- Pinto, Rafael Stelmach, Geraldo Lorenzi-Filho, Rafaella Fagundes Xavier, Celso Ricardo Fernandes Carvalho

PA322 **Postural balance in COPD with obstructive sleep apnea: a cross-sectional study**
Caroline Maschio de Censo (São Paulo, Brazil), Viviane Vieira Passini, Bárbara Aparecida Teodoro Alcantara Verri, Regina Maria De Carvalho-Pinto, Rafael Stelmach, Geraldo Lorenzi-Filho, Rafaella Fagundes Xavier, Celso Ricardo Fernandes Carvalho

PA323 **Brain-heart autonomic axis, health status, symptomatology and functionality in AECOPD**
Renata Mendes (Sao Carlos (SP), Brazil), Nathany Souza Schafauser, Nicole Marques Sgarbosa, Erika Zavaglia Kabbach, Alessandro Domingues Heubel, Débora Mayumi De Oliveira Kawakami, Naiara Tais Leonardi, Audrey Borghi-Silva

PA324 **Characteristics of individuals with moderate to severe asthma who better respond to aerobic training: a cluster analysis**
Celso Ricardo Fernandes de Carvalho (São Paulo (SP), Brazil), Adriana Lunardi, Patricia Freitas, Tiago Endrigue, Ronaldo Silva, Felipe Mendes, Andrezza França, Regina Carvalho-Pinto

PA325 **Relationship of dietary pattern with body composition and symptoms in patients with COPD**
Joana Cruz (Leiria, Portugal), Tiago Novo, Sofia Flora, Marlene Lages, Nádia Hipólito, Marisa Cebola, Maria P. Guarino

PA326 **Cardiac autonomic function, exercise capacity and physical activity in patients with COPD**
Fien Hermans (Gent, Belgium), Eva Arents, Astrid Blondeel, Patrick Calders, Thierry Troosters, Eric Derom, Heleen Demeyer

PA327 **Factors associated with asthma-related quality of life in moderate-to-severe asthma**
Karen Hjerrild Andreasson (Næstved, Denmark), Mike Thomas, Søren T Skou, Uffe Bodtger

PA328 **Validity and Reliability of upper limb muscles strength measurements by handheld dynamometer in COPD**
Marc Beaumont (Morlaix, France), Loic Péran, Anne-Cécile Berriet, Rodolphe Keller, Catherine Le Ber

PA329 **Investigation of Factors Associated with Fall Risk in Lung Cancer Survivors**
Büsra Turgut (Izmir, Turkey), Ilknur Naz, Sevtap Günay Uçurum, Berna Kömürcüoğlu, Derya Özer Kaya

PA330 **Investigation of the relationship between balance, self-confidence, fear of falling, and physical function in cancer patients who have undergone lung resection.**
Büsra Turgut (Izmir, Turkey), Ilknur Naz, Sevtap Gunay Ucurum, Berna Komurcuoglu, Derya Ozer Kaya

PA331 **Fatigue in COPD patients on long term oxygen therapy: a cross-sectional study**
Mara Paneroni (Mazzano (BS), Italy), Michele Vitacca, Laura Comini , Beatrice Salvi, Massimo Venturelli

PA332	**Comparison of Sitting Balance and Functional Independence Levels of COPD Patients Receiving and Not Receiving Non-Invasive Mechanical Ventilation Therapy** Büsra Turgut (Izmir, Turkey), Ilknur Naz, Cenk Kıraklı
PA333	**Comparison of Disease Knowledge Level, Dyspnea, Disease Status and Quality of Life in COPD Patients with and without Comorbidities** Elvan Felekoglu (Izmir, Turkey), Melissa Köprülüoglu, Ilknur Naz, Hülya Şahin
PA334	**Association of sleep quality-quantity with sedentary time and physical activity in bronchiectasis** Victoria Alcaraz Serrano (Barcelona, Spain), Beatriz Herrero-Cortina, Ane Arbillaga-Etxarri, Rodrigo Torres-Castro, Joan Daniel Martí-Romeu, Laia Fernández-Barat, Antoni Torres-Martí, Elena Gimeno-Santos
PA335	**Late Breaking Abstract - Innovative exercise for optimizing exercise intensity in COPD** Johan Jakobsson (Umeå, Sweden), Jana De Brandt, Mattias Hedlund, Anna-Clara Rullander, Andre Nyberg

TP-19 in thematic poster area — Session 76 — 08:30 - 09:30

Thematic poster: Biomarkers in COVID

Disease(s) : Respiratory critical care | Airway diseases

Method(s) : General respiratory patient care | Public health | Cell and molecular biology | Imaging | Physiology | Respiratory intensive care

Chairs : Timothy Hinks (Oxford, United Kingdom), Camille Rolland-Debord (clermont-ferrand, France)

PA336	**Associates of neutrophil/lymphocyte ratio in patients with COVID 19 infection: A single center experience** Burcu Turan (Istanbul, Turkey), Ezgi Baysal, Can Ömür, Yahya Abdurrahman, Caner Çınar, Derya Kocakaya, Sehnaz Olgun Yıldızeli, Emel Eryüksel, Sait Karakurt, Baran Balcan
PA337	**Biomarker profiles associated with COVID-19 severity and mortality** Silvia Sánchez-Díez (Barcelona, Spain), Carlos Gómez Ollés, Miquel De Homdedeu, David Espejo, Cristina Fábregas, María Jesús Cruz, Xavier Muñoz
PA338	**Vitamin d3 and its association with covid-19 disease severity: a prospective study** Ankita Mohanty (Bhubaneswar, India), Gopal Purohit, Chaina Ram Choudhary, Ashok Kuwal, Vikram Bajiya
PA339	**RELATION BETWEEN FERRITIN LEVELS AND PULMONARY AFFECTATION IN COVID-19.** Esperanza Guzmán Ansado (Madrid, Spain), Ana Ochoa-Ruiz, Norman Andrés Villamagua- Arias, Juan Francisco De Mesa Álvarez, Ángela Hidalgo Herranz, Silvia Sans Pérez, Soledad Torres Tienza, Carmen Lorenzo Martinez, Maja Cristina Yanlli Bonduke, José María Rodríguez-Fernández, Sergio Campos Téllez
PA340	**Can IL-6 serve as a reliable biomarker of clinical outcome in COVID19 pneumonia?** Georgia Hardavella (Athens, Greece), Stavroula Mavrea, Elena Bellou, Ioanna Marinou, Elli Keramida, Erasmia Georgakopoulou, Irma Bracka, Thodoris Daskalos, Spyros Mazarakis, Ioannis Karampinis, Maria Salomidou, Antonios Xipolitos, Nikolaos Anastasiou, Despoina Zorpidou, Panagiotis Demertzis, Simona Karabela
PA341	**Thyroid dysfunction reflects severity of COVID-19 pneumonia in hospitalized patients** Ioannis Machairas - Sallas (Nea Erythraia, Greece), Lykourgos Kolilekas, Anastasia Levounets, Dionysios Tsoukalas, Elefterios Zervas, Mina Gaga
PA342	**Neutrophil-to-lymphocyte : a useful biomarker for predicting severity in coronavirus disease-2019 (COVID19)** Manel Loukil Ben Ali (Nabeul, Tunisia), Warda Jelassi, Narjes Abid, Nada Gader, Mechaal Ben Ali, Imen Chaabane, Khaled Bouzaidi, Hedia Ghrairi
PA343	**Lactate dehydrogenase level: A predictive marker for severe COVID-19 infection** Manel Loukil Ben Ali (Nabeul, Tunisia), Warda Jelassi, Narjes Abid, Nada Gader, Mechaal Ben Ali, Imen Chaabane, Khaled Bouzaidi, Hedia Ghrairi
PA344	**Is serum 25-hydroxyvitamin D levels associated with severity of COVID-19 disease? A retrospective study** Maria Boesing (Liestal, Switzerland), Mireille Hunziker, Kristin Abig, Stéphanie Giezendanner, Fabienne Jaun, Giorgia Lüthi-Corridori, Anja Makhdoomi, Jürgen Muser, Jörg Daniel Leuppi
PA345	**Laboratory markers as predictor factor of clinical and radiological severity in hospitalized patient with covid-19** Sabrine Majdoub Fehri (Nabeul, Tunisia), Imen Ketata, Rahma Sellami , Wafa Medi, Hamida Kwass
PA346	**COVID-19 Severity Index (SI): is it a sensitive predictor score for disease outcome in hospitalized patients?** Kateryna Gashynova (Dnipro, Ukraine), Vladyslava Rudakova, Victoria Rodionova, Natalya But

PA347 **Plasminogen activator inhibitor-1 (PAI-1) like the best mortality predictor of in the COVID-19-associated pneumonia**
Kseniia Bielosludtseva (Dniepropetrovsk, Ukraine), Tetyana Pertseva

PA348 **Evolution of IL-6 as possible marker of viral control in Covid-19**
Cristina De Diego Ramos (Zaragoza, Spain), Lucía López, Laura Torralba, Ana Lasierra, Raquel Lahoz, Claudia Abadía, Pablo Ruiz De Gopegui, Alberto Cebollada, Javier Godino, Beatriz Jimeno, Salvador Bello

PA349 **Lactate dehydrogenase (LDH) reinforcement in predicting Covid-19 patient's outcomes**
Hind Eid (Beirut, Lebanon), Antoine El Kik, Albert Riachy, Elio Mekhael, Karim Hoyek, Nabil Nassim, Georges Khayat, Ghassan Sleilaty, Moussa Riachy

PA350 **Relationship between hypercoagulability of hospitalized patients with COVID-19 disease with the clinical course of the disease as determined by the method of rotational thromboelastometry(ROTEM).**
Natasa-Eleni Loutsidi (Glyfada, Greece), Marianna Politou, Vasilios Vlahakos, Dimitrios Korakakis, Theodora Kassi, Asimina Nika, Abraham Pouliakis, Konstantinos Eleuftheriou, Apostolos Pappas, Ioannis Kalomenidis

PA351 **THE MOST INFORMATIVE BIOMARKERS AS PREDICTORS OF MORTALITY IN COVID-19 PNEUMONIA**
Yuliia Huba (Dnipropetrovsk, Ukraine), Kseniia Bielosludtseva, Lyudmyla Konopkina

PA352 **Prognostic value of initial KL-6 (Krebs von den Lungen 6) plasma level during COVID-19 pneumonia**
Camille Rolland-Debord (clermont-ferrand, France), Alice Letellier, David Luque Paz, Guillaume Lefèvre, Laurence Pieroni, Antoine Parrot, Jacques Cadranel

PA353 **Poor nutritional status and dynapenia are highly prevalent in post-acute COVID-19**
ludovica capitelli (san nicola la strada, Italy), Francesco De Blasio, Luca Scalfi, Bianca Castellucci, Annamaria Sacco, Giulia Miracco Berlingieri, Paola Alicante, Claudio Candia, Valeria Giacon, Filomena Tafuro, Rosita Mottola, Alessandro Sanduzzi Zamparelli, Marialuisa Bocchino

PA354 **Prognostic value of Platelet-to-lymphocyte ratio in hospitalized patients with COVID-19 pneumonia**
Nouha Boubaker (Nabeul, Tunisia), Islam Mejri, Nouha Guediri, Salsabil Daboussi, Samira M'Hamdi, Chiraz Aichaouia, Zied Moetemri

PA355 **Adipokines levels in hospitalized patients for COVID-19 and their role in prognosis**
Dorina Rama Esendagli (Ankara, Turkey), Deniz Topcu, Eylem Gul, Cansu Alperen, Sule Akcay

TP-2 in thematic poster area — Session 77 — 08:30 - 09:30

Thematic poster: Pulmonary rehabilitation in clinical conditions beyond COVID

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

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

Chairs : Michele Vitacca (Gussago (BS), Italy), Jatu Aphridasari (Surakarta (Central Java), Indonesia)

PA356 **Late Breaking Abstract - Availability and characteristics of pulmonary rehabilitation programs in family health centers and hospitals from Chile: cross-sectional and multicentric study**
Andrea Méndez (Santiago, Chile), Carlos Nieto, Gonzalo Hidalgo

PA357 **Learning of self-administered Active Cycle of Breathing Technique in patients with nCFb**
Rita Santos (Leiria, Portugal), José Ferreira, Sandra Ferreira, João Costa, Filipa Januário

PA358 **Outpatient pulmonary rehabilitation for patients with lung cancer: a retrospective real-world analysis**
Ralf Harun Zwick (Wien, Austria), Oliver Illini, Dietlinde Gattinger, Milos Petrovic, Arschang Valipour, Hannah Fabikan, Maximilian Johannes Hochmair

PA359 **Urinary incontinence is frequent among people with chronic respiratory disease attending pulmonary rehabilitation.**
Tristan Bonnevie (Saint Léger Du Bourg Denis, France), Fanny Laporte, Léna Bocquet, Pauline Smondack, Guillaume Prieur, Yann Combret, Clément Médrinal, Boujibar Fairuz, Jean-François Muir, Antoine Cuvelier, Francis-Edouard Gravier

PA360 **Predictors of survival in adults with Duchenne muscular dystrophy**
Anne-Christin Stöwhas (Zürich, Switzerland), Michael Furian, Esther Irene Schwarz, Beat Kindler, Michael Rosche, Frank Habersatter, Henning Arndt, Konrad Ernst Bloch

PA361 **Cognitive and psychological consequences of moderate-to-severe COVID-19 pneumonia: associations with clinical variables in convalescent patients without previous comorbidities.**
Claudio Candia (Naples, Italy), Pasquale Moretta, Pasquale Ambrosino, Anna Lanzillo, Salvatore Fuschillo, Antimo Papa, Luigi Trojano, Eliana Sferra, Antonio Molino, Mauro Maniscalco

PA362	**Rehabilitation facilitates the natural recovery of symptoms, mental health and quality of life outcomes post COVID-19.** Andreas Asimakos (Athens, Greece), Stavroula Spetsioti, Ioannis Vogiatzis, Aspasia Mavronasou, Pandelis Gounopoulos, Dimitra Siousioura, Efi Dima, Niki Gianiou, Ioanna Sigala, Sofia Pappa, Spyros Zakynthinos, Anastasia Kotanidou, Paraskevi Katsaounou
PA363	**A psychological needs analysis of individuals with Long-Covid** Amy Barradell (Leicester (Leicestershire), United Kingdom), Claire Bourne, Sally Singh, Noelle Robertson
PA364	**Early experiences of the your COVID recovery® programmme for individuals with long COVID** Nikki Gardiner (Leicester, United Kingdom), Phoebe H I Lloyd-Evans, Molly M Baldwin, Enya Daynes, Annabel Hong, George Mills, Amye Goddard, Emma Chaplin, Sally J Singh
PA365	**Employment status of referrals to a regional Long COVID service in the United Kingdom.** Hafsa Shams-Khan (Liverpool, United Kingdom), Nneka Nwosu, Laura Watkins , Gurinder Tack
PA366	**Effects of pulmonary rehabilitation on major symptoms of long COVID (post-COVID-19 syndrome)** Esperance Moine (Lodeve, France), Virginie Molinier, Francois Alexandre, Adriana Castanyer, Antonin Vernet, Amandine Calvat, Perrine Magrina, Melissa Roux, Audrey Fauge, Joan Lluis Aliaga Parera, Nicolas Oliver, Nelly Heraud
PA367	**Effects of pharmacological and non-pharmacological interventions on physical activity outcomes in chronic respiratory diseases: a systematic review and meta-analysis** Dimitrios Megaritis (Newcastle upon Tyne, United Kingdom), Emily Hume, Nikolaos Chynkiamis, Christopher Buckley, Ashley Polhemus, Henrik Watz, Thierry Troosters, Ioannis Vogiatzis
PA368	**The first-year experience of a long covid clinic in a UK district general hospital** Alarmeluvalli Sivaramakrishnan (Aylesbury, United Kingdom), Jaiminkumar Patel, Imogen Cotter, Tania Emiliou, Mitesh Desai, Mitra Shahidi
PA369	**Clinical phenotyping in COPD patients treated with triple therapy and admitted to a rehabilitative center: a real-world retrospective study.** Michele Vitacca (Gussago (BS), Italy), Beatrice Salvi , Piero Ceriana, Luigino Rizzello, Antonio Spanevello, Mauro Maniscalco , Bruno Balbi, Claudio Bruschi, Paolo De Nardi , Mara Paneroni
PA370	**The appropriate outcome measure of pulmonary rehabilitation in individuals with chronic obstructive pulmonary disease** Michele Vitacca (Gussago (BS), Italy), Mara Paneroni , Beatrice Salvi, Nico Ambrosino
PA371	**Striking high prevalence of quadriceps strength non-response after pulmonary rehabilitation in COPD** Marion Desachy (Jacou, France), Virginie Molinier , Francois Alexandre , Elodie Four, Laurene Charbonnel, Alain Varray, Nelly Heraud
PA372	**How do Motor Neurone Disease (MND) patients perceive a Home Visit (HV) service at the Royal Berkshire Hospital (RBH)?** Francesca Knight (Reading, United Kingdom), Karena Cranstone, Anne Mcgown, Grace Robinson
PA373	**Functional recovery of hospitalised patients with covid-19: a prospective cohort study** Marla Beauchamp (Hamilton, Canada), Renata Kirkwood, Andrew Costa, Mylinh Duong, Terence Ho, Rebecca Kruisselbrink, Hope Morrison, Aaron Jones, Parminder Raina
PA374	**Impact of COVID-19 restrictions on physical activity in adults with severe asthma: a preliminary two-year retrospective analysis** Caroline Reilly (Leeds, United Kingdom), Ian Clifton, Daniel Peckham, Antonios Stavropoulos-Kalinoglou, Oliver Price
PA375	**Clinical and functional characteristics of patients recovering from severe COVID-19 attending an inpatient pulmonary rehabilitation program** Luca Nicola Cesare Bianchi (Rovato (BS), Italy), Silvia Campagnini, Chiara Arienti, Andrea Mannini, Giorgia Mancini, Alessandro G Calabrò, Lucrezia Pianigiani, Paolo I Banfi, Janis Ruggeri, Serena Monteleone, Roberto Porta, Francesco Gigliotti

TP-20 in thematic poster area — Session 78 — 08:30 - 09:30

Thematic poster: Bronchiectasis: 1

Disease(s) : Airway diseases Interstitial lung diseases

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

Chairs : Rosanel Amaro Rodriguez (Premia de Dalt (Barcelona), Spain), Amelia Shoemark (Dundee (Angus), United Kingdom)

PA376	**PHENOTYPIC CLUSTERING IN NON-CYSTIC FIBROSIS BRONCHIECTASIS PATIENTS: THE ROLE OF NEUTROPHILS IN DISEASE SEVERITY** Xuejie Wang (Barcelona, Spain), Carmen Villa, Yadira Dobarganes, Casilda Olveira, Rosa Girón, Marta García-Clemente, Luis Máiz Carro , Oriol Sibila, Rafael Golpe, Rosario Menéndez, Juan Rodríguez-López, Concepción Prados, Miguel Angel Martinez-García, Juan Luis Rodriguez, David De La Rosa, Xavier Duran, Jordi Garcia-Ojalvo, Esther Barreiro
PA377	**Clinical characteristics and imaging of adult PCD patients: a single-center experience.** Chrysavgi Kosti (Gerakas, Greece), Vasilios Tzilas, Antonia Digalaki, Sofia Koukidou, Ioannis Tomos, Georgios Hillas, Serafeim Chrysikos, Emmanouela Zervou, Katerina Dimakou
PA378	**Clinical, radiological and bacteriological profile of patients with Bronchiectasis and asthma coexistence.** Antonia Digalaki (Athens, Greece), Sofia Koukidou, Georgios Hillas, Chrysavgi Kosti, Serafeim Chrysikos, Aikaterini-Ioanna Sakellaropoulou, Katerina Dimakou1
PA379	**Use of multidimensional scales to predict outcomes in admissions due to bronchiectasis exacerbation.** Blanca Urrutia Royo (Barcelona, Spain), Marina Compte Vives, Ignasi García-Olivé, Carlos José Folgado López, Jorge Abad Capa, Antoni Rosell Gratacós
PA380	**Demographic and clinical features of Swedish patients with bronchiectasis; preliminary results from a tertiary EMBARC centre.** Apostolos Bossios (Stockholm, Sweden), Pia Ghosh, Ingrid Gerhardson, Nawfal Bedi, Sara Barsch Cornacchini, Nikolaos Lazarinis, Barbro Dahlen, James D Chalmers
PA381	**Primary ciliary dyskinesia in Volendam: diagnostic and phenotypic features in patients with a CCDC114 mutation** Renate Kos (Soest, Netherlands), Joël Israëls, Christine D L Van Gogh, Josje Altenburg, Sandra Diepenhorst, Tamara Paff, Elles M J Boon, Gerard Pals, Anne H Neerincx, Anke H Maitland-Van Der Zee, Eric G Haarman
PA382	**The Bronchiectasis- rhinosinusitis association is characterized by sputum eosinophilia** Michal Shteinberg (Haifa, Israel), James Chalmers, Miki Rahat, Elina Simanovich, Shai Cohen, Nizar Abu-Hilu, Sharon Avital, Emad Mohammed, Jennny Gerbshian, Nili Stein, Sonia Schneer, Najwan Nasrallah, Iya Eisenberg, Yochai Adir
PA383	**Etiology, clinical, radiological and microbiological profile of patients with non-CF bronchiectasis in Tunisia** Hamida Kwas (Gabes, Tunisia), Sabrine Majdoub, Wafa Medi
PA384	**Comparison of hospital admissions in people with bronchiectasis between the covid-19 pandemic (2020) and pre-pandemic period (2019)** Beatriz Herrero Cortina (Zaragoza, Spain), Xunxiao Lin , Ana García-Esteban, Guillermo Samuel Loscertales-Vacas, Marta Martín Lana, Elena Borobia-Irache, Ana Cristina Aguelo-Velilla
PA385	**Imaging analysis of sarcopenia in a cohort of stable patients with bronchiectasis** Mariela Nieves Alvarado Miranda (Reus, Spain), Adriana Nuñez Robainas, María Pérez Peiró, Salvatore Marsico, Alberto Solano López, Esther Barreiro
PA386	**Bronchiectasis in Pakistan: A retrospective review of patients with non-cystic fibrosis bronchiectasis at a tertiary care center** Syed Muhammad Zubair (karachi, Pakistan), Shayan Shahid, Ali Bin Abdul Jabbar, Abdullah Wagley, Muhammad Daniyal Musharraf, Haris Zahid, Muhammad Irfan
PA387	**PROFILE OF CLINICAL AND ANALYTICAL PARAMETERS IN BRONCHIECTASIS PATIENTS DURING THE COVID-19 PANDEMIC: A ONE-YEAR FOLLOW-UP STUDY.** Liyun Qin (Barcelona, Spain), Filipe Gonçalves-Carvalho, Yingchen Xia, Jianhua Zha, Mireia Admetlló, José María Maiques, Sandra Esteban-Cucó, Xavier Duran, Alicia Marín, Esther Barreiro
PA388	**Long-term outcome of nebulised antibiotic prophylaxis in bronchiectasis: a retrospective cohort study** Keith Hattotuwa (Chelmsford (Essex), United Kingdom), Wei Chin Ng, Jack Mulholland
PA389	**Prevalence of eosinophilia in chronic respiratory illness (CRI) during exacerbation with a focus on outcomes related to ICS treatment in Bronchiectasis** Ioana Rusu (MANCHESTER, United Kingdom), Rosina Khan, Magnus Okoh, Sowmya Ekhelikar, Nawaid Ahmad
PA390	**Correlation between radiological scores and clinical and biological data in patients with bronchiectasis** Houda Snène (Tunis, Tunisia), Malika Guemri, Soumaya Debiche, Hana Blibech, Sirine Daoud, Line Kaabi, Souhir Ouali, Jalloul Daghfous, Leila Ben Farhar, Nadia Mehiri, Nozha Ben Salah, Bechir Louzir
PA391	**CLINICAL CHARACTERISTICS, RADIOLOGICAL FEATURES, AND DISEASE SEVERITY OF BRONCHIECTASIS ACCORDING TO THE SPIROMETRIC PATTERN** Bumhee Yang (Cheongju-si, Republic of Korea), So Rae Kim, Sun-Hyung Kim, Jun Yeun Cho, Eung-Gook Kim, Kang Hyeon Choe

PA392 **Prevalence of LasB elastase variants from Pseudomonas aeruginosa respiratory isolates and their inhibition by novel LasB inhibitor ANT3273**
Agustina Llanos (Labège, France), Clarisse Lozano, Jérôme Castandet, Magdalena Zalacain, Michael Tunney, Rachel Mairs, Gisli Einarsson, Martin Everett

PA393 **Diagnostic value of multiple breath washout in patients with chronic productive cough**
Niklas Ziegahn (Berlin, Germany), Charlotte O Pioch, Mirjam Stahl, Marcus A Mall, Jobst F Roehmel

PA394 **Host transcriptomic signature for viral and bacterial infection at exacerbation of COPD–The longitudinal PAX-I study**
Andrei Darie (Basel, Switzerland), Desiree M. Schumann, Leticia Grize, Kathleen Jahn, Matthias J. Herrmann, Werner Strobel, Hans Hirsch, Michael Tamm, Daiana Stolz

TP-21 in thematic poster area — Session 79 — 08:30 - 09:30

Thematic poster: COVID complications

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

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

Chairs : Søren Sperling (Aarhus N, Denmark), Chair to be confirmed

PA395 **Spontaneous pneumomediastinum, subcutaneous emphysema and pneumothorax in non-intubated patients with COVID-19 pneumonitis: a retrospective case note review of a single centre experience**
Randeep Karwal (WILLENHALL, United Kingdom), Anastasia Fries, Sara Tsimerman, Dewmi Subasinghearac, Lydia Holden, Sharon Power, Yasser Madani

PA396 **CoVid-19 and Influenza co-infection within North-West England: Flu-Rona – we won't ever find it if we don't look for it>**
Fred Fyles (Liverpool, United Kingdom), Phoebe Hazenberg, Jonathan Folb, Daniela Ferreira, Hassan Burhan, Andrea M Collins

PA397 **Clinico-etiological Profile of COVID-19 Cases with Cavitary Lung Lesions**
Arjun Kumar (Rishikesh, India), Prakhar Sharma, Girish Sindhwani

PA398 **Taste and smell disorders during and post-acute Covid-19 in the population of Agadir**
Abdelkrim Khannous (Agadir, Morocco), Fatiha Bounoua, Houda Moubachir, Hind Serhane

PA399 **Pneumothorax in ARDS hospitalized Covid-19 patients: risk factors, therapeutic strategies and outcome**
Beatrice Ragnoli (Vallio Terme, Italy), Patrizia Pochetti, Lorenza Conti, Anna Maria Calareso, Mariangela Barbieri, Luca Ruggero, Tiziana Cena, Mario Malerba

PA400 **Venous and arterial thromboses in hospitalized patients with acute COVID-19 at University Hospital Dubrava**
Ivona Kovacevic (Zagreb, Croatia), Jasna Tekavec Trkanjec, Đivo Ljubicic, Ivan Marasovic, Darjan Ranilovic, Marko Lucijanic, Nevenka Piskac Zivkovic

PA401 **Short term impact of COVID19 pneumonia on cardiovascular profile**
Irma Bracka (GALATSI ATHENS, Greece), Ioannis Karampinis, Eleni Bellou, Elli Keramida, Thodoris Daskalos, Panagiotis Demertzis, Georgia Hardavella

PA402 **Characterization of respiratory sequelae following SARS-CoV-2 infection, a monocenter study**
Aurélien Justet (Paris, France), Jean Richeux, Jasper Flint, Margaux Pasquesoone, Armelle Mouadil, Pierre Cuchet, Fouquet Helene, Nicolas Aide, Simon Deshayes, Vincent Lepennec, Emmanuel Bergot

PA403 **Olfactory dysfunction in COVID-19 according to individuals' perception and olfactory test among health care workers**
THIAGO SERRANO (CAMPINAS, Brazil), Marcelo Antonio, Lorena Giacomin, Fernando Marson, Jose Dirceu Ribeiro, Eulalia Sakano

PA404 **Comparative study assessing the Pulmonary Function impairment in patients affected during Covid -19 1st and 2nd wave**
Rajesh Agrawal (Bareilly, India), Amit Kumar, Rishi Saini, Javied Malik

PA405 **Incidence of pneumothorax, subcutaneous emphysema and pneumomediastinum in patients with COVID – 19**
Pavel Yordanov (Varna, Bulgaria), Valentina Dimitrova

PA406	**Case report: Spontaneous pneumomediastinum (SPM) and intestinal perforation secondary to COVID-19 in the same patient.** Albino Petrone (Cosenza (CS), Italy), Pietro Scrivano, Andrea Corsonello, Michela Quartieri, Giuseppe Francesco Rago, Francesco Cesario, Carlo Lorenzo Manfredi, Achille Gaudio, Enrico Scarpelli, Angelo Barbato
PA407	**Pneumomediastinum in non-intensive care unit hospitalized patients with COVID-19 pneumonia** Moises Muley (Rome, Italy), Panaiotis Finamore, Claudio Pedone, Domenico Paolo Emanuele Margiotta, Emanuele Gilardi, Federica Sambuco, Antonio De Vincentis, Umberto Vespasiani Gentilucci, Francesco Travaglino, Raffaele Antonelli Incalzi
PA408	**COVID-19 associated pulmonary cavitary lesions - A single center observational study** Sheetal Chaurasia (Bangalore (Karnataka), India), Rajesh Mohan Shetty, Raghu Murthy, Saurav Chowdhury
PA410	**Hospitalised patients with COVID-19: the impact of nosocomial infections** Lucía Méndez González (Santa Maria da Feira, Portugal), Jorge Ferreira, Cátia Caneiras
PA411	**Post-COVID-19 patients develop lung fibrotic-like changes: is there a role for IL-1α and TGF-β?** Claudio Candia (Naples, Italy), Chiara Colarusso, Antonio Molino, Michela Terlizzi, Alessandro Saglia, Eliana Sferra, Marta Coppola, Lorena Gallotti, Alessandro Vatrella, Aldo Pinto, Rosalinda Sorrentino
PA412	**CoV-Sym: The development of a psychometrically validated patient reported outcome measure for COVID-19** Caitlin Lythgoe (Liverpool, United Kingdom), Anna Rowe, Olalekan Lee Aiyegbusi, Lucy Chambers, Frances Sherratt, Joseph Wood, Bridget Young, Dan Wootton
PA413	**Long term clinical and lung function test assessment in critically ill covid-19 patients: a 1-year follow-up** Leonardo Rovere (Milano, Italy), Giovanni Fumagalli, Elena Magni, Eliana Scoditti, Lisa Pancini, Paolo Gaboardi, Paolo Tarsia
PA414	**Quality of life and dyspnoea grade after a severe SARS-CoV-2 pneumonia: a 12-month follow-up.** Lidia Zamudio Domingo (BANYOLES, Spain), Lidia Perendreu Busquets, Saioa Eizaguirre Anton, Marc Bonnin Vilaplana, Gladis Sabater Talaverano, Marina Belén Lescano Ponce, Ramon Orriols Martínez

TP-22 in thematic poster area — Session 80 — 08:30 - 09:30

Thematic poster: Tuberculosis, COVID-19 and other coinfections

Disease(s) : Airway diseases

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

Chairs : Ayşegül Fusun Öner Eyüboğlu (Ankara, Turkey)

PA415	**The impact of COVID-19 on Tuberculosis diagnosis** Ricardo José Pereira De Matos Cordeiro (Portela LRS, Portugal), Luis Mateus, Maria Cavaco, André Nunes, Carina Silvestre, Natália André, António Domingos
PA416	**Trend of knowledge and attitude toward COVID-19 during 1st & 2nd wave of pandemic in pulmonary tuberculosis patients.** Ankita Mandal (Lucknow, India), Ajay Kumar Verma, Surya Kant, Jyoti Bajpai, Sujita Kar
PA417	**In-hospital diagnosis of tuberculosis (TB) in non-HIV patients: the impact of the COVID-19 pandemic.** Mariana Ramos Martins (Faro, Portugal), Lídia Carvalho, Teresa Carvalho, Isabel Gomes
PA418	**Influence of COVID19 pandemic on change of attitude about tuberculosis among patients with respiratory diseases in Serbia** Miroslav Ilić (Sremska Kamenica (Vojvodina), Republic of Serbia), Dragan Bijelić, Nevena Savić, Jovan Javorac, Ana Milenković, Miloš Cvetković, Dejan Živanović, Dragica Kovačević
PA419	**Factors associated with the clinical profile and outcome of SARS-COV-2 (COVID-19) patients co-infected with tuberculosis in a tertiary hospital: a retrospective study** Jelena Louise Arreza (Cebu City, Cebu Province, Philippines), Ma. Philina Villamor
PA421	**The COVID19 pandemic may lead to the activation of the forgotten tuberculosis** Miroslav Ilić (Sremska Kamenica (Vojvodina), Republic of Serbia), Miloš Cvetković, Dragica Kovačević, Darinka Kukavica, Nevena Savić, Ana Milenković, Jovan Javorac
PA422	**Tuberculosis related lethality structure in Kharkiv, Ukraine: impact of COVID 19** Olha Konstantynovska (Kharkiv, Ukraine), Petro Poteiko, Tetiana Synenko, Oleh Stepanov, Oleksandr Zinenko, Tetiana Liadova, Olha Volobuieva

PA423	**Increased long-term mortality among tuberculosis and influenza cases compared to patients with Salmonella infection** Anthony Byrne (Sydney (NSW), Australia), Kenneth Ng, Jennifer Pett, Ellen Donnan, Javier Haurat, Ben Marais
PA424	**COVID19 and tuberculosis Co-infection: clinical, biological and radiological characteristics** Abir Hedhli Ep Cherni (tunis, Tunisia), arbia chaieb, Abir Hedhli, Yassine Ouahchi, Toujeni Sonia, Cheikhrouhou Sana, Merai Samira, Mjid Mariem, Dhahri Bessma
PA425	**The role of biological monitoring in raising the suspicion of nosocomial infection with SARS CoV 2 in patients with tuberculosis** Ionut Valentin Stanciu (Constanta, Romania), Zamfir Viorica, Arghir Ioan Anton, Dantes Elena
PA426	**Influence of COVID-19 pandemic on the main epidemiological dataof TB in Azerbaijan** Gulzar Aliyeva (Baku, Azerbaijan), Agigat Gadirova
PA427	**Intrathoracic aspergillomas-study conducted in an area with high endemic tuberculosis** Denisa-Gabriela Andrei (Constanta, Romania), Elena Dantes, Simona Lupsa, Viorica Zamfir, Angelica Potamian, Oana Arghir

TP-23 in thematic poster area — Session 81 — 08:30 - 09:30

Thematic poster: Pleural and thymic malignancies: from bench to bedside

Disease(s) : Thoracic oncology

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

Chairs : Kevin Blyth (Glasgow (Glasgow), United Kingdom), Maria Joana Pereira Catarata (Porto, Portugal)

PA428	**Using InfraRed (IR) Spectroscopy to differentiate between Mesothelioma (Meso), Other Malignant & Non-Malignant pleural effusions** Lauren Fox (Southampton, United Kingdom), Sharon Glaysher, Alexander Hicks, Michael Ball, Rachelle Asciak, Thomas Brown, Leon D'Cruz, Anoop Chauhan
PA429	**BAP1 loss in the diagnosis of malignant mesothelioma; review of a regional mesothelioma MDT** Helen Mcdill (Bristol (Avon), United Kingdom), Alexandra Dipper, Nidhi Bhatt, Amelia Clive, Nick Maskell, Anna Bibby
PA430	**The Management of Thymoma - a retrospective cohort analysis** Richard Cooper (Malpas, United Kingdom), Mohammed Adil, Muhammad Ganaie
PA431	**Diagnostic value of the cancer ratio in pleural effusion – a retrospective study** Maria João Cavaco (Coimbra, Portugal), Luis Mateus, André Nunes, Ricardo Cordeiro, Carina Silvestre, Joana Ferra, Daniel Duarte, Carla Cardoso, Paula Raimundo, António Domingos
PA432	**Has the impact of the COVID-19 pandemic on uptake and usage of indwelling pleural catheters reduced its cost-effectiveness?** Dana Li (London, United Kingdom), Sarah Johnstone, Padmavathi Parthasarathy, Rajini Sudhir, Muhammad Tufail, Rakesh Panchal
PA433	**Malignant Pleural Effusion and Auto-pleurodesis: Biomarkers, Predictors and Survival** Dinesh Addala (Oxford, United Kingdom), Yiwen Soo, Anand Sundaralingam, Eihab Bedawi, Beenish Iqbal, Najib Rahman
PA434	**Molecular identification of the primary cilium BBSome complex in pleural mesothelial cells** Sotirios Zarogiannis (Larisa, Greece), Erasmia Rouka, Rajesh Jagirdar, Eleanna Pitaraki, Ourania Kotsiou, Chrissi Hatzoglou, Konstantinos Gourgoulianis
PA435	**Human malignant pleural mesothelioma derived pleura fluid induces mesenchymal transition of benign pleural mesothelial cells** Sotirios Zarogiannis (Larisa, Greece), Rajesh Jagirdar, Erasmia Rouka, Eleanna Pitaraki, Ourania Kotsiou, Chrissi Hatzoglou, Konstantinos Gourgoulianis
PA436	**Diagnosis and management of thymomas in the Covid-19 era** Chung-Mei Maggie Cheung (London, United Kingdom), Raquel D'Espiney, Ermanno Capuano, Bernard Yung
PA437	**Mortality among hospitalized patients with pleural effusions.** ELEFTHERIOS MARKATIS (PLATITERA, Greece), Garifallia Perlepe, Andreas Afhtinos, Konstantinos Pagkratis, Charalampos Varsamas, Eleftheria Chaini, Ilias C. Papanikolaou, Konstantinos I Gourgoulianis

PA438	**MicroRNAs shuttled by extracellular vesicles within pleural fluids promote lung cancer cell proliferation** Elisabetta Pace (Palermo (PA), Italy), Simona Taverna, Giuseppe Cammarata, Anna Masucci, Ilaria Giusti, Vincenza Dolo
PA439	**Changes in the primary diagnosis of malignant pleural effusion** Oğuz Karcioğlu (Ankara, Turkey), Fatih Tekin, Sevgen Önder, Ziya Toros Selçuk
PA440	**An Evaluation of optimal pleural fluid volume required for accurate cytological diagnosis of malignancy** Nafisa Hussain (Watford, United Kingdom), Alessio Navarra, Anthony Maddox, Rahul Mogal
PA441	**Molecular profiling in Pleural Biopsies** Anand Sundaralingam (Oxford, United Kingdom), Avinash Aujayeb, Baki Akca, Clare Tiedeman, Vineeth George, Michael Carling, Jennifer Brown, Radhika Banka, Dinesh Addala, Eihab O Bedawi, Robert H Hallifax, Beenish Iqbal, Poppy Denniston, Maria T Tsakok, Nikolaos Kanellakis, Florian Vafai-Tabrizi, Michael Bergmann, Georg-Christian Funk, Rachel Benamore, John M Wrightson, Najib M Rahman

TP-24 in thematic poster area — Session 82 — 08:30 - 09:30

Thematic poster: Interstitial lung diseases diagnosis in the COVID-19 era: new tools for new challenges

Disease(s) : Interstitial lung diseases

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

Chairs : Antoine Froidure (Bruxelles, Belgium), Margarida Afonso (Castelo Branco, Portugal)

PA442	**Phenotypes of post covid interstitial lung disease; clinical, radiological, and pathological correlations.** Leonardo Gori (Florence, Italy), Claudia Ravaglia, Valentina Luzzi, Luca Ciani, Leonardo Giuntoli, Giulia Biadene, Sonia Bambina, Martina Marinato, Alessandra Dubini, Diletta Cozzi, Edoardo Cavigli, Camilla Comin, Valeria Pasini, Silvia Puglisi, Alberto Cavazza, Venerino Poletti, Michele Spinicci, Alessandro Bartoloni, Anna Peired, Edoardo Berillo, Cosimo Nardi, Elisabetta Rosi, Federico Lavorini, Sara Tomassetti
PA443	**Post-COVID interstitial lung disease in symptomatic patients after hospital discharge** Lorinc Polivka (Üröm, Hungary), Eniko Barczi, Tamas Nagy, Gabor Horvath, Aniko Bohacs, Veronika Muller
PA444	**COVID-19 in interstitial lung diseases: are fibrotic ILDs associated with worse outcomes?** Maria Carolina Alves Valente (Santo Tirso, Portugal), Mariana Serino, Beatriz Martins, Mariana Martins, Inês Carvalho, Miguel Barbosa, Marina Alves, Catarina Cascais, André Terras Alexandre, Natália Melo, Patrícia Caetano Mota, António Morais, Hélder Novais-Bastos
PA445	**Non-Detection of Post Covid Pulmonary Fibrosis (PCPF) through HRCT and PFT but possible through Transbronchial Lung Biopsy** Vijay Narain Tyagi (Meerut (Uttar Pradesh), India), Shivkant Agarwal, Charul Dabral, Manish Mittal, Manya Narain Tyagi
PA446	**Post-COVID-19 Interstitial Lung Disease: a new entity, what do we deal with?** AYCAN YUKSEL (Ankara, Turkey), Dilek Karadoğan, Nur Hürsoy, Gökhan Telatar, Neslihan Köse, Feride Marım, Ilknur Kaya, Aslıhan Banu Er, Merve Erçelik, Demet Polat, Merve Yumrukuz, Ökkeş Gültekin, Ceren Ilgar, Selin Çakmakçı, Bilge Yılmaz Kara, Neslihan Özçelik, Inci Selimoğlu, Kübra Uyar Er, Abdurrahman Kotan, Hasan Veysel Keskin, Metin Akgün
PA447	**Methylprednisolone in the treatment of post-COVID-19 Interstitial Lung Disease (STERCOV-ILD)** AYCAN YUKSEL (Ankara, Turkey), Dilek Karadoğan, Nur Hürsoy, Gökhan Telatar, Neslihan Köse, Feride Marım, Ilknur Kaya, Aslıhan Banu Er, Merve Erçelik, Demet Polat, Merve Yumrukuz, Ceren Ilgar, Ökkeş Gültekin, Selin Çakmakçı, Bilge Yılmaz Kara, Neslihan Özçelik, Inci Selimoğlu, Kübra Uyar Er, Abdurrahman Kotan, Hasan Veysel Keskin, Metin Akgün
PA448	**Evolution of diffusion capacity in interstitial lung disease associated with rheumatoid arthritis** Marie Vermant (Elsene, Belgium), Tinne Goos, Hannelore Bode, Laurens J De Sadeleer, Kenneth Verstraete, Nico De Crem, Ellen De Langhe, Adriana Dubbeldam, Erik Verbeken, Johny Verschakelen, Birgit Weynand, Jonas Yserbyt, Rene Westhovens, Patrick Verschueren, Wim A Wuyts
PA449	**Persistent Pneumonitis Post-COVID 19: description and risk factors** Sandra Cuerpo Cardeñosa (Barcelona, Spain), Fernanda Hernandez, Mariana Benegas, Joel Francesqui, Alejandra Lopez, Rosa Faner, Nestor Soler, Sergio Prieto, Alexandru Vlagea, Joan Albert Barbera, Marcelo Sanchez, Joan Ramon Badia, Oriol Sibila, Alvar Agustí, Jacobo Sellares, Inés Cobo, Anais Suarez, Veronica Torres, Adelaido Salazar, Anna Muñoz, Luz Bravo, Estibaliz Ruiz, María Molina, Alex Soriano, Judith García
PA450	**Evaluation of pulmonary function in post-COVID-19 patients** Vuk Pejcic (,), Tatjana Pejčić, Marija Topalović, Borislav Božanić, Aleksandra Ignjatović, Desa Nastasijević Borovac

PA451	**Bleomycin lung toxicity: a retrospective analysis of an old culprit.** Diana Sofia Moreira Sousa (Santo Tirso, Portugal), Margarida Afonso, Salete Valente
PA452	**Interstitial lung disease in children associated with biological autoimmunity, analysis of a French monocentric retrospective cohort: towards IPAF in children?** Alice Hadchouel-Duvergé (Paris, France), Laura Aoust, Brigitte Bader-Meunier, Christine Bodemer
PA453	**Effects of RXC007, a highly potent and selective ROCK2 inhibitor, in ex-vivo and in vivo models of pulmonary fibrosis.** Adriana Gambardella (Macclesfield, United Kingdom), Nicolas E. S. Guisot, Peter R. Bunyard, Emily Offer
PA454	**Diagnostic Performance of the Chest Interstitial Lung Disease Patient Questionnaire** Tal Perluk (Givatim, Israel), Inbal Friedman Regev, Ophir Freund, Eyal Kleinhendler, Sharona Ben-Ami, Amir Bar-Shai, Avraham Unterman
PA455	**A retrospective study exploring GAP index as a predictor of mortality in patients with Combined Pulmonary Fibrosis and Emphysema** Hana Alsomali (Newcastle upon Tyne, United Kingdom)
PA456	**Early detection of interstitial lung disease using AI-powered spirometry** Marko Topalovic (Kessel-lo, Belgium), Tomas Coenegrachts, Seppe Van Steenbergen, Armin Halilovic, Julie Maes, Laurens De Sadeleer, Wim Janssens
PA457	**Clusters of comorbidities in chronic hypersensitivity pneumonitis** Thomas Skovhus Prior (Egå, Denmark), Julia Wälscher, Benjamin Gross, Elisabeth Bendstrup, Michael Kreuter
PA458	**Ultrasound as a potential tool to detect interstitial lung disease in the daily clinical setting of patients with rheumatoid arthritis** Marwin Gutierrez (Mexico City, Mexico), Santiago Ruta, Denise Clavijo-Cornejo, Gabriela Fuentes-Moreno, Samuel Reyes-Long, Chiara Bertolazzi
PA459	**Cudetaxestat, a differentiated phase 2-ready investigational treatment for idiopathic pulmonary fibrosis** Bassem Elmankabadi (San Francisco, United States), Prabha Ibrahim, Carol Wong , Ravi Rajagopalan, Xiang Xu, Walter Yu

TP-25 in thematic poster area — Session 83 — 08:30 - 09:30

Thematic poster: Risk assessment in pulmonary arterial hypertension

Disease(s) : Pulmonary vascular diseases

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

Chairs : Athénaïs Boucly (Le Kremlin Bicètre, France), Vasile Foris (Graz, Austria)

PA460	**Validation of EmPHasis-10 health-related quality of life assessment tool in Canadian patients with pulmonary hypertension.** Mithum Kularatne (Calgary, Canada), Ainslie McBride, Doug Helmersen, Naushad Hirani, Mitesh Thakrar, Jonathan Liu, Lea Harper, Hina Iqbal, Aruba Naser, Rhea Varughese, Jason Weatherald, Jason Weatherald
PA461	**Narrative medicine to investigate patients' and caregivers' experience of pulmonary arterialhypertension: the inspectio study** Fabiana Baldi (Rome, Italy), Fabiana Baldi, Laura Scelsi, Pietro Ameri, Gian Piero Perna, Carlo D'Agostino, Piergiuseppe Agostoni, Natale Daniele Brunetti, Lorenzo Dagna, Giuseppe Galgano, Antonietta Cappuccio, Alessandra Fiorencis, Francesco Rucci, Roberta Termini, Stefano De Santis
PA462	**Correlation of emPHasis-10 with clinical tests: insights from the ASPIRE registry** Samer Alabed (Sheffield, United Kingdom), Krit Dwivedi, Charlotte Durrington, Faisal Alandejani, Robert Lewis, Charlie Eelliot, Athanasios Charalampopoulos, Roger Thompson, Abdul Hameed, Alexander Rothman, Iain Armstrong, Robin Condliffe, Andy J Swift, David G Kiely
PA463	**Health disparities and differences in health-care-utilization in patients with pulmonary arterial hypertension** Da-Hee Park (Hannover, Germany), Tanja Meltendorf, Kai G. Kahl, Jan C. Kamp, Manuel J. Richter, Marius M. Hoeper, Karen M. Olsson, Jan Fuge
PA464	**Prognostic importance of centrilobular ground glass changes in patients with Idiopathic Pulmonary Arterial Hypertension** krit Dwivedi (Sheffield, United Kingdom), Michael Sharkey, Robert Lewis, Michail Mamalakis, Samer Alabed, Smitha Rajaram, Catherine Hill, David Kiely, Jim Wild, Andrew Swift, Robin Condliffe

PA465	**The significance of normal lung regions on quantitative CT in pulmonary hypertension** Tadasu Okaya (Tokyo, Japan), Ayako Shigeta, Nobuhiro Tanabe, Akira Nishiyama, Hajime Yokota, Toshihiko Sugiura, Seiichiro Sakao, Koichiro Tatsumi, Takuji Suzuki
PA466	**Different exercise tests with different risk assessment in PAH patients** Amaya Martinez Meñaca (Santander (Cantabria), Spain), Raquel Luna Lopez, Víctor Manuel Mora Cuesta, Teresa Segura De La Cal, Alejandro Cruz Utrilla, Pilar Alonso Lecue, Jose Manuel Cifrian Martínez, Pilar Escribano Subias
PA467	**Limitations of functional class for predicting severity in pulmonary hypertension in Colombia** Manuel Conrado Pacheco Gallego (Pereira (Risaralda), Colombia), Rafael Conde, Alejandro Londoño, Carlos Jaime Velásquez, Ricardo Gómez-Palau, Diana Tiga, Juliana De Luque, Alba Ramírez-Sarmiento, Mauricio Orozco-Levi
PA468	**COMPERA score revised: better risk estimation to better tailor therapeutics in precapillary hypertension.** Joana Brito (Lisbon, Portugal), Pedro Alves Da Silva, Sara Couto Pereira, Beatriz Garcia, Joana Rigueira, Tatiana Guimarães, Ana G Almeida, Fausto J Pinto, Rui Placido
PA469	**Utility of the six minute walking test (6MWT) in the follow-up of patients with pulmonary arterial hypertension (PAH),is there a correlation between the distance walked and oxygen consumption?** Isabel Muñoz Ramirez (Seville, Spain), Alfonso Marin Andreu, Raquel De Andrés David, Aureliano Ais Daza, Maria Morales Gonzalez, Aurelio Arnedillo Muñoz
PA470	**CMR assessed maladaptive right ventricular remodelling predicts treatment failure in pulmonary arterial hypertension** Ze Ming Goh (Leeds, United Kingdom), Nithin Balasubramanian, Samer Alabed, Krit Dwivedi, Yousef Shahin, Alexander Mk Rothman, Pankaj Garg, Allan Lawrie, David Capener, A.A. Roger Thompson, Faisal Alandejani, James M Wild, Christopher S Johns, Robert A Lewis, Rebecca Gosling, Michael Sharkey, Robin Condliffe, David G Kiely, Andrew J Swift
PA471	**Prognostic impact of hypochromic erythrocytes in patients with pulmonary arterial hypertension** Christina Eichstaedt (Heidelberg, Germany), Vivienne Theobald, Panagiota Xanthouli, Nicola Benjamin, Alberto Marra, Anna D'Agostino, Benjamin Egenlauf, Memoona Shaukat, Cao Ding, Antonio Cittadini, Eduardo Bossone, Maria Kögler, Ekkehard Grünig, Martina Muckenthaler
PA472	**Risk stratification approaches perform differently in SSc-associated PAH in EUSTAR** Anna Maria Hoffmann-Vold (Oslo, Norway), Hilde Jenssen Bjørkekjær, Cosimo Bruni, Patricia E. Carreira, Paolo Airò, Carmen-Pilar Simeón-Aznar, Marie-Elise Truchetet, Alessandro Giollo, Alexandra Balbir-Gurman, Mickaël Martin, Christopher Denton, Armando Gabrielli, Håvard Fretheim, Imon Barua, Helle Bitter, Øyvind Midtvedt, Kaspar Broch, Arne Kristian Andreassen, Yoshiya Tanaka, Gabriela Riemekasten, Ulf Müller-Ladner, Marco Matucci Cerinic, Ivan Castellví, Elise Siegert, Eric Hachulla, Oliver Distler
PA473	**Pulmonary Arterial Hypertension risk assessment model using Bayesian Network analysis** Charles Fauvel (Columbus, United States), Zilu Liu, Shili Lin, Priscilla Correa-Jaque, Amy Webb, Rebecca Vanderpool, Raymond Benza
PA474	**Oxygenated hemoglobin as prognostic marker among patients with systemic sclerosis screened for pulmonary hypertension** Christina Eichstaedt (Heidelberg, Germany), Ojan Gordjani, Panagiota Xanthouli, Nicola Benjamin, Franziska Trudzinski, Benjamin Egenlauf, Satenik Harutyunova, Alberto Marra, Nicklas Milde, Christian Nagel, Norbert Blank, Hanns-Martin Lorenz, Ekkehard Grünig
PA475	**Prediction of peak oxygen uptake from 6-minute walk test in pulmonary hypertension** Simon Raphael Schneider (Zürich, Switzerland), Paula Appenzeller, Fiorenza Gautschi, Julian Müller, Mona Lichtblau, Stéphanie Saxer, Esther Irene Schwarz, Silvia Ulrich
PA476	**Ventilatory limitation during cardiopulmonary exercise testing predicts survival in patients with pulmonary arterial hypertension with Eisenmenger physiology** Chinthaka Samaranayake (London, United Kingdom), Ruth Mcniven, Aleksander Kempny, Laura C Price, Carl Harries, Michael Gatzoulis, Konstantinos Dimopoulos, S John Wort, Colm Mccabe
PA477	**D-Dimer predicts mortality in a real-life cohort of patients with indication for right heart catheterization** Vasile Foris (Graz, Austria), Florian Prüller, Gabor Kovacs, Alexander Avian, Philipp Douschan, Teresa Sassmann, Katarina Zeder, Markus Herrmann, Horst Olschewski
PA478	**Lung transplantation in pulmonary arterial hypertension (PAH): survival analysis according to PAH risk** Marta Zapata Ortega (Barcelona, Spain), Eva Revilla López, Berta Sáez Gimenez, Cristina Berastegui García, Marta Arjona Peris, Víctor Monforte Torres, Carlos Bravo Masgoret, Enric Domingo Ribas, Manuel López Meseguer
PA479	**Elevated alveolar nitric oxide in precapillary pulmonary hypertension decreases after therapy** Balázs Csoma (Budapest, Hungary), Györgyi Csósza, Gergő Szűcs, Veronika Müller, Kristóf Karlócai, Zsófia Lázár

TP-26 in thematic poster area — Session 84 — 08:30 - 09:30

Thematic poster: The many faces of interventional bronchoscopy

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

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

Chairs : Prashant Nemichand Chhajed (Mumbai, India), Peter I. Bonta (Amsterdam, Netherlands)

PA480	**Cryobiopsy in the diagnosis of peripheral lung lesion** Vytautas Ankudavicius (Kaunas, Lithuania), Skaidrius Miliauskas, Gediminas Vasiliauskas, Marius Zemaitis
PA481	**Outcomes of Endoscopic Tracheobronchial Brachytherapy: Retrospective Cohort Analysis from a High-Volume Cancer Centre** Stefano Maria Donghi (MILANO (MI), Italy), Elena Prisciandaro, Luca Bertolaccini, Niccolò Filippi, Andrea Vavassori, Lorenzo Spaggiari, Juliana Guarize
PA482	**Transbronchial lung cryobiopsy in sarcoidosis – is single biopsy enough?** Martyna Ciesielska (Jawor, Poland), Maciej Gnass, Anna Filarecka, Jerzy Soja, Damian Czyżewski, Lucyna Rudnicka, Wojciech Zajęcki, Artur Bartczak, Adam Ćmiel, Agnieszka Paluch-Stachowicz, Piotr Gniady, Artur Szlubowski
PA483	**Efficacy of transbronchial lung cryobiopsy with radial EBUS guidance in interstitial lung diseases – 5 years experience** Martyna Ciesielska (Jawor, Poland), Maciej Gnass, Jerz Soja, Damian Czyżewski, Wojciech Zajęcki, Lucyna Rudnicka, Artur Bartczak, Magdalena Życińska, Piotr Gniady, Małgorzata Szołkowska, Adam Ćmiel, Artur Szlubowski
PA484	**Impact of transbronchial lung cryobiopsy on lung function in patients with interstitial lung diseases** Sabrina Martinello (Melito di Porto Salvo (RC), Italy), Claudia Ravaglia, Silvia Puglisi, Martinello Sabrina, Vancheri Ada, Oldani Stefano, Piciucchi Sara, Poletti Venerino
PA485	**Safety and Efficacy of Transbronchial Cryo Lung Biopsy vs Forceps Biopsy in diagnosis of Fibrotic Lung Disease - The Heat is On** Umang C. Shah (Vadodara (Gujarat), India)
PA486	**Complications in the use of transbronchial lung cryobyopsy in non-interstitial lung diseases** Diego Alexis García Estudillo (mexico, Mexico), Olivia Sánchez Cabral, Cira Santillán Díaz, Paula Karina Olvera Llera
PA487	**ONE-SESSION BILATERAL WHOLE LUNG LAVAGE WITH ASSISTANCE BY EXTRACORPOREAL MEMBRANE OXYGENATION: A SAFE AND EFFECTIVE TREATMENT FOR PULMONARY ALVEOLAR PROTEINOSIS.** IRENE MILAGROS DOMINGUEZ ZABALETA (Madrid, Spain), Paola Benedetti, Javier De Miguel Diez, Sergio Suarez Escudero, Virginia Parra León, Luis Puente Maestu, José Javier García López
PA488	**Airway Stents: an important paradigm in the management of airway stenosis** Abhinav Singla (Essen, Germany), Johannes Wienker, Erik Büscher, Rüdiger Karpf-Wissel, Faustina Funke, Kaid Darwiche
PA489	**Management of benign tracheal stenosis: the endoscopic approach** Alia Ezzaouia (Tunis, Tunisia), Sarra Maazaoui, Amany Touil, Tasnim Znagui, Mariem Chaabane, Sonia Habibech, Hajer Racil, Nawel Chaouch
PA490	**Outcome and adverse events of endoscopic lung volume reduction with valves at 6- and 12-month follow-up: Results from the Lung Emphysema Registry (LE-R) in Germany** Thomas Sgarbossa (Berlin, Germany), Jacopo Saccomanno, Pavlina Lenga, Jens-Carsten Rückert, Franz Stanzel, Stefan Welter, Christian Grah, Joachim Pfannschmidt, Bernd Schmidt, Paul Schneider, Stephan Eisenmann, Marcus Krüger, Joachim Ficker, Dietmar Kraus, Angelique Holland, Andreas Kirschbaum, Andreas Gebhardt, Sven Gläser, Stephan Eggeling, Stefan Andreas, Marc Hinterthaner, Karl-Josef Franke, Ulrich Laskowski, Ralf-Harto Hübner
PA491	**Outcome of 2nd lung volume reduction therapy with one-way valves after initial treatment failure in patients from the national lung emphysema registry (LE-R) in Germany** Jacopo Saccomanno (Berlin, Germany), Thomas Sgarbossa, Pavlina Lenga, Jens-Carsten Rückert, Franz Stanzel, Stefan Welter, Christian Grah, Joachim Pfannschmidt, Bernd Schmidt, Paul Schneider, Stephan Eisenmann, Marcus Krüger, Joachim H. Ficker, Dietmar Kraus, Angelique Holland, Andreas Kirschbaum, Andreas Gebhardt, Sven Gläser, Stephan Eggeling, Stefan Andreas, Marc Hinterthaner, Karl-Josef Franke, Ulrich Laskowski, Ralf-Harto Hübner
PA492	**Predictors of survival in COPD: does improvement affect survival?** Sharyn A. Roodenburg (Groningen, Netherlands), Marlies Van Dijk, Karin Klooster, T. David Koster, Dirk-Jan Slebos, Jorine E. Hartman

PA493 **Results from bronchoscopic thermal vapor for lung volume reduction**
Cristina Luna Pardo (valencia, Spain), Raquel Martínez Tomás, Andrés Briones Gómez, Enrique Cases Viedma

PA494 **Perfusion measured with HRCT-approximated perfusion is comparable to SPECT/CT for patients with severe COPD**
T. David Koster (GRONINGEN, Netherlands), Karin Klooster, Marlies Van Dijk, Aafke Van Erp-Zeilstra, Annick Willems Van Beveren, Jan Pruim, Jean-Paul Charbonnier, Dirk-Jan Slebos

PA495 **Long term follow-up after endobronchial valve treatment for emphysema**
Jorine E. Hartman (Groningen, Netherlands), Karin Klooster, T. David Koster, Marlies Van Dijk, Dirk-Jan Slebos

PA496 **Instant pathology of transbronchial cryobiopsies (TBCB) for sample adequacy in ILD patients**
Kirsten Kalverda (Amsterdam, Netherlands), Laura Van Huizen, Venerino Poletti, Peter Bonta, Johannes Daniels, Marloes Groot, Jouke Annema

PA497 **Bronchial thermoplasty; its long-term efficacy in severe asthma**
Pieta C Wijsman (Amsterdam, Netherlands), Annika W Goorsenberg, Julia N D' Hooghe, Nick H Ten Hacken, Els J Weersink, Elisabeth H Bel, Pallav L Shah, Jouke T Annema, Peter I Bonta

PA498 **Endoscopic dilatation of idiopathic subglottic stenosis: effects on lung function and recurrence dynamics**
Louis-Vincent Morin-Thibault (Québec (QC), Canada), Gerrina Ruiter, Peter I. Bonta, Erik-H-F-M Van Der Heijden, Johannes-M-A. Daniels

PA499 **Iatrogenic tracheal stenosis: another cause of persistent dyspnea after COVID-19.**
Alfredo Marín Muñiz (Castelldefels, Spain), Marta Díez Ferrer, Pere Trias Sabrià, Lidia Méndez Mangas, Marta Plana Pes, Francisco Rivas Doyague, Jordi Tornero Salto, Salud Santos Pérez, Rosa López Lisbona

TP-3 in thematic poster area — Session 85 — 08:30 - 09:30

Thematic poster: Asthma and COVID-19 management in primary care

Disease(s) : Airway diseases

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

Chairs : Rachel Jordan (Birmingham (West Midlands), United Kingdom), Cláudia Vicente (Coimbra, Portugal)

PA500 **Shifting asthma management with Asthma Right Care communication tools**
María Mar Martínez Vázquez (Bilbao (Bizkaia), Spain)

PA501 **Identifying gaps and redesigning asthma care pathway in Primary Care with multidisciplinary teams**
María Mar Martínez Vázquez (Bilbao (Bizkaia), Spain), Jaime Gonzálvez Rey, Sara Nuñez Palomo, Miguel Domínguez Santaella, Pere J Simonet Aineto, Javier Plaza Zamora, Miguel Román Rodríguez, Juan Enrique Cimas Hernando, Lucía Regadera Anechita, Francisco Fernández-Conde Jordana De Pozas, Paula Chaparro Briones

PA502 **A cluster-randomised control trial of a paediatric asthma pathway in primary care.**
Andrew Cave (Edmonton (AB), Canada), Melissa Potestio, Heather Sharpe, David Johnson

PA503 **Supporting asthma self-management behavioural change with a mobile application: a feasibility study**
Ee Ming Khoo (Kuala Lumpur, Malaysia), Ping Yein Lee, Hani Salim, Ai Theng Cheong, Sazlina Shariff Ghazali, Noor Harzana Harrun, Bee Kiau Ho, Salbiah Mohamad Isa, Norita Hussein, Nik Sherina Haidi Hanafi, Hilary Pinnock, Respire On Behalf Of The Respire Collaborators

PA504 **Asthma control and unscheduled care during the Hajj among Malaysian Hajj pilgrims: a descriptive observational study.**
Ee Ming Khoo (Kuala Lumpur, Malaysia), Rizawati Ramli, Nik Sherina Haidi Hanafi, Norita Hussein, Ping Yein Lee, Ai Theng Cheong, Sazlina Shariff Ghazali, Ahmad Ihsan Abu Bakar, Azah Abdul Samad, Suhazeli Abdullah, Hilary Pinnock, Aziz Sheikh

PA505 **Association of gastroesophageal reflux disease with asthma control and quality of life, a study from low incom country.**
Nousheen Iqbal, Atiqa Amirali, Maria Ali Khan, Muhammad Irfan

PA506 **Persistent Symptoms Three Months after Clinical Recovery from COVID-19**
Amir Jarjoui (Jerusalem, Israel), George Kalak, Gabriel Izbicki, Ariel Rokach, Abraham Bohadana, Pascal Wild, Nader Abdelrahman, Nissim Arish, Chen Chen-Shuai, Noa Amiad

PA507 **Long COVID in relation to severity of acute COVID-19**
Tasnim Znegui (borj cerdia, Tunisia), Racil Hajer, Maazoui Sarra, Mariem Friha, Amany Touil, Sonia Habibech, Chaouch Nawel

PA508	**Respiratory healthcare professionals' views on long-term recommendations of interventions to prevent acute respiratory illnesses after the COVID-19 pandemic** Karin Yaacoby-Bianu (Haifa, Israel), Galit Livnat, James D. Chalmers, Michal Shteinberg
PA509	**Benefits of early cineole administration during common cold: an exploratory clinical trial** Peter Kardos (Frankfurt am Main, Germany), Ludger Klimek, Jürgen Palm, Kim Goldenstein, Johannes Stöckl, Andreas Michalsen
PA510	**What do medical professionals really think about vaccination?** Oleksandr Fesenko (Slobozhanske, Ukraine), Olena Myronenko, Nataliia Habshydze, Kseniia Bielosludtseva
PA511	**Developing a theoretically-informed education programme within the context of a complex implementation strategy in UK primary care: an exemplar from the IMP2ART trial** Kirstie McClatchey (Edinburgh, United Kingdom), Viv Marsh, Liz Steed, Steve Holmes, Stephanie J C Taylor, Sharon Wiener-Ogilvie, Julia Neal, Rhian Last, Ann Saxon, Hilary Pinnock
PA512	**Impact of COVID-19 pandemic on recommended vaccine uptake in a single-practice primary care COPD cohort in the UK** Mukesh Singh (Sutton Coldfield (West Midlands), United Kingdom), Ketan Singh
PA513	**Implementation of meaningful stakeholder engagement in community-based research in rural India during Covid-19 pandemic** Rashmi Chabukswar (Pune, India), Dhiraj Agarwal, Himangi Lubree, Tracy Jackson, Genevie Fernandes, Sanjay Juvekar
PA514	**Understanding physicians' and patients' perspectives on asthma management** Michelle Tan (London, United Kingdom), Aine Kyle, Kelly Kueh
PA515	**Patient-reported barriers to accepting a technological adherence package in the MAGNIFY trial.** Andrew Dickens (Cambridge, United Kingdom), David Halpin, Victoria Carter, Derek Skinner, Kai Beeh, James Chalmers, Allan Clark, Nasir Hannan, Alan Kaplan, Konstantinos Kostikas, Hilary Pinnock, Nicolas Roche, Omar Usmani, Job F.M. Van Boven, Paul Mastoridis, Karen Mezzi, Steve Davis, David Price
PA516	**Development of a patient-centred asthma review template to improve self-management in UK primary care** Kirstie McClatchey (Edinburgh, United Kingdom), Liz Steed, Aimee Sheldon, Francis Appiagyei, Stephanie Taylor, David Price, Hilary Pinnock
PA517	**Randomised trial evaluating the effect of a digital action plan (web app) versus written action plan for the management of asthma exacerbations of children and adults** Nicole Beydon (Paris, France), Camille Taillé, Harriet Corvol, Judith Valcke-Brossollet, Jean-Jacques Portal, Laurent Plantier, Gilles Mangiapan, Caroline Perisson, Guillaume Aubertin, Alice Hadchouel-Duvergé, Guilllaume Briend, Laurent Guilleminault, Catherine Neukirch, Pierrick Cros, Corinne Appere De Vecchi, Bruno Mahut, Eric Vicaut, Christophe Delclaux
PA518	**Evolution of web-based training videos provided by the German Respiratory League for correct inhalation technique** Maximilian Wollsching-Strobel (Köln, Germany), Uta Butt, Daniel Sebastian Majorski, Tim Mathes, Friederike Sophie Magnet, Melanie Berger, Sarah Bettina Schwarz, Wolfram Windisch

TP-4 in thematic poster area — Session 86 — 08:30 - 09:30

Thematic poster: The lung after COVID: functional recovery after SARS-CoV-2 infection

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

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

Chairs : Necmiye Funda Coşkun (Bursa, Turkey), Gordana Pavliša (Zagreb, Croatia)

PA519	**The utility of 1-minute sit-to-stand test to detect exercise-induced oxygen desaturation in outpatient assessment of post COVID-19 patients.** Muhammad Amin Ibrahim (Puncak Alam, Malaysia), Mohd Nazeri Kamarudin, Chee Shee Chai, Mohammed Fauzi Abdul Rani
PA520	**Dynamic matching of oxygen uptake kinetics and muscle deoxygenation in post-COVID-19** Vitor Souza (São Paulo, Brazil), Mariana Lafeta, Maria Saldanha, Fabiana Penido, Thaís Menezes, Suzana Tanni, Andre Albuquerque, Luiz Nery, Jaquelina Ota-Arakaki, Eloara Ferreira, Priscila Sperandio
PA521	**Impact of SARS CoV2 infection on pulmonary gas exchange and exercise capacity in patients with mild to severe COVID-19.** Matthias Krüll (Berlin, Germany), Mitra Lara Neymeyer, Oliver Noga

PA522	**1,5-year course of quadriceps muscle strength following mild-to-critical Covid-19** Anouk Stoffels (Nijmegen (GE), Netherlands), Nicol Voermans, Hieronymus Van Hees, Jeannette Peters, Hanneke Van Helvoort, Esther Van Voorthuizen, Jonne Doorduin, Bram Van Den Borst
PA523	**Respiratory system resistance and reactance following recovery from non-critical COVID-19** Karen Sidhom (Hamilton, Canada), Carmen Venegas, Ashutosh Thakar, Nisarg Radadia, Melanie Kjarsgaard, Chynna Huang, Manali Mukherjee, Terence Ho, Parameswaran Nair, Sarah Svenningsen
PA524	**Pathophysiological insights from lung diffusing capacity for nitric monoxide (DLNO) after COVID-19** Lucile Sese (Paris, France), Antoine Beurnier, Frédéric Schlemmer, Yurdagül Uzunhan, Warda Khamis, Hilario Nunes, Yousra Coulibaly, Emeline Saindoy, Anabel Moreno, Stéphanie Groutteau, Marcilia Da Silva, Samuel Bayou, Emma Bezza, Hugo La Rosa, Gary Silvera, Marjorie Latrasse, Pierre-Yves Brillet, Laurent Savale, Enora Berti, Laurent Boyer, Bertrand Renaud, Thông Hua-Huy, Sven Günther, David Montani, Carole Planès, Thomas Gille
PA525	**Role of 1-minute sit-to-stand in the diagnosis of Long COVID** Nuno Faria (Porto, Portugal), Tiago Oliveira, Paula Pinto, Vânia Almeida, Maria José Fernandes, Raquel Carvalho, Maria Sucena, Joana Gomes
PA526	**Lung changes after COVID-19: What are the functional differences across the spectrum of disease severity?** Mónica Marques Grafino (Montemor-O-Novo, Portugal), Susana Clemente, Susana Carreira, Marco Pereira, Ana Lutas, Andreia Cardoso, Sofia Furtado
PA527	**Evaluation of functional capacity by cardiopulmonary exercise testing in patients with postCOVID19 syndrome.** Diego Durán Barata (Madrid, Spain), Andrea Pérez Figuera, Silvia Sánchez Cuellar, Aurora Solier López, Beatriz Pintado Cort, Diurbis Josefina Velasco Álvarez, Lidia Aranzabal Orgaz, Raquel Morillo Guerrero
PA528	**Impact of COVID 19 infection on cardiopulmonary functions of a cohort of national level athletes in Sri Lanka** Ruwanthi Thakshila Jayasekara (Nugegoda (WP), Sri Lanka), Wijitha Nissanka, Rukmal Karunanayake, Lal Ekanayake, Suresh Chathurantha, Namal Wijesinghe, Amitha Fernando
PA529	**Effects of SARS-CoV-2 Infection on Pulmonary Function Tests and Exercise Tolerance** Josuel Ora (Roma (RM), Italy), Bartolomeo Zerillo, Patrizia De Marco, Gian Marco Manzetti, Francesca Camerdelli, Ilaria De Guido, Luigino Calzetta, Paola Rogliani
PA530	**Pulmonary function and 6-min walk test (6MWT) among North African long COVID-19 patients** Khansa Derbel (Sousse, Tunisia), Sana Sellami, Wafa Benzarti, Sana Aissa, Sonia Rouatbi, Helmi Ben Saad, Ines Ghannouchi
PA531	**Exercise responses in those with vs. without persistent fatigue post-COVID-19** Michele Schaeffer (Leuven, Belgium), Juthaporn Cowan, Kathryn Milne, Vicente Corrales-Medina, Kim Lavoie, Andrew Mulloy, Julio Chirinos, Sara Abdallah, Jordan Guenette
PA532	**Lung function variability in one year after COVID-19 pneumonia.** Piotr Boros (Warszawa, Poland), Magdalena Martusewicz-Boros, Marcin Paciorek
PA533	**Lung function at 12-18 months in patients with ARDS due to SARS-CoV-2 pneumonia** Anna Mola Ausiró (Aiguafreda (Barcelona), Spain), Yolanda Galea Colón, Núria Angrill Sellés, Mireia Baiges Badia, Santiago Mora Acosta, Enric Barbeta Sanchez
PA534	**Respiratory outcomes 3-month following COVID-19-related hospitalisation: a Tunisian prospective study** Meriem Mjid (Tunis, Tunisia), Mjid Meriem, Rihab Jebali, Ameni Naaroura, Chaima Turki, Abir Hedhli, Sana Cheikhrouhou , Samira Merai, Sonia Toujani, Yassine Ouahchi, Dhahri Bessma
PA536	**Persistent oxygen desaturation during exercise in patients with long COVID** Sara Lococo (Padova, Italy), Gabriella Guarnieri, Leonardo Bertagna De Marchi, Antonella Cecchetto, Beatrice Molena, Giovanna Arcaro, Federico Lionello, Luca Dalle Carbonare, Federica Villona, Giulia Sartori, Francesca Miscetti, Federica Margherita Lovati, Mariagrazia Morcone, Andrea Vianello, Ernesto Crisafulli
PA537	**Exercise capacity in one minute sit to stand test and cardiopulmonary exercise test after 90 days of severe Covid 19** André Luis Pereira De Albuquerque (São Paulo (SP), Brazil), Flavia Folchini, Eliana Bandini, Thales Ishizaki, Suzana Tanni, Eloara Campos, Joao Marcos Salge
PA538	**Submaximal and maximal exercise tests in the follow up of severe Covid-19** ELIANA LOPES (São Roque, Brazil), Flavia Folchini, Thales Ishizaki, Suzana Tanni, Eloara Ferreira, Joao Marcos Salge, Wellington Yamaguti, André Albuquerque

TP-5 in thematic poster area — Session 87 — 08:30 - 09:30

Thematic poster: Severe COVID-19: clinical data

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

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

Chairs : Christoph Fisser (Regensburg, Germany), Maxime Patout (Paris, France)

PA539	**High severity and mortality of non-COVID-19 critically ill patients during the COVID-19 pandemic** Sua Kim (Ansan, Republic of Korea), Jae Kyeom Sim, Won Jai Jung, Young Seok Lee, Je Hyeong Kim
PA540	**Fluid balance as an independent prognostic indicator of in-hospital mortality in heart failure patients with Covid-19** Ruhma Ali (Harrison, United States), Aditya Patel, Neev Mehta, Jihad Slim, Richard Miller, Joaquim Correia
PA541	**Comparative Study of Clinical Outcomes of Severe and Critical COVID-19 Patients With and Without Hemoperfusion Admitted in a Referral Hospital** Maebritt Wincent Tibubos (Quezon City, Philippines), Ralph Moises Royeca, Paul Rilhelm Evangelista, Mary Claire Orden, Glynna Ong-Cabrera, Amor Patrice Estabillo, Ramon Mora
PA542	**Dual Oxygenation in Covid-19 - a Retrospective Cohorot Study** Ivan GUR (Haifa, Israel), Eyal Fuchs
PA543	**Comparison of clinical outcomes between COVID-19 vaccinated and unvaccinated patients admitted to a Respiratory Intensive Care Unit.** Federico Lionello (Padova, Italy), Gabriella Guarnieri, Beatrice Molena, Chiara Giraudo, Giovanna Arcaro, Sara Lococo, Fausto Braccioni, Alessia Achille, Cristina Contessa, Francesca Lugato, Federico Gallan, Andrea Vianello
PA544	**Organizing pneumonia due to COVID-19: the experience of one year in an intensive care unit** João Paulo Duarte dos Santos Oliveira Rodrigues (Oliveira do Hospital, Portugal), Ricardo Júnior, Mário Pinto, Ana Santos, Rita Gerardo, António Miguel, Luís Bento
PA545	**Risk factors for mortality in COPD patients with COVID-19 admitted to Intensive Care Unit** Laia Fernandez Barat (Barcelona, Spain), Sergio Alvarez-Napagao, Marta Barroso, Ana Motos, Albert Gabarrús, Adrian Ceccato, Raquel Pérez, Dario García, Denise Battaglini, Andrea Palomeque, Jesús Bermejo, Ferran Barbé, Antoni Torres
PA546	**Urea/albumin ratio associated with mortality in hospitalized COVID-19 patients: a cohort study** Robson Prudente (Botucatu (SP), Brazil), Estefânia Franco, Luiz Machado, Luis Brizola, Maercio Santos, Edris Savadkouhi, Camila Colombo, Leticia Ishimoto, Suzana Tanni
PA547	**Is acute phase severity predictive of long-covid-19 development?** Simonetta Vernocchi (Gallarate, Italy), Andreas Aceranti
PA548	**Mallampati score is an independent predictor of active oxygen therapy in patients with COVID-19.** Aleksandra Oraczewska (Dąbrowa Górnicza, Poland), Maciej Dyrbuś, Szymon Szmigiel, Szymon Gawęda, Paulina Kluszczyk, Tomasz Darocha, Tomasz Cyzowski, Ewa Trejnowska, Andrzej Swinarew, Michał Wita, Paweł Dubik, Sebastian Kwiatek, Marek Jedrzejek, Michał Kozłowski, Beata Puzanowska, Adam Barczyk, Szymon Skoczyński
PA549	**Clinical Characteristics of COVID-19 between ICU and non-ICU patients** Tuan Muhammad Syukri Tuan Kob (SUNGAI BULOH, Malaysia), Muhammad Amin Ibrahim, Allim Khairuddin, Muhammad Syafiek Mohd Razali, Ridhwan Abd Razak, Zahiah Abd Aziz, Noor Hashida @ Juita Hassan
PA550	**4C Mortality Score and high-flow nasal oxygen therapy outcome in COVID-19** Pavol Pobeha (Košice, Slovakia), Ivana Paranicova, Simona Bodnarova, Peter Skyba, Patrik Jonek, Eva Sokolova, Ingrid Libakova, Pavol Joppa
PA551	**Clinical impact of out-of-ICU non-invasive respiratory support in patients with COVID-19 related pneumonia** Julia Tarrega Camarasa (Granollers, Spain), Inmaculada Castillo Sánchez, Julia Bruguet González, Yolanda Galea Colon, Núria Angrill Sellés, Enric Barbeta Sánchez
PA552	**Air leak in Covid 19: experience from a DGH in the UK** Avinash Aujayeb (Newcastle, United Kingdom)
PA553	**One-year mortality in COVID-19 is associated with patients' comorbidities rather than pneumonia severity** Luca Novelli (Bergamo, Italy), Federico Raimondi, Greta Carioli, Alessandra Carobbio, Simone Pappacena, Luca Malandrino, Roberta Biza, Roberta Trapasso, Marisa Anelli, Mariangela Amoroso, Chiara Allegri, Gianluca Imeri, Caterina Conti, Marta Beretta, Marco Rizzi, Ferdinando Luca Lorini, Michele Senni, Alessandro Rambaldi, Tiziano Barbui, Fabiano Di Marco
PA554	**Amount and distribution of parenchymal abnormalities at CT-scan do not predict awake prone position outcome in Covid-19** Luca Novelli (Bergamo, Italy), Federico Raimondi, Simone Pappacena, Simona Annibali, Ilaria Bianco, Luca Malandrino, Sara Cazzaniga, Matteo Brivio, Roberta Trapasso, Simone Bonetti, Francesco Caglioni, Carlo Catani, Chiara Allegri, Roberta Biza, Marisa Anelli, Fabiano Di Marco

PA555	**Noninvasive ventilation(NIV) with auto-titrating EPAP to extubation for Acute Myocardial Infarction(AMI) patient with heart failure** BoXue Han (Beijing, China), Maoliang Tian, Ying Wang, Wei Wang, Zhitao Jin, Donghua Shen, Guanghan Wu
PA556	**Assessment of lung recruitment with continuous negative extrathoracic pressure after one-lung ventilation: an experimental investigation** Álmos Schranc (Szeged, Hungary), John Diaper, Roberta Südy, Ferenc Peták, Walid Habre, Gergely Albu
PA557	**Late Breaking Abstract - Awake Prone Positioning for COVID-19 Hypoxemic Respiratory Failure: A Systematic Review and Meta-Analysis of Randomized Trials** Jason Weatherald (Edmonton, Canada), Ken Kuljit Singh Parhar, Zainab Al Duhailib, Derek Chu, Anders Granholm, Kevin Solverson, Kimberley Lewis, Morten Hylander Møller, Mohammed Alshahrani, Emilie Belley-Côté, Nicole Loroff, Cheryl Gatto, Edward T. Qian, Todd Rice, Dan Niven, Henry T. Stelfox, Kirsten Fiest, Deborah Cook, Yaseen Arabi, Waleed Alhazzani
PA558	**Late Breaking Abstract - Changes in surface activity of lung surfactant and bronchoalveolar cell profile upon COVID-19-related Acute Respiratory Distress Syndrome** Paula Losada-Oliva (Madrid, Spain), Chiara Autilio, David Sánchez Ortiz, Alvaro Mingote, Raquel Castejon Diaz, Gonzalo Hernandez, Gema Díaz, Mercedes Echaide, Clara Salas, Juan Antonio Vargas, Jesus Perez-Gil

TP-6 in thematic poster area — Session 88 — 08:30 - 09:30

Thematic poster: High flow therapy and NIV in the acute and chronic setting

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

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

Chairs : Marieke L. Duiverman (Groningen, Netherlands), Chloé Cantero (Paris, France)

PA559	**Are home high-flow therapy (HFT) devices as good as hospital HFT devices?** Emeline Fresnel (Bois-Guillaume, France), Sirine Laya, Adrien Kerfourn, Tristan Bonnevie, Léa Razakamanantsoa, Christophe Girault, Maxime Patout
PA560	**Heated, humidified high flow therapy at home setting in children with respiratory failure- Single centre experience** Eman Hassanin (Horsfoth, United Kingdom), Saikiran Gopalakaje , Christopher Edwards
PA561	**Improved survival with high pressure NIV for acute hypercapnic respiratory failure in COPD** Caroline Hedsund (København Ø, Denmark), Philip Mørkeberg Nilsson, Nils Hoyer, Daniel Bech Rasmussen, Claire Præst Holm, Jens Ulrik Jensen, Jon Torgny Wilcke
PA562	**Non-invasive ventilation for COPD exacerbations in daily clinical practice** Judith Elshof (Groningen, Netherlands), Anouschka Van Der Pouw, Els Fikkers, Petra J.E. Vos, Peter J. Wijkstra, Marieke L. Duiverman
PA563	**Association of admission pH with long-term mortality in patients requiring non-invasive ventilation (NIV) for obesity-related respiratory failure (ORRF)** Aditya Krishnan (Birmingham, United Kingdom), Kathryn Brammer, Pearlene Antoine-Pitterson, Alain Al Helou, Alice Turner, Rahul Mukherjee
PA564	**RISK FACTORS FOR RESPIRATORY INFECTIONS IN ALS PATIENTS** Natalia Pascual Martinez (Cordoba, Spain), Estefanía Mira Padilla, Cristina Gómez Rebollo, Cristina Muñoz Corroto, Pablo García Lovera, Elena Lesaga López, Miguel Angel Mendoza Alarcón, Roberto Martín De León
PA565	**Use of mathematically arterialised venous blood gas sampling: Comparison with arterial, capillary, and venous sampling** Michael Davies (Cambridge (Cambridgeshire), United Kingdom), Dariusz Wozniak, Tim Quinnell, Earl Palas, Susan George, Yingchang Huang, Ian Smith, Lars Pilegaard Thomsen, Stephen Rees
PA566	**Exhaled gases and the potential of cross infection from NIV machines.** Nicholas Lane (Newcastle Upon Tyne, United Kingdom), Ben Messer, Alison Armstrong
PA567	**Utility of Cobb angle as predictor of noninvasive ventilation initiation in patients with kyphoscoliosis.** Antonio Quezada Reynoso (València (Comunidad Valenciana), Spain), Jesus Sancho Chinesta, Santos Ferrer Espinosa, Jaime Signes-Costa
PA568	**Home noninvasive ventilation in Myasthenia Gravis: features and predictors.** Antonio Quezada Reynoso (València (Comunidad Valenciana), Spain), Santos Ferrer Espinosa, Jesus Sancho Chinesta, Elia Giménez Samblás, Ana María Ferrer Martí, Jaime Signes-Costa

PA569	**Long term continuous positive airway pressure prescription after an acute hypercapnic respiratory failure** Katiuska Herminia Liendo Martinez (madrid, Spain), Daniel López Padilla, Virginia Gallo González, Elena Ojeda Castillejo, Alicia Cerezo Lajas, Francisco Caballero Segura, Teresa Gómez García, Luis Puente Maestú, Soledad López Martín
PA570	**Remote monitoring and virtual follow-up ventilation clinics in the age of Covid-19** Cat Goodin (Nottingham, United Kingdom), Alex Bond-Alliston, Milind Sovani
PA572	**Long-term effects of Noninvasive ventilation (NIV) on exacerbations rate and mortality in stable hypercapnic COPD patients** Michail Fanaridis (Heraklion, Greece), Izolde Bouloukaki, Georgios Stathakis, Georgios Vaios, Athanasios Voulgaris, Paschalis Steiropoulos, Nikolaos Tzanakis, Sophia Schiza
PA573	**Analysis of Home Non-Invasive Ventilation ambulatory monitoring in chronic hypercapnic respiratory failure** Eleonora Russo (Torino, Italy), Alessio Mattei, Michela Maria Bellocchia, Fulvia Ribolla, Chiara Chiappero, Giuseppe Tabbia, Marco Michele Bardessono, Federico Sciarrone, Mattia Verardo, Francesco Todisco, Elena Sitia, Carlo Albera

TP-7 in thematic poster area — Session 89 — 08:30 - 09:30

Thematic poster: Impact of the external and internal exposome on chronic lung disease

Disease(s) : Airway diseases Interstitial lung diseases

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

Chairs : Tania Maes (Ghent, Belgium), Charalambos Michaeloudes (London, United Kingdom)

PA574	**A novel mouse model reproducing pathomorphological and inflammatory hallmarks of COPD** Bernhard Reiter (8010 Graz, Austria), Natalie Bordag, Diana Schnoegl , Nagy Bence, Martina Delbeck , Grazyna Kwapiszewska , Hana Cernecka , Jörg Meding , Leigh M Marsh
PA575	**Modifications of pulmonary macrophages function by heated tobacco products.** Perrine Donay (Liège (Sart-Tilman), Belgium), Didier Cataldo, Marie-Julie Nokin, Marie-Laure Delhez
PA576	**Using NanoString to investigate effects of cigarette smoke extract on gene expression in lung fibroblasts from healthy and COPD subjects** Martin Ryde (Lund, Sweden), Nicole Van Der Burg, Gunilla Westergren-Thorsson, Leif Bjermer, Ellen Tufvesson
PA577	**Nicotine-Induced Epithelial-Mesenchymal Transformation (EMT): Difference Between Normal and Asthmatic Bronchial Epithelium** Hasan Yuksel (Manisa, Turkey), Merve Ocalan, Ozge Yilmaz, Seda Tunca, Adem Yasar, Damla Akogullari, Seda Vatansever
PA578	**Interaction between type 2 cytokine and inflammasome responses in the pathogenesis of obesity-associated asthma** Jay Horvat (Newcastle (NSW), Australia), James Pinkerton, Richard Kim, Alexandra Brown, Brittany Rae, Chantal Donovan, Jemma Mayall, Md Khadem Ali, Hayley Scott, Bronwyn Berthon, Katherine Baines, Malcolm Starkey, Nazanin Kermani, Yi-Ke Guo, Avril Robertson, Luke O'Neill, Ian Adcock, Matthew Cooper, Peter Gibson, Lisa Wood, Philip Hansbro
PA579	**LSC - 2022 - Allergen exposure induces airway macrophage metabolic reprogramming** Gesa J Albers (London, United Kingdom), Patricia P Ogger, Robert Gray, John M Halket, Gail Gauvreau, Paul O'Byrne, Clare M Lloyd, Adam J Byrne
PA580	**Circadian pathway is downregulated in lungs and adipose tissue in the rat model of allergic airway inflammation** Aleksandra Szczepankiewicz (Poznań, Poland), Joanna Nowakowska, Wojciech Langwiński, Paweł Kołodziejski, Ewa Pruszyńska-Oszmałek, Natalia Leciejewska, Kamil Ziarniak, Dawid Szczepankiewicz
PA581	**Sex-related differences in allergen house dust mite-mediated changes in the lung proteome.** courtney marshall (winnipeg, Canada), Dina Mostafa, Mahadevappa Hemshekhar, Robert Balshaw, Victor Spicer, Neeloffer Mookherjee
PA582	**Farm dust exposure decreases TNF-α/IFN-γ-mediated IL-33 expression in primary bronchial epithelial cells in part by interfering with IFNGR-JAK-STAT1 signaling** Jasmijn A. Schrumpf (Leiden, Netherlands), Mikaela Tham, Dennis K. Ninaber, Erika Von Mutius, Hermelijn H. Smits, Pieter S. Hiemstra
PA583	**Source-specific Th17 responses induced by real-world air pollution and amelioration by vitamin D** Drew Glencross (London, United Kingdom), Charlotte Cheadle, Tanapat Palaga, Tassanee Prueksasit, Ganjana Lertmemongkolchai, Ian Mudway, Catherine Hawrylowicz

PA584	**Evidence for a role of the aryl hydrocarbon receptor in inflammatory responses to air pollution** Drew Glencross (London, United Kingdom), Charlotte Cheadle, Tanapat Palaga, Tassanee Prueksasit, Ganjana Lertmemongkolchai, Ian Mudway, Catherine Hawrylowicz
PA585	**Source-related composition and toxicological effects of shipping-associated particulate matter** Lareb S.N. Dean (Southampton, United Kingdom), Natasha H.C. Easton, James G.H. Parkin, Robert A. Ridley, Franco Conforti, Matthew J. Cooper, Yihua Wang, Mark G. Jones, Donna E. Davies, Gavin L. Foster, Matthew Loxham
PA586	**Epithelial and mesenchymal compartment during differentiation of human iPSC into functional bronchial epithelium** Amel Nasri (Montpellier, France), Florent Foisset, Carine Bourdais, Engi Ahmed, Isabelle Vachier, Said Assou, Arnaud Bourdin, John De Vos
PA587	**Investigating the effects of metals within particulate matter in human alveolar epithelial cells** Lareb S.N. Dean (Southampton, United Kingdom), Helen S. Vethakan-Raj, James G.H. Parkin, Robert A. Ridley, Franco Conforti, Julian Downward, Yihua Wang, Mark G. Jones, Donna E. Davies, Matthew Loxham
PA588	**Acute ozone-induced neutrophilic inflammation is driven by IL-1β independent of NLRP3 and caspase-1** (,), Stephen Schworer, Alexa Knee, Corey Jania, Jenny Ting, David Peden
PA589	**Potential toxic effects in the lung of planetary dust** Jie Ji (stockholm, Sweden), Ingrid Corazzari, Francesco Turci, Per Gerde, Lars Karlsson, Dag Linnarsson, David J Loftus, G. Kim Prisk, Urs Staufer, Erin M Tranfield, Wim Van Westrenen, Lena Palmberg
PA590	**Complex Urban Atmospheres alter Alveolar Mesenchymal Stem Cell Niche Properties and drive Lung Fibrosis** Randa Belgacemi (AULNAY SOUS BOIS, France), Bruno Ribeiro, Grégoire Justeau, Marylène TOIGO, Audrey Der Vartanian, Saverio Bellusci, Geneviève Derumeaux, Denise Al Alam, Jorge Boczkowski, Patrice Coll, Sophie Lanone, Laurent Boyer
PA591	**Late Breaking Abstract - Plasma proteomics analysis reveals sex-related differences in response to diesel exhaust** Mahadevappa Hemshekhar (Winnipeg, Canada), Juma Orach, Victor Spicer, Robert Balshaw, Christopher Carlsten, Neeloffer Mookherjee

TP-8 in thematic poster area — Session 90 — 08:30 - 09:30

Thematic poster: Translational modelling of lung diseases

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

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

Chairs : Darcy Wagner (Lund, Sweden), Vanessa Ho (London, United Kingdom)

PA592	**New physiomimetic model for ARDS in vitro studies** Esther Marhuenda (Barcelona (Catalonia), Spain), Alvaro Villarino , Maria Narciso, Nuria Gavara, Ramon Farre, Isaac Almendros, Jordi Otero
PA593	**Establishment of a human in-vitro model for airway epithelial repair and regeneration** Ashesh Chakraborty (Munich, Germany), Ashesh Chakraborty, Michal Mastalerz, Rudolf Hatz, Jürgen Behr, Michael Lindner, Anne Hilgendorff, Claudia A. Staab-Weijnitz
PA594	**Divergent effects of macrophage migration inhibitory factor and D-dopachrome tautomerase on lung epithelial regeneration** Shanshan Song (Groningue (GR), Netherlands), Habibie Habibie, M.H.De Jager, Corry-Anke Brandsma, Gerrit J Poelarends, Barbro N Melgert
PA595	**Culturing primary alveolar epithelial cells on lung hydrogels preserves the type II phenotype** Jorge Otero (Barcelona, Spain), Esther Marhuenda, Alvaro Villarino, Maria Leonor Narciso, Nuria Gavara, Ramon Farré, Isaac Almendros
PA596	**Collagen hydrogels reinforced with bacterial nanocellulose fibers for the development of in vitro 3D lung models** Nanthilde Malandain (Barcelona, Spain), Hector Sanz-Fraile, Ramon Farré, Anna Laromaine, Anna Roig, Jordi Otero
PA597	**Murine Precision Cut Lung Slices as a model of heme-induced acute injury.** Namrata Kewalramani (Mumbai (Maharashtra), India), Carlos Machahua, Blank Fabian, Melanie Scalice, Jessica Petracca, Michelle Schorer, Fabian Kaesermann, Kleanthis Fytianos, Manuela Funke-Chambour

PA598	**Ex vivo modeling of human lung fibrogenesis and drug mode of action screens using single cell RNA-seq in precision-cut lung slices** Niklas Jonathan Lang (München, Germany), Meshal Ansari, Lin Yang, Shuhong Zhou, Diana Porras-Gonzalez, Ahmed Agami, Christoph H. Mayr, Baharak Hooshiar Kashani, Lukas Heumos, Michael Gerckens, Yuexin Chen, Janine Schniering, Mircea-Gabriel Stoleriu, Rudolf Hatz, Jürgen Behr, Fabian J. Theis, Gerald Burgstaller, Herbert B. Schiller
PA599	**LSC - 2022 - Ex vivo modelling of human lung fibrogenesis and drug mode of action screens using single-cell RNA-seq in precision-cut lung slices** Niklas Jonathan Lang (München, Germany), Meshal Ansari, Diana Porras-Gonzalez, Ahmed Agami, Baharak Hooshiar Kashani, Shuhong Zhou, Lin Yang, Michael Gerckens, Xin Wei, Christoph H. Mayr, Janine Schniering, Mircea-Gabriel Stoleriu, Rudolf Hatz, Jürgen Behr, Gerald Burgstaller, Herbert B. Schiller
PA600	**A tunable lung physiomimetic stretch system evaluated with precision cut lungs slices and recellularized human lung scaffold>** Arturo Ibáñez Fonseca (Lund, Sweden), Oskar Rosmark, Johan Thorsson, Göran Dellgren, Oskar Hallgren, Anna-Karin Larsson Callerfelt, Linda Elowsson, Gunilla Westergren-Thorsson
PA601	**Pulmonary endothelial cells support growth of human alveolar organoids: possible influence of cigarette smoke exposure** Abilash Ravi (Leiden, Netherlands), Xinhui Wu, Anne M. Van Der Does, Andries Van Der Meer, Jill M. Johnson, Martin C. Harmsen, Reinoud Gosens, Pieter S. Hiemstra
PA602	**Using forward genetic screens and novel human alveolar organoid models to study surfactant protein C trafficking in heath and disease** Eimear Rutherford (CAMBRIDGE, United Kingdom), Dick Van Den Boomen, Kyungtae Lim, Paul Lehner, Emma Rawlins, Stefan Marciniak, Jennifer Dickens
PA603	**Heterogeneity of airway remodeling in cystic fibrosis** Astrid Vermaut (Oud-Heverlee, Belgium), Vincent Geudens, Lynn Willems, Janne Kaes, Hanne Beeckmans, Charlotte De Fays, Laurens Ceulemans, Robin Vos, Bart Vanaudenaerde, Lieven Dupont, Mieke Boon
PA604	**Antimicrobial-induced changes in the intestinal microflora affected hydrogen gas production in a mouse model of acute lung injury** Manato Kawano (Kanagawa, Japan), Kozue Kobayashi, Kenichi Kokubo, Masaru Kubota
PA605	**Methotrexate induces DIILD sporadically and at low incidence in rodents, similar to clinical scenario in humans** Nina Fransén Pettersson (Lund, Sweden), Carla Carvalho, Irma Mahmutovic Persson, Hanna Falk-Håkansson, Jian Liu, Lars E. Olsson, Karin Von Wachenfeldt
PA606	**Acute exacerbation in chronic pulmonary fibrosis: Histopathological and molecular characterisation of the mice model** E. Boncoeur (Paris, France), Céline-Hivda Yegen, Liasmine Haine, Dominique Marchant, Carole Planes, Nicolas Voituron
PA607	**Moderate and severe hyperoxia in preterm rabbits: airway reactivity, forced expiration and forced oscillation outcomes** Yannick Regin (Brussels, Belgium), André Gie, Ignacio Valenzuela, Marnél Greyling, Vincent Lenders, Jeroen Vanoirbeek, Jaan Toelen
PA608	**Late Breaking Abstract - hLMSC secretome affects macrophage activity differentially depending on lung-mimetic environments** Bryan Falcones (Malmö, Sweden), Zackarias Söderlund, Arturo Ibáñez, Isaac Almendros, Jordi Otero, Ramon Farré, Sara Rolandsson Enes, Linda Elowsson Rendin, Gunilla Westergren-Thorsson
PA609	**Late Breaking Abstract - Idiopathic pulmonary fibrosis-on-chip: A new model based on biological membranes** Pauline Zamprogno (Bern, Switzerland), Jan Schulte, Tobias Weber, Arunima Sengupta, Thomas Geiser, Olivier T. Guenat
PA610	**Late Breaking Abstract - Spatially resolved transcriptomics of human and mouse fibrotic lung** Lovisa Franzén (Solna, Sweden), Martina Olsson Lindvall, Sonya Jackson, Gregory Hamm, Ben Keith, Steven Oag, Astrid Collin, Jennifer Cann, Julia Lindgren, Graham Belfield, Anna Ollerstam, Marianna Stamou, Patrik Ståhl, Jorrit Hornberg
PA611	**Late Breaking Abstract - Febuxostat inhibits inflammation and fibrosis in a murine model of LPS-induced lung injury** Shin Ohta (Tokyo, Japan), Hitoshi Ikeda, Takaya Ebato, Hideki Inoue, Tetsuya Homma, Shintaro Suzuki, Akihiko Tanaka, Hironori Sagara

TP-9 in thematic poster area — Session 91 — 08:30 - 09:30

Thematic poster: Sleep and breathing in different respiratory and nonrespiratory disorders

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

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

Chairs : Mirjam Elisa Ljunggren (Uppsala, Sweden), Johan Verbraecken (Edegem (Antwerp), Belgium)

PA612	**The influence of smoker status on sleep – more than architectural changes in patients with sleep disorders – a retrospective study** Andreea Florescu (București, Romania), Andreea Cocari, Corina Borcea, Ancuta Tudor, Florin Dumitru Mihaltan, Oana Claudia Deleanu
PA613	**Prognostic cardiovascular markers in COPD patients with and without OSA** Diane Rezende Batista (Botucatu (SP), Brazil), Silke Anna Theresa Weber, Jefferson Luis De Barros, Vanessa Do Lago, Robson Aparecido Prudente, Estefânia Thomé Franco, Luiz Henrique Soares Machado, Suzana Erico Tanni
PA614	**Comparison of serum vitamin D levels in patients with Overlap Syndrome, patients with pure Obstructive Sleep Apnea, and controls** Paschalis Steiropoulos (Alexandroupolis, Greece), Athanasios Voulgaris, Kostas Archontogeorgis, Evangelia Nena, Athanasios Zissimopoulos, Michail Fanaridis, Izolthi Bouloukaki, Sofia Schiza
PA615	**Airway inflammation in moderate/severe asthma and concomitant OSA patients- FeNO assessment** Daniel Pimenta Rocha (Senhora Da Hora, Portugal), André Nunes, Filipa Carriço, Daniela Rodrigues , Mafalda Van Zeller , Marta Drummond
PA616	**Prevalence of Insomnia among Patients with Bronchial Asthma** Abdullah Alharbi (Riyadh, Saudi Arabia), Tammam Alanazi , Hazim Alghamdi, Meshal Alberreet, Abdulaziz Alkewaibeen, Abdulrahman Alkhalifah, Aamir Omair, Mohammad Khan, Hamdan Al-Jahdali
PA617	**Limited utility of STOP-BANG in identification of obstructive sleep apnoea in fibrotic interstitial lung disease** Katherine Myall (London, United Kingdom), Alex West, Jennifer Martinovic, Zhe Wu, Jodie Lam, Diana Roque, Victor Jardim, David J Jackson, Toby Maher, Eui-Sik Suh, Philip Molyneaux, Brian Kent
PA618	**Clinical impact of Obstructive Sleep Apnea on Depression in patients with Cystic Fibrosis and non-Cystic Fibrosis Bronchiectasis patients** Duygu Vezir (İSTANBUL, Turkey), Baran Balcan, Derya Kocakaya, Caner Çınar, Şehnaz Olgun Yıldızeli, Berrin Ceyhan
PA619	**Obstructive Sleep Apnea in patients with Cystic Fibrosis and non-Cystic Fibrosis Bronchiectasis and its relation with clinical parameters** Duygu Vezir (İSTANBUL, Turkey), Baran Balcan, Derya Kocakaya, Caner Çınar, Şehnaz Olgun, Berrin Ceyhan
PA620	**The association between pain and sleep quality** Yossr Aloulou (Manouba, Tunisia), Hadhemi Rejeb, Hela Kammoun, Dorra Greb, Ines Akrout, Hejer Ben Abdelghaffar, Hela Hassen, Leila Fekih, Hanen Smadhi, Mohamed Lamine Megdich
PA621	**CPAP therapy and the COVID pandemic.** Edward Lee (Melbourne, Australia), Joshua O'Day (Clayton South, Australia), Edward Lee, Patricia Lyell, Simon Frenkel, Anne Marie Southcott
PA622	**OSA patients' opinions concerning their disease and treatment during the pandemic** Athanasia Pataka (Thessaloniki, Greece), George Kalamaras, Seraphim Kotoulas, Katalin Fekete, Efimia Daskalopoulou-Vlachogianni
PA623	**Prevalence of sleep-related breathing disorders in long-COVID** Winfried J. Randerath (Solingen, Germany), Simon Herkenrath, Sandhya Matthes, Rembert Koczulla, Martina Bönsch, Daniela Leitl, Marcel Treml
PA624	**COVID-19 Pandemic Effects on sleep quality, mental health and memory** Jaber Alqahtani (Dammam, Saudi Arabia), Saad Alrabeeah, Abdulelah Aldhahir, Rayan Siraj, Yousef Aldabayan, Saeed Alghamdi, Abdullah Alqahtani, Ibrahim Aldraiwiesh, Ahmed Aldakhil
PA625	**Long term sleep disturbances in Tunisian COVID-19 patients discharged from hospital: a cohort study** Abid Sourour (Sfax, Tunisia), Nadia Bouattour, Nesrin Kallel, Mariam Turki, Issraa El Whadhane , Amina Kotti, Najla Halouani, Jihene Aloulou, Sameh Msaad, Walid Feki, Samy Kammoun
PA626	**Evaluation of sleep quality among post-COVID patients: findings from a 6- month follow-up study** Evgenia Kalamara (Athens, Greece), Athanasia Pataka, Afroditi Boutou, Evangelia Panagiotidou, Athina Georgopoulou, Evangelos Ballas, Isidora Bakaimi, Adamantios Chloros, Symeon Metallidis, Ioannis Kioumis, Georgia Pitsiou
PA627	**Hospitalizations in OSA patients** Gabriela Sofia Cancela da Fonseca Ferreira Santos (Lisboa, Portugal), Mafalda Van Zeller, Filipa Carriço, Daniela Rodrigues, Margarida Torres Redondo, Marta Drummond

PA628	**Obstructive sleep apnea and other predictors of postoperative complications after bariatric surgery** Ahmad Mansoor Aldobyany (Makkah, Saudi Arabia), Abdelfattah Touman, Moaad Beshayreh, Feryal Alamri, Joanne Ahmed, Nabil Ghaleb, Rajaa Alsaggaf, Hadeel Alqurashi, Amr Albanna, Eid Alqurashi	
PA630	**Prevalence and Correlates of REM-predominant Obstructive Sleep Apnea in Narcolepsy Patients** Ali Awadh (Riyadh, Saudi Arabia), Salih Aleissi, Ahmad Bahammam	

Studio - online | Session 92 | 08:45 - 09:00

News from the Studio: Welcome and introduction

Chairs : Richard Costello (Dublin 9, Ireland), Christopher E. Brightling (Leicester (Leicestershire), United Kingdom)

08:45	**Discussion and Q&A** All Speakers	**631**

Studio - online | Session 93 | 09:15 - 09:45

Pro-Con debate: T2 high and T2 low asthma: should we care, or should we only care about asthma?

Aims : To introduce the current status of asthma patients with T2 inflammation.

Disease(s) : Airway 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, Paediatrician, Physician in Pulmonary Training

Chairs : Richard Costello (Dublin 9, Ireland), Christopher E. Brightling (Leicester (Leicestershire), United Kingdom)

09:15	**We should phenotype before treating asthma: Pro** Celeste Michala Porsbjerg (Copenhagen, Denmark)	**632**
09:25	**We should phenotype before treating asthma: Con** Marco Idzko (Wien, Austria)	**633**
09:35	**Discussion and Q&A** All Speakers	**634**

8A - live streamed | Session 94 | 09:30 - 11:00

State of the art session: Airway diseases

Precision medicine for asthma, chronic obstructive pulmonary disease and chronic cough: new drugs, biomarkers and approaches

Aims : to discuss an individual's ageing patterns and how these can impact future clinical outcomes; to discuss the identification and treatment options for people with chronic cough; to discuss relevant biomarkers and how to apply them in clinical practice; to provide insight into the barriers to and facilitators of using pulmonary rehabilitation as a vehicle to implement a treatable traits approach.

Disease(s) : Airway diseases | Respiratory critical care

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

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 : Apostolos Bossios (Stockholm, Sweden), Emer Kelly (Dublin 4, Ireland)

09:30	**GETomics: integrating the time axis in our understanding of chronic obstructive pulmonary disease** Alvar Agusti Garcia-Navarro (Barcelona, Spain)	**635**
09:45	**The interrelatedness of chronic cough and chronic pain** Jaclyn Smith (Manchester (Greater Manchester), United Kingdom)	**636**
10:00	**Biomarkers of airway diseases in clinical practice** Florence Schleich (Liège, Belgium)	**637**
10:15	**Patient's testimony** Hanna Nielsen (, Sweden)	**638**

10:20	**Assessment of airway mucus function and associated treatment in asthma and COPD** Arnaud Bourdin (Montpellier Cedex 5, France)	**639**
10:35	**Discussion and Q&A** All Speakers	**640**

8B - live streamed Session 95 09:30 - 11:00

Symposium: Holistic management and rehabilitation of fibrosing interstitial lung diseases

Aims : to describe progress in non-pharmacological management of patients with fibrosing interstitial lung diseases (f-ILDs), including changes in clinical practice and the efficacy of treatments, using a patient-centred approach; to analyse the importance of self-management and the growing role of information and computing technologies in supporting monitoring, rehabilitation and non-pharmacological interventions in f-ILDs, including after lung transplantation; to describe non-pharmacological interventions that aim to relieve symptoms and improve quality of life; to provide an update on dedicated pulmonary rehabilitation strategies and outcome measures in f-ILDs, considering the "new normal" in the context of the pandemic; to discuss new insights into the role of oxygen supplementation in management of breathlessness and the role of ambulatory oxygen in preventing exertional hypoxaemia and maximising the benefits of pulmonary rehabilitation.

Disease(s) : Interstitial lung diseases Respiratory critical care

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

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Nurse, Respiratory critical care physician, Patient, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist, Thoracic surgeon, Respiratory therapist, Journalist

Chairs : Anh Tuan Dinh-Xuan (Paris, France), Hilary Pinnock (Edinburgh (Edinburgh), United Kingdom)

09:30	**Patient's testimony** Steve Jones (Cambridge, United Kingdom)	**641**
09:35	**Digitally supported self-management and rehabilitation of f-ILD patients** Marlies S. Wijsenbeek (Rotterdam, Netherlands)	**642**
09:50	**Supportive care pathways for patients with f-ILDs and the impact of the COVID-19 pandemic** Elisabetta Renzoni (London, United Kingdom)	**643**
10:05	**Standards of pulmonary rehabilitation in f-ILDs: where are we?** Anne Holland (Fitzroy North (VIC), Australia)	**644**
10:20	**The role of oxygen in the management of dyspnoea in f-ILDs** Magnus Ekström (Lund, Sweden)	**645**
10:35	**Discussion and Q&A** All Speakers	**646**

8C - live streamed Session 96 09:30 - 11:00

Clinical cases: Lungs on fire: Lung cancer?

Aims : To facilitate the presentation of 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 Thoracic oncology

Tag(s) : Clinical

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

Chairs : Georgia Hardavella (Athens, Greece), Torsten Gerriet Blum (Berlin, Germany), Joanna Chorostowska-Wynimko (Warsaw, Poland)

Discussants : Andriani Charpidou (Athens, Greece), Sam Janes (London, United Kingdom)

09:30	**Case 1 incl. panel discussion and Q&A - Author: F. Mei (Italy)** Andriani Charpidou (Athens, Greece)	**647**
09:52	**Case 2 incl. panel discussion and Q&A - Author: S. Wickramasinghe (Sri Lanka)** Sam Janes (London, United Kingdom)	**648**

10:14	**Case 3 incl. panel discussion and Q&A - Author: N. Abu Hussein (Switzerland)** Andriani Charpidou (Athens, Greece)	**649**
10:36	**Case 4 incl. panel discussion and Q&A - Author: N. Cetin (Turkey)** Sam Janes (London, United Kingdom)	**650**

8G - live streamed Session 97 09:30 - 11:00

Hot topics: Beyond COVID: translating COVID treatment successes to all-cause ARDS

Aims : To demonstrate that COVID ARDS may serve as model for all-cause ARDS, and to explain how COVID research data may help to improve the medical management of all-cause ARDS. The target audience includes translational and clinical scientists, as well as respiratory intensive care physicians. After the session, attendants will be able to identify the following: 1. how phenotypic data collected during the COVID pandemic will help distinguish ARDS phenotypes that are most likely to respond to treatment, 2. which of the treatments that were tested during the COVID pandemic are potential novel candidates for the treatment of ARDS, and 3. how research infrastructure developed in response to the COVID pandemic will help to accelerate drug development for ARDS.

Disease(s) : Pulmonary vascular diseases Respiratory critical care

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

Tag(s) : COVID

Target audience : Clinical researcher, Medical Student, Respiratory critical care physician, Physiologist

Chairs : Marc Humbert (Le Kremlin-Bicêtre, France), Judith Garcia Aymerich (Barcelona, Spain), Miriam Barrecheguren Fernandez (Barcelona, Spain)

09:30	**Translating COVID biomarkers to treatable traits in ARDS** Tiffanie Jones (Philadelphia, United States)	**651**
09:45	**Targeting novel pathways to dampen the inflammatory response** Manu Shankar-Hari (London, United Kingdom)	**652**
10:00	**Improving vascular stability to enhance alveolocapillary function in ARDS** Jurjan Aman (Amsterdam, Netherlands)	**653**
10:15	**Adaptive platform trials: shifting gears from COVID to tailored ARDS interventions** Carolyn Calfee (San Francisco, United States)	**654**
10:30	**Discussion and Q&A** All Speakers	**655**

8H - live streamed Session 98 09:30 - 11:00

Hot topics: Moving to prevention of preschool wheeze and asthma: almost there?

Aims : to discuss viral infections as asthma triggers; to describe the background and possible mechanisms of bacterial lysate therapy; and to summarise recent research findings, suggesting their beneficial effects on asthma exacerbation frequency.

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

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

Tag(s) : Clinical

Target audience : Clinical researcher, General practitioner, Medical Student, Paediatrician, Patient, Physiologist, Journalist

Chairs : Monika Gappa (Düsseldorf, Germany), Alexander Möller (Zürich, Switzerland), Angela Zacharasiewicz (Wien, Austria)

09:30	**Patient's testimony** Danny Vijsma (Almere, Netherlands)	**656**
09:35	**Immune system function and reaction to infection and inflammation** Speaker to be confirmed	**657**
09:50	**Factors and mechanisms of preschool wheezing** Sejal Saglani (London, United Kingdom)	**658**
10:05	**Paediatric trials using bacterial lysates** Susanna Esposito (Milano (MI), Italy)	**659**
10:20	**Asthma prevention in 2022** Erika von Mutius (München, Germany)	**660**
10:35	**Discussion and Q&A** All Speakers	**661**

8N Session 99 09:45 - 11:00

Oral presentation: Novel targets and approaches in pulmonary translational research

Disease(s) : Interstitial lung diseases Airway diseases

Method(s) : Cell and molecular biology

Chairs : Audrey Joannes (RENNES, France), Antoine Froidure (Bruxelles, Belgium)

OA662	**Monocyte migration epigenetically regulated by PRMT7 driving COPD pathogenesis** Thomas Conlon (Neuherberg, Germany), Aicha Jeridi, Gizem Günes Günsel, Niklas J. Lang, Meshal Ansari, Hannelore P. Van Eeckhoutte, Stijn Verleden, Tobias Stoeger, Melanie Königshoff, Oliver Eickelberg, Ken R. Bracke, Gerald Burgstaller, Henrik Watz, Herbert B. Schiller, Robert Schneider, Ali Önder Yildirim
OA663	**Secreted phospholipase A2 XIIA triggers a mitochondrial damage-induced senescence in chronic obstructive pulmonary disease (COPD) fibroblasts** Danushki Herath (Créteil, France), Benjamin Even, Mathilde Oranger, Dulce Papy, Laurent Boyer, Jorge Boczkowski, Maylis Dagouassat
OA664	**Involvement of FGF21 in pulmonary fibrosis** Mada Ghanem (Paris, France), Aurelien Justet, Mouna Hachem, Tiara Boghanim, Aurelie Vadel, Madeleine Jaillet, Arnaud Mailleux, Bruno Crestani
OA665	**Role of Wnt5a signals in allergic asthma** Abhinav Singla (Essen, Germany), Karin Peters, Sebastian Reuter, Hendrik Beckert, Sandra Busse, Petra Bonowitz, Marcus Peters, Christian Taube
OA666	**Lung tissue multi-layer network in COPD** Núria Olvera Ocaña (Barcelona, Spain), Jon Sánchez-Valle, Iker Núñez, Sandra Casas-Recasens, Alejandra Lopez-Giraldo, Rosalba Lepore, Davide Cirillo, Àlvar Agustí, Alfonso Valencia, Rosa Faner
OA667	**Increasing efficiency of alveolar type II cells generation from human induced pluripotent stem cells** Alejandro Rodriguez Ruiz (Leiden, Netherlands), Abilash Ravi, Shewanti Khoenkhoen, Marcella Dias Brescia, Berend Van Meer, Ruth Olmer, Martin Ulrich, Pieter Hiemstra, Anne Van Der Does
OA668	**Spatial ECM proteomics resolves instructive tissue niches in the distal human lung** Yuexin Chen (München, Germany), Janine Schniering, Pascal Albanese, Meshal Ansari, Christoph H. Mayr, Peter Dorfmüller, Mircea-Gabriel Stoleriu, Rudolf Hatz, Christian P. Schneider, Jürgen Behr, Anne Hilgendorff, Richard Scheltema, Herbert B. Schiller
OA669	**Transcriptional characterization suggests accelerated epithelial differentiation in Trisomy 21 Lungs** Soula Danopoulos (Torrance, United States), Soumyaroop Bhattacharya, Caroline Cherry, Gail Deutsch, Thomas Mariani, Denise Al Alam
OA670	**A single-cell atlas of human fetal lung development between 14 and 19 weeks of gestation.** Laurent RENESME (Talence, France), Flore Lesage, David P Cook, Shumei Zhong, Satu M Hänninen, Olli Carpén, Ivana Mižíková, Bernard Thébaud
OA671	**Late Breaking Abstract - Gene expression and DNA methylation changes induced by Mepolizumab in the nasal epithelium in severe asthma** Kamini Rakkar (Nottingham, United Kingdom), Yik Lam Pang, Poojitha Rajasekar, Michael A Portelli, Robert Hall, Rachel L Clifford, Dominick Shaw, Ian Sayers
OA672	**Discussion** All Speakers

8F Session 100 09:45 - 11:00

Oral presentation: Best abstracts on tobacco, nicotine and cannabis

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

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

Chairs : Sofia Belo Ravara (Covilhã, Portugal), Paraskevi Katsaounou (Athens, Greece)

OA673	**Heated tobacco products induced IL-8 overexpression with increased nicotinic acetylcholine receptor in human monocyte THP-1 cells** Hideki Inoue (Tokyo, Japan), Mayumi Yamamoto, Tetsuya Homma, Kaoru Mochizuki, Hitoshi Ikeda, Takaya Ebato, Yoshitaka Uchida, Kuniaki Hirai, Shin Ohta, Shintaro Suzuki, Akihiko Tanaka, Hironori Sagara
OA674	**Heated Tobacco Products – are they safe alternative for traditional cigarettes?** Paulina Majek (Katowice, Poland), Mateusz Jankowski, Jan Eugeniusz Zejda, Grzegorz Brożek

OA675	**Relationship of smoking with current and future social isolation and loneliness: 12-year follow-up of 8,780 older adults in England** Keir E. J. Philip (London, United Kingdom), Feifei Bu, Michael Polkey, Jamie Brown, Andrew Steptoe, Nicholas Hopkinson, Daisy Fancourt
OA676	**Prevalence and demographics of marijuana users in a Lung Cancer Screening cohort** Amyn Bhamani (London, United Kingdom), Jennifer L Dickson, Carolyn Horst, Sophie Tisi, Helen Hall, Andrew Creamer, Ruth Prendecki, John Mccabe, Samantha L Quaife, Fanta Bojang, Dominique Arancon, Kylie Gyertson, Anne-Marie Mullin, Jonathan Teague, Laura Farrelly, Allan Hackshaw, Sam M Janes
OA677	**Novel messages on cigarette sticks and dissuasive cigarettes in smoking cessation and prevention** Giannis Karagiannidis (Athens, Greece), Emmanouil Smyrnakis, Anna-Bettina Haidich, Athanasia Pataka
OA678	**Parental smoking predicts teenage smoking and e-cigarette use in Ireland-a longitudinal study** Salome Sunday (Blackpool, Ireland), Luke J. Clancy, Joan Hanafin
OA679	**Particles emissions from a Heated Tobacco Product using sticks having four different flavours** Efthimios Zervas (Patra, Greece), Niki Matsouki, Chara Tsipa, Manos Konstantinidis, Paraskevi Katsaounou
OA680	**Gender differences in teenage e-cigarette prevalence and predictive variables** Joan Hanafin (Dublin, Ireland), Salome Sunday, Luke Clancy
OA681	**Impact of chewing bags, e-cigarettes, and combustible cigarettes on small airways and arterial stiffness** Annabelle Susann Hauck (Lübeck, Germany), Isabel Buchwald, Henrik Watz, Frederik Trinkmann, Daniel Drömann, Klaas Frederik Franzen
OA682	**Late Breaking Abstract - Patient sentiments on tobacco industry ownership of respiratory therapies: A community survey** Ruth Tal-Singer (Media, United States), Murali Krishna Paglou, Linda Walsh, Tim Deuby, Karin Hoth, Victor Gascon, Susanne Hintringer, Nicole Hass, Tonya Winders, Lucy Morgan, Byron Thomashow, David Mannino
OA683	**Discussion** All Speakers

8L Session 101 09:45 - 11:00

Oral presentation: Lung allograft dysfunction: towards better monitoring and treatment

Disease(s) : Airway diseases Interstitial lung diseases

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

Chairs : Robin Vos (Leuven, Belgium), Michael Perch (København Ø, Denmark)

OA684	**Can early lung function measurement predict baseline lung allograft dysfunction (BLAD)?** Nour Hanafi (Toronto, Canada), Anastasiia Vasileva, Joyce Wu, Clodagh Ryan, Chung-Wai Chow, John Matelski
OA685	**Characterization of chronic lung allograft dysfunction (CLAD) at time onset using respiratory oscillometry (Osc)** Anastasiia Vasileva (Toronto, Canada), Nour Hanafi, Ella Huszti, Cynthia Nohra, Natalia Belousova, Joyce K. Y. Wu, Clodagh Ryan, Chung-Wai Chow
OA686	**LSC - 2022 - Mapping the Immune Response Diversity after Murine Lung Transplantation** Janne Kaes (Leuven, Belgium), Emilie Pollenus, Celine Aelbrecht, Vincent Geudens, Arno Vanstapel, Tobias Heigl, Annelore Sacreas, Lynn Willems, Jan Van Slambrouck, Astrid Vermaut, Lucia Aversa, Hanne Beeckmans, Dirk Van Raemdonck, Hengshuo Liu, Alexey Dashkevich, Ali Önder Yildirim, Philippe Van Den Steen, Laurens Ceulemans, Robin Vos, Bart Vanaudenaerde
OA687	**JAK-STAT pathway is upregulated in CLAD** Hanne Beeckmans (Leuven, Belgium), John E Mcdonough, Laurens De Sadeleer, Annelore Sacreas, Arno Vanstapel, Janne Kaes, Anke Van Herck, Karen Maes, Ghislaine Gayan-Ramirez, Wim Janssens, Hélène Schoemans, Els Wauters, Arne P Neyrinck, Geert M Verleden, Lieven J Dupont, Godinas Laurent, Laurens J Ceulemans, Dirk E Van Raemdonck, Bart M Vanaudenaerde, Robin Vos
OA688	**Detection of bacterial colonization in lung transplant recipients using an electronic nose** Nynke Wijbenga (Rotterdam, Netherlands), Nadine L. A. De Jong, Rogier A. S. Hoek, Bas J. Mathot, Leonard Seghers, Daniel Bos, Olivier C. Manintveld, Merel E. Hellemons
OA689	**Upper tract microbiome modifications after lung transplantation and its impact in chronic lung allograft dysfunction** Victoria Ruiz De Miguel (Barcelona, Spain), Olfat Khannous, Cristina Berastegui, Kharina Loor, Mario Culebras, Maria Deu, Chaysavanh Mannichanh, Alba Santiago, Berta Saez-Gimenez, Susana Gomez-Olles, Encarna Varela, Manuel Lopez-Meseguer, Eva Revilla-Lopez, Victor Monforte, Antonio Roman, Toni Gabaldon

OA690	**Azithromycin and lung transplant: the sooner the better** Marta Cristeto Porras (Santander, Spain), Víctor Manuel Mora Cuesta, Laura González Ramos, Noelia Borja Vargas, Joy Selene Osorio Chávez, Sandra Tello Mena, David Iturbe Fernández, Jose Manuel Cifrián Martínez
OA691	**National experience with Nintedanib for restrictive allograft syndrome following lung transplantation** Hans Henrik Schultz (København, Denmark), Elisabeth Bendstrup, Kristine Jensen, Jesper Rømhild Davidsen, Thomas Kromann Lund, Michael Perch
OA692	**Late Breaking Abstract - Altered pIgR/IgA mucosal immunity in bronchiolitis obliterans syndrome** François Carlier (Namur, Belgium), Marina Pretolani, Bruno Detry, Nicolas Heddebaut, Thomas Planté-Bordeneuve, Elisabeth Longchampt, Loïc Falque, Martine Reynaud-Gaubert, Sandrine Hirschi, Xavier Demant, Jean-François Mornex, Adrien Tissot, Jérôme Le Pavec, Jonathan Messika, Aurore Foureau, Alexandre Vallée, Charles Pilette, Olivier Brugière, And The Colt Consortium
OA693	**Discussion** All Speakers

8M Session 102 09:45 - 11:00

Mini symposium: Update on nontuberculous mycobacterial pulmonary diseases

Aims : to present and discuss the state of the art in nontuberculous mycobacteria, considering recent evidence and recently published guidance documents.

Disease(s) : Respiratory infections

Method(s) : Epidemiology Imaging Public health

Tag(s) : Clinical

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

Chairs : Raquel Duarte (Porto, Portugal), James D. Chalmers (Dundee (Angus), United Kingdom)

09:45	**Consensus management recommendations for less-common nontuberculous mycobacterial pulmonary diseases** Christoph Lange (Borstel, Germany)	**694**
10:00	**How to deal with underlying host factors** Claire Andrejak (Amiens, France)	**695**
10:15	**New drugs: status, gaps and future** Jakko van Ingen (Nijmegen, Netherlands)	**696**
10:30	**Discussion and Q&A** All Speakers	**697**

Studio - online Session 103 10:00 - 10:30

Guidelines session: Idiopathic pulmonary fibrosis: an update of diagnosis and treatment recommendations

Official ATS/ERS/JRS/ALAT Clinical Practice Guidelines

Disease(s) : Interstitial lung diseases

Method(s) : General respiratory patient care

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Medical Student, Physician in Pulmonary Training, Clinical researcher, General practitioner

Chairs : Andrew Bush (London, United Kingdom)

10:00	**Discussion and Q&A** Ganesh Raghu (Seattle, United States), Maria Molina Molina (Barcelona, Spain)	**698**

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

8D Session 104 10:40 - 13:00

Skills workshop: SW2 Exercise, muscle and sleep assessment and interpretation: tips and pitfalls

Tips and pitfalls in exercise, muscle and sleep assessment

Aims : To describe “typical” patterns of responses to exercise, muscle and sleep and to determine methods to distinguish these responses from “anomalous” response profiles that can cause misinterpretation of test results.

Disease(s) : Sleep and breathing disorders

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

Tag(s) : Clinical

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

Chairs : Chair to be confirmed

10:40	**Introduction**	**699**
10:40	**Cardiopulmonary exercise testing: breathing patterns and dynamic hyperinflation** Michele Schaeffer (Leuven, Belgium)	**700**
10:40	**Respiratory and locomotor muscle testing in clinical practice** Samuel Verges (Grenoble, France)	**701**
10:40	**From different pathophysiological traits revealed by polysomnography to treatment indications or combination of therapies** Manuel Sanchez De La Torre (Lleida, Spain)	**702**
10:40	**Implementation, titration and follow-up of positive airway pressure in patients with obstructive sleep apnoea** Athanasia Pataka (Thessaloniki, Greece)	**703**

Studio - online Session 107 10:45 - 11:15

Guidelines session: Transbronchial (cryo)biopsy and surgical lung biopsy in interstitial lung diseases

Disease(s) : Interstitial lung diseases Thoracic oncology

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

Tag(s) : Clinical

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

Chairs : Andrew Bush (London, United Kingdom)

10:45	**Discussion and Q&A** Daniël Korevaar (Amsterdam, Netherlands), Venerino Poletti (Forlì, Italy)	**709**

8A - live streamed Session 113 11:15 - 12:45

Clinical trials session: ALERT 1: COPD and hospital management

Aims : Including the ALERT sessions (Abstracts Leading to Evolution in Respiratory Medicine Trials), these formats showcase important and very late-breaking clinical trial data from all respiratory disease areas. Presenters, session chairs and viewers will take part lively discussions on the presented trials.

Disease(s) : Respiratory critical care Airway diseases

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

Tag(s) : Clinical

Chairs : Apostolos Bossios (Stockholm, Sweden), Emer Kelly (Dublin 4, Ireland)

Discussants : Dave Singh (Manchester, United Kingdom), Frits M.E. Franssen (Horn, Netherlands)

RCT710	**RCT Abstract - Dose response of icenticaftor in patients with COPD and chronic bronchitis on triple inhaled therapy** Frits M.E. Franssen (Horn, Netherlands), Fernando J. Martinez, Jadwiga A. Wedzicha, Joerg H. Eckert, Barbara Knorr, Rutvick Parlikar, Ana-Maria Tanase, Christian Gessner

RCT711	**RCT Abstract - Point of care blood eosinophil guided oral prednisolone for COPD exacerbations: a multi-centre double blind randomised controlled trial (The STARR2 trial)** Mona Bafadhel (London, United Kingdom), Sanjay Ramakrishnan, Helen Jeffers, Beverley Langford-Wiley, Joanne Davies, Mahdi Mahdi, Christine A'Court, Ian Binnian, Stephen Bright, Simon Cartwright, Robin Fox, Richard Ek Russell
RCT712	**RCT Abstract - Bronchodilators in Symptomatic Tobacco-exposed Persons with Preserved Spirometry for the RETHINC Study Group** MeiLan K. Han (Ann Arbor, United States), Wen Ye, Di Wang, Emily White, Mehrdad Arjomandi, Igor Barjaktarevic, Stacey-Ann Brown, Russell Buhr, Alejandro Comellas, Christopher Cooper, Gerard Criner, Mark Dransfield, Frank Drescher, Rodney Folz, Nadia Hansel, Robert Kaner, Richard Kanner, Jerry Krishnan, Stephen Lazarus, Veeranna Maddipati, Fernando Martinez, Anne Matthews, Catherine Meldrum, Charlene Mcevoy, Toru Nyunoya, Linda Rogers, William Stringer, Christine Wendt, Robert Wise, Stephen Wisniewski, Frank Sciurba, Prescott Woodruff
RCT713	**Wrap-up by discussant and discussion** Dave Singh (Manchester, United Kingdom)
RCT714	**Late Breaking Abstract - Randomized, rater-blinded, controlled study of intravenous (IV) N-acetylcysteine (NAC) in hospitalized adults with respiratory tract disease and abnormal mucus secretion** Alberto Papi (Cona, Ferrara, Italy), Wei Tang, Dan Zhu, Xin Zhang, Valentina Zanin, Pietro Magrone, Jieming Qu
RCT715	**RCT Abstract - High-flow nasal cannula versus noninvasive ventilation in the prevention of escalation to invasive mechanical ventilation in patients with acute hypoxemic respiratory failure** Gamal Rabie Agmy (Assiut, Egypt), Mohamed Adam, Manal Elkhawaga, Entsar Hsanen
RCT716	**Awake Prone Positioning in Acute Hypoxemic Respiratory Failure from COVID-19: A Randomized Clinical Trial** Jason Weatherald (Edmonton, Canada), Waleed Alhazzani, Ken Kuljit S. Parhar, Zainab Al Duhailib, Mohammed Alshahrani, Abdulrahman Al-Fares, Sarah Buabbas, Sujith V. Cherian, Laveena Munshi, Eddy Fan, Fahad Al-Hameed, Jamal Chalabi, Amera A. Rahmatullah, Erick Duan, Jennifer L.Y. Tsang, Kimberley Lewis, François Lauzier, John Centofanti, Bram Rochwerg, Sarah Culgin, Katlynne Nelson, Sheryl Ann Abdukahil, Kirsten M. Fiest, Henry T. Stelfox, Haytham Tlayjeh, Maureen O. Meade, Dan Perri, Kevin Solverson, Daniel J. Niven, Rachel Lim, Morten Hylander Møller, Emilie Belley-Cote, Lehana Thabane, Hani Tamim, Deborah J. Cook, Yaseen M. Arabi
RCT717	**Wrap-up by discussant and discussion** Frits M.E. Franssen (Horn, Netherlands)
RCT718	**Closing remarks** All Speakers

8B - live streamed Session 114 11:15 - 12:45

Journal session: The best of the European Respiratory Journal in 2022

Aims : to highlight the best articles published in the European Respiratory Journal (ERJ) over the past 12 months; to provide an up-to-date review of the latest developments in three key respiratory fields, namely, interstitial lung disease, COVID-19 and respiratory epidemiology.

Disease(s) : Interstitial lung diseases Respiratory infections

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

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 : Anh Tuan Dinh-Xuan (Paris, France), Hilary Pinnock (Edinburgh (Edinburgh), United Kingdom)

11:15	**Interstitial lung disease** Marlies S. Wijsenbeek (Rotterdam, Netherlands)	**719**
11:30	**COVID-19** Tobias Welte (Hannover, Germany)	**720**
11:45	**Respiratory epidemiology** Isabella Annesi Maesano (Montpellier, France)	**721**
12:00	**The ERJ: past, present and future** Martin Kolb (Hamilton (ON), Canada)	**722**
12:15	**Discussion and Q&A** All Speakers	**723**

8C - live streamed Session 115 11:15 - 12:45

State of the art session: Thoracic oncology

Unravelling lung cancer mazes: a call for an aggressive approach

Aims : to highlight the latest developments and controversies in lung cancer management; to cover four key areas in which critical new observations have been made in the past year; to provide consolidated updates in order to improve clinical management of lung cancer patients.

Disease(s) : Thoracic oncology

Method(s) : Cell and molecular biology Palliative care Surgery

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, Journalist

Chairs : Georgia Hardavella (Athens, Greece), Torsten Gerriet Blum (Berlin, Germany), Joanna Chorostowska-Wynimko (Warsaw, Poland)

11:15	**Patient's testimony** Seamus Cotter (Clarecastle, Ireland)	**724**
11:20	**Does aggressive surgical management of oligometastatic disease pay off?** Stefano Elia (Roma (RM), Italy)	**725**
11:35	**Recent advances in novel targeted therapies for non-small cell lung cancer and implications for current practice** Jan van Meerbeeck (Edegem (Antwerp), Belgium)	**726**
11:50	**Incorporating immunotherapy in early-stage lung cancer management** Joanna Chorostowska-Wynimko (Warsaw, Poland)	**727**
12:05	**Dyspnoea management in lung cancer: Pandora's box?** Irene Higginson (London, United Kingdom)	**728**
12:20	**Discussion and Q&A** All Speakers	**729**

8G - live streamed Session 116 11:15 - 12:45

Hot topics: Launch of “Lung Facts”

Using data to create a transformation in respiratory healthcare

Aims : to launch and present the findings of the new "Lung Facts". As a major step forwards from the European Lung White Book, published >10 years ago, Lung Facts is a web-based resource presenting all the key epidemiological and economic data for key respiratory conditions across WHO Europe and by each WHO Europe country, which will now be updated regularly. "Lung Facts" will provide a key advocacy tool in the context of the International Respiratory Coalition (IRC) to raise the profile of lung health following the devastating impact of the COVID-19 pandemic on respiratory health across the globe.

Method(s) : Epidemiology General respiratory patient care 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, Journalist

Chairs : Marc Humbert (Le Kremlin-Bicêtre, France), Judith Garcia Aymerich (Barcelona, Spain), Tonya Winders (Hendersonville, United States)

11:15	**What we know and where the gaps are** Guy F. Joos (Ghent, Belgium)	**730**
11:30	**The economics** Matthew Franklin (Sheffield, United Kingdom)	**731**
11:45	**Areas for action** Mina Gaga (Athens, Greece)	**732**
12:00	**Having a national impact** Chantal Raherison-Semjen (Pointe-à-Pitre, Guadeloupe)	**733**
12:15	**Discussion and Q&A** All Speakers	**734**

8H - live streamed Session 117 11:15 - 12:45

Symposium: Lung function testing from preschool age to adolescence: are we done with spirometry?

From technical recommendations to real-life use

Aims : to update the knowledge of the audience about different lung function tests applicable from preschool age to adolescence by reviewing the most recent technical changes and the clinical use of these techniques; to explore the accuracy of respiratory mechanics measurements in assessment of bronchial reactivity in asthmatic children, the clinical applications of oscillometry in children, the swift ascent of the measurement of ventilation heterogeneity as a primary outcome in cystic fibrosis patients and the accuracy of new developments in spirometry that have been accelerated by the ongoing COVID-19 pandemic.

Disease(s) : Airway diseases Paediatric respiratory diseases

Method(s) : Epidemiology Physiology Pulmonary function testing

Tag(s) : Clinical

Target audience : Clinical researcher, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Paediatrician, Patient, Physician in Pulmonary Training, Physiologist

Chairs : Monika Gappa (Düsseldorf, Germany), Alexander Möller (Zürich, Switzerland), Angela Zacharasiewicz (Wien, Austria)

11:15	**The interrupter technique: from reference values to bronchial reactivity assessment** Nicole Beydon (Paris, France)	**735**
11:30	**Oscillometry in children: from reference values to clinical use** Enrico Lombardi (Florence, Italy)	**736**
11:45	**Multiple breath washout techniques: from the technical consensus statement to clinical use** Paul Robinson (Sydney (NSW), Australia)	**737**
12:00	**Spirometry: from implications of new recommendations to home-based spirometry during pandemics** Graham Hall (Sydney, NSW, Australia)	**738**
12:15	**Discussion and Q&A** All Speakers	**739**

8N Session 118 11:15 - 12:30

Mini symposium: Learning is a treasure that follows its owner everywhere

Yernault lecture session

Aims : to illustrate how the joy of learning, distinct curiosity and work endurance advance careers.

Chairs : Marion Delcroix (Leuven, Belgium), Richard Costello (Dublin 9, Ireland)

11:15	**Introduction** Richard Costello (Dublin 9, Ireland)	**740**
11:25	**From respiratory research to clinical needs: the role model illustrates the way** Silvia Ulrich (Zurich, Switzerland)	**741**
11:45	**Education and interdisciplinary research in a globalised world: physicians and allied health professionals' view** Mona Lichtblau (Zürich, Switzerland), Stéphanie Saxer (Zürich, Switzerland)	**742**
12:00	**Discussion and Q&A** All Speakers	**743**
12:20	**Education and Teaching awards** Omar S. Usmani (London, United Kingdom), Anita Simonds (London, United Kingdom), Stylianos Loukides (Athens, Greece), Jayesh M. Bhatt (Nottingham (Nottinghamshire), United Kingdom), Irene Steenbruggen (Zwolle, Netherlands)	**744**

8F Session 119 11:15 - 12:30

Oral presentation: COPD treatment: new mechanisms and novel insights

Disease(s) : Airway diseases

Method(s) : Epidemiology Palliative care General respiratory patient care Cell and molecular biology Pulmonary rehabilitation Endoscopy and interventional pulmonology

Chairs : Alexander Mathioudakis (Stockport, United Kingdom), Chair to be confirmed

OA9001	**RCT Abstract - Airway smooth muscle mass to predict response to ICS in COPD patients receiving triple therapy (HISTORIC study): a randomized, placebo-controlled, double-blind, investigator-initiated trial** Daiana Stolz (Basel, Switzerland), Eleni Papakonstantinou, Maria Pascarella, Kathleen Jahn, Aline Siebeneichler, Andrei Darie, Matthias Herrmann, Werner Strobel, Anna Salina, Leticia Grize, Michael Tamm
OA745	**The effect of integrated palliative care on quality of life and acute healthcare use in patients with COPD – results of the COMPASSION study** Niels H. Chavannes (Leiden, Netherlands), Johanna Broese, Rianne Van Der Kleij, Els Verschuur, Ewald Bronkhorst, Yvonne Engels, Huib Kerstjens
OA746	**Pulmonary rehabilitation changes the oral microbiota of people with COPD** Sara Melo-Dias (Ílhavo, Portugal), Miguel Cabral, Andreia Furtado, Sara Souto-Miranda, João Carvo, Aurora Mendes, Catarina Almeida, Alda Marques, Sousa Ana
OA747	**Benefit of prompt initiation of single-inhaler triple therapy in COPD patients in England following an exacerbation** Afisi Ismaila (Malvern, United States), Robert Wood, Alexandros Czira, Vicky Banks, Lucinda Camidge, Olivia Massey, Raj Sharma, Chris Compton, Kieran Rothnie
OA748	**Commencement of fixed dose ICS of varying particle size as a predictor of pneumonia in COPD patients** William Henley (Exeter, United Kingdom), David Price, William Henley, Victoria Carter, Derek Skinner, Rebecca Vella, Alberto Papi, Leonardo M. Fabbri, Huib Am Kerstjens, Nicolas Roche, Dave Singh, Claus F Vogelmeier, Elif Şen, José Eduardo Delfini Cançado, Maxim Kots, Elena Nudo, Sara Barile, George Georges
OA749	**Antimicrobial properties of Gallium Protoporphyrin in COPD** James Baker (MANCHESTER, United Kingdom), Aisha Baba-Dikwa, Simon Lea, Dave Singh
OA750	**Machine learning-based individual treatment effect estimation of azithromycin on COPD exacerbations** Kenneth Verstraete (Leuven, Belgium), Iwein Gyselinck, Michaël Staes, Sarah Lindberg, Richard Albert, John Connett, Maarten De Vos, Wim Janssens
OA751	**Similar Programmed Death Ligand 1 expression profile in COPD and NSCLC structural and immune cells** Renata Esposito (Caserta, Italy), Davida Mirra, Giuseppe Spaziano, Erika Cione, Luca Gallelli, Antonio Capuozzo, Carlo Santoriello, Mario Polverino, Bruno D'Agostino, Francesca Polverino
OA752	**Effects of inhaled corticoids on chronic bronchial infection by Pseudomonas aeruginosa in COPD patients** Noemi Cerón Pisa (Palma, Illes Balears, Spain), Amanda Iglesias, Hanaa Shafiek, Elena Jordana-Lluch, Maria Escobar-Salom, Javier Verdú, Carla López, Antonio Oliver, Carlos Juan, Borja G Cosío
OA753	**Randomized double blind placebo-controlled study to demonstrate that antibiotics are not needed in moderate acute exacerbations of COPD - Results from the ABACOPD study** Gernot G.U. Rohde (Frankfurt am Main, Germany), Sebastian Häckl, Armin Koch, Martin Kolditz, Hartmut Timmermann, Stefan Andreas, Grit Barten, Tobias Welte, The Abacopd Study Group
OA754	**Discussion** All Speakers

8L Session 120 11:15 - 12:30

Oral presentation: Advances in epidemiology, diagnosis and treatment of tuberculosis

Disease(s) : Airway diseases

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

Chairs : Ayşegül Fusun Öner Eyüboğlu (Ankara, Turkey), Marc Lipman (London, United Kingdom)

OA755	**Long-term mortality of post-tuberculous survivors in Korea: a population-based longitudinal study** Hayoung Choi (Seoul, Republic of Korea), Hyun Lee, Kyungdo Han, Sang Hyuk Kim, Sang Hyun Park, Hyung Koo Kang, Jang Won Sohn, Dong Wook Shin
OA756	**Effect of prevention therapy for subclinical tuberculosis in child household contacts** Qi Tan (Nanjing (Jiangsu), China), Chuan-Chin Huang, Mercedes Becerra, Roger Calderon, Silvia Chiang, Carmen Contreras, Leonid Lecca, Jimenez Judith, Perez-Velez Carlos, Claudia Roya-Pabon, Rosa Yataco, Hai Xu, Zibiao Zhang, Megan Murray
OA757	**Culture conversion at 2 months among patients with rifampicin-susceptible pulmonary tuberculosis: a prospective cohort study** Jinsoo Min (Seoul, Republic of Korea), Hyung Woo Kim, Ju Sang Kim, Ki Man Lee, Sun-Hyung Kim, Sung Soo Jung
OA758	**A new fully automated IGRA solution for the diagnosis of M.tb infection** Ali Esmail (Cape Town, South Africa), Richard Meldau, Linda Mbuthini, Marilyne Dupin, Didier Poirault, Keertan Dheda

OA759	**Spirometry and radiological sequelae in post pulmonary tuberculosis: A systematic review** ayush goel (New Delhi, India), Animesh Ray, J Kirtana
OA760	**Symptom Burden After Completion of Tuberculosis Therapy in REMoxTB** Conor Tweed (London, United Kingdom), Genevieve Wills, Jamilah Meghji
OA761	**High prevalence of COPD despite successful tuberculosis treatment** Louis Yeung (Sydney, Australia), Zhixin Liu, Kenneth Ng, Anthony Byrne
OA762	**Using whole genome sequencing to investigate tuberculosis outbreaks in a large UK city: examining the effectiveness of a stone in pond contact tracing approach** Darryl Braganza Menezes (Birmingham (West Midlands), United Kingdom), Tom Marshall, Emmanouil Tranos, Hanna Kaur, Esther Robinson, Grace Smith, Martin Dedicoat
OA763	**Drivers determining active TB screening yield in different European screening programmes: a comparative analysis.** Dominik Zenner (London, United Kingdom), Daniella Brals, Connie Erkens, Alberto Matteeli, Joanna Nederby Öhd, Dee Menezes, Gerard De Vries, Morris Muzyamba, Job Van Rest, Valentina Marchese, Robert Aldridge, Ineke Spruijt, John Were, Sarah Anderson, Knut Lönnroth, Ibrahim Abubakar, Frank Cobelens
OA764	**Discussion** All Speakers

8M Session 121 11:15 - 12:30

Oral presentation: Innovations in interventional pulmonology: pushing boundaries with beams, tunnels and robots

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

Method(s) : Endoscopy and interventional pulmonology | Imaging | Surgery

Chairs : Daniela Gompelmann (Vienna, Austria), Mohammed Munavvar (Preston (Lancashire), United Kingdom)

OA765	**Cone beam CT is essential for worthwhile navigation bronchoscopy of small lung nodules** Laurien Reinders (Rotterdam, Netherlands), Georgios Sotiropoulos, Ralitsa Baranowski, Lúcia Fonseca, Sander Langereis, Kelvin Lau
OA766	**Robotic-assisted navigation bronchoscopy with needle-based confocal laser endomicroscopy (nCLE) for real-time lung cancer detection** Tess Kramer (Amsterdam, Netherlands), Christopher Manley, Rohit Kumar, Lizzy Wijmans, Martijn De Bruin, Eric Ross, Yulan Gong, Hormoz Ehya, Peter Bonta, Jouke Annema
OA767	**The Archimedes navigation system for the diagnosis of peripheral pulmonary nodule. Report on initial experience.** Rachid Tazi Mezalek (Barcelona, Spain), Pere Serra Mitjà, Carmen Centeno Clemente, Carmen Fernandez Arias, Eduard Barrio Herraiz, Felipe Andreo García, Marta Avila, Eva Castella, Ignasi Guasch Arriaga, Jorge Bechini Bernard, Jorge Abad Capa, Antoni Rosell Gratacós
OA768	**Four year outcomes of bronchoscopic microwave ablation of peripheral lung nodules** Kelvin Lau (London, United Kingdom), Kornelija Maceviciute, Kire Temov, Ralitsa Baranowski
OA769	**Cryo- versus surgical lung biopsy for diagnosing interstitial lung disease (ILD): the COLD RCT** Kirsten Kalverda (Amsterdam, Netherlands), Maarten K. Ninaber, Jelle R. Miedema, Jürgen Hölters, Chris Dickhoff, Merijn Kant, Johannes M.A. Daniels, Lizzy Wijmans, René E. Jonkers, Daniel A. Korevaar, Peter I. Bonta, Jouke T. Annema
OA770	**Systematic evaluation of the pulmonary arteries during endobronchial ultrasound (EBUS) in patients with suspected lung cancer a prospective cohort trial.** Amanda Juul (Odense S, Denmark), Christian B. Laursen, Alice Vangerschov Christophersen, Arman Arshad, Stefan Møller Luef, Vasiliki Panou, Jens Paaby, Julie Gellert Larsen, Jacob Reimer, Casper Falster
OA771	**Bronchial rheoplasty for chronic bronchitis: initial results from a european registry study with RheOx** Kaid Darwiche (Essen, Germany), Hanna Zellerhoff, Felix Herth, Judith Brock, Michael Meilinger, Irene Sperk, Arschang Valipour
OA772	**CONVERT Trial: Collateral ventilation conversion by closure of fissure defect with AeriSeal Foam for BLVR with Zephyr valves** Michela Bezzi (Firenze (FI), Italy), Guido Levi, Kaid Darwiche, Thomas Egenod, Nicolas Guibert, Daniel Franzen, Felix J Herth, Dirk-Jan Slebos, Alan Kirk, Alex Yang, Dennis Mchugh , Narinder Shargill, Samuel V Kemp, Pallav L Shah
OA773	**Discussion** All Speakers

Studio - online | Session 122 | 11:30 - 12:30

Online skills lab: Patient ventilator asynchrony (PVA) from ICU to home

Aims : To describe major PVA in the intensive care, its clinical consequences and how to treat them; To describe major PVA during Home mechanical ventilation and propose a specific algorithm; Using case vignettes to provide guidance to understand PVA and how to solve them.

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

11:30	**Introduction** All Speakers	**774**
11:35	**PVA in intensive care: Do we know what to do now?** Lise Piquilloud (Lausanne, Switzerland)	**775**
11:50	**PVA at home: How and what to check in a "lifetime ventilation"?** Claudia Crimi (Catania (CT), Italy)	**776**
12:05	**Let's set the ventilator treating asynchronies: Do all the roads lead to Rome?** Jesus Gonzalez Bermejo (Montlignon, France)	**777**
12:20	**Q&A** All Speakers	**778**

8N | Session 128 | 12:45 - 14:00

Oral presentation: Malignant pleural effusion and mesothelioma: diagnosis and optimal management

Disease(s) : Thoracic oncology

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

Chairs : Selina Tsim (Glasgow (Glasgow), United Kingdom)

OA779	**Anatomical and symptom changes in malignant pleural effusion using 4-Dimensional MRI** Geeshath Jayasekera (Glasgow (Glasgow), United Kingdom), Geoffrey Martin, Rosemary Woodward, John Foster, Selina Tsim, Kevin Blyth
OA780	**Global trends in mesothelioma incidence, mortality and disability adjusted life years for the period 1990-2019** Sotirios Zarogiannis (Larisa, Greece), Erasmia Rouka, Chrissi Hatzoglou, Konstantinos Gourgoulianis
OA781	**External validation of a breath test for pleural mesothelioma** Eline Schillebeeckx (Antwerpen, Belgium), Eline Janssens, Joris Van Cleemput, Veerle Surmont, Kristiaan Nackaerts, Elly Marcq, Jan Van Meerbeeck, Kevin Lamote
OA782	**Caring for indwelling pleural catheters: self-management vs district nursing care** Vineeth George (Oxford, United Kingdom), Nicky Russell, Anand Sundaralingam, Bavidra Kulendrajah, Eihab Bedawi, Radhika Banka, Mohammed Ellayeh, Robert Hallifax, Najib Rahman
OA783	**Virtual review following indwelling pleural catheter (IPC) insertion** David McCracken (Newtownabbey, United Kingdom), Claire Bradley, Kathryn Kerr, Nicholas Magee
OA784	**Malignant Pleural Mesothelioma in situ is a reality: how to handle this?** Federico Raveglia (Monza, Italy), Riccardo Orlandi, Francesca Bono, Piergiorgio Solli, Giuseppe Cardillo, Lidia Libretti, Antonio Tuoro, Enrico Mario Cassina, Edward Caruana, Marco Scarci
OA785	**Analysis of patients with non-specific pleuritis from the International Collaborative Effusion (ICE) database: an ERS Clinical Research Collaboration** Anand Sundaralingam (Oxford, United Kingdom), Avinash Aujayeb, Karl A Jackson, Emilia I Pellas, Irfan I Khan, Muhammad T Chohan, Roos Joosten, Anton Boersma, Jordy Kerkhoff, Silvia Bielsa, Jose M Porcel, Ales Rozman, Mateja Marc-Malovrh, Hugh Welch, Jenny Symonds, Stavros Anevlavis, Marios Froudrakis, Federico Mei, Francesco Porcarelli, Francesca Gonnelli, Inderdeep Dhaliwal, Michael A Mitchell, Katrine Fjaellegaard, Jesper K Petersen, Mohamed Ellayeh, Eihab O Bedawi, Dinesh Addala, Najib M Rahman, Thomas Burden, Uffe Bodtger, Coenie Koegelenberg , Nick A Maskell, Julius Janssen, Rahul Bhatnagar
OA786	**Defining a new diagnostic biomarker panel for malignant pleural mesothelioma using a novel proteomic technique** Eline Schillebeeckx (Antwerpen, Belgium), Esperanza Fernandez, Marnik Vuylsteke, Daria Fijalkowska, An Staes, Jan Van Meerbeeck, Kris Gevaert, Kevin Lamote

OA787	**Reflecting real-world patients in mesothelioma research: the pragmatic, multi-centre ASSESS-meso cohort** Ruairi J H Conway (Bristol, United Kingdom), Sonia Patole, Anna J Morley, Jenny Symonds, Deborah Walton, Emma Tucker, Charles Comins, Andrew Low, Janet Probets, John E Harvey, William Cooper, Anthony Edey, Kevin G Blyth, Nick A Maskell, Anna C Bibby
OA788	**Discussion** All Speakers

8F Session 129 12:45 - 14:00

Oral presentation: Expanding the insight into COVID-19 dyspnoea

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

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

Chairs : Sam Bayat (Grenoble, France), Caroline Jolley (London, United Kingdom)

OA789	**Pulmonary function and tomographic features in adult survivors of severe COVID-19 pneumonia: a prospective study of 12-month follow-up.** Paulina Barria (Santiago, Chile), Maria Mozó, Gonzalo Mendoza, Carlos Cerra, Jorge Manriquez, Mario Arellano
OA790	**Dysfunctional breathing after COVID-19: symptoms, functional impact and quality of life** Selina Loew (, Switzerland), Leon Genecand, Marco Altarelli, Grégoire Gex, Elzbeta Binkova, Isabelle Frésard, Pierre-Olivier Bridevaux
OA791	**Cardiopulmonary exercise testing and ventilatory efficiency in long COVID-19: 15 months follow-up** Daniel Piamonti (Roma (RM), Italy), Daniela Pellegrino, Arianna Sanna, Luigi Panza, Roberto Flore, Altea Lecci, Giulia Lo Muzio, Emanuele Messina, Valeria Panebianco, Carlo Catalano, Paolo Palange
OA792	**CPET ventilatory characteristics of dysfunctional breathing in long COVID patients with persistent dyspnea** Pierre-Olivier Bridevaux (Sion, Switzerland), Marco Altarelli, Léon Genecand, Selina Loew, Elzbeta Binkova, Grégoire Gex, Isabelle Frésard
OA793	**Dyspnoea in patients presenting post-COVID-19 respiratory clinic not fully explained by lung function impairment and chest radiography abnormalities.** Balamugesh Thangakunam (Vellore (Tamil Nadu), India), Jebin Roger, Barney Isaac, Divya Mangal, Anitha Barney, Richa Gupta, Devasahayam J Christopher
OA794	**Virtual reality intervention alleviates dyspnea in patients recovering from COVID pneumonia** Sophie Betka (Genève, Switzerland), Kannape Oliver , Fasola Jemina, Lance Florian, Cardin Sylvain, Schmid Aline, Similowski Thomas, Soccal Paola, Herbelin Bruno, Adler Dan, Blanke Olaf
OA795	**Persistent dyspnea six months after SARS-CoV-2 pneumonia : what are the contributing factors ?** Leila Douik El Gharbi (Ariana, Tunisia), Imen Sahnoun, BOUGACHA MARWA, Ines Moussa, Siwar Rejab, Salma Mokkadem, Rihab Jebali, Saloua Jameleddine
OA796	**Persisting exertional dyspnea and perceived exercise intolerance after mild Covid-19: a critical role for breathing dysregulation?** Bram van den Borst (Nijmegen, Netherlands), Esther L. van Voorthuizen, Hanneke A.C. Van Helvoort, Jeannette B. Peters, Michel M. Van Den Heuvel
OA797	**A pattern of respiratory dysfunction in mild cases of post-COVID-19 athletes: an emerging hypothesis** Vasileios Stavrou (Larissa, Greece), Stylianos Boutlas , George Vavougios, Kyriaki Astara, Ioannis Papaioannou, Eirini Papayianni , Vasileios Mitakos , Tourlakopoulos Konstantinos, Kalabakas Konstantinos, Karagiannis Dimitrios, Daniil Zoe, Basdekis George, Gourgoulianis Konstantinos
OA798	**Late Breaking Abstract - Blood haemoglobin and pulse oximetry oxygen saturation measurement error** Dominick Shaw (Nottingham (Nottinghamshire), United Kingdom), Colin Crooks, Joe West, Joanne Morling, Mark Simmonds, Irene Juurlink, Steve Briggs, Simon Cruickshank, Susan Hammond-Pears, Timothy Card, Andrew Fogarty
OA799	**Discussion** All Speakers

8L Session 130 12:45 - 14:00

Oral presentation: New trends in exercise, physical activity and behavioural changes in COPD, ILD and asthma

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

Method(s) : Pulmonary rehabilitation | Public health | General respiratory patient care | Surgery

Chairs : Thierry Troosters (Leuven, Belgium), Anne Holland (Fitzroy North (VIC), Australia)

OA800	**Rapid Access Rehabilitation after exacerbations of COPD – an international Delphi study** Ana Oliveira (Hamilton, Canada), Shirley Quach, Jan Walker, Dina Brooks, Roger Goldstein
OA801	**Does an 8-week pulmonary rehabilitation (PR) program have equivalent outcomes to a 12-week program in COPD? A randomised controlled trial.** Joshua Bishop (Balmain, Australia), Lissa Spencer, Tiffany Dwyer, Zoe Mckeough, Amanda Mcanulty, Jennifer Alison
OA802	**Clusters of functional status in COPD: an exploratory analysis** Guilherme Rodrigues (Aveiro, Portugal), Vera Afreixo, Sara Souto-Miranda, Filipa Machado, Vânia Rocha, Maria A. Mendes, Vitória Martins, Paula Simão, Alda Marques
OA803	**The importance of feeling in control - people with COPD's experiences regarding maintaining or increasing physical activity when using an eHealth tool. A grounded theory analysis.** Sarah Marklund (Umeå, Sweden), Ann Sörlin, Tobias Stenlund, Karin Wadell, Andre Nyberg
OA804	**Hybrid pulmonary rehabilitation versus conventional outpatient pulmonary rehabilitation: a propensity-matched analysis** Marieke Wuyts (Laeken, Belgium), Astrid Blondeel, Sofie Breuls, Tim Vanhoutte, Veronica Barbier, Amber Beersaerts, Lode Claes, Iris Coosemans, Nele Vandenbergh, Heleen Demeyer, Thierry Troosters, Wim Janssens, . On Behalf Of Leuven Pulmonary Rehabilitation Team Uz Leuven
OA805	**Physical activity coaching in patients with ILD: a pilot study** Sofie Breuls (Leuven, Belgium), Astrid Blondeel, Marieke Wuyts, Jonas Yserbyt, Wim Janssens, Wim Wuyts, Heleen Demeyer, Thierry Troosters
OA806	**Anxiety and depression symptoms after pulmonary rehabilitation in people with interstitial lung disease: responders and non-responders** Alda Sofia Pires De Dias Marques (Aveiro, Portugal), Eduardo Samuel Santos, Guilherme Rodrigues, Sara Souto-Miranda, Sara Almeida, Vânia Rocha, Pedro G. Ferreira, Maria Aurora Mendes
OA807	**iLiFE-Lifestyle Integrated Functional Exercise for people with interstitial lung disease: a feasibility study** Cátia Paixão (Aveiro, Portugal), Pedro Ferreira, M Aurora Mendes, Dina Brooks, Alda Marques
OA808	**Behavior change to increase physical activity reduces sleep disturbances in asthma: A randomized controlled trial** Celso Ricardo Fernandes de Carvalho (São Paulo (SP), Brazil), Patricia Freitas, Natalia Febrini Passos, Alberto Cukier, Regina Carvalho-Pinto
OA809	**Late Breaking Abstract - Prognostic value of the 1-minute sit-to-stand test on postoperative complications in people with lung cancer elected for lung surgery** Kirsten Quadflieg (Hasselt, Belgium), Rachael Higgins, Maarten Criel, Marc Daenen, David Ruttens, Michiel Thomeer, Andrew Maiorana, Chris Burtin, Vinicius Cavalheri
OA810	**Discussion** All Speakers

Studio - online Session 131 13:00 - 14:30

Online skills lab: Paediatric lung function and sleep measurements

Aims : to describe the physiology, indications, technical aspects and criteria for quality acceptability of lung function and sleep measurements; to discuss the interpretation of different lung function tests and results and polysomnography fragments and results; to discuss the clinical implication of lung function and polysomnography results using clinical cases.

Target audience : Paediatrician

Chairs : Refika Hamutcu Ersu (Ottawa, Canada), Nicole Beydon (Paris, France)

13:00	**Introduction** All Speakers	**811**
13:05	**Static lung volumes and spirometry measurements** Christiane Lex (Goettingen, Germany)	**812**
13:18	**Clinical case: spirometry and a bronchodilator** Christiane Lex (Goettingen, Germany)	**813**
13:25	**Multiple breath washout** Paul Robinson (Sydney (NSW), Australia)	**814**
13:38	**Clinical case: multiple breath washout technique in children** Paul Robinson (Sydney (NSW), Australia)	**815**

13:45	**Scoring sleep and respiratory events using polysomnography** Stijn Verhulst (Antwerpen, Belgium)	**816**
13:58	**Clinical case: voting on polysomnography tracings** Stijn Verhulst (Antwerpen, Belgium)	**817**
14:05	**Sleep studies** Hui Leng Tan (London, United Kingdom)	**818**
14:18	**Clinical cases: differences between polysomnography and polygraphy** Hui Leng Tan (London, United Kingdom)	**819**
14:25	**Conclusion** All Speakers	**820**

13:00-14:00
INDUSTRY LUNCHTIME SYMPOSIUM SEE PAGE 1

TP-1 in thematic poster area — Session 139 — 13:00 - 14:00

Thematic poster: Biomarkers in COVID-19

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

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

Chairs : Manali Mukherjee (Hamilton (ON), Canada), Timothy Hinks (Oxford, United Kingdom)

PA856	**The platelet-to-lymphocyte ratio (PLR) versus Neutrophil-to-lymphocyte ratio (NLR) in prediction of Coronavirus disease-19 outcome** Luci Suliman (Mansoura, Egypt), Mona Elwasefy, Nesrine Saad Farrag, Heba Wagih Abdelwahab
PA857	**Predictive role of some biomarkers in the course of COVID 19 infection** Pavlina Nikolova Glogovska (Pleven, Bulgaria), Elena Borisova, Snezhanka Ivankovska, Plamen Pavlov
PA858	**Evaluation of lipid profile in patients with COVID-19 infection** Ali Abdelaziz (Minia, Egypt), rasha abdelfattah, Mohammad O. Abdel Aziz, Mahmoud M Higazi, Noha M Abdullah, Hany Taha Asklany
PA859	**The evaluation of Serum angiotensin-converting enzyme 2 (ACE2) levels and its relationship with clinical outcome in patients with Coronavirus disease 2019 (COVID-19)** Seyed mehdi Hashemi (Kerman, Islamic Republic of Iran), Mitra Samareh Fekri, Mahdi Hosseinib, Amir Baniasad, Anahita Behzadi, Sajjadeh Movahedinia
PA860	**Nasal swab sampling for antigen test identifies COVID-19 well in all ages** Maria Juusela (Espoo, Finland), Juha M Koskinen, Venla Aaltonen, Matilda Sipilä, Seppo Sarna, Janne O Koskinen, Erik Qvist
PA861	**Is it really so important to study humoral immunity to SARS-CoV-2?** Yuliia Huba (Dnipropetrovsk, Ukraine), Olena V. Myronenko, Oxana V. Plekhanova, Hanna A. Garagulya
PA862	**Outcome prediction in hospitalized COVID-19 patients: what is the prognostic value of organ failure biomarkers?** Kateryna Gashynova (Dnipro, Ukraine), Vladyslava Rudakova, Viktorya Rodionova, Yelyzaveta Lysak
PA863	**RELATIONSHIP BETWEEN KREBS VON DEN LUNGEN-6 (KL-6) LEVELS AND THE SEVERITY OF PATIENTS OF A POST-COVID MULTIDISCIPLINARY UNIT** Pablo Mariscal Aguilar (Madrid, Spain), Daniel Laorden Escudero, Ana Laila Qasem Moreno, Teresa Lázaro Miguel-Sin, María Jiménez González, Alberto Moreno Fernández, Francisco Arnalich Fernández, Alberto Borobia Fernández, Jaime Pavón Guede, Ricardo Camperos Moreno, Antonio Buño Soto, Rodolfo Álvarez-Sala Walther, Luis Gómez Carrera, Concepción Prados Sánchez, Elena Villamañán Bueno, Vega Rey Mauleón, Victoria Arnalich Montiel, Sergio Alcolea Batres, Isabel Fernández Navarro, Carlos Carpio Segura
PA864	**Hematological and hepatic alterations as predictors of mortality in patients hospitalized by SARS-COV-2** Laura Cornejo-Cornejo (México City, Mexico), Alejandra Rios-Pereda, Arturo Orea-Tejeda, Dulce Gonzalez-Islas, Jorge Aguilar-Meza, Carlos Marquez-Cordero, Mariana Salvatiera-Escobar, Iris Lopez-Vazquez, Carlos Sanchez-Moreno, Juan Orozco-Gutierrez, Benigno Valderrabano-Salas, Robinson Robles-Hernandez, Rafael Hernandez-Zenteno, Angelia Jimenez-Valentin, Maria Salgado-Fernandez

PA865	**Severe lymphocyte dysfunction and impaired cellular immune response as a consequence of COVID-19** Katarzyna Plewka-Barcik (Warsaw, Poland), Karolina Aleksandrowicz, Klaudia Porebska, Robert Zdanowski, Jacek Z. Kubiak, Krzysztof Klos, Andrzej Chcialowski
PA866	**Neutrophil-to-lymphocyte ratio (NLR) as a predictor of survival in COVID-19-associated pneumonia patients (pts)** Daria Koval (Dnipropetrovsk, Ukraine), Kseniia Bielosludtseva
PA867	**COMPARISON OF CARDIAC BIOMAKERS PREDICTIVE ROLE IN COVID-19 PNEUMONIA** Olha Shchudro (Dnipro, Ukraine), Mariia Krykhtina, Kseniia Bielosludtseva, Lyudmila Konopkina
PA868	**TIMING AND PREDICTORS OF DECANNULATION: COMPARISON BETWEEN COVID-19 AND NO-COVID-19 ARDS** Francesca Cemmi (Peschiera del Garda, Italy), Cinzia Lastoria, Roberta Marra, Federica Fioretti, Abramo Bazza, Manuela Bergonzi, Matteo Vigna, Chiara Mele, Annalisa Carlucci
PA869	**Abnormal FeNO post COVID-19** Bavithra Vijayakumar (thame (Oxfordshire), United Kingdom), James Tonkin, Christopher M Orton, Leeh Faustino, Isaac Mwita, Jadwiga Wedzicha, Pallav L Shah
PA870	**Neutrophil-to-lymphocyte ratio (NLR) as a marker of COVID-19-associated pneumonia progression.** Daria Koval (Dnipropetrovsk, Ukraine), Kseniia Bielosludtseva
PA871	**Is lymphopenia a predictive factor of outcomes in COVID-19 patients?** Leila Douik El Gharbi (Ariana, Tunisia), Tasnim Znegui, Imen Sahnoun, Ines Moussa, Sarra Ben Sassi, Chiraz Ksouri, Asma Allouch, Rafik Guerfallah
PA872	**EXPLORING THE ROLE OF KREBS VON DEN LUNGEN-6 (KL-6) IN SEVERE TO CRITICAL COVID-19: A SINGLE INSTITUTION EXPERIENCE** Vito D'Agnano (S. Vito dei Normanni, Italy), Fabio Perrotta, Filippo Scialò, Francesco Saverio Cerqua, Luigi Aronne, Lidia Atripaldi, Carlo Iadevaia, Grazia Mazzeo, Adriano Costigliola, Andrea Bianco, Cecilia Calabrese
PA873	**Correlation between vitamin D and anosmia in post acute Covid syndrome clinic** Aoife O'Connor (Rathfarnham, Ireland), Carol Buckley, Mark Griffin, Ahmad Basirat, Joshua Olaniyi, Meabh Monaghan, Seamas Donnelly, Patrick Mitchell
PA874	**CAT Score Correlates with Lung Function in Post Covid Pulmonary Disease** Saeed Akbar (Gillingham (Kent), United Kingdom), Yee-Ean Ong, Adrian Draper, James Kent Bramer , Raminder Aul
PA875	**Patient-reported respiratory outcome measures in the recovery of adults hospitalised with COVID-19: A systematic review and meta-analysis** Sophie Middleton (Nottingham, United Kingdom), Christos Chalitsios, Tricia Mckeever, Alex Jenkins, Charlotte Bolton

TP-10 in thematic poster area — Session 140 — 13:00 - 14:00

Thematic poster: Severe asthma: from phenotypes to exacerbations

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

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

Chairs : Stylianos Loukides (Athens, Greece), Carolina Maria Gotera Rivera (Madrid, Spain)

PA876	**Multi-ancestral meta-analysis yields novel genetic loci for asthma exacerbations** Esther Herrera Luis (La Laguna, Spain), Victor E. Ortega, Elizabeth J. Ampleford, Yang Yie Sio, Raquel Granell, Emmely De Roos, Natalie Terzikhan, Ernesto Elorduy Vergara, Natalia Hernandez-Pacheco, Javier Perez-Garcia, Elena Martin-Gonzalez, Fabian Lorenzo-Diaz, Simone Hashimoto, Paul Brinkman, Andrea L. Jorgensen, Qi Yan, Erick Forno, Susanne J. Vijverberg, Ryan Lethem, Antonio Espuela-Ortiz, Mario Gorenjak, Celeste Eng, Ruperto González-Pérez, José M Hernández-Pérez, Paloma Poza-Guedes, Olaia Sardón, Paula Corcuera, Greg A Hawkins, Annalisa Marsico, Thomas Bahmer, Klaus F. Rabe, Gesine Hansen, Matthias Volkmar Kopp, Raimon Rios, Maria Jesus Cruz, Francisco-Javier González-Barcala, José María Olaguibel, Vicente Plaza, Santiago Quirce, Glorisa Canino, Michelle Cloutier, Victoria Del Pozo, Jose R Rodriguez-Santana, Javier Korta-Murua, Jesús Villar, Uroš Potočnik, Camila Figueiredo, Michael Kabesch, Somnath Mukhopadhyay, Munir Pirmohamed, Daniel B. Hawcutt, Erik Melén, Colin N Palmer, Steve Turner, Anke H Maitland-Van Der Zee, Erika Von Mutius, Juan C. Celedón, Guy Brusselle, Fook Tim Chew, Eugene Bleecker, Deborah Meyers, Esteban G Burchard, Maria Pino-Yanes
PA877	**Respiratory system modeling of impedance on the effect of simulated obstructive apnea in participants with and without asthma** Xiaoshu Cao (North York, Canada), Nasim Montazeri Ghahjaverestan, Behrad Taghibeyglou, Jason H. T. Bates, Azadeh Yadollahi

PA878	**Respiratory muscle strength investigation in severe asthma patients with lung hyperinflation** Galyna Gumeniuk (Kyiv, Ukraine), Yurii Feshchenko, Svitlana Opimakh, Maryna Polianska, Viktoria Ignatieva, Svitlana Moskalenko, Inna Zvol
PA879	**Perimenstrual worsening of asthma; prevalence and clinical outcomes in severe asthma population** Adel H Mansur (, United Kingdom), Ali Bahron, Christopher Reilly, Lisa White, Julie Sullivan
PA880	**Sputum eosinophilia is a useful biomarker for treatment failure of biologics for severe eosinophilic asthma** Torben Smidt-Hansen (Stavtrup, Denmark), Helle Haagensen Andersen, Lene Moelgaard Pedersen, Anne Sofie Bjerrum, Tina Skjold, Runa Poulsen, Søren Bagge Petersen, Hans Jürgen Hoffmann, Johannes Schmid
PA881	**Optimizing adrenal insufficiency screening in severe asthma patients on biologic therapy** Irene Berrar Torre (london, United Kingdom), Kena Simpson, Veronica Greener, Breda Cushen, Pujan Patel
PA882	**Discrepancies between anti-Intereukin5 (anti-IL5) starters from SHARP central registry and eligible patients in clinical trials** Stefania Principe (Palermo (PA), Italy), Levi B. Richards, Simone Hashimoto, Johannes A. Kroes, Job J.M.H. Van Bragt, Susanne J.H. Vijverberg, Jacob K. Sont, Nicola Scichilone, Kristina Bieksiene, Anneke Ten Brinke, Zsuzsanna Csoma, Barbro Dahlén, Bilun Gemicioglu, Ineta Grisle, Piotr Kuna, Zorica Lazic , Florin Mihaltan, Sanja Popović-Grle, Sabina Skgrat, Anke-Hilse Maitland Van Der Zee
PA883	**Identification of plasma fibrinogen-high asthma phenotype** Letizia Valsecchi (Torino, Italy), Andrea Sprio, Andrea Baroso, Martina Sciolla, Vitina Carriero, Francesca Bertolini, Antonino Di Stefano, Fabio Luigi Massimo Ricciardolo
PA884	**REAL LIFE FOLLOW-UP OF PATIENTS WITH SEVERE EOSINOPHILIC ASTHMA TREATED WITH RESLIZUMAB.** Cristhian Correa (Madrid, Spain), Katiuska Herminia Liendo Martinez, Francisco Javier De Castro Martínez, Ji Zichen, Luis Puente Maestu, Julia Garcia De Pedro
PA885	**Hand grip strength as a screening tool for frailty in elderly patients with moderate to severe asthma** Ricardo Figueiredo (Feira De Santana (BA), Brazil), Gabriela P. Pinheiro, Vanessa Arata, Maisa F. M. Leal, Cinthia V. N. Santana, Jean Carlos Z. Contreras, José De Bessa Junior, Alvaro A. Cruz
PA886	**Body Mass Composition in asthmatics according to inflammatory phenotypes (SAMBA trial)>** Stephanie Ziant (LIEGE, Belgium), Sebastien Louis, Sophie Graff, Catherine Moermans, Monique Henket, Rita Deroisy, Renaud Louis, Jean-Francois Kaux, Thierry Bury, Florence Schleich
PA887	**Effects of biologics on systemic and airway inflammation in severe asthma: a real-life study** Francesco Ardesi (Milan, Italy), Dina Visca, Patrizia Pignatti, Martina Zappa, Rosella Centis, Federico Mattia Oliva, Flavia Rusconi, Ombretta Mentasti, Giovanni Battista Migliori, Antonio Spanevello
PA888	**Cross-sectional validation of the German version of the Asthma Impairment and Risk Questionnaire (AIRQ)** Frank Kanniess (Reinfeld (Holstein), Germany), Marek Lommatzsch, Thomas Schultz, Hartmut Timmermann, Olaf Schmidt, Stefan Heindl, Kerstin Defosse, Hans-Joerg Baumann, Charles Lange, Dana Dirlam, Cesar Ignacio Fernandez-Lazaro, Anja Rudolph, Stephanie Korn
PA889	**Predicting asthma attack risk in real life severe asthma patients on mepolizumab** Gaël Tavernier (Manchester (Greater Manchester), United Kingdom), Liam Whipday, Taqdees Qureshi, Stephen Fowler
PA890	**Characterising the impact of sex on severe asthma (SA) in the UK Severe Asthma Registry (UKSAR)** Lola Loewenthal (London, United Kingdom), John Busby, Ronald Mcdowell, Thomas Brown, Hassan Burhan, Rekha Chaudhuri, Paddy Dennison, James Dodd, Simon Doe, Shoaib Faruqi, Robin Gore, Elfatih Idris, David Jackson, Mitesh Patel, Thomas Pantin, Ian Pavord, Paul Pfeffer, David Price, Salman Siddiqui, Liam Heaney, Andrew Menzies-Gow
PA891	**Risk factors for asthma exacerbations during pregnancy: a systematic review and meta-analysis** Annelies Robijn (New Lambton Heights (NSW), Australia), Marleen Bokern, Megan Jensen, Daniel Barker, Katherine Baines, Vanessa Murphy
PA892	**Severe asthma outcomes in patients self-administering biological therapy at home** Leanne Jo Holmes (manchester, United Kingdom), Lynn Elsey, Amelia Simpson, Gael Tavernier, Stephen J Fowler
PA893	**T2 and T3 cytokine expression in asthma with chronic rhinosinusitis** Vitina Carriero (Orbassano, Italy), Elisa Arrigo, Francesca Bertolini, Fabio Luigi Massimo Ricciardolo
PA894	**Effects of menopause and fat mass in asthmatic inflammation in female asthmatics** Andriana Papaioannou (Vrilissia (Athens), Greece), Anastasia Papaporfyriou, Maria Kallieri, Eftychia Papachatzopoulou, Paschalina Giouleka, Georgia Papadaki, Aris Spathis, Petros Bakakos, Spyros Papiris, Stelios Loukides

PA895 **Clinical, functional, and biological characterization of neutrophilic asthma phenotype and endotypes.**
Elisa Arrigo (Orbassano, Italy), Camilla Demasi, Vitina Carriero, Francesca Bertolini, Gino Villetti, Daniela Miglietta, Fabio Luigi Massimo Ricciardolo

TP-11 in thematic poster area — Session 141 — 13:00 - 14:00

Thematic poster: Chronic cough: management and impact on quality of life

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

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

Chairs : Alyn Hugh Morice (Cottingham, United Kingdom), Jaclyn Smith (Manchester (Greater Manchester), United Kingdom)

PA896 **Language and geographical location influences the incidence of chronic cough in the Canadian Longitudinal Study on Aging (CLSA)**
Imran Satia (Hamilton, Canada), Alexandra Mayhew, Nazmul Sohel, Om Kurmi, Kieran Killian, Megan O'Connell, Paul O'Byrne, Parminder Raina

PA897 **Productive vs non-productive chronic cough associated with worse lung health and higher morbidity and mortality in the general population**
Eskild Morten Landt (Koege, Denmark), Yunus Çolak, Børge Nordestgaard, Peter Lange, Morten Dahl

PA898 **Impact of mental health and personality traits on the incidence of chronic cough in the Canadian Longitudinal Study on Aging (CLSA)**
Imran Satia (Hamilton, Canada), Alexandra Mayhew, Sohel Nazmul, Om Kurmi, Kieran Killian, Paul O'Byrne, Parminder Raina

PA899 **Canadian health care professionals' experiences diagnosing chronic cough – results from a healthcare survey**
Elena Kum (Hamilton, Canada), Nermin Diab, Mustafaa Wahab, Theodore Abraham, Sevag Sahakian, Paul Hernandez, Harold Kim, Maxime Cormier, Peter Lin, Anne Ellis, Louis-Philippe Boulet, Alan Kaplan, Stephen Field, Imran Satia

PA900 **Canadian health care professionals' familiarity with chronic cough, its impact on patients, and guideline recommendations of the diagnosis and treatment of chronic cough**
Mustafaa Wahab (Hamilton, Canada), Elena Kum, Nermin Diab, Theodore Abraham, Sevag Sahakian, Paul Hernandez, Harold Kim, Maxime Cormier, Peter Lin, Anne Ellis, Louis-Philippe Boulet, Alan Kaplan, Stephen Field, Imran Satia

PA901 **Hypotonic Saline Effectively discriminates Refractory/Unexplained Chronic Cough from Healthy Volunteers**
James Wingfield Digby (Manchester (Greater Manchester), United Kingdom), Jenny King, Rachel Dockry, Shilpi Sen, Shannon Galgani, Paul Marsden, Jacky Smith

PA902 **Validation of cough monitoring by Albus Home RD, a contactless bedside device for nocturnal monitoring**
William Do (Oxford, United Kingdom), Richard Russell, Christopher Wheeler, Hamza Javed, Cihan Dogan, George Cunningham, Vikaran Khanna, Maarten De Vos, Imran Satia, Mona Bafadhel, Ian Pavord

PA903 **Exhaled biomarkers in adults with non-productive cough**
Össur Ingi Emilsson (Uppsala, Sweden), Spela Kokelj, Jörgen Östling, Anna-Carin Olin

PA904 **An algorithm to identify patients with refractory chronic cough from administrative claims data: a feasibility study**
Negin Hajizadeh (Madrid, Spain), Sascha van Boemmel-Wegmann, Philippe Vieira Pires, Ron Herrera, Pareen Vora

PA905 **Consensus goals and standards of specialist cough clinics: the NEuroCOUGH international Delphi study**
Woo-Jung Song (Seoul, Republic of Korea), Charlotte Van De Kerkhove, Laurent Guilleminault, Jan Willem Van Den Berg, Giovanni Fontana, Surinder Birring, Eva Millqvist, Alyn Morice, Lieven Dupont, Lorcan Mcgarvey

PA906 **Characteristics of patients with potential refractory chronic cough identified using an algorithm designed for administrative claims databases: a descriptive study**
Negin Hajizadeh (Madrid, Spain), Sascha van Boemmel-Wegmann, Philippe Vieira Pires, Ron Herrera, Pareen Vora

PA907 **Does hiatal hernia impact GER-related chronic cough?**
Olga Truba (Warszawa, Poland), Joanna Żuchowska, Marta Dąbrowska, Elżbieta Magdalena Grabczak, Katarzyna Białek-Gosk, Aleksandra Rybka-Frączek, Rafał Krenke

PA908 **Effects of environmental exposure to iron powder in an elastase mice model**
Fernanda Degobbi Tenorio Quirino dos Santos Lopes (São Paulo (SP), Brazil), Thiago Tafarel Galli, Elaine C. Campos, Tabata M. Santos, Silvia Fukuzaki, Leandro N. Camargo, Suellen K. M. Bezerra, Sara S. S. Hamaguchi, Fábio J. A. Da Silva, Beatriz M. Saraiva-Romanholo, Clarice R. Olivo, Carla M. Prado, Edna A. Leick, Christine L. M. Bourotte, Isabela J. M. Benseñor, Paulo A. Lotufo, Renato F. Righetti, Iolanda F. L. C. Tibério

PA909	**Posturography using video game of individuals with COPD compared to healthy elderly** Rodrigo Luiz (Mogi das Cruzes, Brazil), Carolina Castellari, Daniela Ike, Adriana Sousa, Evelim Gomes, Dirceu Costa
PA910	**Late Breaking Abstract - Use of novel tidal breathing monitoring device to detect methacholine challenge test responders** Inbal Shafran (Haifa, Israel), Andreas Zachariades, Nadav Bachar, Noy Danino, Gregory Shuster, Wieland Voigt
PA911	**Late Breaking Abstract - Novel QCT textures are associated with sRAGE and IL-6 in SPIROMICS** Wassim Labaki (Ann Arbor, United States), Hira Anees Awan, Muhammad F. A. Chaudhary, Junfeng Guo, Eric A. Hoffman, Alejandro P. Comellas, Igor Z. Barjaktarevic, Surya P. Bhatt, Eugene R. Bleecker, Sandeep Bodduluri, Russell P. Bowler, Christopher B. Cooper, Jeffery L. Curtis, Meilan K. Han, Jerry A. Krishnan, Fernando J. Martinez, Wanda O'Neal, Robert Paine Iii, Joseph M. Reinhardt
PA912	**Late Breaking Abstract - Frequent productive cough is consistently associated with higher risk of COPD exacerbations during follow-up in NOVELTY** Hana Müllerová (Cambridge, United Kingdom), Rod Hughes, Stefan Franzén, Laura Belton, Clement Erhard, Christina Keen, Christer Janson, Helen K Reddel, Benjamin Fenby
PA913	**Late Breaking Abstract - Development of a daily predictive model for the exacerbation of chronic obstructive pulmonary disease** Yong Suk Jo (Seoul, Republic of Korea), Kyung Hoon Min, Seoung Ju Park, Hyoung Kyu Yoon, Won-Yeon Lee, Kwang Ha Yoo, Ki Suck Jung, Chin Kook Rhee
PA914	**Late Breaking Abstract - Oral corticosteroid (OCS) risk predictor for Type II Diabetes in asthma** Brooklyn Stanley (One Shenton, Singapore), Andrew Menzies-Gow, Arnaud Bourdin, Giorgio Walter Canonica, Mark Gurnell, Helen Reddel, Liam G. Heaney, Victoria Carter, Jatin Chapaneri, Trung N. Tran, Ekaterina Maslova, David Price
PA915	**Late Breaking Abstract - Health status, activity score and dyspnoea grade in chronic bronchitis, COPD and healthy controls in China** Paul Jones (London, United Kingdom), Rongchang Chen, Jingping Zheng, Yongchang Sun, Fuqiang Wen, Qianli Ma, Xufei Li, Liang Zhang, Weilun Ke, Shang Cao, Shuling Hu, Jie Song, Chris Compton, Nanshan Zhong

TP-12 in thematic poster area — Session 142 — 13:00 - 14:00

Thematic poster: New insights into asthma immunology: from mouse to man

Disease(s) : Airway diseases

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

Chairs : Ian M. Adcock (London, United Kingdom), Tania Maes (Ghent, Belgium)

PA916	**Screening and verification of differentially expressed genes for airway remodeling in asthma** Ling Qin (Changsha (Hunan), China), Chi Liu, Mengping Wu, Ye Yao
PA917	**Control of T cell-dependent steroid-resistant asthma model by several kinase inhibitors** Akio Mori (Sagamihara (Kanagawa prefecture), Japan), Satoshi Kouyama, Iyako Yamaguchi, Akemi Ohtomo-Abe, Keisuke Iwamoto, Koichi Yano, Norihito Fujita, Maki Iwata, Kisako Nagayama, Kai Ryu, Yuto Nakamura, Yuto Hamada, Kentaro Watai, Yosuke Kamide, Kiyoshi Sekiya, Yuma Fukutomi, Takayuki Ohtomo, Osamu Kaminuma
PA918	**Female sex hormones affect asthma severity by altering cellular metabolism in the airways** Olivia Carroll (Newcastle, Australia), Alexandra Brown, Jemma Mayall, Nazanin Zounemat-Kermani, Henry Gomez, Richard Kim, Chantal Donovan, Evan Williams, Bronwyn Berthon, James Pinkerton, Katie Wynne, Hayley Scott, Yi-Ke Guo, Philip Hansbro, Paul Foster, Sven-Erik Dahlen, Ian Adcock, Lisa Wood, Jay Horvat
PA919	**Monensin inhibits mast cell-induced airway contractions in human and guinea pig asthma models** Jielu Liu (solna, Sweden), Mu Nie, Caijuan Dong, Jesper Säfholm, Gunnar Pejler, Gunnar Nilsson, Mikael Adner
PA920	**Modulation of sensitization and inflammation through S. aureus nasal carriage in allergic asthma patients and a mouse model** Sabine Stegemann-Koniszewski (Magdeburg, Germany), Sophia Görges, Azin Asari, Eva Lücke, Silva Holtfreter, Siouxsie Wiles, Jens Schreiber
PA921	**The polybacterial mucosal vaccine MV130 impairs airway inflammation in a HDM-induced eosinophilic asthma model** Ana Carmen Sevilla Ortega (Madrid, Spain), Alba Angelina Querencias, Beatriz Marcos Ramiro, Mario Pérez Diego, Laura Conejero Hall, Jose Luis Subiza, Oscar Palomares Gracia

PA922	**Relationship between interleukin-13 and transferrin receptor-1 responses in the pathogenesis of asthma** Amber Pillar (New Lambton Heights, Australia), Alexandra Brown, Jemma Mayall, Jessica Weaver, Ama-Tawiah Essilfie, Gabriela Hoefel, Md Khadem Ali, Richard Kim, Chantal Donovan, Henry Gomez, Kanth Swaroop Vanka, Hock Tay, Nazanin Kermani, Yi-Ke Guo, Sharon Mumby, Ian Adcock, Greg Anderson, David Frazer, Daniel Johnstone, Elizabeth Milward, Philip Hansbro, Peter Wark, David Reid, Paul Foster, Jay Horvat
PA923	**Transcriptomic analysis of cellular senescence signatures in severe asthma** Woo-Jung Song (Seoul, Republic of Korea), Nazanin Zounemat-Kermani, Yi-Ke Guo, Ian Adcock, Kian Fan Chung
PA924	**Blood eosinophils activation type, besides count, associate with exacerbations in asthma** Simone Scarlata (Roma (RM), Italy), Laura Vitiello, Carmen Mazzuca, Panaiotis Finamore, Sonia Zotti, Silvia Travaglini, Raffaele Antonelli Incalzi
PA925	**Dupilumab treatment increases transitional B-cells (regulatory B-cells) in severe asthma** Marek Lommatzsch (Rostock, Germany), Marieke Dost, Neeraja Jaishankar, Martin Weise, Paul Stoll, Johann Christian Virchow, Kai Bratke
PA926	**Alarmin release in the bronchial epithelium of allergic asthma patients vary in response to different aeroallergens** Sangeetha Ramu (Lund, Sweden), Christian Uggerhoej Woehlk, Juan-Jose Nieto-Fontarigo, Samuel Cerpes, Sara Vazquez Mera, Mandy Menzel, Hamid Akbharshahi, Celeste Porsbjerg, Lena Uller
PA927	**Endotyping severe asthma with qPCR for five mast cell transcripts in induced sputum correlates with microscopy** Bo Tønnesen (Aarhus C, Denmark), Johannes M Schmid, Michael Fricker, Hans Jürgen Heinrich Hoffmann
PA928	**The association between complement C3 and small airway impairment in asthma** Spela Kokelj (Göteborg, Sweden), Jörgen Östling, Karin Fromell, Kristina Nilsson Ekdahl, Bo Nilsson, Henric K. Olsson, Anna-Carin Olin
PA929	**Influence of polymorphisms in vitamin D receptor gene on severity and exacerbations of asthma** Sekiko Uehara (Shizuoka, Japan), Keita Hirai, Toshihiro Shirai, Hinako Otaki, Taisuke Akamatsu, Kunihiko Itoh
PA930	**Airway inflammation before and after bronchial thermoplasty** Annika W.M. Goorsenberg (Amsterdam, Netherlands), Pieta C. Wijsman, Abilash Ravi, Julia N.S. D'Hooghe, Barbara S. Dierdorp, Tamara Dekker, Charlotte C.C.L.M. Van Schaik, Nick H.T Ten Hacken, Pallav L. Shah, Els J.M Weersink, Elisabeth H Bel, Jouke T. Annema, Rene Lutter, Peter I. Bonta
PA931	**Impaired cytokine production of circulating immune cells in severe asthma in response to Influenza virus** Kaschin Jamal Jameel (Bochum, Germany), Sarah Yanik, Cansel Kamaci, Daniel Weidinger, Eike Buelthoff, Simon Rohde, Faisal Yusuf, Juliane Kronsbein, Matthias Tenbusch, Juergen Knobloch
PA932	**Effect of Ozone on Allergic Airway Inflammation** Mehrdad Arjomandi (San Francisco, United States), Hofer Wong, Rachel Tenney, Nina Holland, John Balmes
PA933	**Alarmin Expression in the Upper and Lower Airways of Asthmatics with Allergic Rhinitis** Christiane Whetstone (Hamilton, Canada), Maral Ranjbar , Nadia Alsaji, Dhuha Al-Sajee, Lesley Wiltshire, Jennifer Wattie , Paul O'Byrne, Ruth Cusack, Roma Sehmi, Gail Gauvreau
PA934	**Increased IgA+ memory B cells are associated with small airway dysfunction in asthma patients** Ruth Grychtol (Hannover, Germany), Anika Habener, Svenja Gaedcke, David Deluca, Anna Maria Dittrich, Christine Happle, Mustafa Abdo, Henrik Watz, Frauke Pedersen, Inke Regina König, Dominik Thiele, Mathias Volkmar Kopp, Erika Von Mutius, Thomas Bahmer, Klaus F. Rabe, Almut Meyer-Bahlburg, Gesine Hansen
PA935	**Comparison of upper and lower airway expression of SARS-COV-2 receptors in mild allergic asthmatics** Maral Ranjbar (Hamilton, Canada), Christiane Whetstone, Ruth Cusack, Dhuha Al-Sajee, Nadia Alsaji, Paul O'Byrne, Roma Sehmi, Gail Gauvreau

TP-13 in thematic poster area — Session 143 — 13:00 - 14:00

Thematic poster: Diagnosis, risk factors and management of asthma

Disease(s) : Airway diseases

Method(s) : Epidemiology Public health Pulmonary function testing

Chairs : Shyam Krishnan (Kolkata (West Bengal), India), elisa lopez varela (Barcelona, Spain)

PA936	**Treatment situation of patients with uncontrolled GINA 4 or 5 asthma in Germany** Dirk Skowasch (Bonn, Germany), Hartmut Timmermann, Katrin Milger, Johann Christian Virchow, Olaf Schmidt, Karl Christian Bergmann, Dirk Koschel, Claus Neurohr, Florian Scholz, Robert Lindner, Sebastian Heck

PA937	**Severity of adult onset asthma – a matter of blood neutrophils and severe obesity?** Sofia Winsa Lindmark (Luleå, Sweden), Caroline Stridsman, Axel Sahlin, Linnea Hedman, Nikolai Stenfors, Tomi Myrberg, Anne Lindberg, Eva Rönmark, Helena Backman
PA938	**Adverse events and asthma among adults in the UK Biobank** Yueh-Ying Han (Pittsburgh, United States), Erick Forno, Wei Chen, Juan Celedón
PA939	**Accuracy of asthma diagnosis and factors associated with misdiagnosis in primary care setting** Isabella Annesi Maesano (Montpellier, France), Marzia Simoni, Claudio-Maria Sanguinetti, Stefano Nardini, Fernando De Benedetto
PA940	**Time trends of asthma in children – true increase or increased diagnostics?** Linnea Hedman (Luleå, Sweden), Anna Winberg, Anders Bjerg, Helena Backman, Martin Andersson, Eva Rönmark
PA941	**Influence of asthma on ARIA classification of allergic rhinitis in the French population-based cohort Constances** Marine Savouré (Paris, France), Jean Bousquet, Bénédicte Leynaert, Marcel Goldberg, Marie Zins, Bénédicte Jacquemin, Rachel Nadif
PA942	**The prevalence of severe asthma, use of oral corticosteroid and management strategies in the Nordic countries: results from the pan-Nordic NORDSTAR cohort** Susanne Hansen (Copenhagen, Denmark), Anna Von Bülow, Patrik Sandin, Olivia Ernstsson, Hanna Fues Wahl, Kirk Geale, Christer Janson, Lauri Lehtimäki, Hannu Kankaanranta, Charlotte Ulrik, Bernt Bøgvald Aarli, Sheila Tuyet Tang, Maija Wolf, Tom Larsen, Vibeke Backer, Helena Backman, Jussi Karjalainen, Alan Altraja, Arja Viinanen, Valentyna Yasinska, Tina Skjold, Johannes Schmid, Pauli Kauppi, Dóra Lúðvíksdóttir, Sverre Lehmann, Asger Sverrild, Maritta Kilpeläinen, Apostolos Boissos, Celeste Porsbjerg
PA943	**Birth order, sibship size and wheezing phenotypes: a systematic review and meta-analysis** Daniil Lisik (Gothenburg, Sweden), Athina Ioannidou, Gregorio Paolo Milani, Sungkutu Nyassi, Saliha Selin Özuygur Ermis, Giulia Carla Immacolata Spolidoro, Hannu Kankaanranta, Emma Goksör, Göran Wennergren, Bright Ibeabughichi Nwaru
PA944	**Persistent asthma-like symptoms in COVID-19 patients 3 and 12 months after severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection** Shokouh Makvandi-Nejad (ÅS, Norway), Hooman K Moghadam, Francisco Gomez Real, Randi Jacobsen Bertelsen, Juan Pablo López-Cervantes, Nina Langeland, Bjørn Blomberg, Rebecca Jane Cox, Cecilie Svanes
PA945	**The prevalence and risk factors of asthma, allergic rhinitis, and chronic obstructive pulmonary disease in Azerbaijan** Çagla Khurshud Huseynova (ANKARA, Turkey), Gunel Sadiqova, Dilara Bakhshaliyeva, Khurshud Hajiyeva, Elvin Mammadov, Lamiya Abbasli, Beyim Mahmudova, Kamran Mammadov, Niftali Zerbeliyev, Abbas Bagırov, Kamala Baylarova, Ahmet Ugur Demir, Ali Fuat Kalyoncu
PA946	**Clinical and paraclinical profile in asthmatic patients with COVID-19 at Hassan II hospital in AGADIR** Oussama HALLOUMI (AGADIR, Morocco), Houda Moubachir, Hind Serhane
PA947	**Adherence to Mediterranean diet and asthma control: results from a cross-sectional study in Greece.** Maria Sfika (Athens, Greece), Myrto Blizou, Spiros Papiris, Maria-Iosifina Kasdagli, Petros Bakakos, Stelios Loukides, Pagona Lagiou, Androniki Naska
PA948	**The economic cost of intermittent and persistent asthma in Italy.** Simone Accordini (Verona (VR), Italy), Luigi Martinelli, Lucia Calciano, Federica Albicini, Leonardo Antonicelli, Roberto Bono, Alessandro Fois, Erica Gini, Amelia Grosso, Nicola Murgia, Pietro Pirina, Giulia Squillacioti, Elisabetta Zinellu, Angelo Corsico
PA949	**Impact of lockdowns on paediatric asthma hospital presentations over three waves of COVID-19 pandemic** Nusrat Homaira (Sydney (NSW), Australia), Nan Hu, Louisa Owens, Mei Chan, Melinda Gray, Philip Britton, Hiren Selvaduri, Raghu Lingam, Adam Jaffe
PA950	**Different prevalence trends in allergic sensitization, asthma and rhinitis among children from 1996 to 2017 in Northern Sweden** Eva Rönmark (Luleå, Sweden), Joakim Bunne, Anders Bjerg, Linnea Hedman
PA951	**Diet quality, food intake and incident adult-onset asthma** Edith Visser (Leeuwarden, Netherlands), Kim De Jong, Janneke Pepels, Huib Kerstjens, Anneke Ten Brinke, Tim Van Zutphen
PA952	**A replication of the adult-onset (AOA) and late-onset asthma (LOA) genome-wide association studies (GWAS) in the Finnish Environment and Asthma Study (FEAS) of AOA** Taina Lajunen (Oulu, Finland), Jouni Jaakkola, Maritta Jaakkola

PA953 **Risk factors for allergic and non-allergic asthma in adults**
Petri Tapani Räisänen (Luleå, Sweden), Helena Backman, Linnea Hedman, Ann Lindberg, Linda Ekerljung, Bright Nwaru, Eva Rönmark

PA955 **Association between Diet Quality and Frequency based on Dietary Fats and Glycaemic Index Scores with the presentation of Asthma in Young Chinese Adults in Singapore and Malaysia.**
Jun Jie Lim (Singapore, Singapore), Praneeth Malipeddi, Ying Yi Eliza Lim, Jun Yan Ng, Wei Yi Teo, Ambrose Qi Yi Wong, Yi Ru Wong, Keng Foo Teh, Smyrna Moti Rawanan Shah, Yee-How Say, Kavita Reginald, Sri Anusha Matta, Yang Yie Sio, Fook Tim Chew

TP-14 in thematic poster area — Session 144 — 13:00 - 14:00

Thematic poster: Tobacco and nicotine: where are we after the pandemic

Disease(s) : Pulmonary vascular diseases | Airway diseases | Thoracic oncology

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

Chairs : Aslı Görek Dilektaşlı (Bursa, Turkey), Chair to be confirmed

PA956 **Paternal pre-pubertal tobacco smoking and offspring DNA methylation**
Negusse Kitaba (Southampton, United Kingdom), Toril Knudsen, Ane Johannessen, Faisal Rezwan, Andrei Malinovschi, Anna Oudin, Bryndis Benediktsdottir, David Martino, Francisco Callejas González, Leopoldo Gómez, Mathias Holm, Oskar Jõgi, Shyamali Shyamali Dharmage, Svein Skulstad, Francisco Gómez-Real, Vivi Schlünssen, Cecilie Svanes, John Holloway

PA957 **Cannabis smokers among lung cancer patients: data from real-life French study**
Olivier Molinier (Le mans, France), Dorine Templement, Sébastien Couraud, Stéphanie Dehette, Pierre-Alexandre Hauss, Marjorie Picaud, Anne-Sophie Bravard, Hervé Le Floch, Magalie Paysse, Patrick Dumont, Laurent Mosser, Christian Delafosse, Cécile Maincent, Joëlle Courdeau-Labourie, Jérôme Virally, Anne-Sophie Blanchet-Legens, Florence Lamotte, Alexa Mairovitz, Vincent Tack, Alexia Letierce, Didier Debieuvre

PA958 **Tobacco smoking and severity of COVID-19: Experience from ICU department in a referral hospital during the third pandemic wave**
Stamatoula Tsikrika (Athens, Greece), Sylvia Raftopoulou, Vasiliki Nanou, Sotiris Kakavas, Aikaterini Tzagkaraki, Sofia Pouriki, Panagiotis Nikolopoulos, Marina Asmanidou, Theoni Agapitou, Ioannis Nikolopoulos

PA959 **COVID-19 and smoking: Worst complications and outcome**
Gholamreza Heydari (Tehran, Islamic Republic of Iran)

PA960 **Smoking habits during the COVID pandemic: data from Greek healthcare professionals' population.**
Athanasia Pataka (Thessaloniki, Greece), Asterios Tzinas, Seraphim Kotoulas, Evdokia Sourla, Evangelos Chatzopoulos, Ioanna Grigoriou, Katalin Fekete, Paraskevi Argyropoulou

PA961 **What is the main driver of tobacco survey participation in medical schools? A national cross-sectional study in Portugal**
Sofia Belo Ravara (Covilhã, Portugal), Inês Sofia Pontes Clemente , Hilson Cunha Filho, Pedro Aguiar , Jorge Bonito

PA962 **Trend of smuggled cigarette consumption in Tehran in the last two decades**
Gholamreza Heydari (Tehran, Islamic Republic of Iran), Luk Joossens

PA963 **Medical trainees' knowledge and attitudes towards electronic cigarettes and Hookah**
Luiza Helena Degani-Costa (São Paulo, Brazil), Fernando P Bruno, Fernanda Gushken, Claudia Szlejf, João Roberto Resende Fernandes, Ana B P Tokeshi, Yasmin F Tehrani, Daniel Kaufman, Kandipudi K Lakshmi Prasad, Limalemla Jamir, Pentapati S S Kumar, Morag G Ryan, Matthew G K Benesch, Hardeep S Lotay, Jonathan P Fuld, Thiago M Fidalgo

PA964 **Long-term outcomes of a tertiary care university affiliated hospital's smoking cessation outpatient clinic: Experience from the Eastern Black Sea Region of Turkey**
Dilek Karadoğan (Rize, Turkey), Semih Altunsoy, Tahsin Gökhan Telatar, Ünal Şahin

PA965 **Electronic opt-out smoking cessation proforma results in high levels of engagement among emergency surgical admissions>**
Fred Fyles (Liverpool, United Kingdom), Steven Coulson, Kate Maitland, Patricia Rodrigues, Gareth Jones

PA966 **Curcumventing the Menthol Ban: Internet sales of menthol balls**
Elif Dagli (Istanbul, Turkey), Ummuhan Pece Sonmez, Murat Guner, Osman Elbek, Pinar Ay, Fusun Yildiz, Tanzer Gezer, Murat Ceyhan

PA967 **Effect of gender and age on the perception of cigarettes flavour intensity**
Efthimios Zervas (Patra, Greece), Niki Matsouki, Emmanuel Konstandinidis, Chara Tsipa

PA968	**New Product at Point of Sales : Menthol ball** Elif Dagli (Istanbul, Turkey), Ummuhan Pece, Murat Guner, Fusun Yildiz, Osman Elbek, Pinar Ay, Tanzer Gezer, Murat Ceyhan
PA969	**The effects of the pandemic on smoking behaviors of smokers in a border region where easy access to low price tobacco products available** Dilek Karadoğan (Rize, Turkey), Tahsin Gökhan Telatar
PA970	**E-cigarettes in Ireland – prevalence, motivations, and relationship with tobacco** Luke J. Clancy (Dublin 8, Ireland), Joan Hanafin, Salome Sunday
PA971	**Physicians self-reported barriers on smoking cessation brief intervention: a cross-sectional study in Portugal** Sofia Belo Ravara (Covilhã, Portugal), Susana Amorim, Hilson Cunha-Filho, Pedro Aguiar
PA972	**Point of sales:Playground of the tobacco industry** Elif Dagli (Istanbul, Turkey), Ummuhan Pece Sonmez, Murat Guner, Osman Elbek, Fusun Yildiz, Pinar Ay, Tanzer Gezer, Murat Ceyhan
PA973	**Late Breaking Abstract - An estimate of the global COPD prevalence in 2050: Disparities by income and gender** Elroy Boers (Calgary, Canada), Meredith Barrett, Vy Vuong, Adam Benjafield, Jason Su, Leanne Kaye, Daniela Tellez, Carlos Nunez, Atul Malhotra
PA974	**Late Breaking Abstract - E-cigarette use and lung function: preliminary results from the VapeScan Study** Elizabeth Oelsner (New York, United States), Enoch Jiang, Nicole Vieira Pires, Diane Hawkins, Dona Sangapalaarachchi, Vesna Ilievski, Nancy Loiacono, Ana Navas Acien
PA975	**Late Breaking Abstract - Quantitative CT emphysema subtypes and pulmonary blood volume on dual-energy CT: The MESA Lung Study** Emilia Hermann (NEW YORK, United States), Amin Motahari, Eric Hoffman, Norrina Allen, Elsa Angelini, Alain Bertoni, David Bluemke, Ali Eskandari, Sarah Gerard, Junfeng Guo, David Kaczka, Andrew Laine, Erin Michos, Prashant Nagpal, Jim Pankow, Sanjiv Shah, Karen Stukovsky, Karol Watson, R. Graham Barr

TP-15 in thematic poster area — Session 145 — 13:00 - 14:00

Thematic poster: Finding the way to a correct asthma diagnosis

Disease(s) : Airway diseases

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

Chairs : Erol Gaillard (Leicester (Leicestershire), United Kingdom), Carmen Cornelia Maria de Jong (Bern, Switzerland)

PA976	**Asthma diagnosis in children by real-time breath analysis** Alexander Möller (Zürich, Switzerland), Srdjan Micic#, Houssni Lamkaddam#, Yvette Baumann, Prince Tiwari, Peter Horvath, Andre Stephan Henry Prevot, Imad El Haddad
PA977	**Pulmonary function characteristics in children with suspected asthma: implications for asthma diagnosis** SOOYEON KIM (Seoul, Republic of Korea), Mireu Park, Yun Young Roh, Hamin Kim, Jae Hwa Jung, Jong Deok Kim, Yong Ju Lee, Min Jung Kim, Yoon Hee Kim, Kyung Won Kim, Myung Hyun Sohn
PA978	**Post-bronchodilator 1-FEV1/FEV3 as a measure of small airway dysfunction in childhood asthma** Yun Young Roh (Seoul, Republic of Korea), Hamin Kim, Jae Hwa Jung, Mireu Park, Jong Deok Kim, Min Jung Kim, Yoon Hee Kim, Myung Hyun Sohn, Kyung Won Kim, Soo Yeon Kim
PA979	**Normal reference values of Fractional Exhaled Nitric Oxide (FENO)in healthy Indian primary school children** Neha Mohan Rao (Birmingham, United Kingdom), Sanjay Bafna, Bhakti Sarangi, Prasad Nagakumar, Satish Rao
PA980	**Ethnic differences in daily FeNO response after systemic steroids in children with severe asthma** Ioannis Makariou (London, United Kingdom), Andrew Bush, Sejal Saglani, Valentina Fainardi, Cara J Bossley, Louise Fleming
PA981	**Forced Oscillation Technique (FOT) in school-aged healthy children** Afnan AlRaimi (Leicester, United Kingdom), Pooja Devani, Caroline Beardsmore, Erol Gaillard
PA982	**Pre- and post-bronchodilator Forced Oscillation Technique in preschool children with acute wheeze in the emergency department.** Malak Alshlowi (Alkhobar, Saudi Arabia), Pooja Devani, Afnan Alraimi, Caroline Beardsmore, Erol Gaillard
PA983	**Forced Oscillation Technique (FOT) and spirometry in school aged children with stable asthma** Afnan AlRaimi (Leicester, United Kingdom), Pooja Devani, Malak Alshlowi, Caroline Beardsmore, Erol Gaillard

PA984 **Sensitivity and specificity of the Forced Oscillation Technique (FOT) in school aged children with stable asthma**
Afnan AlRaimi (Leicester, United Kingdom), Pooja Devani, Malak Alshlowi, Caroline Beardsmore, Erol Gaillard

PA985 **Peak inspiratory flow in children with exercise induced laryngeal obstruction**
Ioannis Makariou (London, United Kingdom), Serena Rhamie, Andrew Bush , Sejal Saglani, Louise Fleming, Samatha Sonnappa

PA986 **Paediatric breath VOC analysis using the ReCIVA breath sampler and batch effects**
Erol Gaillard (Leicester (Leicestershire), United Kingdom), Kirandeep Bhavra, Mike Wilde, Matt Richardson, Rebecca Cordell, Paul Thomas, Bo Zhao, Luke Bryant, Christopher Brightling, Wadah Ibrahim, Dahlia Salman, Salman Siddiqui, Paul Monks

PA987 **The role of cardiopulmonary exercise testing to evaluate exercise induced dyspnoea in asthmatic children**
Elizabeth Scotney (Harpenden, United Kingdom), Ridma Jayarathna, Latika Gupta, Andrew Bush, Sejal Saglani, Louise Fleming, Samatha Sonnappa

PA988 **Urinary eosinophil-derived neurotoxin in wheezing and asthmatic children**
Jimmy Omony (Neuherberg, Germany), Clemens Thölken, Azam Salimi, Kristina Laubhahn, Markus Weckmann, Ruth Grychtol, Dominik Thiele, Matthias Volkmar Kopp, Gesine Hansen, Harald Renz, Erika Von Mutius, Bianca Schaub, Chrysanthi Skevaki

PA989 **Small airways dysanapsis in overweight/obese asthmatic children**
Maria Cristina Gimena Donth Leger (ciudad Autonoma de Buenos Aires, Argentina), (,), Magdalena Vocos, Anahí Kruger, Doris Sofía Primrose, Marcela Roque, Gabriela Andrada, Carlos Tomás Velasco Suarez, Tania Vanessa Florez Gonzalez, Juan Manuel Figueroa Turienzo

PA990 **Serum Eosinophil-Derived Neurotoxin (EDN) is a Promising Biomarker for Recurrent Wheezing and Asthma in Preschool Children**
Niclas Rydell (Uppsala, Sweden), Taiga Kobori, Mizuho Nagao, Robert Movérare, Helena Ekoff, Anders Sjölander, Magnus P Borres, Takao Fujisawa

PA991 **Serum Eosinophil-Derived Neurotoxin is Associated with Symptom Severity During Acute Wheeze in Preschool Children**
Niclas Rydell (Uppsala, Sweden), Taiga Kobori, Mizuho Nagao, Robert Movérare, Anders Sjölander, Helena Ekoff, Magnus P Borres, Takao Fujisawa

PA992 **Handgrip strength in adolescence - sex differences, determinants, and associations with Asthma-related Traits**
Laura Hesselberg (København N, Denmark), Julie Nyholm Kyvsgaard, Jakob Stokholm, Klaus Bønnelykke, Hans Bisgaard, Bo Chawes

PA993 **Feasibility of Airwave Oscillometry in Preschool Children with Acute Wheeze in the Emergency Department**
Malak Alshlowi (Alkhobar, Saudi Arabia), Pooja Devani, Afnan Alraimi, Caroline Beardsmore, Erol Gaillard

PA994 **Influence of age on skin sensitization in atopic children**
Hela Cherif (Tunis, Tunisia), Nouha Guediri, Slim Kalboussi, Mariem Triki, Hend Khouani, Ferdaous Yangui, Med Rida Charfi

PA995 **Late Breaking Abstract - Exhaled air metabolome analysis for childhood asthma fingerprints identification - th e preliminary study**
Andrzej Swinarew (Katowice, Poland), Grzegorz Brożek, Agnieszka Jarosińska, Jan E. Zejda, Jadwiga Gabor, Paweł Raif, Szymon Skoczyński, Jarosław Paluch

TP-16 in thematic poster area — Session 146 — 13:00 - 14:00

Thematic poster: Predictors of lung function and respiratory morbidity in children

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

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

Chairs : Maribel Casas (Barcelona, Spain), Franca Rusconi (Pisa, Italy)

PA996 **Systematic review and meta-analysis of FEV1 in preterm born children**
Sarah Kotecha (Cardiff (South Glamorgan), United Kingdom), James Gibbons, Christopher W Course, Emily E Evans, Shannon J Simpson, W John Watkins, Sailesh Kotecha

PA997 **Lung function and structure in preterm-born adolescents of the surfactant era**
Yasmin Salem (Bern, Switzerland), C. Corin Willers, Anne-Christianne Kentgens, Julian Jakob, Enno Stranzinger, Ben Brabandt, Alan Peters, Laura I. Loebelenz, Grzegorz Bauman, Philipp Latzin, Sophie Yammine

PA998	**Lung function trajectories and pulmonary functions in healthy young smokers** Stoilka Koleva Mandadzhieva (Plovdiv, Bulgaria), Blagoi Marinov, Stefan Kostianev
PA999	**Exposure to air pollution and lung development during childhood: the LUIS Study** Jakob Usemann (Basel, Switzerland), Rebeca Mozun, Claudia Kuehni, Kees De Hoog, Florian Singer, Alexander Möller, Philipp Latzin
PA1000	**Investigating the impact of London's Ultra Low Emission Zone (ULEZ) on children's respiratory health: Lung function of participants in the CHILL Study** Luke Sartori (London, United Kingdom), Harpal S. Kalsi, James Scales, Ivelina Tsocheva, Rosamund Dove, Jasmine Chavda, Grainne Colligan, Helen E. Wood, Louise Cross, Jessica Moon, Amy Hall, Chris Newby, Ian S. Mudway, Gurch Randhawa, Chris J. Griffiths
PA1001	**Impact of biomass fuel smoke on respiratory health of children under 15 years old in Madagascar** Nolwenn Jestin-Guyon (Bordeaux, France), El Hassane Ouaalaya, Michel Tiaray Harison, Kiady Ravahatra, Rondro Nirina Raharimanana, Jocelyn Robert Rakotomizao, Joelson Lovaniaina Rakotoson, Njaka Andriamahenina, Ange Andrianarisoa, Andrianaivo Ralison, Denis Charpin, Brigitte Rahoelina, Jean De Dieu Marie Rakotomanga, Pierre L'Her, Jean-Marie Tschopp, Raoelina Andriambololona, Chantal Raherison-Semjen
PA1002	**Ambient air pollution exposure during pregnancy is associated with low cord blood IL-17a in infants** Olga Gorlanova (Bättwil, Switzerland), Heide Oller, Andrea Marten, Loretta Müller, Jessica Laine-Carmelli, Fabienne Decrue, Yasmin Salem, Danielle Vienneau, Kees De Hoogh, Amanda Gisler, Jakob Usemann, Insa Korten, Sophie Yammine, Uri Nahum, Noemi Künstle, Pablo Sinues, Sven Schulzke, Philipp Latzin, Oliver Fuchs, Martin Röösli, Bianca Schaub, Urs Frey
PA1003	**Short-term air pollutant exposure and infant lung function in a South African birth cohort** Nithiseelan Rajen Naidoo (Durban, South Africa), Sheena Muttoo, Prakash Jeena, Kareshma Asharam, Kees De Hoogh, Martin Roosli
PA1004	**Impact of exposure reduction recommendations on asthma symptom control during the high desert dust season in Cyprus: The MEDEA randomised trial in children with asthma** Panayiotis Kouis (Nicosia, Cyprus), Paraskevi Kinni, Antonis Michanikou, Pinelopi Anagnostopoulou, Konstantinos Pitsios, Maria G. Kakkoura, Stefania I. Papatheodorou, Petros Koutrakis, Panayiotis K. Yiallouros
PA1005	**Predictors of suboptimal asthma control and of asthma attacks differ: the Swiss Paediatric Airway Cohort (SPAC)** Cristina Ardura-Garcia (Bern, Switzerland), Maria Christina Mallet, Daria Olena Berger, Eva Sophie Lunde Pedersen, Karyn Hoyler, Anja Jochmann, Alena Kuhn, Alexander Moeller, Nicolas Regamey, Florian Singer, Claudia E Kuehni
PA1006	**External Validation of the Predicting Asthma Risk in Children (PARC) tool in a clinical cohort** Daria Berger (Bern, Switzerland), Eva S L Pedersen, Maria C Mallet, Carmen C M De Jong, Jakob Useman, Nicolas Regamey, Ben D Spycher, Cristina Ardura-Garcia, Claudia E Kuehni
PA1007	**Night cough in children: phenotypic characterisation, healthcare utilisation, and management in a population-based study** Maria Christina Mallet (Bern, Switzerland), Rebeca Mozun, Cristina Ardura-Garcia, Maja Jurca, Philipp Latzin, Moeller Alexander, Kuehni Claudia E
PA1008	**The impact of passive smoking in infancy on respiratory morbidity during covid-19 pandemic: a birth-cohort study** Keren Armoni Domany (Tel-Aviv, Israel), Michael Schnapper, Nataly Rosenfeld, Ilan Dalal, Diana Tasher, Alma Kamar, Avigdor Mandelberg
PA1009	**Mortality in children and adolescents on Home Mechanical Ventilation: Systematic Literature Review and Meta-Analysis** Roberto Vera Uribe (Santiago, Chile), Luis Vasconcello, Jordi Vilaró, Rebeca Paiva, Rodrigo Torres-Castro
PA1010	**What is the clinical status of patients on discharge from bronchopulmonary dysplasia clinic?** Sinead Carton (Derby, United Kingdom), Joshua Meadows, Jayesh Mahendra Bhatt
PA1011	**Recurrent Pneumonia in children: A Single Centre Experience in Malaysia.** Sze Chiang Lui (Kuala Lumpur, Malaysia), Charlotte Ying Shi Gan, Yi Cheau Chua, Nor Diyana Ismail, Jia Chyi Soh, Dakshnamoorthy Vythinathan, Then Moli Othayamoorthy, N.Fafwati Faridatul Akmar Mohammad, Hasliza A.Razak, Shangari Kunaseelan, Karuthan Chinna, Asiah Kassim
PA1012	**Late Breaking Abstract - Comparison of nasal microbiota between term and preterm infants at mean post-menstrual age of 45 weeks** Olga Gorlanova (Bättwil, Switzerland), Annika Nissen-Kratzert, Nadezda Mostacci, Noemi Künstle, Andrea Marten, Amanda Gisler, Katharina Bacher, Yasmin Salem, Jakob Usemann, Insa Korten, Sophie Yammine, Uri Nahum, Sven Schulzke, Philipp Latzin, Oliver Fuchs, Markus Hilty, Urs Frey

PA1013 **Late Breaking Abstract - Cough phenotypes in children**
Maria Christina Mallet (Bern, Switzerland), Eva S L Pedersen, Ronny Makhoul, Sylvain Blanchon, Karin Hoyler, Anja Jochmann, Philipp Latzin, Alexander Moeller, Nicolas Regamey, Oliver Sutter, Myrofora Goutaki, Ben D Spycher, Claudia E Kuehni

PA1014 **Late Breaking Abstract - Prevalence and patient characteristics of dysfunctional breathing in children and adolescents with asthma**
Signe Vahlkvist (Kolding, Denmark), Louise Jürgensen, Tine Detlefsen Hell, Thomas Houmann Petersen, Poul- Erik Kofoed

PA1015 **Late Breaking Abstract - Application and External Validation of the Asthma Severity Scoring System (ASSESS) in children and adults**
Ruth Grychtol (Hannover, Germany), Lennart Riemann, Svenja Gaedcke, Bin Liu, David Deluca, Reinhold Förster, Nicole Maison, Dominik Thiele, Nikolas Jakobs, Thomas Bahmer, Meike Meyer, Svenja Foth, Stefanie Weber, Ernst Rietschel, Klaus F. Rabe, Matthias V. Kopp, Erika Von Mutius, Anna-Maria Dittrich, Hansen Gesine

TP-17 in thematic poster area — Session 147 — 13:00 - 14:00

Thematic poster: Risk stratification in lung transplant patients

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

Method(s) : Transplantation | Imaging | Cell and molecular biology | Pulmonary function testing | General respiratory patient care | Physiology | Surgery

Chairs : Saskia Bos (Newcastle upon Tyne, United Kingdom), Merel Hellemons (Rotterdam, Netherlands)

PA1016 **Morbimortality of severe early abdominal complications in lung transplanted patients**
Laura González Ramos (Santander, Spain), Joy Selene Osorio Chávez, Marta Cristeto Porras, Noelia Borja Vargas, Sandra Tello Mena, David Iturbe Fernández, José Manuel Cifrián Martínez, José Manuel Cifrián Martínez, Víctor Manuel Mora Cuesta

PA1017 **Sarcopenia and skeletal muscle disfunction in lung transplant candidates**
Mauricio Salinas (Colina, Chile), Christian Andrade, Silvana Valdés, Claudio Caniulaf, Ditzy Provoste, Rodrigo Adasme, Virginia Linacre

PA1018 **IMPACT OF NEUTROPENIA AND GRANULOCYTE COLONY-STIMULATING FACTOR TREATMENT IN LUNG TRANSPLANT RECIPIENTS**
Raquel Sanabrias (Madrid, Spain), Rosalía Laporta, Myriam Aguilar, María Teresa Lázaro, Christian García, Silvia Aguado, Ana Royuela, María Piedad Ussetti

PA1019 **Cystic Lung Diseases and Lung Transplantation**
Rosa Gutiérrez-Larraya Sánchez-Andrade (Madrid, Spain), Marta Erro Iribarren, Silvia Aguado Ibañez, Rosalía Laporta Hernández, Myriam Aguilar Pérez, Christian García Fadul, Guillermo Padín Pico, María Piedad Ussetti Gil

PA1020 **Renal outcomes according to baseline kidney function after lung or combined heart-lung transplantation for pulmonary hypertension**
Alexander D'Haenens (Leuven, Belgium), Louis Vanwalleghem, Rozenn Quarck, Catharina Belge, Guido Claessen, Dirk Kuypers, Greet De Vlieger, Tom Verbelen, Laurens Ceulemans, Dirk Van Raemdonck, Arne Neyrinck, Geert Verleden, Robin Vos, Marion Delcroix, Laurent Godinas

PA1021 **Right ventricle and lung ischemia-reperfusion injury: Large animal model mimicking hemodynamics during off-pump sequential single-lung transplantation**
Michaela Orlitová (Leuven, Belgium), Piet Claus, Anna E Frick, Dieter Van Beersel, Bert Demeulenaere, Marouane Benthami Kbibi, Jan Van Slambrouck, Bart M Vanaudenaerde, Geert M Verleden, Stijn Verleden, Walter Coudyzer, Robin Vos, Dirk E Van Raemdonck , Laurens J Ceulemans, Tom Verbelen, Arne P Neyrinck

PA1022 **Referral characteristics and outcome of listing for lung transplantation in interstitial lung diseases patients**
Martina Šterclová (Praha, Czech Republic), Lucie Valentova-Bartakova, Libor Fila, Jiri Pozniak, Monika Svorcova, Robert Lischke

PA1023 **Lung transplantation for interstitial lung disease: lessons from a UK single centre experience**
Saskia Bos (Newcastle upon Tyne, United Kingdom), Swee W Leong, Zhe K Law, James L Lordan, Arun Nair, Andrew J Fisher, Gerard Meachery

PA1024 **A survey of referral rates for lung transplant assessment in patients with interstitial lung disease meeting pulmonary function criteria**
Ofir Deri (Petach Tikva, Israel), David Ovadia, Michael Peled, Sumit Chatterji, Liran Levy

PA1025 **Telomere length measurement in the pre lung transplant evaluation of patients with interstitial lung disease**
Julie Morisset (Montréal (QC), Canada), Vincent Ferraro, Basil S Nasir , Anne-Sophie Lemay, Stépane Doucet, Genevieve Huard, Charles D Poirier, Pasquale Ferraro

PA1026 **Downregulation of NLRP3CASP1 and IL1B expression in COPD patients after lung transplantation**
Ivona Markelić (Zagreb, Croatia), Lada Rumora, Iva Hlapčić, Feđa Džubur, Sanja Popović Grle, Miroslav Samaržija, Andrea Vukić Dugac

PA1027 **Airway complications after lung transplantation: risk factors and clinical characteristics**
Hyeon Hwa Kim (Seoul, Republic of Korea), Dong Kyu Oh, Kyung-Wook Jo, Sang-Bum Hong, Tae Sun Shim, Geun Dong Lee, Sehoon Choi, Dong Kwan Kim, Seung-Il Park, Ho Cheol Kim

PA1028 **The impact of donor-recipient sex match in the lung function after lung transplant**
Albert Cheng (Richmond Hill, Canada), Haruna Kitazawa, Natalia Belousova, Anastasiia Vasileva, Joyce K.Y. Wu, Clodagh Ryan, Chung-Wai Chow

PA1029 **Bronchoalveolar lavage lymphocytes as a marker of acute cellular rejection in lung transplant recipients**
Rosa Gutiérrez-Larraya Sánchez-Andrade (Madrid, Spain), Silvia Aguado Ibáñez, Marta Erro Iribarren, Guillermo Padín Pico, Myriam Aguilar Pérez, Rosalia Laporta Hernández, María Piedad Ussetti Gil, Beatriz Jara Chinarro

PA1030 **Morphological changes during CLAD development after lung transplantation**
Hanne Beeckmans (Leuven, Belgium), Vincent Geudens, Lynn Willems, Janne Kaes, Astrid Vermaut, Charlotte De Fays, Arne P Neyrinck, Geert M Verleden, Lieven Dupont, Laurens J Ceulemans, Dirk E Van Raemdonck, Robin Vos, Bart Vanaudenaerde

PA1031 **Influence of mycophenolate mofetil dosage and plasma levels on the occurrence of chronic lung allograft dysfunction in lung transplants.**
carolin steinack (Zürich, Switzerland), Philipp Saurer, Fiorenza Gautschi, René Hage, Gernot Ortmanns, Macé M Schuurmans, Thomas Gaisl

PA1032 **Late Breaking Abstract - Donor smoking history does not affect the risk of lung cancer in lung transplantation patients**
Eline A. van der Ploeg (Groningen, Netherlands), Erik A.M. Verschuuren, T. Jeroen N. Hiltermann, Johanna P. Van Gemert, Michiel Erasmus, Carolien Van De Wauwer, C Tji Gan

PA1033 **Late Breaking Abstract - Effective home monitoring using portable spirometer of the patient after lung transplantation – feasibility pilot study**
Mikolaj Basza, Wojciech Bojanowicz, Fryderyk Zawadzki, Marek Ochman, Lukasz Koltowski, Piotr Przybylowski, Mateusz Soliński

TP-18 in thematic poster area — Session 148 — 13:00 - 14:00

Thematic poster: Updates on physical activity, exercise and nonconventional therapies

Disease(s) : Interstitial lung diseases Airway diseases

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

Chairs : Heleen Demeyer (Leuven, Belgium), Celso Ricardo Fernandes de Carvalho (São Paulo (SP), Brazil)

PA1034 **Measurement properties of walk tests in interstitial lung diseases**
Ana Oliveira (Hamilton, Canada), Sanaa Alsubheen, Wade Michaelchuk, Alda Marques, Roger Goldstein, Dina Brooks

PA1035 **Reference values for six-minute walk distance, -walk work and -distance-saturation product in adults**
Jeannet Delbressine (Horn, Netherlands), Dennis Jensen, Anouk Vaes, Pei Li, Jean Bourbeau, Wan Tan, Bita Hajian, Alex Van 'T Hul, Martijn Spruit

PA1036 **Impact of ActiGraph's processing criteria on steps count in COPD**
Joana Antão (Aveiro, Portugal), Sara Almeida, Patrícia Rebelo, Alda Sofia Pires De Dias Marques

PA1037 **Physical activity and its correlates in patients with Cystic Fibrosis: a systematic review**
Manon Kinaupenne (Gentbrugge, Belgium), Marieke De Craemer, Heidi Schaballie, Kristof Vandekerckhove , Stephanie Van Biervliet, Heleen Demeyer

PA1038 **Experienced physical activity in patients with COPD: identifying subgroups according to C-PPAC**
Astrid Blondeel (Leuven, Belgium), Heleen Demeyer, Sofie Breuls, Marieke Wuyts, Fien Hermans, Nikolaas De Maeyer, Eric Derom, Wim Janssens, Thierry Troosters

PA1039 **Correlates of physical activity in patients with COPD: a multifactorial approach**
Astrid Blondeel (Leuven, Belgium), Heleen Demeyer, Sofie Breuls, Marieke Wuyts, Fien Hermans, Nikolaas De Maeyer, Eric Derom, Wim Janssens, Thierry Troosters

PA1040	**Who are the COPD patients who have reduced exercise capacity during recovery from hospitalization for acute exacerbation of COPD (AECOPD)? A longitudinal observational study** Renata Mendes (Sao Carlos (SP), Brazil), Naiara Leonardi, Erika Zavaglia Kabbach, Alessandro Domingues Heubel, Nathany Souza Schafauser, Débora Mayumi Kawakami, Viviane Castello-Simões, Valéria A. Pires Di Lorenzo, Audrey Borghi-Silva
PA1041	**Investigation of the health status and quality of life in COPD according to the caregivers-a pilot study** Elvan Felekoglu (Izmir, Turkey), Melissa Kopruluoglu, Aslihan Delice, Hulya Sahin, Ilknur Naz
PA1043	**Exercise-induced bronchoconstriction (EIB) in young athletes - a need for repeated testing?** Karin Ersson (Uppsala, Sweden), Henrik Johansson, Elisabet Mallmin, Leif Nordang, Andrei Malinovschi
PA1044	**The PAY test: a new approach to assessing functional performance in children and adolescents with asthma** Fernanda C. Lanza (Belo Horizonte, Brazil), Jenifer Santos, Jessyca Selman, Ariane Crispim, Karina Nascimento, Giovanna Souza, Danila Cano, Anne Holland, Simone Dal Corso
PA1045	**EXERCISE CAPACITY AND ASTHMA: PROSPECTIVE COHORT STUDY IN CHILDREN AND ADOLESCENTS** Fernanda C. Lanza (Belo Horizonte, Brazil), Luana Silva, Mariana Reimberg, Bruno Soares, Rebeca Scalco, Talita Rodrigues, Gustavo Wandalsen, Dirceu Solé, Simon Dal Corso
PA1046	**Musculoskeletal (MSK) assessment in children and young people (CYP) with Primary Ciliary Dyskinesia (PCD)** Julie Simpson (Birmingham, United Kingdom), Prasad Nagakumar, Manjith Narayanan, Rajinder Kang, Priti Kenia
PA1047	**The effects of elastic tape on dyspnea and health status in COPD: a randomized controlled trial** Caroline Maschio de Censo (São Paulo, Brazil), Eloise A. Dos Santos, Thiago Fernandes Pinto, Rafaella F. Xavier, Regina M. Carvalho-Pinto, Rafael Stelmach, Celso R. F. Carvalho
PA1048	**Comparison of physical capacity between smokers and non-smokers: an observational study.** Christophe Thibon (Bruxelles, Belgium), Gilles Caty, Sophie Gohy, Frank Aboubakar, Grégory Reychler
PA1049	**Muscle energy techniques for COPD patients: Effects on pulmonary function and activities of daily living** Kimberley Sevasta (Zejtun, Malta), Anabel Sciriha, Tonio Agius
PA1051	**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
PA1052	**The relationship of disease knowledge level with perceived knowledge and health status in COPD – a pilot study** Elvan Felekoglu (Izmir, Turkey), Melissa Kopruluoglu, Aslihan Delice, Hulya Sahin, Ilknur Naz
PA1053	**Late Breaking Abstract - Preferences for pulmonary rehabilitation care: a discrete choice experiment among patients** Rebecca Farah (Bruxelles, Belgium), Wim Groot, Milena Pavlova

TP-19 in thematic poster area — Session 149 — 13:00 - 14:00

Thematic poster: COVID imaging and diagnosis

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

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

Chairs : Harm Tiddens (Rotterdam, Netherlands), David Laszlo Tarnoki (Budapest, Hungary)

PA1054	**Chest CT scan features in COVID-19 pneumonia according to duration of symptoms** Donia Belkhir (Tunis, Tunisia), Hana Blibech, Houda Snene, Aymen Jebali, Syrine Daoud, Line Kaabi, Soumaya Debbich, Nadia Mehiri, Saoussen Miladi, Ahmed Laatar, Nozha Ben Salah, Bechir Louzir
PA1055	**Lung ultrasound : an economic solution to estimate the severity of SARS-COV2 pneumonia** Yesmine Haddar (Sousse, Tunisia), Islam Mejri, Samira Mhamdi, Selsabil Daboussi, Chiraz Aichaouia, Zied Moetemri
PA1056	**Imagistic lung findings using Artificial Intelligence in SARS CoV2 hospitalized patients based on vaccinal status** Stoichita Alexandru (Bucharest, Romania)
PA1057	**Home oxygen therapy : A suitable modality for critically ill COVID-19 patients after discharge** Fatma Essafi (Zaghouan, Tunisia), Malek Kharrat, Najla Ben Slimene, Imen Talik, Khaoula Ben Ismail, Moez Kaddour, Takoua Merhabene
PA1058	**Association with changes in pulmonary artery diameters and outcomes in COVID-19: Retrospective study** Aybuke Selcuk (Beylikdüzü, Turkey), Can Ilgın, Sait Karakurt

PA1059	**Radiological findings of severe SARS-CoV-2 pneumonia: 1-year follow-up.** Lidia Perendreu Busquets (Sabadell, Spain), Lidia Zamudio Domingo, Saioa Eizaguirre Anton, Marc Bonnin Vilaplana, Gladis Sabater Talaverano, Marina Belén Lescano Ponce, Ramon Orriols Martínez
PA1060	**The ability of Lung High-Resolution Computed Tomography Severity Score to early identify COVID-19 patients who need respiratory support. A retrospective analysis of a monocentric Italian COVID-19 cohort.** emanuele gilardi (rome, Italy), Francesco Travaglino, Silvia Mazzaroppi, Carlo Alberto Mallio, Solange Fugger, Flavia Cristofano, Tommaso Grandi, Domenico Margiotta, Silvia Navarin, Michela Orrù, Giada Zoccoli, Pasquale D'Alessio, Carlo Cosimo Quattrocchi, Federica Sambuco
PA1061	**COVID pneumoniae: Clinical and radiological follow-up of a prospective cohort** Eva Ailín Vallejos (Ciudad Autónoma Buenos Aires, Argentina), Sabrina Resnik, Eva Ailín Vallejos, Florencia Santtia, Laura Barria, Eugenia Perticone, Federico Felder, Mariano Sosa, Facundo Nogueira, Carlos Luna
PA1062	**Pre-COVID determinants of COVID-19 diagnosis by clinician and RT-PCR in a general adult population** Eman Quraishi (göteborg, Sweden), Chiamaka Jibuaku, Daniil Lisik, Hannu Kankaanranta, Bright I Nwaru
PA1063	**Comparison of clinician diagnosis of COVID-19 against real-time polymerase chain reaction in a general adult population** Daniil Lisik (Gothenburg, Sweden), Chiamaka Jibuaku, Eman Quraishi, Hannu Kankaanranta, Bright Nwaru
PA1064	**Does the accuracy of clinician diagnosis of COVID-19 compared to RT-PCR in adults depend on the number and severity of comorbidities?** Daniil Lisik (Gothenburg, Sweden), Chiamaka Jibuaku, Eman Quraishi, Hannu Kankaanranta, Bright I Nwaru
PA1065	**Clinical, functional and radiological long-term follow-up of pneumonia cases treated for COVID-19** Miraç Öz (Ankara, Turkey), Aslıhan Gürün Kaya, Övgü Velioğlu Yakut, Sema Nur Doğru, Serhat Erol, Fatma Çftci, Irem Akdemir Kalkan, Güle Çınar, Neriman Defne Altuntaş, Çağlar Uzun, Aydın Çiledağ, Kemal Osman Memikoğlu, Akın Kaya, Öznur Yıldız, Oya Kayacan, Özlem Özdemir Kumbasar, Sevgi Saryal
PA1066	**Exhaled Breath Condensate (EBC) for SARS-CoV-2 diagnosis still an open debate.** Paola Pierucci (Bari, Italy), Maria Chironna, Daniela Loconsole, Mariagrazia Tummolo, Lavinia Palma, Marianna Cicchetti, Giovanni Sanasi, Sara Piccinno, Giovanna Elisiana Carpagnano
PA1067	**Contribution of SARS-CoV-2 antigen rapid diagnostic tests for diagnosis of SARS-CoV-2 infection among health care professionals** Nidhal Belloumi (la soukra, Tunisia), Mariem Mersni, Wiem Ayed, Najla Mechergui, Dorra Brahim, Rania Nakhli, Emna Bechrifa, Nizar Ladhari, Imen Youssef
PA1068	**Comparison of a point-of-care and a standard RT-PCR assay for COVID-19 detection in the emergency department.** Christos Kampolis (Nikea, Greece), Sabrina Gkogka, Panagiotis Varsos, Efthimia Pavlou, Ilka Babatseva-Vagena, Dimitrios Tsartsalis, Sotirios Adam, Apostolos Drolias, Georgios Charalambous
PA1069	**Detection of COVID-19 in hospitalised patients by exhaled breath analysis** Abraham van Poppel (Edegem, Belgium), Eline Janssens, Veronique Verplancke, Johanna Kwakkel-Van Erp, Lore Vandermeersch, Gynaika De Coster, Preben Van Overmeiren, Jan P. Van Meerbeeck, Benedicte Y. De Winter, Kristof Demeestere, Christophe Walgraeve, Therese S. Lapperre, Kevin Lamote
PA1070	**Analysis of Volatile Organic Compounds in Exhaled Breath of COVID-19 Patients** Tiar Oktavian (SURABAYA, Indonesia), Iin Noor Chozin, Suryanti Dwi Pratiwi
PA1071	**Radiological sequelae in patients with ARDS due to SARS-CoV-2 pneumonia** Yolanda Galea Colón (Barcelona, Spain), Anna Mola Ausiró, Núria Angrill Sellés, Mireia Baiges Badia, Santiago Mora Acosta, Enric Barbeta Sanchez
PA1072	**Factors influencing the radiological evolution of COVID19 pneumonia** Hela Cherif (Tunis, Tunisia), Selim Kalboussi, Bochra Karaborni, Mariem Triki, Ferdaous Yangui, Med Ridha Charfi
PA1073	**Clinical and radiological outcomes in patients with COVID-19 organizing pneumonia** Sze Shyang Kho (Kuching (Sarawak), Malaysia), Noorul Afidza Muhammad, Mona Zaria Nasaruddin, Jamalul Azizi Abdul Rahaman

TP-2 in thematic poster area — Session 150 — 13:00 - 14:00

Thematic poster: Clinical problems in pleural and respiratory muscle disorders

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

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

Chairs : Anne Orholm Nielsen (Roskilde, Denmark), Shailesh Balasaheb Kolekar (Herlev, Denmark)

PA1074	**Pacemaker insertion and pneumotorax: experience from a UK district general hospital** Avinash Aujayeb (Newcastle, United Kingdom), Karl Jackson
PA1075	**An analysis of 'errors' in pleural medicine over 5 years from a UK district general hospital** Avinash Aujayeb (Newcastle, United Kingdom)
PA1076	**Day case thoracoscopy in a UK district general hospital** Karl Jackson (Newcastle Upon Tyne, United Kingdom), Avinash Aujayeb
PA1077	**Blood pleurodesis- A UK wide survey and call for collaboration** Avinash Aujayeb (Newcastle, United Kingdom)
PA1078	**Birt-Hogg-Dubé (BHD) syndrome in patients with spontaneous pneumothorax (SP). Preliminary result shows high prevalence of BHD in SP patients.** Bart P.C. Hoppe (Leiden, Netherlands), Duco Schippers, Willemien Thijs, Franz M.N.H. Schramel, Sietske A. Smulders, Jan Willem K. Van Den Berg, Wouter J. Blox, Hans J.M Smit, Marlous Nagtegaal, Lucia Kroft, Lauran Stoger, Frank Baas, Christi Van Asperen, Cintha Klop, Pieter E. Postmus
PA1079	**Pneumatocele as rare thoracic complication after recovering COVID-19 pneumonitis- a case series including literature review.** Katarzyna Zimna (Warszawa, Poland), Małgorzata Sobiecka, Katarzyna Lewandowska, Ewa Łyżwa, Dorota Wyrostkiewicz, Monika Szturmowicz, Kazimierz Roszkowski-Śliż, Katarzyna Błasińska, Lilia Jakubowska, Witold Tomkowski
PA1080	**Observation of traumatic haemo-pneumothorax** Avinash Aujayeb (Newcastle, United Kingdom)
PA1081	**Clamping vs non-clamping strategies prior to removal of ICD for spontaneous pneumothorax.** Arshiya Mastan (Manchester, United Kingdom), Aqeem Azam, Patrick Bradley, Claire Baker, Ijaz Mohammed, Jennifer Nixon
PA1082	**Decellularised pleural membranes in pulmonary regenerative medicine** Trisha Vikranth (Stone, United Kingdom), Tina Dale, Nicholas Forsyth
PA1083	**Prevalence of pleural effusion in dengue:systematic review and meta-analysis** Molly D. Kaagaard (Copenhagen, Denmark), Luan Oliveira Matos, Marliton V. P. Evangelista, Alma Wegener, Karine O. Lima, Anna Engell Holm, Lasse S. Vestergaard, Suiane C. N. Do Valle, Rodrigo M. De Souza, Flavia Barreto Dos Santos, Tor Biering-Sørensen, Odilson M. Silvestre, Philip Brainin
PA1084	**Pulmonary infarct in post COVID-19 period, complicated with spontaneous pneumothorax – case report.** Ivan Novakov (Plovdiv, Bulgaria), Plamena Novakova
PA1085	**Pneumothorax following cardiac device insertion: experience at a tertiary centre in the United Kingdom>** Shiva Bikmalla (Stoke-on-Trent (Staffordshire), United Kingdom), Nishita Padmanabhan, Muhammad Tariq, Mohammed Hussain, Adil Mohammed, Muhammad Shakoor, Hussain Ebrahim
PA1086	**Management of pneumothoraces cases in a district general hospital in London** Ranu Baral (London, United Kingdom), Kar Mun Ang, Sivanantham Sasikumar
PA1087	**Trajectory of dyspnoea in patients with unilateral pleural effusion following thoracentesis.** Katrine Fjællegaard (Farum, Denmark), Jesper Koefod Petersen, Paul Frost Clementsen, Christian B. Laursen, Rahul Bhatnagar, Uffe Bodtger
PA1088	**Cardioprotective medication in Duchenne muscular dystrophy: a single-centre cohort study** Janneta Kisel (London, United Kingdom), Emily Ballard, Suh Eui-Sik, Nicholas Hart, Shelley Srivastava, Patrick Murphy, Philip Marino, Stam Kapetanakis, Joerg Steier
PA1089	**Predictors for outcome of intervention for spontaneous pneumothorax** Andreas Thelle (Bergen, Norway), Miriam Gjerdevik, Rune Nielsen, Per Bakke
PA1090	**Impact of drug addiction on the outcome of pneumothorax** Emna Benjemia (Tunis, Tunisia), Khouloud Chaabi, Yosr Ben Attig, Nourchene Khalfallah, Jihene Ben Amar, Med Sadok Boudaya , Zaibi Haifa , Hichem Aouina
PA1091	**Respiratory muscle dysfunction in patients with nemaline myopathy** Esmee van Kleef (Nijmegen, Netherlands), Jeroen Van Doorn, Michael Gaytant, Willemien De Weerd, Bettine Vosse, Carina Wallgren-Pettersson, Baziel Van Engelen, Coen Ottenheijm, Nicol Voermans, Jonne Doorduin

PA1092 **Association between aberrant biochemical indicators levels and respiratory musclesdysfunction in patients with amyotrophic lateral sclerosis (ALS). Preliminary data.**
Grazia Crescimanno (Palermo (PA), Italy), Manuela Bertini, Francesca Milone, Oreste Marrone

PA1093 **Optimizing invasive ventilation for SMA type 1 children who are receiving the gene therapy**
Rania Abusamra (Dubai, United Arab Emirates), Omi Narayan, Mohammad Alajjuri, Vivek Mundada

TP-20 in thematic poster area — Session 151 — 13:00 - 14:00

Thematic poster: Pleural and other respiratory infections

Disease(s) : Airway diseases Respiratory critical care

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

Chairs : Monika Bratová (Brno 35, Czech Republic), Poppy Denniston (London, United Kingdom)

PA1094 **Microbiological analysis and empirical antibiotic preference in complicated pleural infections**
Seda Tural Önür (Istanbul, Turkey), Eminegül Yavuzsan, Fatma Tokgöz Akyil, Mustafa Vedat Doğru, Levent Cansever, Sedat Altın

PA1095 **The microbiology of adult pleural infection in an Egyptian hospital**
Maged Hassan (Alexandria, Egypt), Mohamed Gadallah, Asmaa Elshazly, Basma El-Shaarawy, Ahmed Sadaka

PA1096 **Ambulatory management of bronchopleural fistulae secondary to empyema**
Joanna Davy (Ipswich, United Kingdom), Po Tang, Mathew Burton

PA1097 **Nursing administration of Alteplase and Dornase Alfa in empyema**
Hussun-Ara Shah (Newcastle upon Tyne, United Kingdom), Thomas Fretwell, Gemma Stiller, Sarah Bain

PA1098 **USE AND EFFECTIVENESS OF INTRAPLEURAL FIBRINOLYTICS IN COMPLICATED PARAPNEUMONIC EFFUSIONS AND EMPYEMAS**
Fotios Sampsonas (Patra, Greece), Maria Lagadinou, Maria Mpouga, Ioannis Picliknski, Theodoros Karampitsakos, Ourania Papaioannou, Matthaios Katsaras, Panagiota Tsiri, Giorgos Tsirikos, Eirini Zarkadi, Vasilina Sotiropoulou, Argyrios Tzouvelekis

PA1099 **A feasibility randomised trial comparing therapeutic thoracentesis to chest tube insertion for the management of pleural infection: results from the ACTion trial.**
David Arnold (Bristol (Avon), United Kingdom), Emma Tucker, Anna Morley, Alice Milne, Louise Stadon, Sonia Patole, George Nava, Steven Walker, Nick Maskell

PA1100 **Management and outcomes of patients with pleural empyema**
Nesrin Kallel (Sfax, Tunisia), Molka Abdelkefi, Ahmed Dhia El Euch, Moustapha Hamoudi, Sourour Abid, Walid Feki, Samy Kammoun

PA1101 **Lung abscess is associated with COPD, use of sedatives and a high mortality: A retrospective cohort study**
Søren Sperling (Aarhus N, Denmark), Jakob Kirkegaard Vaarst, Søren Sperling Haugen, Victor Næstholt Dahl, Andreas Fløe Hvass, Christian Borbjerg Laursen, Elisabeth Bendstrup

PA1102 **Lung hydatidosis treatment: which are the associated morbidity and mortality risk factors ?**
Abdessalem Hentati (Sfax, Tunisia), Zied Chaari, Aymen Ben Ayed, Walid Abid, Imed Frikha

PA1103 **An unusual cause of infection in immunocompetent individuals: A case series**
Hari Kishan Gonuguntla (SECUNDERABAD, India), Don Gregory Mascarenhas, Roshan Kumar, Preeti Vidyasagar, Sravani Reddy, Samia Syeda

PA1104 **Valaciclovir for Epstein-Barr virus suppression in Chronic Obstructive Pulmonary Disease: A Randomised Controlled Trial (EViSCO)**
Dermot Linden (Belfast, United Kingdom), Hong Guo-Parke, Michael Mckelvey, Gisli Einarsson, Andrew Lee, Derek Fairley, Vanessa Brown, Danielle Logan, Christina Campbell, Dave Singh, Michael Tunney, Danny Mcauley, Cliff Taggart, Joe Kidney

PA1105 **Pulmonary hydatid disease: clinical and radiographic features**
Alia Ezzaouia (Tunis, Tunisia), Ines Akrout, Hela Hassene, Hela Kamoun, Yosra Bellil, Hend Ouertani, Hadhemi Rejeb, Dorra Greb, Hanene Smadhi, Hager Ben Abdelghaffar, Leila El Fekih, Mohamed Lamine Megdiche

PA1106 **Pulmonary infection characteristics leading to respiratory failure, a modelling approach.**
Frédérique NOEL (Paris, France), Benjamin Mauroy

PA1107	**Tolerance and safety of inhaled hypertonic saline solutions in patients with chronic bronquial infection.** Diurbis Josefina Velasco Álvarez (Madrid, Spain), Diego Durán Barata, Rosa Nieto Royo, Raquel Morillo Guerrero, Aurora Solier López, Carlos Almonacid Sánchez, Esther Barbero Herranz, Beatriz Pintado Cort, Andrea Pérez Figuera, Luis Máiz Carro
PA1108	**The contribution of bronchoscopy in the diagnosis of pulmonary hydatid cyst** Zakaria Laklaai (casablanca, Morocco), Khadija Channoune, Nahid Zaghba, Hanane Benjelloune, Najiba Yassine
PA1109	**Human tularemia in Southern Germany: a case series** Marion Heiß-Neumann (Gauting, Germany), Marianne Vacca
PA1110	**Saccharomyces boulardii in the prevention of antibiotic-associated diarrhea in hospitalized adult patients with lower respiratory tract infections** Branislava Milenković (Beograd, Republic of Serbia), Ilija Andrijevic, Sanja Dimic Janjic, Senka Milutinov Ilic, Ivan Kopitovic, Mihailo Stjepanovic, Ana Andrijevic, Jelena Jankovic, Svetlana Mitrovic
PA1111	**Bacterial biofilms predominate in both acute and chronic human lung infections** Mette Kolpen (Copenhagen, Denmark), Kasper Nørskov Kragh, Juan Barraza Enciso, Daniel Faurholt-Jepsen , Birgitte Lindegaard , Gertrud Baunbæk Egelund, Andreas Vestergaard Jensen , Pernille Ravn, Inger Hee Mabuza Mathiesen, Alexandra Gabriella Gheorghe , Frederik Boëtius Hertz , Tavs Qvist, Marvin Whiteley , Peter Østrup Jensen, Thomas Bjarnsholt
PA1112	**Pleuropneumonia caused by Nocardia cyriacigeorgica in a 14-year-old girl with PCD** Ruth Maria Urbantat (Berlin, Germany), Charlotte Pioch, Niklas Ziegahn, Miriam Stegemann, Mirjam Stahl, Marcus A. Mall, Jobst F. Röhmel
PA1113	**Integrated microbiome-mucus profiling in chronic obstructive pulmonary disease (COPD)** Oliver Ward Meldrum (Singapore, Singapore), Gavin C. Donaldson, Pei Yee Tiew, Huiying Xu, Jayanth Kumar Narayana, Fransiskus Xaverius Ivan, Tavleen Kaur Jaggi, Micheál Mac Aogáin, John Arputhan Abisheganaden, James P. Allinson, Sanjay H. Chotirmall, Jadwiga A. Wedzicha

TP-21 in thematic poster area — Session 152 — 13:00 - 14:00

Thematic poster: Vaccination

Disease(s) : Airway diseases

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

Chairs : Eric Mortensen (Simsbury, United States), Laura Fregonese (London, United Kingdom)

PA1114	**COVID-19: Vaccinated versus unvaccinated or not fully vaccinated patients** Antonia Digalaki (Athens, Greece), Georgios Hillas, Sofia Koukidou, Aikaterini-Ioanna Sakellaropoulou, Chrysavgi Kosti, Serafeim Chrysikos, Katerina Dimakou
PA1115	**Clinical characteristics and respiratory care of hospitalized patients according to vaccination status of COVID 19** Miguel Suarez Ortiz (madrid, Spain), Jose Rafael Teran Tinedo, Miguel Lorente Gonzalez, Daniel Laorden Escudero, Annette Zevallos Villegas, Eduardo Cano Sanz, Maria Angeles Ortega Fraile, Joaquin Hernandez Nuñez, Maria Elena Saiz Lou, Pedro Landete Rodriguez
PA1116	**Determinants of antibody responses to primary courses and booster doses of SARS-CoV-2 vaccines in 9,101 UK adults** Adrian R Martineau (London, United Kingdom), David A Jolliffe, Sian E Faustini, Hayley Holt, Mohammad Talaei, Giulia Vivaldi, Alex G Richter, Seif O Shaheen
PA1117	**Effectiveness of the pneumococcal polysaccharide and conjugated vaccines in elderly and high-risk populations in preventing invasive pneumococcal disease: A systematic search and review of the literature** Melina Sikjær (Egå, Denmark), Mari Stenvold Wik, Synne Smith Stensholt, Ole Hilberg, Anedrs Løkke
PA1118	**Vaccine efficacy in severe COVID-19 patients before and after the Delta variant endemic** Masamichi Mineshita (Kawasaki (Kanagawa), Japan), Kazuhiro Nishiyama, Satoshi Tanaka, Yusuke Shinozaki, Junko Shibuya, Hajime Tsuruoka, Kouhei Kinoshita, Shin Matsuzawa, Shinya Azagami, Hiromi Muraoka, Atsuko Ishida, Kei Morikawa, Hirotaka Kida, Hiroshi Handa, Hiroki Nishine, Takeo Inoue
PA1119	**Immunogenicity and clinical effectiveness of the SINOVAC vaccine in patients older than 70 years** Angela María Giraldo Montoya (Pereira, Colombia), Giovanni García Castro

PA1120	**Long-term efficacy of an inactivated whole particle H5N1 virus against H5N1 highly pathogenic avian influenza virus challenge in cynomolgus monkeys** Misako Nakayama (Otsu, Japan), Hirohito Ishigaki, Nguyen Thanh Cong, Saori Suzuki, Hideaki Ishida, Naoko Kitagawa, Kazumasa Ogasawara, Yasushi Itoh
PA1121	**Evaluating pneumococcal vaccine's effectiveness against pneumonia among adults over 50 years in Catalonia, 2017-2018.** cinta de diego cabanes (tarragona, Spain), Angel Vila-Corcoles, Eva Satué-Gracia, Olga Ochoa-Gondar, Angel Vila-Rovira, M José Forcadell-Peris
PA1122	**Messenger RNA COVID-19 vaccine: What side effects?** Nidhal Belloumi (la soukra, Tunisia), Wiem Ayed, Dorra Brahim, Wala Haouari, Najla Mechergui, Ghada Bahri, Nizar Ladhari, Imen Youssef
PA1123	**Experimental Human Pneumococcal Challenge can be performed safely and is associated with low rates of rescue antibiotic use in healthy adults** Ryan Robinson (Liverpool, United Kingdom), Chris Myerscough, Helen Hill, Wendi Shephard, Konstantinos Liatsikos, Samuel Latham, Fred Fyles, Klara Doherty, Fathimath Shiham, Daniella Mclenghan, Angela Hyder-Wright, Elena Mitsi, Hassan Burhan, Ben Morton, Stephen Gordon, Andrea Collins, Daniela Ferreira
PA1124	**Reasons for reluctance to covid-19 vaccination among health care workers** Nidhal Belloumi (la soukra, Tunisia), Siwar Chemingui, Najla Mechergui, Mariem Mersni, Dorra Brahim, Hend Belhouen, Nizar Ladhari, Imen Youssef
PA1125	**Efficacy of corona virus disease 2019 vaccines on oxygen demand, intensive care unit administration and mortality: a single centre retrospective study** Havva Yeşildağlı (Nicosia, Cyprus), Birdal Cihangir, Belin Kamiloğlu
PA1126	**Attitudes of the health personnel of the Hassan II hospital in Agadir towards the 3rd dose of the vaccine anti-covid-19** Aboubekr Imzil (Agadir, Morocco), Houda Moubachir , Hind Serhane
PA1127	**Evaluation of lung immune response to the BNT162b2 COVID-19 vaccine** Dan Padawer (Jerusalem, Israel), Miri Stolovich-Rain, Maria Billan, Neville Berkman, Alexander Rouvinski
PA1128	**Clinical outcomes in vaccinated and unvaccinated patients with COVID-19: a population- based analysis** Ourania Papaioannou (Patras, Greece), Theodoros Karampitsakos, Panagiota Tsiri, Vasilina Sotiropoulou, Electra Koulousousa, Panagiotis Tasiopoulos, Charikleia Chourpiliadi, Apostolos Matsioulas, Matthaios Katsaras, Eirini Zarkadi, Georgios Tsirikos, Eva Theochari, Elli Malakounidou, Vasiliki Georgiopoulou, Dionysios Papalexatos, Fotios Sampsonas, Argyrios Tzouvelekis
PA1129	**Personalized predictions of adverse side effects to the COVID-19 vaccines** Nahal Mansouri (Lausanne, Switzerland), Elham Jamshidi, Amirhossein Asgari
PA1130	**Factors affecting vaccine acceptance and uptake among COPD patients.** Janos Tamas Varga (Budapest, Hungary), Monika Fekete, Zsofia Szarvas, Vince Fazekas-Pongor, Andrea Lehoczki
PA1131	**Breakthrough infections with SARS-CoV-2 B.1.617.2 variant B.1.617.2 and humoral reponse in vaccinated maintenance hemodialysis patients** Ori Wand (Kfar Sava, Israel), Naomi Nacasch, Sydney Benchetrit , Keren Cohen-Hagai
PA1132	**Assessment of Predictors for SARS-CoV-2 Antibodies Decline Rate in Health Care Workers after BNT162b2 Vaccination-Results from a Serological Survey** Amir Bar-Shai (Tel-Aviv, Israel), Nadav Zacks, Chezy Levi, Anna Breslavsky, Shlomo Maayan, Evgeniya Tsiba, Shlomo Fytlovich, Ori Wand, Moshe Shaffer, Yaniv Sherer, Gili Givaty, Anat Tzurel Ferber, Michael Tal , Natalya Bilenko
PA1133	**The intensive care unit admissions and mortality rates of the Covid-19 patients whose chest imaging findings were progressed during hospitalization: Is there any difference between vaccinated or unvaccinated patients?** Emine Kamiloğlu (lefkosa, Cyprus), Birdal Cihangir

TP-22 in thematic poster area — Session 153 — 13:00 - 14:00

Thematic poster: Diagnostics and biomarkers in lung cancer

Disease(s) : Thoracic oncology Airway diseases

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

Chairs : Ilona Tietzova (Prague, Czech Republic), Dragos Bumbacea (Bucuresti, Romania)

PA1134	**Detection of micrometastases in mediastinal lymph nodes by haematological analyser and flow cytometry-pilot study.** Iwona Kwiecień (Warszawa, Poland), Elżbieta Rutkowska, Joanna Bednarek, Rafał Sokołowski, Agata Raniszewska, Karina Jahnz- Różyk , Piotr Rzepecki, Joanna Domagała-Kulawik
PA1135	**Computed tomography derived body composition analysis predicts cachexia and survival in patients with lung cancer** Teresa Kerkhoff (Essen, Germany), Johanna Pappisch, Nicolas Linder, Harald Busse, Albrecht Gläser, Sabine Taubenheim, Hartmut Kuhn, Hubert Wirtz, Armin Frille
PA1136	**Volatile biopsies in personalized molecular diagnosis and follow-up of lung adenocarcinoma** Ozlem Goksel (Izmir (Bornova), Turkey), Aslı Tetik Vardarlı, Levent Pelit, Tugberk Nail Dizdas, Su Ozgur, Ceyda Aldag, Korcan Korba, Caglar Celebi, Ertan Baysal, Fusun Pelit, Ali Veral, Yasemin Basbınar, Cumhur Gunduz, Tuncay Goksel
PA1137	**Proportion of mediastinal lymph nodes that cross predefined borders on the IASLC map.** Øyvind Yksnøy (Ålesund, Norway), Dag Arne Liaug Hoff, Bjørn Henning Grønbereg, Sveinung Sørhaug
PA1138	**Mediastinal "deep freeze" - transcarinal lymph node cryobiopsy** Evgeni Gershman (Givataim, Israel), Alon Ikan, Barak Pertzov, Dror Rosengarten, Mordechai Kramer
PA1139	**Malignant pleural effusion (MPE) diagnosis with medical thoracoscopy (MT) compared with conventional approaches** Ioannis Karampinis (Athens, Greece), Georgia Hardavella, Antonios Katsipoulakis, Nikolaos Anastasiou
PA1140	**Correlation of PD-L1 expression on tumour cells between diagnostic biopsies and surgical specimens of lung cancer in real life with respect to biopsy techniques and neoadjuvant treatment** Daniela Gompelmann (Vienna, Austria), Katharina Sinn, Jonas Brugger, Dominik Bernitzky, Berta Mosleh, Helmut Prosch, Silvana Geleff, Alissa Blessing, Andreas Tiefenbacher, Konrad Hoetzenecker, Marco Idzko, Mir Alireza Hoda
PA1141	**A comparison of the biopsy techniques for tissue subtyping and molecular profiling in non-small -call lung cancer: is tissue an issue?** Parniya Arooj (Plymouth, United Kingdom), Irfan Zaki, Maged Fayed, Hem Rai, Katherine Syred, Rob Hadden, Lindsey Taylor, Timothy Howell, Thomas Nichsolson, John Corcoran, Cyrus Daneshvar
PA1142	**Clarifying oligometastatic non-small cell lung cancer in patients with local ablative therapies for oligoprogression after tyrosine kinase inhibitors** Dong-gon Hyun (Seoul, Republic of Korea), Yoon Jung Jang, Wonjun Ji, Chang-Min Choi, Dae Ho Lee, Sang-We Kim, Shinkyo Yoon, Woo Sung Kim, Jae Cheol Lee
PA1143	**N2 institutional consensus on Non-Small Cell Lung Cancer (NSCLC)** Hind Eid (Beirut, Lebanon), Antoine El Kik, Elias Karam, Ammar Chamaa, Bassem Habr, Fadi El Karak, Hampig-Raphael Kourie, Fares Azouri, Viviane Smayra, Noel Aoun, Joseph Kattan, Georges Chahine, Marwan Ghosn, Jad Wakim, Hussein Nasserddine, Fadi Nasr, Georges Khayat, Joseph Nakad, Carine Harmouche, Georges Dabar, Georges Tabet, Zeina Aoun, Moussa Riachy
PA1144	**Detection of EGFR mutation status on pleural fluid samples in patient with lung adenocarcinoma** Alessio Navarra (Harlow, United Kingdom), Anthony Maddox, Andrew Barlow, Rahul Mogal
PA1145	**Impact of COVID-19 (C19) on EBUS-TBNA** Abhimanyu Lal (Solihull (West Midlands), United Kingdom), Muhammad Bilal Khan Niazi, See Ling Tan
PA1146	**Trans thoracic CT-guided fine-needle biopsy of pulmonary lesions, predictive factors for complications and accuracy of diagnosis** Kristina Piotkovskaya, Eva Radeka, Sven Nyrén, Reza Karimi

TP-23 in thematic poster area — Session 154 — 13:00 - 14:00

Thematic poster: Comorbidities and symptoms in interstitial lung diseases think out of the box

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

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

Chairs : Laurens De Sadeleer (Leuven, Belgium), Sabina A. Guler (Bern, Switzerland)

PA1147	**Clinical and biological impact of respiratory sleep disorders in IPF** Jaume Bordas Martinez (barcelona, Spain), Neus Salord, Vanesa Vicens Zygmunt, Rosana Blavia Aloy, Sandra Pérez Ramos, Eliseo Prado Gala , María D. Calvo Sánchez , Guadalupe Bermudo, Jesús Ríos Martín, Salud Santos, María Molina-Molina*, Carmen Monasterio*
PA1148	**Development of scoring system for the prediction of pulmonary complications following curative resection in lung cancer with idiopathic pulmonary** Hongseok Yoo (Seoul, Republic of Korea), Yunjoo Im, Man Pyo Chung
PA1149	**Nintedanib in patients with progressive fibrosing ILDs in subgroups by comorbidity burden** Elisabeth Bendstrup (Aarhus N, Denmark), Teng Moua, Masaki Okamoto, Sara Tomassetti, Claudia Valenzuela, Wim A Wuyts, Corinna Miede, Dirk Lievens, Francesco Bonella
PA1150	**Idiopathic pulmonary fibrosis and palliative care: a qualitative exploration of nurses' experiences.** Grace O'Sullivan (Cork, Ireland), Chanel Watson, Bridget Murray
PA1151	**Triggers and impact of chronic cough in interstitial lung disease** Barnaby Hirons (london, United Kingdom), Katie Rhatigan, Harini Kesavan, Louise Wright, Emma Pelling, Peter S P Cho, Surinder S Birring
PA1152	**Neurocognitive impairment in patients with idiopathic pulmonary fibrosis** Ana Milenković (Novi Sad, Republic of Serbia), Jovan Javorac, Dejan Živanović, Miroslav Ilić, Nevena Savić, Miloš Cvetković
PA1153	**Impact of weight loss on outcomes in patients with progressive fibrosing interstitial lung diseases (ILDs)** Michael Kreuter (Heidelberg, Germany), Elisabeth Bendstrup, Toby M Maher, Yoshikazu Inoue, Corinna Miede, Dirk Lievens, Bruno Crestani
PA1154	**Effects of influenza vaccination in patients with interstitial lung diseases: an epidemiological claims data analysis** Michael Kreuter (Heidelberg, Germany), Pavo Marijic, Larissa Schwarzkopf, Werner Maier, Franziska Trudzinski, Lars Schwettmann
PA1155	**Patients' perceptions of interstitial lung disease (ILD)** Vijay Joshi (Edgware (Middlesex), United Kingdom), Arisa Reka, Lizan Drummonds
PA1156	**“The will to live!” The perceptions of patients with idiopathic pulmonary fibrosis (IPF) in relation to antifibrotic treatment: a qualitative study** Eliane Viana Mancuzo (Belo Horizonte (MG), Brazil), Liliane Neto Generoso, Tais Mancuzo De Freitas, Marcella Guimaraes Assis
PA1157	**Oesophageal Dysmotility: Does it Play a Role in Interstitial Lung Diseases?** Dominic Sykes (Hull, United Kingdom), Simon P Hart, Michael G Crooks, Warren Jackson, John Gallagher, Alyn H Morice
PA1158	**Non-tuberculous mycobacterial pulmonary disease in patients with idiopathic pulmonary fibrosis Non-tuberculous mycobacterial pulmonary disease in patients with idiopathic pulmonary fibrosis** Jin-Young Huh (, Republic of Korea), Kyung-Wook Jo, Tae Sun Shim, Jin Woo Song
PA1159	**Deterioration of 6-minute walk distance in Idiopathic pleuroparenchymal fibroelastosis is not related to the disease entity** Satoru Ebihara (Tokyo, Japan), Naofumi Sato, Takae Ebihara
PA1160	**Psychological assessment and intervention in IPF patients** Leonardo Rovere (Milano, Italy), Stefania Pozzi, Emanuela De Juli, Sabrina Agostina Amatucci, Giorgio Ziglio, Paolo Tarsia, Umberto Mazza
PA1161	**Impact of intrathoracic pressure in the assessment of central pulmonary pressures in COPD and ILD candidates for lung transplantation.** Juan Grignola (Montevideo, Uruguay), Alvaro Calabuig, Carlos Bravo, Pedro Trujillo, Manuel López-Messeguer, Enric Domingo
PA1162	**Interstitial Lung Disease: The Forgotten Patient** Heidi Prior (greater manchester, United Kingdom), Hashim Hameed, Alison Unsworth, Adele Watmough, Abdul Ashish
PA1163	**A Comparison of Survival in IPF, Emphysema and CPFE Syndrome** Christopher C. Huntley (Bromsgrove, United Kingdom), Michael N. Armitage, Pathrabali Mitra, Maximllian Thomas, P. Sherwood Burge, Gareth I. Walters, Alice M. Turner

PA1164 **Loss of muscle mass in Idiopathic Pulmonary Fibrosis**
Nicol Bernardinello (Trecenta (RO), Italy), Simone Petrarulo, Giulia Grisostomi, Antonella Modugno, Sofia Bertin, Dylan Pasin, Elisabetta Cocconcelli, Paolo Spagnolo, Chiara Giraudo, Elisabetta Balestro

PA1165 **Late Breaking Abstract - Association between the Use of Statins and Incidence of Interstitial Lung Disease/Idiopathic Pulmonary Fibrosis: A Cohort Study**
Won-Il Choi (Goyang-si, Republic of Korea), Gjustina Loloci, Dong Yoon Lee, Jihyeon Jeong

PA1166 **Late Breaking Abstract - The interstitial lung disease (ILD) patient journey in Brazil**
Adalberto Sperb Rubin (Porto Alegre (RS), Brazil), Licia Mota, Rodrigo Scabello, Carla Cruz, Henrique Silva

TP-24 in thematic poster area — Session 155 — 13:00 - 14:00

Thematic poster: Advances in rare interstitial lung diseases

Disease(s) : Interstitial lung diseases

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

Chairs : Ivette Buendia Roldán (México D.F, Mexico), Raphaël Borie (Paris, France)

PA1167 **Is YouTube a reliable source for patient information in lymphangioleiomyomatosis?**
Finn Wilkens (Heidelberg, Germany), Claudia Ganter, Katharina Kriegsmann, Heinrike Wilkens, Nicolas Kahn, Gillian C. Goobie, Christopher J. Ryerson, Michael Kreuter

PA1168 **Respiratory lesions of IgG4-related disease classified by 2019 ACR/EULAR criteria: A retrospective study**
Masamichi Komatsu (Matsumoto, Japan), Hiroshi Yamamoto, Shoko Matsui, Yasuhiro Terasaki, Akira Hebisawa, Tae Iwasawa, Takeshi Johkoh, Tomohisa Baba, Atsushi Miyamoto, Tomohiro Handa, Keisuke Tomii, Yuko Waseda, Masashi Bando, Haruyuki Ishii, Yasunari Miyazaki, Akihiko Yoshizawa, Tamiko Takemura, Yoshinori Kawabata, Masayuki Hanaoka, Takashi Ogura

PA1169 **Lane-hamilton syndrome and CCF: a fatal association**
Salman Ayyaz (Multan, Pakistan), Shakeel Ahmed Khan, Faisal Zaheer, Mudassar Rasool, Waqas Afzal

PA1170 **LYMPHANGIOLEIOMYOMATOSIS AND GENETICS**
Marta Garcia Moyano (Barakaldo, Spain), Leticia Ceberio Hualde, Beatriz González Quero, Imanol González Muñoz, Francisco Javier Martínez Núñez, Marta Lázaro Serrano, Ainhoa Gandiaga Mandiola, Blanca Gener Querol

PA1171 **Antifibrotic therapy on progressive fibrotic lung disease non-IPF – a retrospective cohort**
Marta Sousa De Sá Marques (Vila Nova de Gaia, Portugal), Sérgio Campainha, Carla Nogueira, Inês Marques, Sofia Neves

PA1172 **The role of BAL in a long Covid population.**
Francesco Bini (Pavia (PV), Italy), Bruno Dino Bodini, Umberto Zanini, Angelo De Lauretis, Giuseppe Pepe, Stefano Zucchetti, Paola Faverio

PA1173 **Right ventricle to arterial uncoupling is a mortality predictor in fibrotic interstitial lung diseases**
Angelo Canora (Napoli (NA), Italy), Ciro Santoro, Agostino Buonauro, Gaetano Rea, Mario Enrico Canonico, Roberta Esposito, Alessandro Sanduzzi Zamparelli, Giovanni Esposito, Marialuisa Bocchino

PA1174 **Inflammatory profile of bronchoalveolar lavage in pulmonary Langerhans cell histiocytosis**
Diego Castillo Villegas (Barcelona, Spain), Silvia Barril, Diego Castillo, Paloma Millán, Alfonso Luque, Paloma Acebo, Sonsoles Hortelano

PA1175 **Characteristics, similarities and differences comparing fibrotic alveolar to airway basal cells**
Sabrina Blumer (Basel, Switzerland), Petra Khan, Julien Roux, Spasenija Savic, Lars Knudsen, Danny Jonigk, Mark Kuehnel, Michael Tamm, Katrin Hostettler

PA1176 **Survival and mortality associated factors in progressive fibrosing interstitial disease**
Haifa Zaibi (Tunis, Tunisia), Khouloud Chaabi, Emna Ben Jemia, Nourchene Khalfallah, Jihen Ben Amar, Hichem Aouina

PA1177 **Management of bronchiolitis obliterans in a group of Tunisian children**
Amal Saidani (Bizerte, Tunisia), Sabrine Louhaichi, Mariem Hamdi, Olfa Ben Moussa, Besma Hamdi, Ikbel Khalfallah, Jamel Ammar, Agnes Hamzaoui

PA1178 **Idiopathic Inflammatory Myopathy-associated Interstitial Lung Disease (IIM-ILD): does radiologic features matter?**
Gioele Castelli (Padova, Italy), Elisabetta Cocconcelli, Elisabetta Zanatta, Chiara Giraudo, Nicol Bernardinello, Cristina Dartora, Luca Iaccarino, Paolo Spagnolo, Elisabetta Balestro

TP-25 in thematic poster area — Session 156 — 13:00 - 14:00

Thematic poster: Suspicion and management of pulmonary embolism

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

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

Chairs : Cécile Tromeur (Locmaria Plouzané, France), Benjamin Planquette (Paris, France)

PA1179 **Adjusted D-dimer cutoff levels to rule out pulmonary embolism in patients hospitalized for COPD exacerbation: results from de SLICE trial**
David Jiménez Castro (Madrid, Spain), Sara Gonzalez Castro, Carmen Rodríguez Calle, Luis Jara Palomares, Eva Tabernero Huguet, Andrés Tenes Mayen, Winnifer Briceño Franquiz, Jose Luis Lobo Beristain, Raquel Morillo Guerrero, Behnood Bikdeli

PA1180 **Cellular indices and outcome in patients with acute venous thromboembolism.**
Amina Bekki (València (Comunidad Valenciana), Spain), Alberto García-Ortega, Raquel López-Reyes, Grace Oscullo, Thais Beauperthuy, Fakiha Siddiqui, Jawed Fareed, José Daniel Gómez-Olivas, Miguel Ángel Martínez-García, Manuel Monreal

PA1181 **Differences in patients with pulmonary embolism according to in-hospital or home therapy: findings in the RIETE registry**
Cristhian Correa (Madrid, Spain), Zichen Ji, Javier De Miguel Díez, Rodrigo Jiménez García, Ana López De Andrés, Pedro Parra, Andrei Braester, Andris Skride, María Del Carmen Díaz-Pedroche, Marina Lumbierres, Manuel Monreal

PA1182 **CHRONIC THROMBOEMBOLIC DISEASE AFTER ACUTE PULMONARY EMBOLISM RELATED TO SARS-CoV-2**
Oswaldo Antonio Caguana Vélez (Barcelona, Spain), Oswaldo Antonio Caguana Vélez, Karys Helena Khilzi Alvarez , Juan Jose Rodríguez-Sevilla, Diana Badenes Bonet, Judith Villar Garcia , Jose Gregorio Gonzalez Garcia , Anna Herranz Blasco , Mireia Admetllo Papiol , Anna Rodo Pin , Lluis Molina Ferragut , Flavio Zuccarino , Eva Balcells Vilarnau, Diego A. Rodriguez Chiaradía

PA1183 **Post-COVID-19 patients show vascular sequelae that last up to 6 months**
Paula Poyatos (Girona, Spain), Neus Luque, Saioa Eizaguirre, Sònia Belda, Marc Bonnin, Mònica Sánchez, Míriam Peracaula, Ramon Orriols, Olga Tura-Ceide

PA1184 **Prospective study of pulmonary embolism in patients with SARS CoV-2 pneumonia with high levels of D Dimer**
Joaquin 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, Sara Hermoso De Mendoza, Nestor Calvo Rado, María Antonieta Ballesteros Bizoso, Paula Argente Del Castillo Rodríguez, Daniel Morell Garcia, Aina Millán Pons, Francisco Berga Montaner, Sara Sánchez Asis, Beatriz Garcia Garcia, Jaume Ausias Pons Llinares, Luminita Marinela Preda Ungureanu, Maria Luisa Martin Pena, Juan Antonio Palmer Sancho, Jaume Sauleda Roig, Ernest Sala Llinas

PA1185 **Persistent dyspnoea after acute pulmonary embolism is related to perfusion defects and lower long-term quality of life**
Coen van Kan (Amsterdam, Netherlands), Heleen Alblas, Suzanne Van Het Westeinde, Jasper Emmering, Andre Niezen, Ibrahim Al Butaihi, Anton Vonk Noordegraaf, Josien Van Es

PA1186 **An optimized D-dimer cut-off value to predict pulmonary embolism in COVID-19 patients: a retrospective study**
Sophie Engels (Enschede, Netherlands), Ilonka Van Veen, Matthijs Oudkerk, Job Van Der Palen, Marjolein Heuvelmans

PA1187 **Barriers to outpatient management of pulmonary embolism**
Thomas Knowlman (Brisbane, Australia), Robert Carroll

PA1188 **Post-acute prevalence of occult pulmonary embolism after hospitalisation for Covid-19**
Esther L. van Voorthuizen (Nijmegen, Netherlands), Jeannette B. Peters, Jenneke Leentjens, Michel M. Van Den Heuvel, Mathias Prokop, Bram Van Den Borst

PA1189 **D-dimer levels on admission to predict Venous thrombotic events in patients with Covid-19**
Sabrine Majdoub Fehri (Nabeul, Tunisia), Imen ketata, Wafa Medi, Rahma Sellami, Hamida Kwass

PA1190 **A retrospective study to evaluate CTPA outcomes in COVID-19 patients at a district hospital in London**
Ayah Mekhaimar (London, United Kingdom), Lia Chauhan, Ayantika Dhara, Ali A Mohammed

PA1191 **Anticoagulants in COVID-19: Is there a role for a D-dimer-driven dosing ?**
Ömer Selim Unat (Izmir, Turkey), Ziya Karimov, Damla Serce Unat, Gizem Damar, Pakize Caglayan, Faiq Teymurlu, Mehmet Sezai Tasbakan, Pervin Korkmaz Ekren, Ozen Kacmaz Basoglu, Mustafa Hikmet Özhan, Abdullah Sayiner

PA1192 **Investigation of the level of knowledge about Pulmonary Embolism in the general population**
Ourania Kotsiou (Larissa, Greece), Konstantinos Tourlakopoulos, Maria Tziraki, Dimitrios Raptis, Stylianos Boutlas, Georgia Rapti, Ioanna V Papathanasiou, Dimitrios Papagiannis, Zoe Daniil, Konstantinos I Gourgoulianis, Foteini Malli

TP-26 in thematic poster area — Session 157 — 13:00 - 14:00

Thematic poster: Thoracic ultrasound: from central airways to the chest wall

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

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

Chairs : Søren Helbo Skaarup (Aarhus C, Denmark), Konstantina Kontogianni (Heidelberg, Germany)

PA1193 **Chest ultrasound description of bullous emphysema and comparison to pneumothorax: a prospective multicentre study**
Kinan El Husseini (Paris, France), Thomas Flament, Sophie Laroumagne, Mathilde Le Brun, Elise Noël-Savina, Philippe Richard, Damien Basille, Gilles Mangiapan, Elise Artaud-Macari

PA1194 **Focused lung ultrasound versus conventional chest x-ray for detection of pneumothorax following CT-guided transthoracic needle biopsy**
Pia Iben Pietersen (Odense NØ, Denmark), Emma Katrine Jeppesen, Amanda Dandanell Juel , Christian Laursen, Ole Graumann

PA1195 **Ultrasound monitoring of pneumothorax after CT-guided transthoracic lung biopsy**
Pia Iben Pietersen (Odense NØ, Denmark), Nina Everløff, Amanda Dandanell Juel, Christian Laursen, Ole Graumann

PA1196 **SEARCHING FOR A ROLE OF TRANSTHORACIC ULTRASOUND IN SEVERE ASTHMA**
Carla Maria Irene Quarato (Foggia, Italy), Donato Lacedonia, Marco Sperandeo, Maria Giovanna Palumbo, Paolo Fuso, Marcello Stomaci, Giorgia Lepore, Annarita Depalo, Maria Pia Foschino Barbaro, Giulia Scioscia

PA1197 **M-mode obstruction index (MIO): an ultrasound method to evaluate presence and severity of airway obstruction in COPD patient**
Elisa Riccardi (Massino Visconti, Italy), Massimo Comune, Giovanni Ferrari, Alessandro Oliva, Paolo Righini, Valter Gallo, Carlotta Geninatti, Roberto Prota

PA1198 **Association of diaphragm thickness and echogenicity with age, sex and BMI in healthy subjects: a cross-sectional study**
Jeroen van Doorn (Nijmegen, Netherlands), Juerd Wijntjes, Christiaan Saris, Coen Ottenheijm, Nens Van Alfen, Jonne Doorduin

PA1199 **Ipsilateral and contralateral hemidiaphragm dynamics in symptomatic pleural effusion,the 2nd PLeural Effusion And Symptom Evaluation (PLEASE)-2 Study**
Deirdre B. Fitzgerald (Perth, Australia), Sanjeevan Muruganandan, Carolyn J Mcintyre, Y C Gary Lee, Bhajan Singh

PA1200 **Diaphragm ultrasound in spondyloarthritis: assessment of diaphragmatic motion and respiratory function**
Islam Mejri Ep Ajili (Hammamlif Ben Arous, Tunisia), Abir Dghaies, Rim Dhahri, Samira Mhamdi, Selsabil Daboussi, Chiraz Aichaouia, Imen Gharsallah, Zied Moatemri

PA1201 **USEFULNESS OF DIAPHRAGM ECOINTENSITY FOR THE MANAGEMENT OF PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS**
Santos Ferrer Espinosa (Valencia, Spain), Alba Mulet Arabi, Jesús Sancho Chinesta, Lucía Fdez-Presa, Jaime Signes-Costa Miñana

PA1202 **Prediction of extubation failure via diaphragmatic ultrasonography among mechanically ventilated adult patients admitted in intensive care unit of a tertiary care hospital, Karachi, Pakistan: a prospective cohort**
Maria Khan (Karachi, Pakistan), Maryam Lakhdir, Hashir Majid, Iqbal Azam, Ghufran Adnan, Masood Kadir

PA1203 **Usefulness of diaphragmatic ultrasound as a prognosis predictor in a Intermediate Respiratory Care Unit in COVID-19 patients**
Tomas Villen (Madrid, Spain), Esther Barbero, Miguel Lorente, José Terán, Pedro Landete

PA1204 **The role of Trans-thoracic ultrasonography for rapid detection of Covid-19 pandemic-pneumonia(262cases)?**
Abdul Rasheed Qureshi (Lahore, Pakistan), Huma Bilal

PA1205 **Title Lung ultrasound vs. CT scan for the assessment of post-ICU long COVID**
Silvia Bonaiti (Pavia, Italy), Chandra Bortolotto, Giulia Salve, Maria Antonietta Forte, Caterina Sonnati, Martina Moscariello, Giulia Ceschin, Antonella Donatelli, Alice Lionetti, Anita Orlando, Lorenzo Preda, Francesco Mojoli, Silvia Mongodi

PA1206	**Lung Ultrasound (LUS) To Predict The Risk Of Hospitalization In COVID-19 Patients Treated With Anti-SARS-CoV-2 Monoclonal Antibodies** Valentina Pinelli (Sarzana, Italy), Federica Novelli, Puppo Gianfranco, Meazza Massimiliano, Stefania Artioli
PA1207	**Segmental lung anatomy for ultrasound assessment for post-COVID conditions** Rostyslav Bubnov (Kyiv, Ukraine), Anatoliy Serhiienko, Zbigniew Pilecki, Grzegorz Pilecki
PA1208	**Pseudo-anthropomorphic phantom for ultrasound-guided thoracic interventions** Ana Belén Llanos Gonzalez (La Orotava, Spain), Natalia Arteaga-Marrero, Enrique Villa, Marta Elena Gómez Gil, Orlando Acosta Fernández, Juan Bautista Ruiz-Alzola, Javier González-Fernández
PA1209	**Physician-led ultrasound interventions: Rapid diagnosis of lung cancer during the COVID-19 pandemic** Kerri-Marie Heenan (Dungannon, United Kingdom), Laura Davidson, Therese Scullion, Eddie Gibson, Rory Kelly, Kelly Elliot, Graeme O'Hara, Jackie Jamison, Izhaq Masih
PA1210	**Ultrasound guided neck node aspiration (FNAC) by pulmonologist in patients with lung cancer** Eman Nasr (Manchester (Greater Manchester), United Kingdom), Kashif Ali Khan, Simon Bailey, David Shelton
PA1211	**Ultrasound-guided needle aspiration biopsy of anterior mediastinal masses in the hands of pulmonologists** Marta Viscuso (Roma, Italy), Guido Levi, Vanina Livi, Daniela Paioli, Luca Richeldi, Rocco Trisolini, Giampietro Marchetti
PA1212	**Ultrasound guided(USG) trucut biopsy of the pleura, lymph nodes and chest wall/subcutaneous lesions performed by respiratory physicians** Qaiser Abdullah (Stoke on trent, United Kingdom), Sana Iftikhar, Ahmed Abimusa, Muhammad Ganaie, Shahul Khan, Mohammed Haris

TP-3 in thematic poster area — Session 158 — 13:00 - 14:00

Thematic poster: Physiology and pulmonary rehabilitation

Disease(s) : Airway diseases | Respiratory critical care | Sleep and breathing disorders | Interstitial lung diseases | Pulmonary vascular diseases

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

Chairs : Sarah Gephine (Pérenchies, France), Claire M. Nolan (Richmond, United Kingdom)

PA1213	**Frailty in the chronic respiratory patient: association with mortality in obstructive, restrictive and mixed spirometric patterns.** Simone Scarlata (Roma (RM), Italy), Matteo Cesari, Christian Osadnik , Panaiotis Finamore, Raffaele Antonelli Incalzi, Claudio Pedone
PA1214	**Impact of Resistance Training by Electromyostimulation on Energy Cost of Walking and Chronotropic Reserve** Khadija Ayed (Nabeul, Tunisia), Zayneb El Guebsy, Ibtissem Dekhil, Imededdine Ben Dhia, Touhami Khelifi
PA1215	**The effect of airflow from a hand-held fan on breathlessness recovery from submaximalexercise** Miriam Johnson (Hull (North Humberside), United Kingdom), Sarah O'Beirne, Andrew Brew, Christina Ramsenthaler, Peter Watson, Usamah Adia, Philip Rubini, Michael Fagan, Flavia Swan, Andrew Simpson
PA1216	**Is sleep impaired in post-COVID syndrome vs. healthy controls? Preliminary data.** Inga Jarosch (Schönau am Königssee, Germany), Tessa Schneeberger, Antje Stegemann, Daniela Leitl, Rainer Gloeckl, Virginia Swan, Christopher Schoen, Andreas Rembert Koczulla
PA1217	**Nocturnal hypoventilation and respiratory muscle/cough weakness in COVID-19 ICU survivors** Ana Filipa Gonçalves (Vila Nova de Gaia, Portugal), Rodrigo Correia, Rui Santos, João Carlos Winck
PA1218	**Persistent symptoms up to a year after non-hospitalised Covid-19 and lung function findings in persons with persistent dyspnea.** Marta Alina Kisiel (Uppsala, Sweden), Helena Janols, Tobias Nordquist, Jonas Bergquist, Simone Hagfeldt, Andrei Malinovschi, Magnus Svartengren
PA1219	**Spirometry outcomes in survivors of COVID-19 pneumonia** Muhammad Amin Ibrahim (Puncak Alam, Malaysia), Chee Shee Chai, Bushra Johari, Roqiah Fatmawati Abdul Kadir, Abdul Razak Muttalif, Mohammed Fauzi Abdul Rani
PA1220	**Persistent symptoms and spirometric abnormalities after COVID-19: A prospective cohort study** Vijay Hadda (New Delhi (Delhi), India), Tejas Suri, Anant Mohan, Saurabh Mittal, Karan Madan, Surendra Nath, Garima Srivastava, Sunil Kumar, Syam Shaji, Randeep Guleria

PA1221 **Frequency and clinical impact of low muscle mass in patients with asthma referred for pulmonary rehabilitation**
Roy Meys (Horn, Netherlands), Felipe Machado, Martijn Spruit, Anouk Stoffels, Hieronymus Van Hees, Bram Van Den Borst, Peter Klijn, Chris Burtin, Fabio Pitta, Frits Franssen

PA1222 **Effect of physical conditioning evaluated in the 6-minute walk in subjects recovered from COVID-19**
Laura Cornejo-Cornejo (México City, Mexico), Mariana Salvatierra-Escobar, Samanta Hernandez-Lopez, Arturo Orea-Tejeda, Dulce Gonzalez-Islas, Susana Galicia-Amor, Esperanza Trejo-Mellado, Juan Garcia-Hernandez, Iris Lopez-Vasquez, Juan Marquez-Cordero, Jorge Aguilar-Meza, Alejandra Rios-Pereda

PA1223 **Transcutaneous PCO2 (TcPCO2) in COPD patients during incremental exercise test (IET)**
Wendel Dierckx (Kontich, Belgium), Kris Ides, Yinka De Meyer, Eline Lauwers, Erik Franck, Wilfried De Backer

PA1224 **Fatigue And Dyspnea In Young Adults Recovered From COVID-19**
Özge Ertan (İstanbul, Turkey), Buket Barutçu Akinci, Eylul Pinar Kisa, Begüm Kara Kaya, Ahmet Koçyiğit, Hande Şahiner, Zeynep Hosbay

PA1225 **Feasibility of Peak Inspiratory Flow measurement in neuromuscular patients**
Shane Hanon (Bruxelles, Belgium), Sylvia Verbanck, Dimitri Stylemans, Marc Meysman, Eef Vanderhelst

PA1226 **The role of NT-proBNP in patients discharged after COVID-19 pneumonia**
Olha Shchudro (Dnipro, Ukraine), Lyudmyla Konopkina, Tetyana Pertseva, Larysa Botvinikova, Kesiia Bielosludtseva

PA1227 **Effect of oral and mental task on Time Up and Go in COPD.**
Olivier Van Hove (Bruxelles, Belgium), Sarah Noel , Romain Pichon , Rolando Espinoza, Ana Maria Cebolla, Véronique Feipel, Dimitri Leduc, Gael Deboeck , Bruno Bonnechère

PA1228 **The effect of COVID rehabilitation on fatigue and post-exertional symptom exacerbation.**
Enya Daynes (Leicester, United Kingdom), Molly M Baldwin, Matthew Annals, David Coope, Nikki Y Gardiner, Sally J Singh

PA1229 **Assessment of nutritional status and body composition in relation to quality of life in COPD patients.**
Janos Tamas Varga (Budapest, Hungary), Monika Fekete, Zsofia Szarvas, Agnes Feher, Andrea Lehoczki

PA1230 **Benefits of rehabilitation on neuropsychological symptoms in patients acquiring COVID-19 in the workplace: a longitudinal study**
Katrin Mueller (Chemnitz, Germany), Katharina Zwingmann, Anna-Lena Schultz, Eva Wilhelm, Rainer-Christian Weber, Ivo Berger, Michael Stegbauer

PA1231 **Impact of pulmonary rehabilitation on peak respiratory pressures and dyspnea of patients with pulmonary arterial hypertension**
Lina Marcela Orozco Mejia (Cali, Colombia), Ricardo Mosquera, Eleonora Girón Ruiz, Julián Andrés Rivera Motta

TP-4 in thematic poster area — Session 159 — 13:00 - 14:00

Thematic poster: New techniques and improvements in lung function assessment

Disease(s) : Pulmonary vascular diseases | Airway diseases | Sleep and breathing disorders | Interstitial lung diseases | Respiratory critical care

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

Chairs : Raffaele Dellaca (Milano (MI), Italy), Camille Rolland-Debord (clermont-ferrand, France)

PA1232 **Validating RespMech: an automated, free and open-source platform for respiratory mechanics analysis at rest and in exercise**
Annie Liu (Richmond Hill, Canada), Yannick Molgat-Seon, Nathaniel Y. W. Yuen, Paolo B. Dominelli, Matthew D. James, Denis E. O'Donnell, Nicolle J. Domnik, Emil Schwarz Walsted

PA1233 **An app-based spirometer for home use can detect exercise-induced bronchoconstriction in athletes**
Tonje Reier-Nilsen (Jar, Norway), Julie Stang , Hanne Flatsetøy, Martine Isachsen, Björn Nordlund

PA1234 **Digital lung sound characteristics related to airflow turbulence intensity: a methodological proof-of-concept.**
Eline Lauwers (Wilrijk, Belgium), Toon Stas, Hosein Sadafi, Rita João, Ian Mclane, Wendel Dierckx, Kim Van Hoorenbeeck, Jan Steckel, Wilfried De Backer, Stijn Verhulst, Kris Ides

PA1235 **Pulmonary acinar biomechanics imaged with synchrotron phase contrast microtomography in live rats**
Sam Bayat (Grenobe, France), Jose-Luis Cercos, Luca Fardin, Gaetano Perchiazzi, Alberto Bravin

PA1236 **Dependence of capnogram shape factors on age and anthropometric parameters in spontaneously breathing normal subject**
József Tolnai (Szeged, Hungary), Ferenc Peták, Katalin Kapus, Gergely H. Fodor, Ferenc Rárosi, Zoltán Novák

PA1237 **Lung Ultrasound as a tool for monitoring the interstitial changes in recently hospitalised patients with COVID-19 pneumonia - the COVIDLUS study**
Naomi Earl (Tunbridge Wells, United Kingdom), Austin Begbey, Miriam Davey, Emma Ince, Sarah Greenslade, Naveen Sharma, Nicklas Wakeham, Karina Cox, Tuck-Kay Loke

PA1238 **Comparison of current predicted spirometric values examined in a Bolivian population and proposal of local reference equations**
Alfredo Ajata (Santa Cruz, Bolivia), Giuseppe Liistro

PA1239 **Pulmonary function test in obese patients**
Yael González (Buenos Aires, Argentina), Alejandro Salvado, Belén Ginetti, Julieta Franzoy, Pablo Oyhamburu, Josefina Pascua, Glenda Ernst, Fernando Di Tullio

PA1240 **Cardiorespiratory responses to head down tilt**
ABDULAZIZ ALSHARIFI (london, United Kingdom), Akbar Irampaye, Niamh Carter, Joerg Steier, Gerrard Rafferty

PA1241 **Comparison of mainstream and sidestream capnography in spontaneously breathing adults**
Ibolya Tóth (Hódmezővásárhely, Hungary), Ferenc Rárosi, József Tolnai, Álmos Schranc, Zoltán Novák, Ferenc Peták, Gergely H. Fodor

PA1242 **Validity of a novel respiratory health meter for analysis of maximal respiratory pressures**
Herkko Ryynänen (Helsinki, Finland), Ilpo Kuronen, Essi Ahokas, Maarit Valtonen, Johanna K. Ihalainen, Anssi Sovijärvi, Juhani Multanen

PA1243 **Pulmonary Hypertension and measurement of exercise capacity remotely: the PERSPIRE study**
Carol Keen (Sheffield (South Yorkshire), United Kingdom), Molly Hashmi-Greenwood, Karen Sage, David Kiely

PA1244 **Can Forced Expiratory Time be used as a surrogate tool in quantifying the lung hyperinflation in COPD?**
Sana SELLAMI (sfax, Tunisia), Rim Kammoun, Fatma Elleuch, Leila Triki, Rania Bouchech, Hela Zouari, Kaouthar Masmoudi

PA1245 **Physiologist- and SLT-led CPET-CLE: a one stop shop for complex breathlessness**
Scott Hawkes (Woking (Surrey), United Kingdom), Joanne Clayton, Rob Peat, Thomas Simon FitzMaurice, Richard Steven, Rob Cooper

PA1246 **Spirometric lung function as a predictor of peak VO2 in adults with congenital heart disease**
Scott Hawkes (Woking (Surrey), United Kingdom), Thomas Simon FitzMaurice, Yuen Liao, Angella Bryan, Reza Ashrafi

PA1247 **Late Breaking Abstract - Lung volumes differentiate the predominance of emphysema versus airway disease phenotype in early COPD**
Mehrdad Arjomandi (San Francisco, United States), Siyang Zeng, Russell Bowler, Gang Luo, David Lynch

TP-5 in thematic poster area — Session 160 — 13:00 - 14:00

Thematic poster: Non-COVID-19: mechanical ventilation and beyond

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

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

Chairs : Ignacio Martin-Loeches (Dublin, Ireland), Nikoletta Rovina (Athens, Greece)

PA1248 **Corticosteroid for acute exacerbations of COPD in ICU. A French Cohort: OUTCOMEREA database.**
Jean-Louis Pépin (Grenoble, France), Louis-Marie Galerneau, Sébastien Bailly, Nicolas Terzi, Stéphane Ruckly, Maité Garrouste-Orgeas, Yves Cohen, Vivien Hong Tuan Ha, Marc Gainnier, Shidasp Siami, Claire Dupuis, Michael Darmon, Elie Azoulay, Jean-Marie Forel, Florian Sigaud, Christophe Adrie, Dany Goldgran-Toledano, Fabrice Bruneel, Etienne De Montmollin, Laurent Argaud, Jean Reignier, Jean-François Timsit

PA1249 **Management of Acute Exacerbations of COPD in the Intensive Care Unit: OUTCOMEREA Database 1997-2018**
Jean-Louis Pépin (Grenoble, France), Louis-Marie Galerneau, Sébastien Bailly, Nicolas Terzi, Stéphane Ruckly, Maité Garrouste-Orgeas, Yves Cohen, Vivien Hong Tuan Ha, Marc Gainnier, Shidasp Siami, Claire Dupuis, Michael Darmon, Elie Azoulay, Jean-Marie Forel, Florian Sigaud, Christophe Adrie, Dany Goldgran-Toledano, Fabrice Bruneel, Etienne De Montmollin, Laurent Argaud, Jean Reignier, Jean-François Timsit

PA1250 **Evaluation of aerosol drug delivery in a simulated adult asthma patient**
Elena Fernández Fernández (Galway, Ireland), Marc Mac Giolla Eain, Mary Joyce, Ronan Macloughlin

PA1251	**The Prognostic significance of MELD-XI in Patients Admitted to the ICU for Respiratory Failure** Fatma Çiftci (Ankara, Turkey), Yağmur Gizem Kılıç, Aslıhan Gürün Kaya, Miraç Öz, Serhat Erol, Aydın Çiledağ, Akın Kaya
PA1252	**Parasternal EMG assessment in patients with severe Guillain-Barré Syndrome weaning from mechanical ventilation** Michael Cheng (Broadway (NSW), Australia), Anne Rossel, Amanda Piper, Patrick Murphy, Joerg Steier
PA1253	**Machine learning (ML) classifier models in ARDS to identify patients with a low percentage of potentially recruitable lung** Francesca Pennati (Milano (MI), Italy), Silvia Coppola, Andrea Aliverti, Davide Chiumello
PA1254	**Outcomes of patients with initial acute respiratory failure on veno-venous extracorporeal membrane oxygenation (ECMO) requiring additional circulatory support by VVA-ECMO** Benjamin Seeliger (Hannover, Germany), Rolf Erlebach, Lennart Wild, Ann-Kathrin Rath, Rea Andermatt, Daniel Hofmänner, Jens-Christian Schewe, Christoph Ganter, Christian Putensen, Christian Kühn, Johann Bauersachs, Tobias Welte, Marius M Hoeper, Pedro David Wendel-Garcia, Sascha David, Christian Bode, Klaus Stahl
PA1255	**Impact of early ECMO support on survival of patients with Hantavirus cardiopulmonary syndrome in Chile.** Ricardo Fritz (Santiago, Chile), Francisco Arancibia Hernandez, Claudia Sepúlveda, Jorge Gavilán, Christian Espinoza, Edgardo Ossandon, Marcelo Concha, Sebastian Iturra
PA1256	**Safety of a prone implementation quality based initiative in a safety net hospital** Keely Johnson (Astoria, United States), Reiichiro Obata, Demetrios Papademetriou, Mohamed Darwish, Alfredo Astua
PA1257	**Predictive mortality factors of Diffuse Alveolar Hemorrhage: a retrospective study in Tunisia** amina abdelkbir (ben arous, Tunisia), Yosr Ayedi, Chahida Harizi, Afef Skhiri, Monia Attia, Radhouane Fakhfakh
PA1258	**Higher Crystalloids Volumes Predict Adverse Outcomes in Emergency Department Patients with Blunt Thoracic Trauma** Jacopo Davide Giamello (Busca, Italy), Gianpiero Martini, Paola Crida, Ylenia Arese, Luca Bertolaccini, Sara Abram, Elisa Basile, Emanuele Bernardi, Fabio Morra, Fabrizio Corsini, Francesco Tosello, Gabriele Sobrero, Giovanna Greco, Letizia Barutta, Marco Bironzo, Giuseppe Lauria
PA1259	**Spontaneous pneumothorax and factors associated with its development in a cohort of COVID-19 patients in Latin America** Luis Dulcey (Bucaramanga, Colombia), Raimondo Caltagirone, Juan Theran, Diana Villamizar, Melissa Aguas, Hector Moreno, Jonathan Pineda, Rafael Parales
PA1260	**STUMBL score for emergency department safe discharge of patients with minor blunt thoracic trauma** Jacopo Davide Giamello (Busca, Italy), Gianpiero Martini, Davide Prato, Marco Santoro, Ylenia Arese, Luca Bertolaccini, Remo Melchio, Ceri Elisabeth Battle, Timothy Driscoll, Alessia Bono, Alessia Poggi, Alice Bruno, Andrea Falcetta, Andrea Sciolla, Chiara Fulcheri, Daniela Caruso, Giuseppe Lauria
PA1261	**Responder status and long term outcomes of critically ill patients with ARDS receiving high dose steroids as rescue therapy in a specialist acute respiratory failure centre** Thomas A Leahy (London, United Kingdom), Aneesha Chauhan, Victoria Nicholas, Pooja Patel, Joanna Alcada, Paolo Bianchi, Francisca Caetano, Sujal Desai, James Doyle, Phillip Molyneux, Stephane Ledot, Simon Padley, Anand Devaraj, Carole A Ridge, Bhavin Rawal, Maurizio Passariello, Susanna Price, Cliff Morgan, Maria Kokosi, Brijesh Patel, Athol Wells, Geoffrey Ball, Tina Xu, Abdullah Bashir, Christopher Remmington, Suveer Singh
PA1262	**Impact of limbs pneumatic compression during cardiopulmonary resuscitation (CPR) on the survival of cardiac arrest patients** BoXue Han (Beijing, China), Jian Zhang, Ying Wang, Yanyang Zhao, Jianguo Zhao, Donghua Shen, Wei Wang, Zhitao Jin, Beifeng Zhang, Yongfei Liu, Jie Bai, Aier Wang, Guanghan Wu
PA1263	**Evaluation of pleural procedural confidence in intensive care trainees (EPIC)** Lillian Fitzpatrick (Tamworth, Australia), Claire Pickering, Kathryn Kerr, Vineeth George
PA1264	**Kinetics of serum chemerin in critically ill patients with sepsis: a prospective study** Irene Karampela (Athens, Greece), Gerasimos-Socrates Christodoulatos, Natalia Vallianou, Dimitrios Tsilingiris, Evangelia Chrysanthopoulou, George Skyllas, Georgios Antonakos, Ioanna Marinou, Evaggelos Vogiatzakis, Apostolos Armaganidis, Maria Dalamaga
PA1265	**Ventilator alarms that received no intervention:an analysis of ventilator alarm relationship in intensive care unit** Chang Yujen (Taichung City, Taiwan), Chi Shuhua, Hsiao Yaochuan
PA1266	**Technological innovation device "DYNAtraq" for the alignment and fixation of the tracheostomy cannula: Preliminary analysis of its efficacy and safety.** Mauricio A. Orozco-Levi (Barcelona, Spain), Diana Tiga-Loza, Mabel Reyes-Pulido, Carlos Reyes, Camilo Pizarro, Diana Rey, Angela Espitia, Angie Pabón, Magia Pérez-Silva, Sandra Sanabria, Neikel Quintero, Alba Ramírez-Sarmiento

PA1267 **Pneumothorax - a life-threatening complication in patients with cystic fibrosis**
Oxana Munteanu (Chișinău (Chișinău), Republic of Moldova), Ludmila Balanețchi, Eva Gudumac, Rodica Selevestru, Doina Ciolpan, Ana Goloborodico, Cristina Tomacinshi, Svetlana Sciuca

TP-6 in thematic poster area — Session 161 — 13:00 - 14:00

Thematic poster: New insights and biomarkers in COPD

Disease(s) : Airway diseases

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

Chairs : Arnaud Mailleux (Paris, France), Anita Somborac Bačura (Zagreb, Croatia)

PA1268 **DNA methylation signature and epigenetic age of severe COPD**
Sandra Casas Recasens (Barcelona, Spain), Nuria Mendoza, Nuria Olvera, Tamara Garcia, Oriol Sibila, Alvar Agustí, Rosa Faner

PA1269 **Spatial transcriptomics (ST) of cigarette smoke (CS)-induced experimental COPD**
Alen Faiz (Ultimo (NSW), Australia), Hao Chen, Izabela Galvao, Chantal Donovan, Richard Kim, David Ortega, Sobia Idrees, Jonas Schulte-Schrepping, Anna Schaar, Joachim Schultze, Philip Hansbro

PA1270 **Sensitive and specific measurement of alpha-1 antitrypsin elastase inhibitory activity**
Alfred Weber (Vienna, Austria), Andrea Engelmaier

PA1271 **Unique differentially expressed genes in bronchial brushes in severe COPD**
Jos van Nijnatten (Groningen, Netherlands), Alen Faiz, Wim Timens, Victor Guryev, Dirk-Jan Slebos, Karin Klooster, Jorine Hartman, Tessa Kole, David F. Choy, Michele Grimbaldeston, Carrie M. Rosenberger, Irene Heijink, Simon D. Pouwels, Huib Kerstjens, Corry-Anke Brandsma, Maarten Van Den Berge

PA1272 **Sensitive and selective measurement of neutrophil elastase based on a new assay principle**
Alfred Weber (Vienna, Austria), Gabriela Prodinger, Andrea Engelmaier

PA1273 **Gene expression changes in the COPD respiratory epithelium reveals widespread processes of mitochondrial dysfunction.**
Ashley Heinson (Southampton, United Kingdom), Kristoffer Ostridge, Lisa Oberg, Bastian R Angerman, Graham Belfield, Maria G Belvisi, Hannah Burke, Doriana Cellura, Damla Etal, Anna Freeman, Michael Huhn, Alex Mackay, Christopher Mcrae, Daniel Muthas, Adam Platt, Mirella Spalluto, Karl J Staples, Alastair Watson, Tom M.A Wilkinson

PA1274 **Hypomethylation of PRSS23 (cg23771366) is associated with COPD secondary to biomass exposure**
Gloria Pérez Rubio (México, Mexico), Ramcés Falfán Valencia, Omar Bravo Gutiérrez, Alejandra Ramírez Venegas, Rafael Hernández Zenteno

PA1275 **Genome-wide exome identifies differential profiles associated with COPD secondary to tobacco smoking and biomass-burning smoke.**
Enrique Ambrocio-Ortiz (México, Mexico), Gloria Pérez-Rubio, Alejandra Ramírez-Venegas, Rafael De Jesús Hernández-Zenteno, Juan Carlos Fernández-López, María Elena Ramírez-Díaz, Filiberto Cruz-Vicente, María De Lourdes Martínez-Gómez, Julia Pérez-Ramos, Ramcés Falfán-Valencia

PA1276 **A lung tissue gene expression profile of severe early onset COPD**
Niek Bekker (Reeuwijk, Netherlands), Jos Van Nijnatten, Peter Horvatovich, Justina Wolters, Victor Guryev, Wierd Kooistra, Marjan Reinders-Luinge, Roy Woldhuis, Wim Timens, Maarten Van Den Berge, Corry-Anke Brandsma

PA1277 **Blood neutrophil adhesion properties and plasma levels of acute-phase proteins in subjects with PiMM and PiZZ alpha1-antitrypsin**
Urszula Lechowicz (Warsaw, Poland), Aneta Zdral, Adriana Roży, Sabina Janciauskiene, Joanna Chorostowska-Wynimko

PA1278 **Alpha-1 Antitrypsin Deficiency Laboratory Testing-External Quality Assessment Program AATD LABNet 2019-2021**
Joanna Chorostowska-Wynimko (Warsaw, Poland), Irene Belmonte, Malika Balduyck , Tomás P. Carroll , Timm Greulich, Noel G. Mcelvaney, Marc Miravitlles, Francisco Rodriguez-Frias, Marie-Françoise Odou, Stefania Ottaviani, Adriana Rozy, Susana Seixas, Gerard Orriols Torras, Martina Veith, Farid Zerimech, Angelo G. Corsico, Ilaria Ferrarotti

PA1279 **Influence of smoking on bronchial epithelial cell composition by cellular deconvolution and IHC**
Senani Rathnayake (Leppington, Australia), Benedikt Ditz, Jos Van Nijnatten, Corry-Anke Brandsma, Wim Timens, Pieter Hiemstra, Nick Ten Hacken, Brian Oliver, Huib Kerstjens, Maarten Van Den Berge, Alen Faiz

PA1280	**The effect of COVID-19 pandemics on the comprehensive laboratory diagnostic of alpha-1 antitrypsin deficiency in Europe - report from the AATD LABNet** Joanna Chorostowska-Wynimko (Warsaw, Poland), Malika Balduyck, Tomás P. Carroll , Timm Greulich, Noel G. Mcelvaney, Marc Miravitlles, Francisco Rodriguez-Frias, Marie-Françoise Odou, Stefania Ottaviani, David Parr, Adriana Rozy, Susana Seixas, Gerard Orriols Torras, Martina Veith, Farid Zerimech, Angelo G. Corsico, Ilaria Ilaria Ferrarotti
PA1281	**COPD: can genetic background inform about disease heterogeneity?** Rui Marçalo (Aveiro, Portugal), Rui Filipe Santos Marçalo, Guilherme Rodrigues, Thaís Córdova, Vasco Neves, Sonya Neto, Miguel Pinheiro, Manuel A. S. Santos, Paula Simão, Aurora Mendes, Lília Andrade, Alda Marques, Gabriela R. Moura
PA1282	**Late Breaking Abstract - Epigenetic clock analysis shows accelerated ageing in severe early onset COPD** Maaike de Vries (Groningen, Netherlands), Marshellon E. Martinus, Niek J. Bekker, Wierd Kooistra, Rolf H.J. Vedder, Wim Timens, Maarten Van Den Berge, Corry-Anke Brandsma
PA1283	**Genetic effect of SNPs in TMTC2 and COPD secondary to tobacco smoking** Enrique Ambrocio-Ortiz (México, Mexico), Ramcés Falfán-Valencia, Gloria Pérez-Rubio, Alejandra Ramírez-Venegas, Rafael De Jesús Hernández-Zenteno, Julia Pérez Ramos
PA1284	**Genetic variants in SCGB1A1 affect sputum CC16 levels in wood smoke COPD and are associated with COPD susceptibility in smokers.** Armando Zazueta-Marquez (, Mexico), Ramcés Falfán-Valencia, Gloria Pérez-Rubio, Rafael De Jesús Hernández-Zenteno, Alejandro Ortega-Martínez, Alejandra Ramírez-Venegas
PA1285	**One carbon metabolic pathway and smoking mediated altered global DNA methylation in Chronic Obstructive Pulmonary Disease: A vegetarian community-based study from rural India** Suniti Yadav (New Delhi, India), Vijay Hadda, Kallur Nava Saraswathy
PA1286	**Late Breaking Abstract - An in depth study of morphological small airway changes in explant lungs with end stage COPD.** Charlotte de Fays (Loverval, Belgium), Vincent Geudens, Hanne Beeckmans, Astrid Vermaut, Iwein Gyselinck, Tinne Goos, Marie Vermant, Janne Kaes, Celine Aelbrecht, Karen Maes, Youssry Mohamady, Lynn Willems, Lucia Aversa, Stephanie Everaerts, John E. Mcdonough, Laurens De Sadeleer, Sophie Gohy, Wim A. Wuyts, Wim Janssens, Laurens J. Ceulemans, Dirk E. Van Raemdonck, Robin Vos, Charles Pilette, Ghislaine Gayan-Ramirez, Bart M. Vanaudenaerde
PA1287	**Late Breaking Abstract - Water sorption properties and nanostructures of airway mucus in patients with COPD and cystic fibrosis** Lara Marisa Poeschke (Düsseldorf, Germany), Vladislav Genevskiy, Susyn Kelly, Sebastian Bjorklund, Maik Schröder, Georg Nillius, Vitaly Kocherbitov, Stanislav Tatkov

TP-7 in thematic poster area — Session 162 — 13:00 - 14:00

Thematic poster: Contribution of host-microbe interactions to respiratory disease

Disease(s) : Airway diseases, Respiratory critical care

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

Chairs : Gwenda Vasse (Groningen, Netherlands), Colin Bingle (Sheffield (South Yorkshire), United Kingdom)

PA1288	**Protein Blend Suppress Inflammatory Response from Bronchial Epithelial Cells Induced by SARS-Cov-2** José Roberto Mateus da Silva (São José dos Campos, Brazil), Carlos R. Oliveira, Maysa A. R. Brandao-Rangel, Anamei Silva-Reis, Fabiana R. Da S. Olimpio, Lucas Dos S. Zamarioli, Rodolfo P. Vieira
PA1289	**Differentially expressed FOXO1NFE2L2 and NFKB1 mRNAs are associated with differentially regulated corona- and influenza viral receptor genes and Toll-like receptor pathway genes in human bronchial epithelial cells under hyperbaric oxygen exposure** Yu-Ming Li (TAIPEI, Taiwan), Cheng-Chin Wang, Yun Chang, Chieh-Min Chen, Yi-Hui Chen
PA1290	**Investigating neutrophil function during SARS-CoV2 infection in human airway epithelial cells from elderly and young individuals** Tereza Masonou (London, United Kingdom), Maximillian Woodall, Elizabeth Robinson, Ayad Eddaoudi, Katie M. Case, Julio O. Canseco, Priya Solanki, Linzy Elton, Lia B. Arruda, Timothy D. Mchugh, Rob Hynds, Colin Butler, Marko Nikolic, Rosalind L. Smyth, Claire M. Smith
PA1291	**RNA sequencing unravels unique host transcriptional responses to infection with SARS-CoV-2 in well differentiated primary human bronchial epithelial cells compared to other coronaviruses** Ying Wang (Leiden, Netherlands), Melissa Thaler, Clarisse Salgado-Benvindo , Nathan Ly, Anouk A. Leijs , Dennis K. Ninaber, Martijn J. Van Hemert, Pieter S. Hiemstra, Anne M. Van Der Does, Alen Faiz

PA1292	**Changes in the hematological cells ratios are associated with death in COVID-19 patients** Ilse Adriana Gutiérrez Pérez (mexico, Mexico), Gloria Pérez-Rubio, Ivette Buendía-Roldán, Rafael Hernández-Zenteno, Leslie Chavez-Galán, Ramcés Falfán-Valencia, Iris Paola Guzmán-Guzmán
PA1293	**Conditions affecting bronchial epithelial cells responses to poly (I:C)** Fatemeh Moheimani (Middlesbrough, United Kingdom), Nafeesa Shahdab, Chris Ward, Stephen Cummings
PA1294	**A model of epithelial and neutrophil responses to cystic fibrosis microbes** Daniel Laucirica (Nedlands, Australia), Craig Schofield, Samantha Mclean, Camilla Margaroli, Patricia Agudelo-Romero, Stephen Stick, Rabindra Tirouvanziam, Thomas Riley, Anthony Kicic, Luke Garratt
PA1295	**Method development for flow-cytometric analysis of primary human airway epithelia infected with non-typeable Haemophilus influenzae** Katie L Horton (Southampton, United Kingdom), Jennifer L Cane, Claire L Jackson, Raymond N Allan, Jane S Lucas, Timothy S C Hinks
PA1296	**Phosphoinositide 3-kinase and airway infections in severe asthmatics** Anurag Bhalla (Toronto (ON), Canada), Katherine Radford, Kayla Zhang, Zachary Brautigam, Chynna Huang, Melanie Kjarsgaard, Nicola Lavigne, Sarah Svenningsen, Guillaume Pare, Manali Mukherjee, Parameswaran Nair
PA1297	**Staphylococcal enterotoxin B has sustained effects on the respiratory immune milieu and significantly modulates allergic airway inflammation in a mouse model** Sabine Stegemann-Koniszewski (Magdeburg, Germany), Ilka Jorde, Christina Hildebrand, Irina Han, Eva Lücke, Jens Schreiber
PA1298	**In vitro approaches to identify an antiviral role for BPIFB1 in the airway epithelium** Abdulaziz Alkhoshaiban (Sheffield, United Kingdom), Miraj Kobad Chowdhury, Priyanka Anujan, , Lynne Bingle , Colin Bingle
PA1299	**Increased degradation of heparan sulfate is implicated in COPD exacerbations of different etiology** Eleni Papakonstantinou (Basel, Switzerland), Maria-Elpida Christopoulou, Michael Tamm, Daiana Stolz
PA1300	**The gut microbiome in COPD; a case-control study** Anders Ørskov Rotevatn (Nesttun, Norway), Tomas Mikal Lind Eagan, Solveig Tangedal, Gunnar Reksten Husebø, Rune Nielsen
PA1301	**Circulating levels of hyaluronic acid synthase-2 (HAS-2) are associated with COPD exacerbations of different etiology** Eleni Papakonstantinou (Basel, Switzerland), Maria-Elpida Christopoulou, Michael Tamm, Daiana Stolz
PA1302	**Inflammatory signature of a murine model of chronic obstructive pulmonary disease (COPD) exacerbations** Elena Tantillo (Parma, Italy), Paola Caruso, David Colecchia, Gloria Pittelli, Silvia Pontis, Maurizio Civelli, Marcello Trevisani
PA1303	**Late Breaking Abstract - COVID 19 severity is associated with the presence of lung derived cfDNA in plasma** Ariel Rokach (Jerusalem, Israel), Roni Ben Ami, Eden Cohen, Nama Bogot, Danit Kochan, George Kalak, Amir Jarjoui, Chen Chen Shuali, Hava Azulai, Hezi Barhoum, Moshe M Greenberg, David Velleman, Ramzi Kurd, Eli Ben Chetrit, Ahmad Quteineh, Yuval Dor
PA1304	**Late Breaking Abstract - Novel fully primary human airway epithelium-alveolar macrophages in vitro co-cultures models to study host pathogen interactions** Samuel Constant (Plan-les-Ouates, Switzerland), Bernadett Boda, Carole Bertinetti, Ophélie Verbeke, Xiao-Yann Huang, Song Huang
PA1305	**Late Breaking Abstract - Single cell mRNA sequencing of nasal swabs indicate an impaired ciliated cell function in COVID-19 convalescents with persisting dyspnea** Saskia Trump (Berlin, Germany), Jennifer Loske, Maria Theresa Völker, Olivia Debnath, Sören Lukassen, Naveed Ishaque, Marey Messingschlager, Anke Seegebarth, Fridolin Steinbeis, Florian Kurth, Thomas Zoller, Martin Witzenrath, Irina Lehmann, Sven Laudi, Roland Eils
PA1306	**Late Breaking Abstract - Vaccination after recovery from COVID-19 affects nasal antibody levels** Felicity Liew (London, United Kingdom), Shubha Talwar, Claudia Efstathiou, Thushan De Silva, Susannah Dunachie, Antonia Ho, Sara Fontanella, Lance Turtle, Ryan S Thwaites, Peter J M Openshaw
PA1307	**Late Breaking Abstract - Increased susceptibility to Pseudomonas aeruginosa pneumonia in overventilated lungs is caused by airspace acidification** Matthias Felten (Berlin, Germany), Chiunjiang Tan, Sebastian Ferencik, Jingjing Li, Eleftheria Letsiu, Jasmin Lienau, Holger C Müller-Redetzky, Theresa C Firsching, Achim D Gruber, Gopinath Krishnamoorthy, Zhang Qi, Wolfgang Kübler, Martin Witzenrath

TP-8 in thematic poster area — Session 163 — 13:00 - 14:00

Thematic poster: Diagnostic modalities for sleep disordered breathing

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

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

Chairs : Athanasia Pataka (Thessaloniki, Greece), Matteo Bradicich (Zollikerberg, Switzerland)

PA1308	**Diagnostic utility of the modified Berlin Questionnaire vs Berlin Questionnaire for the diagnosis of obstructive sleep apnoea in adults with a history of COVID-19 infection** Yeliz Çelik (İstanbul, Turkey), Yüksel Peker
PA1309	**Gender gap of NOSAS score in patients with suspected OSA.** Jone Solorzano Egurbide (bilbao, Spain), Imanol González Muñoz, Edurne Echevarría Guerrero, Mª Luz Zaldibar Barinaga, Yolanda Rey Fernandez, Beatriz González Quero, Laura Cancelo Díaz, Sonia Castro Quintas, Amaia Urrutia Gajate, Valentín Cabriada Nuño
PA1310	**Validation of NoSAS score for screening of sleep disordered breathing (SDB) in our patients with suspected OSA** Sonia Castro Quintas (Bilbao (Bizkaia), Spain), Amaia Urrutia Gajate, Jone Solorzano Egurbide, Elena Garay Llorente, Beatriz Gonzalez Quero, Joseba Andia Iturrate, Valentin Cabriada Nuño
PA1311	**Comparison of two questionnaires for screening obstructive sleep apnea syndrome in the elderly.** syrine Abdellatif (Marsa, Tunisia), Ferdaous Yangui, Chaima Baya, Hela Cherif, Mrassi Hana, Mariem Triki, Mohamed Ridha Charfi
PA1312	**Diagnostic accuracy of different tools for OSA: with reference to level I PSG** Abhishek Goyal (Bhopal, India), Abhijit Pakhare, Ankur Joshi
PA1313	**Assessment of Obstructive sleep apnea among Iraqi people in 2019 by using (STOP – BANG) model** Hashim Talib Hashim (Nassiryah, Iraq)
PA1314	**Prevalence and determinants of sleep apnea in the French general population** Pauline BALAGNY (Paris, France), Emmanuel Wiernik, Adeline Renuy, Johane Matta, Justine Frija-Masson, Philippe Gabriel Steg, Céline Ribet, Marcel Goldberg, Emmanuelle Vidal-Petiot, Marie Zins, Marie-Pia D'Ortho
PA1315	**Machine learning and geometric morphometrics to predict obstructive sleep apnoea from 3D craniofacial scans** Raoua Ben Messaoud (Grenoble, France), Fabrice Monna, Nicolas Navarro, Sébastien Baillieul, Lionel Sanchez, Corinne Loiodice, Renaud Tamisier, Marie Joyeux Faure, Jean Louis Pepin
PA1316	**Gender equity: AASM scoring criteria for OSA diagnosis** Kate Cole (San Diego, United States), R. Benjamin Dexter, Atul Malhotra, Peter A. Cistulli, Alison Wimms, Will Mcconnell, Kimberly L. Sterling, Jean Louis Pepin
PA1317	**Type III sleep test at home versus Type I polysomnography in the laboratory before bariatric surgery** Luc Groshaeny (Saint Croix en Plaine, France), Emmanuel Gomez, Mathilde Oranger, Pierre Thore, Julien Soler, Anne Guillaumot, Simon Valentin, Delphine Sayen, Didier Quillot, Nicolas Reibel, François Chabot, Ari Chaouat
PA1318	**Peripheral arterial tonometry versus polysomnography in suspected obstructive sleep apnea** Jonathan Röcken (Basel, Switzerland), Desiree M. Schumann, Matthias Herrmann, Léo Franchetti, Leticia Grize, Werner Strobel, Michael Tamm, Daiana Stolz
PA1319	**Comparative study between Nox Body Sleep algorithm (NBS) and the manual scoring (MS) of respiratory polygraphs (RP)** Imanol Gonzalez Muñoz (Barakaldo, Spain), Jone Solorzano Egurbide, Laura Cortezon Garces, Nerea Ortiz Laza, Cristina Valverde Novillo, Sonia Castro Quintas , Amaia Urrutia Gajate, Beatriz Gonzalez Quero, Valentin Cabriada Nuño
PA1320	**Comparison of AI-driven scoring with manual scoring of lab-based polysomnography data** Christian Gysin (St. Gallen, Switzerland), Florent Baty, Franziska Schmidli, Kathrin Schaerz, Otto Schoch, Martin Brutsche
PA1321	**“My Fitbit tells me I don’t sleep”** Eli Dabscheck (Melbourne (VIC), Australia), Maitri Munsif, Ria Jumabhoy, Kanishka Rangamuwa, Darren Mansfield, Sean Drummond
PA1322	**In what position do people sleep in the sleep laboratory?** Christiaan Yu (Clayton, Australia), Renel Cuesta, Eldho Paul, Teanau Roebuck, Belinda Miller
PA1323	**Positional Obstructive Sleep Apnea: A Mild and Male Predominant Phenotype** Ömer Selim Unat (Izmir, Turkey), Mehmet Sezai Tasbakan, Ozen Kacmaz Basoglu

PA1324	**Geographical and Seasonal Impact on snoring prevalence - A study based on Internet search frequencies** Inês Silva e Costa De Castro Barreto (Lisboa, Portugal), Cátia Pereira, Mónica Pereira, Cristina Bárbara, Paula Pinto, Richard Staats
PA1325	**Validation of ambulatory blood pressure monitoring and pulse transit time** Katiuska Herminia Liendo Martinez (madrid, Spain), Daniel López-Padilla, Javier De Miguel Díez, Felipe Villar Alvarez, Teresa Gomez Garcia
PA1326	**Late Breaking Abstract - Trajectories of CPAP termination and resumption: a French nationwide database analysis** Jean-Louis Pépin (Grenoble, France), Renaud Tamisier, Adam Benjafield, Pierre Rinder, Florent Lavergne, Anne Josseran, Paul Sinel-Boucher, Peter Cistulli, Atul Malhotra, Pierre Hornus, Sebastien Bailly
PA1327	**Late Breaking Abstract - Tobacco smoke exposure and sleep duration among U.S. adolescents** Ashley L. Merianos (Cincinnati, United States), Timothy Stone, E. Melinda Mahabee-Gittens, Roman A. Jandarov, Kelvin Choi

TP-9 in thematic poster area — Session 164 — 13:00 - 14:00

Thematic poster: Asthma treatment: real-world studies and other diseases

Disease(s) : Airway diseases

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

Chairs : Nicolas Roche (Paris, France), Ellen Tufvesson (Lund, Sweden)

PA1328	**Subcutaneous specific immunotherapy (SCIT) added to omalizumab in severe allergic asthma patients -efficacy and safety M.Christopoulou, J.Moisidis, L.Panteli and A.Christopoulos Asthma Clinics Private outpatient clinic Patras/Greece** Antonios Christopoulos (Patras, Greece), Mariaelpida Christopoulou, Lilia Panteli, Ioannis Moisidis, Ioannis Christopoulos
PA1329	**Improvement of health-related quality of life after 3 months of treatment with extrafine single-inhaler triple therapy in asthmatics: a real-world view from Germany** Christian Gessner (Leipzig, Germany), Berktan Akyildiz, Maurice-Dominique Martini, Torben Meyer-Duderstaedt, Rembert Koczulla
PA1330	**Effectiveness of initiating biologics in severe asthma patients with high steroid exposure** Wenjia Chen (Vancouver, Canada), Trung N Tran , Mohsen Sadatsafavi, Esther Garcia Gil, Marianna Alacqua, Andrew Menzies Gow, Liam G Heaney, Paul E.Pfeffer, Jorge Maspero, Matthew Peters, George C Christoff, Mohit Bhutani, Carlos A.Torres-Duque, Charlotte Ulrik, Alan Altraja, Lauri Lehtimaki, Camille Taille, Andrianna I.Papaioannou, Sundeep Salvi, Richard W Costello, Giorgio Walter Canonica, Takashi Iwanaga, Mona Al-Ahmad, Desiree Larenas-Linnemann, Piotr Kuna, João A.Fonseca, Riyad Al-Lehebi, Mariko Koh Siyue, Chin Kook Rhee, Luis Perez-De-Llano, Rupert C Jones, Diahn-Warng Perng , Eileen Wang, Flavia Hoyte, Nigel Wong Chong Boon , Juntao Lyu , Con Ariti, Ruth Murray , Celine Goh, Indu Joshi, Neva Eleangovan, David Price
PA1331	**Complex therapy in patients with bronchial asthma on the background of gastroesophageal reflux disease (GERD)** Yevgeniya Dytyatkovska (Dniepropetrovsk, Ukraine), Ieliena Koretskaia, Natalia Nedogibchenko, Anastasiia Yevtushenko
PA1332	**Adolescence to early adulthood transition in French severe asthmatic children treated with omalizumab** Camille Taillé (Paris, France), Marc Humbert, Arnaud Bourdin, Ralph Niarra, Céline Thonnelier, Audrey Lajoinie, Alexandre Rigault, Mathieu Molimard, Antoine Deschildre
PA1333	**Specialist care among adults with asthma and frequent use of oral corticosteroids – a nationwide Danish register-study** Inge Raadal Skov (Odense, Denmark), Hanne Madsen, Jacob Harbo Andersen, Anton Pottegård, Jesper Rømhild Davidsen
PA1334	**Outcomes from treating rhinitis in patients with refractory breathlessness** Rachel Daly (Manchester , United Kingdom), Siobhan Ludlow, Thomas Pantin, Stephen Fowler
PA1335	**Real-life comparative study on the effectiveness of benralizumab, mepolizumab and omalizumab in severe allergic asthma associated with nasal polyps** Angelica TIOTIU (Nancy, France), Paula Mendez-Brea, Iulia Ioan, Rodrigo Romero-Fernandez, Jean Philippe Oster, Thi-Cam-Tu Hoang, Pauline Roux, Diana Carolina Ochoa-Gutierrez, Philippe Bonniaud, Frederic De Blay, Francisco-Javier Gonzalez-Barcala
PA1336	**Prevalence of anxiety and depression in patients with severe Asthma who are receiving biologic therapy.** Jane Watson (Epsom, United Kingdom), Chloe Peach, Nicola Price, Jane Evans, Adrian Draper, Sachelle Ruickbie
PA1337	**Suppressive effect of corticosteroid treatment on urinary levels of androgens and cortisol in mild and severe asthma** Valentyna Yasinska (Rönninge, Sweden), Cristina Gómez, Johan Kolmert, Anna James, Lars I. Andersson, Barbro Dahlén, Craig E. Wheelock, Sven-Erik Dahlén, Eva Wikström-Jonsson, (On Behalf Of The U-Biopred Study Group)

PA1338	**Economic impact of oral corticosteroids in severe asthmatics: a simulation study in selected European countries** Arnaud Bourdin (Montpellier Cedex 5, France), Elisabeth H Bel, Barbro Dahlén , Ratko Djukanovic, Enrico Heffler, Piotr Kuna, Renaud Louis, Celeste Porsbjerg, David Ramos-Barbon , Sabina Škrgat, Giacomo Matteo Bruno, Sergio Di Matteo , Chiara Martinotti, Giorgio Lorenzo Colombo , Thomas Paulsson, Barbara Mascialino
PA1339	**Assessing variation in severe asthma care in England: a national benchmarking study** James Rose (Reading, United Kingdom), Seema Gadhia, Marianna Lepetyukh, Ben Williams, Hitasha Rupani, Grainne D'Ancona
PA1340	**Using clusters of asthmatic patients to quantitatively estimate, prior to initiating treatment, the likelihood of β2-agonist response in asthma patients** Edgar Delgado-Eckert (Basel, Switzerland), Cindy Thamrin, Ian Town, D Robin Taylor, Urs Frey
PA1341	**Clinical Characteristics and Disease Burden of Severe Asthma According to Oral Corticosteroid Dependence: Real-World Assessment from the Korean Severe Asthma Registry (KoSAR)** Ji-Hyang Lee (Seoul, Republic of Korea), Hyo-Jung Kim, Chan Sun Park, So Young Park, So-Young Park, Hyun Lee, Sang-Heon Kim, You Sook Cho
PA1342	**Prevalence of asthma-COPD overlap in COPD and severe asthma cohorts** Hyonsoo Joo (Seoul, Republic of Korea), So-Young Park, So Young Park, Seo Young Park, Sang-Heon Kim, You Sook Cho, Kwang Ha Yoo, Ki Suck Jung, Chin Kook Rhee
PA1343	**Adherence to inhalers and asthma control assessed by two validated self-reported questionnaires.** Silviya Novakova (Plovdiv, Bulgaria), Plamena Novakova
PA1344	**Impact of baseline characteristics on clinical remission achievement in severe asthma** Christian Domingo Ribas (Sabadell (Barcelona), Spain), Ian Pavord, David Bañas Conejero, Robert G. Price, Alison Pullan, John Oppenheimer, Liam G. Heaney, Hiroyuki Nagase, Emilio Pizzichini, Peter Howarth, Frances Gardiner
PA1345	**Innovation in drug development: applying human factors to understand asthmatic patients' needs.** Marta Lombardini (Parma, Italy), Giulia Marenghi, Francesco Bianchi
PA1346	**Analysis of the tolerance and safety of inhaled antibiotics and hypertonic saline solution in patients with bronchial hyperreactivity** Andrea Carolina Perez Figuera (Madrid, Spain), Rosa Nieto Royo, Raquel Morillo Guerrero, Carlos Almonacid Sánchez, Aurora Solier López, Esther Barbero Herranz, Diego Durán Barata, Beatriz Pintado Cort, Diurbis Velasco Álvarez, Luis Máiz Carro
PA1347	**Comorbidities in severe and non-severe asthma: a nationwide population-based observational study** Hannu Kankaanranta (Seinäjoki, Finland), Arja Viinanen, Pinja Ilmarinen, Juha Mehtälä, Tero Ylisaukko-Oja, Juhana J Idänpään-Heikkilä, Lauri Lehtimäki

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

8A - live streamed Session 167 14:15 - 15:45

State of the art session: Respiratory infections

Aims : to review the most relevant topics related to respiratory infection in 2021–2022.

Disease(s) : Respiratory infections

Method(s) : Cell and molecular biology Public health Pulmonary rehabilitation

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Nurse, Respiratory critical care physician, Paediatrician, Patient, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist, Respiratory therapist, Journalist

Chairs : Eva Polverino (Barcelona, Spain), Holly R. Keir (Dundee (Angus), United Kingdom), Giovanni Sotgiu (Sassari, Italy)

14:15	**The lung microbiome and pneumonia: is dysbiosis the new pathway to investigate these infections ?** Leopoldo N. Segal (New York New York, NY, United States)	**1355**
14:45	**The role of new diagnostics in managing mycobacterial infections** Daniela Maria Cirillo (Milano (MI), Italy)	**1357**
14:30	**How new vaccine technology can modify the history of respiratory infections** Tobias Welte (Hannover, Germany)	**1356**

15:00	**New drugs and regimens in tuberculosis** Christoph Lange (Borstel, Germany)	**1358**
15:15	**Discussion and Q&A** All Speakers	**1359**

8B - live streamed Session 168 14:15 - 15:45

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 2022 which will then be presented by one of the authors.

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

Method(s) : General respiratory patient care

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Physician in Pulmonary Training

Chairs : Darren Teichman (Boston, United States), Martin Kolb (Hamilton (ON), Canada), Louise Donnelly (London, United Kingdom)

14:15	**NEJM: Albuterol–Budesonide fixed-dose combination rescue inhaler for asthma** Alberto Papi (Cona, Ferrara, Italy)	**1360**
14:30	**ERJ: Sotatercept for the treatment of pulmonary arterial hypertension: PULSAR open-label extension** Pilar Escribano- Subias (Madrid, Spain)	**1361**
14:45	**NEJM: Trial of a preferential phosphodiesterase 4B inhibitor for idiopathic pulmonary fibrosis** Marlies S. Wijsenbeek (Rotterdam, Netherlands)	**1362**
15:00	**ERJ: COMPERA 2.0: a refined four-stratum risk assessment model for pulmonary arterial hypertension** Marius M. Hoeper (Hannover, Germany)	**1363**
15:15	**Discussion and Q&A** All Speakers	**1364**

8C - live streamed Session 169 14:15 - 15:45

Clinical cases: Lungs on fire: Pulmonary vascular diseases?

Aims : To facilitate the presentation of 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 | Respiratory infections

Tag(s) : Clinical

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

Chairs : Mona Lichtblau (Zürich, Switzerland), Marc Humbert (Le Kremlin-Bicêtre, France), Laurent Bertoletti (Saint Etienne Cedex, France)

Discussants : Silvia Ulrich (Zurich, Switzerland), David Jiménez Castro (Madrid, Spain)

14:15	**Case 1 incl. panel discussion and Q&A - Author: R. O'Loghlin (Ireland)** Silvia Ulrich (Zurich, Switzerland)	**1365**
14:37	**Case 2 incl. panel discussion and Q&A - Author: L. Tregidgo (United Kingdom)** David Jiménez Castro (Madrid, Spain)	**1366**
14:59	**Case 3 incl. panel discussion and Q&A - Author: N. Boyle (Ireland)** Silvia Ulrich (Zurich, Switzerland)	**1367**
15:21	**Case 4 incl. panel discussion and Q&A - Author: S. Cullivan (Ireland)** David Jiménez Castro (Madrid, Spain)	**1368**

8G - live streamed Session 170 14:15 - 15:45

Symposium: What I learnt from COVID-19 to better manage my current patients

Onboarding of COVID-19 practices to improve non-COVID-19 care pathways and outcomes

Aims : to discuss lessons learnt from COVID-19 that can be implemented to improve respiratory care or access to care pathways beyond the COVID-19 pandemic.

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

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

Tag(s) : Clinical

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

Chairs : Anita Simonds (London, United Kingdom), Thierry Troosters (Leuven, Belgium)

14:15	**Management of severe acute respiratory failure** Stefano Nava (Bologna (BO), Italy)	**1369**
14:30	**How will digital health change care of obstructive lung disease patients after the pandemic?** Niels H. Chavannes (Leiden, Netherlands)	**1370**
14:45	**Rehabilitation accessible to all** Anne Holland (Fitzroy North (VIC), Australia)	**1371**
15:00	**Care of children with chronic respiratory disease** Monika Gappa (Düsseldorf, Germany)	**1372**
15:15	**Discussion and Q&A** All Speakers	**1373**

8H - live streamed Session 171 14:15 - 15:45

Symposium: Cell death modalities regulating the onset and progression of chronic lung diseases

The therapeutic potential of modulating cellular fate

Aims : to explain the relevance of different cell death modalities upon lung tissue damage in the development of various chronic lung diseases, including chronic obstructive pulmonary disease (COPD), interstitial lung disease and COVID-19; to differentiate between different cell death modalities and the underlying molecular mechanisms; to describe the immunological and pathological consequences of different cell death modalities; to explain the role of specific cell death modalities in the pathophysiology of chronic lung diseases; to provide insight into the therapeutic potential of cellular fate regulation in chronic lung diseases.

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

Method(s) : Cell and molecular biology

Tag(s) : Translational

Target audience : Clinical researcher, Medical Student, Paediatrician, Pathologist, Scientist (basic, translational)

Chairs : Silke Meiners (Sülfeld, Germany), Reinoud Gosens (Groningen, Netherlands)

14:15	**Introduction to cell death modalities and their role in the progression of chronic lung diseases** Simon D. Pouwels (Zuidhorn, Netherlands)	**1374**
14:30	**The role of mechanical and cellular stress in lung injury and airway remodeling** Jin-Ah Park (Boston, United States)	**1375**
14:45	**Clinical importance of cell death modalities in COPD: from necroptosis to ferroptosis** Ken Bracke (Ghent, Belgium)	**1376**
15:00	**Does NETosis contribute to lung fibrosis in COVID-19?** Speaker to be confirmed	**1377**
15:15	**Discussion and Q&A** All Speakers	**1378**

8N Session 172 14:15 - 15:30

Oral presentation: Biomarkers and beyond in lung cancer

Disease(s) : Sleep and breathing disorders Thoracic oncology

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

Chairs : Rudolf M. Huber (Munich, Germany), Joanna Domagała-Kulawik (Warszawa, Poland)

OA1379	**Quantitative proteomics indicates radical removal of non-small cell lung cancer and predicts outcome** Embla Bodén (Lund, Sweden), Jesper Andreasson, Gabriel Hirdman, Oskar Hallgren, Franziska Olm, Sandra Lindstedt
OA1380	**Prophylactic use of mini tracheostomy in patients with comorbidities undergoing lung resection** Ioannis Karampinis (Athens, Greece), Georgia Hardavella, Antonios Katsipoulakis, Nikolaos Anastasiou
OA1381	**Relationship between clinicopathologic characteristics and spread through air spaces in resected lung adenocarcinoma and squamous cell carcinoma cases** Tugba Nur Tezvergil (Ankara, Turkey), Ulku Yilmaz
OA1383	**Subtype-specific transcription factors are clinically relevant and show distinct therapeutic vulnerabilities in human small cell lung cancer** Christian Lang (Vienna, Austria), Zsolt Megyesfalvi, Beata Szeitz, Andras Lantos, Nicole Woldmar, Zsuzsanna Valko, Anna Schwendenwein, Felicitas Oberndorfer, Nandor Barany, Sandor Paku, Viktoria Laszlo, Helga Kiss, Edina Bugyik, Bence Ferencz, Katalin Dezso, Zoltan Lohinai, Judit Moldvay, Janos Fillinger, Gabriella Galffy, Christopher Rivard, Fred R. Hirsch, Luka Brcic, Helmut Popper, Izidor Kern, Mile Kovacevic, Jozef Skarda, Marcel Mittak, Attila Marcell Szasz, Luciana Pizzatti, Krisztina Bogos, Mir Alireza Hoda, Konrad Hoetzenecker, Gyoergy Marko-Varga, Peter Horvatovics, Ferenc Renyi-Vamos, Thomas Klikovits, Karin Schelch, Melinda Rezeli, Balazs Döme
OA1384	**IGFBP3 inhibits tumour growth and invasion of H1299 lung cancer cells and leads to improved survival in patients with lung cancer** Armin Frille (Leipzig, Germany), Hartmut Kuhn, Marie Anna Petersen, Jonas Meyer, Lukas Hofmann, Albrecht Gläser, Sabine Taubenheim, Sebastian Krämer, Johannes Broschewitz, Maximilian Von Laffert, Hubert Wirtz
OA1385	**Extracellular vesicles derived from lung cancer cells exposed to intermittent hypoxia promote M2 macrophage polarization through miR-20a-5p/PTEN/Akt pathway** Yuanling Liu (GuangZhou, China), Gang Xu, Congrui Feng, Yuluo Chen, Huake Sun, Feng Liu, Wei Ma
OA1386	**On-chip human microvasculature assay to study extravasation dynamics of lung cancer cells** Soheila Zeinali (Bern, Switzerland), Karin F. Rechberger, Christelle Dubey, Rrahim Gashi, Thomas M. Marti, Patrick Dorn, Olivier T. Guenat
OA1387	**Discussion** All Speakers

8F Session 173 14:15 - 15:30

Oral presentation: What is hot in interstitial lung diseases

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

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

Chairs : Wim A Wuyts (Leuven, Belgium), Fernanda Ines Hernandez Gonzalez (Barcelona, Spain)

OA1388	**Assessment of a relationship between prognostic biomarkers and treatment response in ISABELA1 &2 IPF cohorts** Matthew Randall (Basel, Switzerland), Simon De Bernard, Ineke Seghers, Nadia Verbruggen, Sharlene Lim, Bernt Van Den Blink, Claus Andersen, Philippe Pujuguet, Niyati Prasad, Paul Ford, Yasmina Bauer
OA1389	**Nocturnal hypoxaemia is associated with mortality in patients with fibrotic interstitial lung disease** Katherine Myall (London, United Kingdom), Jennifer Martinovic, Zhe Wu, Jodie Lam, Diana Roque, Victor Jardim, David J Jackson, Eui-Sik Suh, Toby Maher, Philip Molyneaux, Brian Kent, Alex West
OA1390	**Outcomes of patients managed in specialised compared to non-specialised ILD centres** Michael Kreuter (Heidelberg, Germany), Pavo Marijic, Larissa Schwarzkopf, Werner Maier, Franziska Trudzinski, Lars Schwettmann
OA1391	**Predicting treatment response in patients with interstitial lung disease using electronic nose technology** Iris G. van der Sar (Rotterdam, Netherlands), Catharina C. Moor, Brigitte P.M. Vellekoop, Marlies S. Wijsenbeek
OA1392	**Family history of ILD predicts pulmonary function decline in IPF patients** Tinne Goos (Leuven, Belgium), Marie Vermant, Laurens J. De Sadeleer, Kenneth Verstraete, Nico De Crem, Ellen De Langhe, Adriana Dubbeldam, Erik K. Verbeken, Johny Verschakelen, Birgit Weynand, Jonas Yserbyt, Sascha Vermeer, Stijn E. Verleden, Wim A. Wuyts

OA1393	**Association of mUC5B rs35705950 minor allele with age and survival in European patients with Idiopathic Pulmonary Fibrosis** Joanne van der Vis (Nieuwegein, Netherlands), A. Prasse, E. Renzoni, C.J.W. Stock, C. Caliskan, T.M. Maher, F. Bonella, R. Borie, B. Crestani, M. Petrek, W.A. Wuyts, A. Wind, P.L. Molyneaux, J.C. Grutters, C.H.M. Van Moorsel
OA1394	**Nationwide prospective registry of idiopathic interstitial pneumonias with central multidisciplinary diagnosis in Japan (JIPS Registry): Analysis of disease progression** Ryo Okuda (Yokohama, Japan), Takahi Ogura, Nobuhisa Ishikawa, Takafumi Suda, Naoki Arai, Takahisa Takihara, Megumi Hamaguchi, Yasuhiro Kondoh, Mikio Toyoshima, Keisuke Tomii, Mitsuhiro Abe, Motoyasu Kato, Michiko Kagajo, Yasuo Shimizu, Hiromi Tomioka, Kodai Kawamura, Kojiro Honda, Yasuhiko Nishioka, Motoaki Tanigawa, Hiroshi Chiba, Shinyu Izumi, Kazunori Tobino, Hiroyoshi Yamauchi, Tetsuharu Kawamura, Minoru Inomata, Kazuhiro Usui, Hirotsugu Ohkubo, Hidekaze Matsushima, Yoshitaka Oyamada, Takeshi Jokoh, Toru Arai, Tae Iwasawa, Fumikazu Sakai, Satoshi Morita, Naoaki Ichihara, Toshihiro Nukiwa, Kunihiko Kobayashi, Jips Registry Members
OA1395	**Late Breaking Abstract - An interim analysis of a phase 2 trial evaluating oral nalbuphine extended release for treating chronic cough in idiopathic pulmonary fibrosis** William Forbes (New Haven, United States), Toby M. Maher, Enoch Bortey, Thomas Sciascia
OA1396	**Late Breaking Abstract - Additive effect of BI 1015550 and nintedanib in patients with IPF** Luca Richeldi (Roma, Italy), Arata Azuma, Vincent Cottin, Christian Hesslinger, Susanne Stowasser, Claudia Valenzuela, Marlies Wijsenbeek, Daniel Wachtlin, Donald Zoz, Toby Maher
OA1397	**Late Breaking Abstract - Interim results from AIR, an open-label, single arm, 36-week ph 2 trial of C21 in subjects with idiopathic pulmonary fibrosis** Rohit Batta (Maidenhead, United Kingdom), Toby Maher, Cecilia Ganslandt, Göran Tornling, Thomas Bengtsson, Himanshu Pophale, Elin Rosendahl
OA1398	**Discussion** All Speakers

8L Session 174 14:15 - 15:30

Oral presentation: Best of imaging research: highlights in 2022

Disease(s) : Airway diseases Interstitial lung diseases

Method(s) : Imaging Pulmonary function testing Physiology

Chairs : Helmut Prosch (Wien, Austria), Ádám Domonkos Tárnoki (Budapest, Hungary)

OA1399	**Machine Learning analysis of human pulmonary extracellular matrix architecture identifies disease-specific remodeling patterns** Thomas Kromann Lund (Copenhagen NV, Denmark), Monica Jane Emerson, Oliver Willacy, Chris Madsen, Raphael Reuten, Christian Beltoft Brøchner, Anders Bjorholm Dahl, Thomas Hartvig Lindkaer Jensen, Janine Terra Erler, Alejandro Enrique Mayorca-Guiliani
OA1400	**Airway inter-tapering and tortuosity predict mortality in idiopathic pulmonary fibrosis** Ashkan Pakzad (London, United Kingdom), Wing Keung Cheung, Nesrin Mogulkoc, Recep Savas, Daniel C. Alexander, Yipeng Hu, John R. Hurst, Joseph Jacob
OA1401	**Ultra-high-resolution photon-counting CT of the lungs: a comparative study** Valerie Van Ballaer (Leuven, Belgium), Adriana Dubbeldam, Lesley Cockmartin, Emanuele Muscogiuri, Johan Coolen, Walter Coudyzer, Walter De Wever
OA1402	**Deep learning model for the quantification of lung abnormalities in ILD patients** Akshayaa Vaidyantahan (Liege, Belgium), Flore Belmans, Francois Blistein, Ingrid Van Peufflik, Wim Vos, Sean Walsh, Mariaelena Occhipinti, Julien Guiot
OA1403	**Longitudinal lung function assessment of patients hospitalised with COVID-19 using 1H and 129Xe lung MRI** Laura Saunders (Hope Valley, United Kingdom), Guilhem Collier, Ho-Fung Chan, Paul Hughes, Laurie Smith, James Watson, Zoë Gabriel, James Meiring, Megan Plowright, Thomas Newman, James Eaden, Jody Bray, Helen Marshall, David Capener, Leanne Armstrong, Jennifer Rodgers, Martin Brook, Alberto Biancardi, Madhwesha Rao, Graham Norquay, Oliver Rodgers, Ryan Munro, Neil Stewart, Gisli Jenkins, James Grist, Fergus Gleeson, Fred Wilson, Anthony Cahn, Andy Swift, Smitha Rajaram, Gary Mills, Lisa Watson, Paul Collini, Rod Lawson, Roger Thompson, Jim Wild
OA1404	**Patient acceptability of dynamic chest radiography compared to pulmonary function testing>** Fred Fyles (Liverpool, United Kingdom), Ryan Robinson, Fathimath Farah Shiham, Karl Hunter, Catherine Lowe, Hassa Burhan
OA1405	**Longitudinal chest-CT findings after moderate to critical COVID-19 pneumonia** Antine Flikweert (Breda, Netherlands), Arthur Du Mee, Ingrid De Backer, Simone van der Sar

OA1406 **Association of CT imaging and clinical definitions of chronic bronchitis in the COPD phenotyping study**
Marisa Fat (Sacramento, United States), Seoncheol Park, Feridoun Abtin, Jonathan Phillips, John Belperio, Donald Tashkin, Christopher Cooper, Igor Barjaktarevic

OA1407 **Comparison of 19F-MRI, CT and spirometry in a patient with airways disease**
Charlotte Holland (Newcastle upon Tyne (Tyne and Wear), United Kingdom), Mary Neal, Ben Pippard , Ian Forrest, Rod Lawson, Holly F. Fisher, John N.S. Matthews, Kieren G. Hollingsworth, A. John Simpson, Jim. M Wild, Pete E. Thelwall

OA1408 **Discussion**
All Speakers

8M Session 175 14:15 - 15:30

Oral presentation: Chronic airway diseases: from phenotypes to severity

Disease(s) : Airway diseases Respiratory critical care

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

Chairs : Petros Bakakos (Athens, Greece), Mona Bafadhel (London, United Kingdom)

OA1409 **The Upper and Lower Airway Microbiome in Severe Asthma**
Maisha Jabeen (Oxford, United Kingdom), Nicholas Sanderson, Clair Barber, Laurie C K Lau, Ian D Pavord, Anoop Chauhan, Paul Klenerman, Teresa Street, Peter Howarth, Timothy S C Hinks

OA1410 **Comparison of the influence of omalizumab and mepolizumab on airway remodeling in severe asthma patients with evaluation of detection techniques: endobronchial ultrasound (EBUS) and high-resolution computed tomography (HRCT)**
Marek Przybyszowski (Kraków, Poland), Weronika Zastrzeżyńska, Agnieszka Gawlewicz-Mroczka, Iwona Gross-Sondej, Jacek Zarychta, Stanisława Bazan-Socha, Grażyna Bochenek, Jerzy Soja, Krzysztof Sładek

OA1411 **Radiomics for severe asthma phenotyping and endotyping**
Paolo Montuschi (Roma (RM), Italy), Nazanin Zounemat Kermani, Giuseppe Macis, Per S Bakke, Massimo Caruso, Pascal Chanez, Ratko Djukanovic, Stephen J Fowler, Yi-Ke Guo, Ildiko Horvath, Peter H Howarth, Anke I Maitland-Van Der Zee, Mario Malerba, Graham Roberts, Marek Sanak, Dominic Shaw, Susan J Wilson, Salman Siddiqui, Sven-Erik Dahlen, Kian Fan Chung, Ian M Adcock, , On Behalf Of The U-Biopred Study Group

OA1412 **Risk factors for corticosteroid- and antibiotic only-treated asthma attacks in the NOVELTY cohort**
Simon Couillard (Sherbrooke, Canada), Stefan Peterson, Thomas Bengtsson, Maarten Van Den Berge, David Price, Richard Beasley, Mohsen Sadatsafavi, Christer Janson, Alberto Papi, Laura Belton, Malin Fagerås, Hana Müllerová, Ian D Pavord

OA1413 **A primary ciliary dysfunction might be present in severe asthma**
Céline Kempeneers (Liège, Belgium), Romane Bonhiver, Noemie Bricmont, Maud Pirotte, Françoise Guissard, Catherine Moermans, Marie-Christine Seghaye, Renaud Louis, Florence Schleich

OA1414 **Alterations of humoral immune response in the bronchi of rapid decliners with chronic obstructive pulmonary disease**
Francesca Dossena (Gattinara, Italy), Antonino Di Stefano, Isabella Gnemmi, Vitina Carriero, Francesca Bertolini, Francesco Nucera, Silvestro Ennio D'Anna, Mauro Maniscalco, Paola Brun, Alessio Piraino, Antonio Spanevello, Bruno Balbi, Gaetano Caramori, Fabio Lm Ricciardolo

OA1415 **Influence of parental disease phenotypes and smoking on fractional exhaled nitric oxide values in offspring**
Suneela Zaigham (Malmö, Sweden), Randi Jacobsen Bertelsen, Shyamali Dharmage, Vivi Schlünssen, Nils Oskar Jögi, Leopoldo Palacios-Gomez, Mathias Holm, Anna Oudin, Michael Abramson, Torben Sigsgaard, Rain Jõgi, Cecilie Svanes, Anna-Carin Olin, Bertil Forsberg, Christer Janson, Elisabet Nerpin, Ane Johannessen, Andrei Malinovschi

OA1416 **Neither baseline blood nor sputum eosinophils predict future exacerbations in the SPIROMICS cohort**
Annette Hastie (Winston-Salem, United States), Pedro Miguel Quibrera, David Couper, Neil Alexis, Igor Barjaktarevic, Jeffrey Curtis, Eugene Bleecker

OA1417 **Stability of sputum eosinophil cell counts in COPD**
Augusta Beech (Manchester, United Kingdom), Natalie Jackson, Dave Singh

OA1418 **Late Breaking Abstract - Clinical predictors and phenotypic associations of mucus plugging in moderate to severe asthma**
Rory Chan (Glasgow, United Kingdom), Chary Duraikannu, Brian Lipworth

OA1419 **Discussion**
All Speakers

8D Session 176 14:30 - 16:50

Skills workshop: SW3 Exercise, muscle and sleep assessment and interpretation: tips and pitfalls

Tips and pitfalls in exercise, muscle and sleep assessment

Aims : To describe "typical" patterns of responses to exercise, muscle and sleep and to determine methods to distinguish these responses from "anomalous" response profiles that can cause misinterpretation of test results.

Disease(s) : Sleep and breathing disorders

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

Tag(s) : Clinical

Chairs : Pierantonio Laveneziana (Paris, France)

14:30	**Introduction**	**1420**
14:30	**Cardiopulmonary exercise testing: breathing patterns and dynamic hyperinflation** Pierantonio Laveneziana (Paris, France)	**1421**
14:30	**Respiratory and locomotor muscle testing in clinical practice** Daniel Langer (Leuven, Belgium)	**1422**
14:30	**From different pathophysiological traits revealed by polysomnography to treatment indications or combination of therapies** Manuel Sanchez De La Torre (Lleida, Spain)	**1423**
14:30	**Implementation, titration and follow-up of positive airway pressure in patients with obstructive sleep apnoea** Athanasia Pataka (Thessaloniki, Greece)	**1424**

Studio - online Session 177 14:45 - 16:15

Language session: Spanish/Portuguese programme 2022

A joint ERS/ALAT/SBPT/SEPAR/SPP session

Aims : There has been a significant evolution in the screening, diagnosis, staging, and treatment and these issues were not be the object of presentations in the sessions of the last years.
This session will be delivered in Spanish and Portuguese. It will not be translated in English.

Disease(s) : Thoracic oncology

Tag(s) : Clinical

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

Chairs : António Manuel Morais (Maia, Portugal), Carlos Robalo Cordeiro (Coimbra, Portugal), Maria Joana Pereira Catarata (Porto, Portugal), Sebastian Lamot (Neuquen, Argentina), Irma De Godoy (BOTUCATU, Brazil), Juan Pablo de Torres Tajes (Kingston, Canada)

14:45	**Lung Cancer Screening- time to move forward?** Luis Miguel Seijo Maceiras (Madrid, Spain)	**1425**
15:00	**Intervention Bronchoscopy in the diagnosis and staging of Lung Cancer** Lucia Carolina Viola Muñoz (Bogotá, Colombia)	**1426**
15:15	**Immunotherapy-based strategies** Gustavo Faibischew Prado (São Paulo (SP), Brazil)	**1427**
15:30	**Targeted therapy-based strategies** Maria Gabriela Oliveira Fernandes (Matosinhos, Portugal)	**1428**
15:45	**Discussion and Q&A** All Speakers	**1429**

8N Session 183 15:45 - 17:00

Oral presentation: COVID-19 acute respiratory distress syndrome

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

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

Chairs : Christian Karagiannidis (Cologne, Germany), Annemijn Jonkman (Rotterdam, Netherlands)

OA1430	**Usefulness of day-one chest X-ray score for predicting mortality and ICU admission in COVID-19 patients** THI TRIEU NGHI HOANG (HOCHIMINH-CITY, VIETNAM, Vietnam), Hai Dang Tran, Duc Tuan Tran, Manh Cuong Dang, Tra-My Ton-Nu, Le Hong Minh Trinh, Huu Hanh Nhi Le, Nga My Le Thi, Trinh Tran Cong, Dong Nhat Nam Dong, Anh-Tuan Dinh-Xuan
OA1431	**Predictive value of ultrasonic diaphragm thickening score combined with P0.1 in patients with mechanical ventilation** Tao Yang (Changchun (Jilin), China), Wenwen Han
OA1432	**Synchronous diaphragm neurostimulation reduced mechanical work required to ventilate pigs with ARDS** Elizabeth Rohrs (Surrey, Canada), Thiago Bassi, Karl Fernandez, Jessica Wittmann, Michelle Nicholas, Marlena Ornowska, Matt Gani, Steven Reynolds
OA1433	**Diaphragm neurostimulation attenuates hippocampal pro-inflammatory microglia percentage in an ARDS porcine model** Thiago Bassi (Burnaby, Canada), Elizabeth Rohrs, Karl Fernandez, Michelle Nicholas, Marlena Ornowska, Matt Gani, Doug Evans, Steven Reynolds
OA1434	**Improved atelectasis and lung homogeneity with diaphragm neurostimulation during mechanical ventilation in pigs with ARDS** Elizabeth Rohrs (Surrey, Canada), Thiago Bassi, Karl Fernandez, Jessica Wittmann, Michelle Nicholas, Marlena Ornowska, Matt Gani, Steven Reynolds
OA1435	**Estimation of transdiaphragmatic pressure using the airway occlusion in critically ill patients** Heder de Vries (Amsterdam, Netherlands), Pieter Tuinman, Annemijn Jonkman, Angelique De Man, Harm-Jan De Grooth, Leo Heunks
OA1436	**When should lung transplant be considered for severe COVID-19 associated ARDS?** Ofir Deri (Petach Tikva, Israel), Sumit Chatterji, Lior Seluk, Nadav Furie, Inbal Shafran, Ronen Mass, Leonid Sternik, Ehud Raannani, Ran Kremer, Yigal Kassif, Eyal Nachum, Nona Zeitlin, Jonathan Frogel, Milton Saute, Amir Onn, Alex Kogan, Liran Levy
OA1437	**One year overview of follow-up in a post-covid consultation of critical patients with covid-19** Jessica Gonzalez Gutierrez (Lleida, Spain), Maria Zuil, Iván D. Benítez, Maria Aguilà, Sally Santisteve, Fatty Seck, Anna Moncusí-Moix, Clara Gort-Paniello, Antoni Torres, Ferran Barbé
OA1438	**Late Breaking Abstract - The efficacy and safety of intravenous imatinib in invasively ventilated patients with COVID-19 related acute respiratory distress syndrome (InventCOVID): a multicentre, randomised, double-blinded, placebo-controlled, phase II clinical study.** Leila Atmowihardjo (Amsterdam, Netherlands), Job Schippers, Erik Duijvelaar, Imke Bartelink, Pierre Bet, Nienke Van Rein, Keith Purdy, David Cavalla, Alexia Flamarion, Andrew Mcelroy, Sarah Fritchley, Matty Koopmans, Harm Jan Bogaard, Leo Heunks, Nicole Juffermans, Marcus Schultz, Pieter Roel Tuinman, Henrik Endeman, Patricia Van Velzen, Lieuwe Bos, Jurjan Aman
OA1439	**Discussion** All Speakers

8F Session 184 15:45 - 17:00

Oral presentation: New respiratory physiological tests and home assessment of sleep disturbed breathing in children

Disease(s) : Sleep and breathing disorders Airway diseases

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

Chairs : Nicole Beydon (Paris, France), Stijn Verhulst (Antwerpen, Belgium)

OA1440	**Sleep apnoea in school-age children living at high and low altitude** Mirjam Grimm (Samedan, Switzerland), Anina Seglias, Lucie Ziegler, Maamed Mademilov, Elvira Isaeva, Kubanych Tynybekov, Aigerim Tilebalieva, Nargiza Osmonbekova, Gulzada Mirzalieva, Kamila Magdieva, Aijan Taalaibekova, Simone Buenzli, Michael Furian, Talant Sooronbaev, Silvia Ulrich, Konrad E. Bloch
OA1442	**Home cardiorespiratory sleep studies in children and young people: experience of a UK Regional Service** Shweta Natarajan (Birmingham, United Kingdom), Andrea Bradbury, James Baird, Daniel Wilkinson, Andrew Prayle, David Thomas, Matthew Hurley
OA1443	**Evaluation of Paediatric Inpatient and Outpatient Transcutaneous Carbon Dioxide Monitoring (TOSCA) using leg versus ear lobe fixation.** Aditi Sinha (Manchester, United Kingdom), Philip Lawrence, Debbie Large, Christopher Grime, Ruth Trinick

OA1444 **Modified hypoxic challenge testing in children who need nocturnal ventilation: an observational study**
Martin Samuels (London, United Kingdom), Mollie Riley, Stephanie Brotherston, Paula Kelly, Katharine Pike

OA1445 **THE IMPACT OF NEW SPIROWARE V3.3.1 SOFTWARE ON THE INTERPRETATION OF CROSS-SECTIONAL N2MBW DATA IN SICKLE CELL ANEMIA**
Michele Arigliani (London, United Kingdom), Mollie Riley, Paul Aurora

OA1446 **Effects of a volatile compound filter on breath profiles measured by real time high resolution mass spectrometry**
Leo Thanikkel (Aesch-Zh, Switzerland), Ronja Weber, Sophia Moeller, Jerome Kaeslin, Yvette Baumann, Nathan Perkins, Srdjan Micic, Alexander Möller

OA1447 **Novel capnographic inhomogeneity indices in preterm infants and infants with cystic fibrosis**
Anne-Christianne Kentgens (Grindelwald, Switzerland), Sotirios Fouzas, Marion Curdy, Yasmin Salem, Marc-Alexander Oestreich, Sophie Yammine, Philipp Latzin

OA1448 **Discussion**
All Speakers

8L Session 185 15:45 - 17:00

Oral presentation: Hot topics in connective tissue disease-associated interstitial lung disease

Disease(s) : Interstitial lung diseases

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

Chairs : Bruno Crestani (Paris, France), Katerina Antoniou (Heraklion, Greece)

OA1449 **Progression of systemic sclerosis-associated ILD (SSc-ILD) and effect of nintedanib in subgroups by monocyte and neutrophil counts**
Michael Kreuter (Heidelberg, Germany), Christopher P Denton, Lawrence A Ho, Rachel K Hoyles, Ian Glaspole, Takafumi Suda, Corinna Miede, Margarida Alves, Toby M Maher

OA1450 **Cohort enrichment strategies for progressive interstitial lung disease in systemic sclerosis from EUSTAR**
Anna Maria Hoffmann-Vold (Oslo, Norway), Cathrine Brunborg, Paolo Airò, Lidia P Ananyeva, László Czirják, Serena Guiducci, Eric Hachulla, Mengtao Li, Carina Mihai, Gabriela Riemekasten, Petros P Sfikakis, Gabriele Valentini, Otylia Kowal-Bielecka, Yannick Allanore, Oliver Distler

OA1451 **Plasma-derived exosomal miRNAs as non-invasive biomarkers for lung involvement in systemic sclerosis**
Makon-Sébastien Njock (Liège, Belgium), Monique Henket, Pierre Jacquerie, Catherine Moermans, Dominique De Seny, Michel Malaise, Renaud Louis, Julien Guiot

OA1452 **Extensive autoantibody panel in Systemic sclerosis associated Interstitial Lung Disease**
Carmel Stock (London, United Kingdom), Benjamin Seeliger, Paolo Cameli, Maria Kokosi, Vasilis Kouranos, Peter George, Philip Molyneaux, Felix Chua, Voon Ong, David Abraham, Christopher Denton, Gisli Jenkins, Athol Wells, Jacqueline Donovan, Elena Bargagli, Antje Prasse, Torsten Witte, Elisabetta Renzoni

OA1453 **Persistent inflammation in systemic sclerosis is strongly associated with mortality: a EUSTAR database analysis**
Sabina A. Guler (Bern, Switzerland), Adela-Cristina Sarbu, Odile Stadler, Yannick Allanore, Vera Bernardino, Jörg H.W. Distler, Armando Gabrielli, Anna-Maria Hoffmann-Vold, Marco Matucci-Cerinic, Ulf Müller-Ladner, Vera Ortiz-Santamaria, Simona Rednic, Valeria Riccieri, Vanessa Smith, Susanne Ullman, Ulrich Walker, Thomas Geiser, Oliver Distler, Britta Maurer, Florian Kollert

OA1454 **Effects of nintedanib in patients with systemic sclerosis-associated ILD (SSc-ILD) and differing levels of lung function impairment**
Athol Wells (London, United Kingdom), Wim A Wuyts, Sven Gläser, Alfredo Guillen-Del-Castillo, Hilario Nunes, Masaki Okamoto, Rozeta Simonovska, Margarida Alves, Kristin B Highland

OA1455 **Lung involvement in early rheumatoid arthritis, interim analysis of the FINDRA prospective study**
Antoine Froidure (Bruxelles, Belgium), Marie Perrot, Benoît Ghaye, Deniz Zan, Aleksandra Avramovska, Maria Stoenoiu, Marie Doyen, Sandra Koenig, Patrick Durez

OA1456 **Serum KL-6 improves prediction of progressive phenotype (PP) at one year independently of underlying interstitial lung disease (ILD): results from the VAMOS study.**
Francesco Bonella (Düsseldorf, Germany), Maria Carmen Vegas Sanchez, Diego Castillo Villegas, Paloma Millan-Billi, Eva Gottstein, Olga Sánchez Pernaute, Elena Bargagli, Maria Molina Molina

OA1457 **Predictors of Interstitial Lung Disease (ILD) in patients with Idiopathic Inflammatory Myopathy-associated (IIM)**
Elisabetta Balestro (Padova (PD), Italy), Elisabetta Cocconcelli, Elisabetta Zanatta, Serena Bellani, Gioele Castelli, Simone Petrarulo, Luca Iaccarino, Paolo Spagnolo

OA1458	**Discussion** All Speakers	

8M Session 186 15:45 - 17:00

Mini symposium: Tobacco control during the pandemic

Aims : to review the epidemiology and trends of tobacco, e-cigarette use during the pandemic, highlighting the novel methods developed in cessation; to discuss the recent changes in regulations such as about synthetic nicotine and menthol; to review the tobacco industry tactics during the pandemic; to stress the need for effective regulation to prevent tobacco industry pharmaceutical transformation of the industry.

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

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

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, General practitioner, Medical Student, Paediatrician, Patient, Scientist (basic, translational), Journalist, Medical Technical Assistant, Nurse, Respiratory physiotherapist, Thoracic oncologist, Thoracic surgeon

Chairs : Ane Johannessen (Bergen, Norway), Jonathan Grigg (London, United Kingdom)

15:45	**Implications of menthol, aromas and tobacco free nicotine alternatives** Paraskevi Katsaounou (Athens, Greece)	**1459**
16:00	**Pharmaceutical transformation of the industry** Aslı Görek Dilektaşlı (Bursa, Turkey)	**1460**
16:15	**Exposure of children to tobacco advertising; what more do we have to do?** Alexander Möller (Zürich, Switzerland)	**1461**
16:30	**Discussion and Q&A** All Speakers	**1462**

8A - live streamed Session 187 16:00 - 17:30

Clinical cases: Lungs on fire: Respiratory infections?

Aims : To facilitate the presentation of 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

Tag(s) : Clinical

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

Chairs : Eva Polverino (Barcelona, Spain), Holly R. Keir (Dundee (Angus), United Kingdom), Giovanni Sotgiu (Sassari, Italy)

Discussants : Daiana Stolz (Basel, Switzerland), James D. Chalmers (Dundee (Angus), United Kingdom)

16:00	**Case 1 incl. panel discussion and Q&A - Author: M. Saad (Italy)** Daiana Stolz (Basel, Switzerland)	**1463**
16:22	**Case 2 incl. panel discussion and Q&A - Author: S. Yuvarajan (India)** James D. Chalmers (Dundee (Angus), United Kingdom)	**1464**
16:44	**Case 3 incl. panel discussion and Q&A - Author: D. Rodrigo (Sri Lanka)** Daiana Stolz (Basel, Switzerland)	**1465**
17:06	**Case 4 incl. panel discussion and Q&A - Author: S. Wickramasinghe (Sri Lanka)** James D. Chalmers (Dundee (Angus), United Kingdom)	**1466**

8B - live streamed Session 188 16:00 - 17:30

Hot topics: The future of inhalation therapy in COPD

Aims : To update colleagues on novel findings in inhalation therapy in COPD in order to provide them with current and future knowledge in the field.

Disease(s) : Airway diseases

Method(s) : Epidemiology General respiratory patient care Physiology

Tag(s) : Clinical

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

Chairs : Martin Kolb (Hamilton (ON), Canada), Darren Teichman (Boston, United States), Louise Donnelly (London, United Kingdom)

16:00	**Novel inhaled bronchodilators** Mario Cazzola (Roma (RM), Italy)	**1467**
16:15	**Novel inhaled anti-inflammatory drugs and inhaled monoclonal antibodies** Paola Rogliani (Roma (RM), Italy)	**1468**
16:30	**Inhaled vaccines and inhaled antimicrobial agents** Gary P. Anderson (Parkville (VIC), Australia)	**1469**
16:45	**Evolution in pulmonary drug delivery devices** Omar S. Usmani (London, United Kingdom)	**1470**
17:00	**Discussion and Q&A** All Speakers	**1471**

8C - live streamed Session 189 16:00 - 17:30

Symposium: Update on pulmonary embolism management

Aims : to discuss guidelines that help identify risk factors for pulmonary embolism (PE) and venous thromboembolism (VTE); to debate definitions and their major impact on management of the disease (extended vs. short-term anticoagulant therapy); to assess the adequacy of these risk factors and whether treatment with direct-acting oral anticoagulants should reconsider any of them; to review the scores and data available to help decide when to continue or suspend anticoagulant treatment; to review the risk of thrombosis associated with COVID-19; to describe anticoagulation regimens used to treat VTE and prophylaxis to prevent recurrence in hospitalised patients; to explain the proper anticoagulation strategies for hospitalised COVID-19 patients and define the proper anticoagulation for outpatients in the active or convalescent phase of infection.

Disease(s) : Pulmonary vascular diseases Respiratory infections Thoracic oncology

Method(s) : General respiratory patient care

Tag(s) : Clinical

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

Chairs : Mona Lichtblau (Zürich, Switzerland), Marc Humbert (Le Kremlin-Bicêtre, France), Laurent Bertoletti (Saint Etienne Cedex, France)

16:00	**Cancer-associated thrombosis: case fatality rates and scores to balance the risks and benefits of long-term anticoagulant treatment** Marc Carrier (Ottawa (ON), Canada)	**1472**
16:15	**Prevention and treatment of pulmonary embolism related to COVID-19** Stéphane Zuily (Vandoeuvre-lès-Nancy, France)	**1473**
16:30	**Relevance of the term “provoked” in the management of PE: PRO** Francis Couturaud (Brest, France)	**1474**
16:45	**Relevance of the term “provoked” in the management of PE: CON** Remedios Otero Candelera (Sevilla, Spain)	**1475**
17:00	**Discussion and Q&A** All Speakers	**1476**

8G - live streamed Session 190 16:00 - 17:30

Symposium: Post-critical care long COVID: reducing the physical and emotional toll

Pathophysiological mechanisms, assessments and therapeutic options in patients with long COVID following intensive care unit admission

Aims : to discuss the pathophysiological mechanisms of post-intensive care unit (ICU) long COVID; to explore how to wean from mechanical ventilation and the therapeutic modalities of inpatient physiotherapy and outpatient rehabilitation; to discuss the psychological and cognitive aspects of post-ICU long COVID, particularly the assessment and support of these patients.

Disease(s) : Respiratory critical care | Respiratory infections

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

Tag(s) : COVID

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, Respiratory therapist, Journalist

Chairs : Anita Simonds (London, United Kingdom), Thierry Troosters (Leuven, Belgium)

16:00	**Patient's testimony** Grant McIntyre (, United Kingdom)	**1477**
16:05	**Pathophysiology of post-ICU long COVID syndrome** Negin Hajizadeh (Madrid, Spain)	**1478**
16:20	**Prolonged mechanical ventilation and physiotherapy for COVID patients in ICUs** Nicholas Hart (London, United Kingdom)	**1479**
16:35	**Managing anxiety, depression and cognitive impairment to promote recovery** Tracy Vannorsdall (Baltimore, United States)	**1480**
16:50	**Rehabilitation modalities to address physical morbidity and support recovery** Mara Paneroni (Mazzano (BS), Italy)	**1481**
17:05	**Discussion and Q&A** All Speakers	**1482**

8H - live streamed | Session 191 | 16:00 - 17:30

Symposium: Reflections from the 2022 Lung Science Conference

Aims : The ERS Lung Science Conference is at the forefront of basic and translational respiratory science, and it is an essential event for budding respiratory researchers looking to boost their career. It offers a unique opportunity to network with peers from across the globe and aims to present cutting-edge abstracts on novel experimental lung research. The Lung Science Conference 2022 took place on March 10–13 in Estoril, Portugal with the following overarching theme: “Mucosal immunology of the lung: Balancing protective immunity and chronic inflammation”. This session features a selection of scientific presentations that were given at this conference. In addition, the session highlights the winners of the William MacNee Award for young presenters (40 years old or less at the time of the Conference) who submitted an outstanding abstract, and of the Geoffrey Laurent Award for the Best Oral presentation.

Disease(s) : Airway diseases | Interstitial lung diseases

Method(s) : Cell and molecular biology

Tag(s) : Basic science

Target audience : Clinical researcher, Medical Student, Scientist (basic, translational)

Chairs : Reinoud Gosens (Groningen, Netherlands), Silke Meiners (Sülfeld, Germany)

16:00	**The discovAIR project: a roadmap to the Human Lung Cell Atlas** Malte Lücken (Oberschleissheim, Germany)	**1483**
16:15	**Human CD116+ foetal liver progenitors migrate to the perinatal lung and give rise to alveolar macrophages in vivo** Elza Evren (Stockholm, Sweden)	**1484**
16:22	**Inflammatory blood neutrophils in COPD stem from activated bone marrow progenitors** Theodore Kapellos (Mannheim, Germany)	**1485**
16:29	**Local and systemic response to SARS-CoV-2 infection in children and adults** Kerstin Meyer (Cambridge, United Kingdom)	**1486**
16:44	**Virus-provided protection against allergic asthma** Laurent Gillet (Liège, Belgium)	**1487**
16:59	**Discussion and Q&A** All Speakers	**1488**

Studio - online | Session 192 | 16:30 - 17:30

Online skills lab: Hypoxic challenge and oxygen assessments

Aims : to provide skills and background knowledge needed to perform the hypoxic challenge test and oxygen assessments utilising blood gas analysis according to best practice and in accordance with the latest recommendations; to describe the basic principles, techniques and associated physiology for performance of the hypoxic challenge test, oxygen assessments and arterial/capillary blood gas analysis; to discuss standardisation of test performance in accordance with the latest best practice guidelines; to provide background knowledge needed to perform the tests, compile reports and interpret the results; to provide technical and physiological knowledge needed to perform the tests.

Chairs : Maria Bonsignore (Palermo, Italy), Karl Sylvester (Cambridge (Cambridgeshire), United Kingdom)

16:30	**Blood gases** Julie Lloyd (Birmingham (West Midlands), United Kingdom)	**1489**
16:45	**Q&A** Julie Lloyd (Birmingham (West Midlands), United Kingdom)	**1490**
16:50	**Oxygen assessment** Magnus Ekström (Lund, Sweden)	**1491**
17:05	**Q&A** Magnus Ekström (Lund, Sweden)	**1492**
17:10	**Hypoxic challenge** Rachel Ong-Salvador (Amsterdam, Netherlands)	**1493**
17:25	**Q&A** Rachel Ong-Salvador (Amsterdam, Netherlands)	**1494**

18:00-19:00
INDUSTRY VIRTUAL SYMPOSIUM SEE PAGE 1

18:00-19:30
INDUSTRY EVENING SYMPOSIUM SEE PAGE 1

18:00-19:30
INDUSTRY EVENING MINI-SYMPOSIUM SEE PAGE 1

08:00-09:15
INDUSTRY VIRTUAL SYMPOSIUM SEE PAGE 1

08:00-09:15
INDUSTRY EARLY MORNING SYMPOSIUM SEE PAGE 1

08:00-09:15
INDUSTRY EARLY MORNING MINI-SYMPOSIUM SEE PAGE 1

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

8D Session 217 08:00 - 10:20

Skills workshop: SW4 Cardiopulmonary rehabilitation beyond the basics

Aims : To describe diagnostic methods and interventions that enhance the comprehensiveness of cardiopulmonary rehabilitation programmes and contribute to a more patient-tailored approach; to describe methods of assessing physical activity level in patients referred for cardiopulmonary rehabilitation and methods of providing cognitive behavioural therapy to promote physical activity; to describe neuromuscular electrical stimulation and the patients referred for cardiopulmonary rehabilitation who could benefit from this treatment; and to describe the incorporation of mindfulness-based interventions into cardiopulmonary rehabilitation and their outcomes.

Disease(s) : Airway diseases

Method(s) : Pulmonary rehabilitation

Tag(s) : Clinical

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

Chairs : Heleen Demeyer (Leuven, Belgium)

08:00	**Introduction**	**1599**
08:00	**Physical activity assessment and intervention** Chris Burtin (Diepenbeek, Belgium)	**1600**
08:00	**Neuromuscular electrical stimulation** Anouk W. Vaes (Horn, Netherlands)	**1601**
08:00	**Frailty assessment and intervention** Roberto Benzo (Rochester, United States)	**1602**
08:00	**Mindfulness interventions during cardiopulmonary rehabilitation** Ingeborg Farver-Vestergaard (Vejle, Denmark)	**1603**

8N Session 218 08:15 - 09:30

Oral presentation: Cardiopulmonary exercise and challenge testing: utilisation and safety implications

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

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

Chairs : Karl Sylvester (Cambridge (Cambridgeshire), United Kingdom), Aisling McGowan (Dublin 15, Ireland)

OA1604	**Cardiopulmonary exercise test & risk assessment in lung resection surgery: A Tunisian experience** Hana Mrassi (Tunis, Tunisia), Nozha Ben Salah, Hana Blibech, Houda Snene, Mahdi Abdennadher, Line Kaabi, Soumaya Debbiche, Nadia Mehiri, Taher Mestiri, Adel Marghli, Bechir Louzir
OA1605	**Evaluation of covid-19 lung involvement effect on exercise capacity in the 3rd and 6th months** Elif Yilmazel Uçar (Erzurum, Turkey), Omer Araz, Bugra Kerget, Kadir Ozmen, Metin Akgun, Leyla Saglam
OA1606	**Transition to a physiologist led cardiopulmonary exercise testing (CPET) service and evaluation of one year outcomes** Sara Mcarthur (Edinburgh (Edinburgh), United Kingdom), Jill Macleod, Shaun Baxter, Kristofor Cuthbert

OA1607	**Comparing peripheral capillary oxygen saturation during a six-minute walk test with arterial saturation during a cardiopulmonary exercise test** Liv Karin Vesteng (Jessheim, Norway), Christine Gudim Karlsen, Anita Grongstad
OA1608	**NICE asthma guidelines: time to re-evaluate the diagnostic value of exercise challenge testing?** Oliver Price (Leeds, United Kingdom), Andrew Simpson
OA1609	**The role of transcutaneous carbon dioxide measurement during exercise.** Rachel Ong-Salvador (Amsterdam, Netherlands), Patrick Jak, Rolien Bekkema, Joost Van Den Aardweg
OA1610	**Effects of tidal expiratory flow limitation on lung functions, exercise limitation and symptoms severity in stable COPD** Amit Kiran Rath (Raipur, India), Vikas Kumar, Dibakar Sahu, Sajal De
OA1611	**Recovery after histamine provocation: predictive power of gender and body mass index** Catharina C de Vreede (Delft, Netherlands)
OA1612	**Methacholine challenge: Safety of the quadrupling protocol** Irene Steenbruggen (Zwolle, Netherlands), Peter De Laat
OA1613	**Late Breaking Abstract - Adopting the 2019 ATS/ERS spirometry guidelines in clinical trials: impact on site and patient burden.** Philip Lake (Monmouth (Gwent), United Kingdom), Kevin McCarthy, Dawn Patterson, Marc-Aurel Baumle, Reza Farienfar, Jose Ramos
OA1614	**Discussion** All Speakers

8F Session 219 08:15 - 09:30

Oral presentation: Monitoring the effect of therapy with CFTR modulators

Disease(s) : Airway diseases

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

Chairs : Mirjam Stahl (Berlin, Germany), Stojka Fustik (Skopje, North Macedonia)

OA1615	**Volume of trapped gas in adolescents with cystic fibrosis starting CFTR modulator thera** Marie-Pier Dumas (Toronto, Canada), Renee Jensen, Michelle Shaw, Aviva West, Samal Munidasa, Brandon Zanette, Jason Woods, Paul D. Robinson, Giles Santyr, Felix Ratjen
OA1616	**Long-term benefits of early initiation of ivacaftor (IVA) in people with cystic fibrosis (CF): interim results from an ongoing registry-based study** Mark Higgins (London, United Kingdom), Nataliya Volkova, Thalia Farietta, Meng Liu, Runyu Wu, Alexander Elbert, Susan C. Charman, Andrew Lee, Steven Cunningham
OA1617	**Long-term effectiveness of dual CFTR modulator treatment of Cystic Fibrosis** Danya Muilwijk (Utrecht, Netherlands), Domenique Zomer, Vincent Gulmans, Rene Eijkemans, Kors Van Der Ent
OA1618	**A multimodal MRI protocol for structure and functional lung, gut and liver imaging in cystic fibrosis (CF) for children aged 6 and above.** Christabella Ng (Nottingham, United Kingdom), Naaventhan Palaniyappan, Zachary Peggs, Alex Yule, Christopher Bradley, Neele Dellschaft, Jonathan Brooke, Luca Marciani, Robin Spiller, Guruprasad Aithal, Caroline Hoad, Susan Francis, Penny Gowland, Ian Hall, Andrew Prayle, Alan R Smth
OA1619	**Multivolume Magnetic Resonance Imaging (MRI) to assess response to triple-combination Elexacaftor/Tezacaftor/Ivacaftor (ETI) in the lung of patients with Cystic Fibrosis (CF)** Francesca Pennati (Milano (MI), Italy), Irene Borzani, Erica Nazzari, Maria Chiara Russo, Giulia Bischetti, Chiara Rosazza, Calogero Sathya Sciarrabba, Alessandra Mariani, Gianpaolo Carrafiello, Andrea Aliverti, Carla Colombo
OA1620	**Efficacy of elexacaftor/tezacaftor/ivacaftor therapy assessed by lung ultrasound** Uros Krivec (Ljubljana, Slovenia), Marina Praprotnik, Malena Aldeco, Dušanka Lepej, Aleksandra Zver, Jasna Rodman Berlot, Saša Šetina Šmid, Špela Dolenc, Jana Lozar Krivec
OA1621	**Breath profiles in cystic fibrosis children treated with CFTR modulators** Elias Seidl (München, Germany), Johann-Christoph Licht, Gitte Slingers, Rianne De Vries, Felix Ratjen, Hartmut Grasemann
OA1622	**Elexacaftor-tezacaftor-ivacaftor (ETI) treatment improves Lung Clearance Index (LCI) in patients with Cystic Fibrosis (CF) independently from baseline respiratory function** Sonia Volpi (, Italy), Francesca Lucca, Riccardo Guarise, Antonella Borruso, Monica Signorini, Marco Cipolli

OA1623	**Effect of ELX/TEZ/IVA treatment on lung ventilation in children with cystic fibrosis – comprehensive assessment using spirometry, MBW, structural and functional lung MRI** Carmen Streibel (Bern, Switzerland), Christoph Corin Willers, Orso Pusterla, Grzegorz Bauman, Oliver Bieri, Enno Stranzinger, Ben Brabandt, Philipp Latzin, Elisabeth Kieninger
OA1624	**Late Breaking Abstract - A multimodal cell atlas of the pediatric lower airway** Melanie Neeland (Parkville, Australia), Shivanthan Shanthikumar, Jovana Maksimovic, Alicia Oshlack, Sarath Ranganathan
OA1625	**Discussion** All Speakers

8L Session 220 08:15 - 09:30

Oral presentation: Digital medicine for COVID-19

Disease(s) : Airway diseases | Sleep and breathing disorders | Interstitial lung diseases | Pulmonary vascular diseases | Respiratory critical care

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

Chairs : Hilary Pinnock (Edinburgh (Edinburgh), United Kingdom), Omar S. Usmani (London, United Kingdom)

OA1626	**Developing a multivariate prediction model for the detection of COVID-19 from crowd-sourced respiratory voice data.** Wafaa Aljbawi (Amstelveen, Netherlands), Sami Simons, Visara Urovi
OA1627	**Deep learning-based hybrid clinical decision support system algorithm for COVID-19 diagnosis via PCR graphics and Thorax CT images, preliminary data** Elvan Burak Verdi (ANKARA, Turkey), Memetcan Gok, Deniz Dogan Mülazimoglu, Merve Begum Terzi, Aslihan Gurun Kaya, Serhat Erol, Ozlem Isik, Onur Utku Guvendik, Caglar Uzun, Atilla Halil Elhan, Zeynep Ceren Karahan, Alpay Azap, Akın Kaya, Orhan Arikan, Ozlem Ozdemir Kumbasar
OA1628	**Telemedicine implementation for management of COVID-19 patients at hospital admission: a single center experience** AYCAN YUKSEL (Ankara, Turkey), Nalan Ogan, Ceren Ilgar, Esen Sayin Gülensoy, Hale Çolakoğlu Er, Samet Altunbaş, Evrim Eylem Akpınar
OA1629	**Altea: Improving Long COVID affected people's quality of life by knowledge and experience sharing** Natalie Rangelov (Wallisellen, Switzerland), Michael Schlunegger
OA1630	**Continuous cough monitoring with AI. Cases: treatment response, smoking cessation and COVID-19** Mindaugas Galvosas (Vilnius, Lithuania), Juan C. Gabaldón-Figueira, Virginia Orrillo, Isabel Blavia, Juliane Chaccour, Alejandro Fernandez-Montero, Nita Umashankar, Nuria Armendáriz, Francisco Javier Bartolomé, Eric M. Keen, Joe Brew, Peter M Small, Simon Grandjean Lapierre, Carlos Chaccour
OA1631	**Process evaluation of the Dutch COVID-19 QR code app: an example of citizen science** Esther I. Metting (Groningen, Netherlands), Bart Noort, Wolfgang Ebbers, Lotty Hooft, Joris Van Hoof
OA1632	**Demand for hospital-based telemedicine services among outpatients during the Covid-19 outbreak** Qi Tan (Nanjing (Jiangsu), China), Yan Chen, Cheng Zhang, Chun-Yu Li, Megan Murray
OA1633	**Self-monitoring using multimodal connected devices in patients with COVID-19 confined at home** Jean-Louis Pépin (Grenoble, France), Mallory Cals-Maurette, Rui-Yi Yang, Pierre Escourrou, Valéry ELIE
OA1634	**Tele-medicine in home treatment with physical therapy in the Sars-cov2 pandemic** Simonetta Vernocchi (Gallarate, Italy), Andreas Aceranti, Davide Emedoli, Teresa Serini
OA1635	**Late Breaking Abstract - Detecting COVID-19 through cough audio analysis: Pilot study initial results** Shrawan Patel (New York, United States), Freya Cristea, Jack Hanson, Neroli Anderson, Vesa Peltonen, John May, Paul Porter, Tony Keating
OA1636	**Discussion** All Speakers

TP-1 in thematic poster area Session 222 08:30 - 09:30

Thematic poster: Clinical problems and management of airway diseases

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

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

Chairs : Andrea Bianco (Napoli, Italy), Tiziana Patrizia Cremona (Bern, Switzerland)

PA1638	**A Possible Complication of Chronic Obstructive Pulmonary Disease: Ischemic Colitis** Shielah Mauntana (El Paso, United States), Mahesh Gajendran
PA1639	**Underdiagnosis of chronic obstructive pulmonary disease: a problem that persists** Ana Roca Noval (Madrid, Spain), Rocío García García, Miguel Jiménez Gómez, Julia Díaz Miravalls, Eduardo Catalinas Muñoz
PA1640	**Barriers to early diagnosis and smoking cessation for COPD patients** Liliya Belenko Gentet (Drucourt, France)
PA1641	**Development in diagnosed comorbidities over a twelve-month period in patients with COPD** Mia Solholt Godthaab Brath (Vadum, Denmark), Sisse Dyrman Alsted, Pernille Veiss-Pedersen, Rasmus Brath Christensen, Ulla Møller Weinreich
PA1642	**COPD patients' experiences and understanding of exacerbations: a qualitative study** Michael Crooks (East Riding of Yorkshire, United Kingdom), Richard Russell, Helena Cummings, Kay Roy, Omar Usmani, Judith Cohen, Sarah Macfadyan, Tamsin Morris, Hana Mullerova, Yang Xu, Ann Hutchinson
PA1643	**Undiagnosed and undertreated heart disease in hospitalised patients with exacerbations of chronic obstructive pulmonary disease (COPD)** Joseph Kibbler (Carlton, United Kingdom), David P Ripley, Stephen C Bourke, John Steer
PA1644	**Impact of treatment with inhaled corticosteroids on COVID-19 risk and outcome – a potential protective effect on severity of disease and survival** Marina Labor (Linköping, Sweden), Fredrik Nyberg, Brian K. Kirui, Lowie E.G.W Vanfleteren
PA1645	**Relationship between plasma alpha-1-antitrypsin polymers and lung or liver function in ZZ alpha-1-antitrypsin deficient patients** Sabina Janciauskiene Wallmark (Hannover, Germany), Srinu Tumpara, Beata Olejnicka, Malin Fromme, Pavel Strnad, Tobias Welte, Jan Stolk
PA1646	**Effectiveness of Nationwide COPD Pay-for- Performance Program on quality-of-life for COPD patients** Chiung-Zuei Chen (Tainan, Taiwan), Sheng Han Tsai
PA1647	**Risk of malignancy in patients with asthma-COPD overlap compared to patients with COPD without asthma** Alexander Jordan (Copenhagen N, Denmark), Barbara Bonnesen, Pradeesh Sivapalan, Johannes Wirenfeldt Pedersen, Christina Marisa Bergsøe, Josefin Eklöf, Louise Lindhardt Toennesen, Sidse Graff Jensen, Matiullah Naqibullah, Zaigham Saghir, Jens-Ulrik Jensen
PA1648	**Impact of moderate to severe asthma from the patient's perspective in Spain** Javier Dominguez-Ortega (Madrid, Spain), V. Plaza, J. Delgado Romero, A. Nieto, J. Molina, J. Ancochea, A. Gil, J. Oliva, M. Blanco-Aparicio, M. Sarasa
PA1649	**Outcomes after prolonged weaning in COPD patients – Data from the German WeanNet-Initiative** Maximilian Wollsching-Strobel (Köln, Germany), Tobias Freundt, Nina Hämäläinen, Stefan Suchi, Wolfram Windisch, Bernd Schönhofer
PA1650	**Evaluation of risk factors for barotrauma complications in COVID-19 patients treated with high flow nasal cannula (HFNC)** Plamen Titorenkov (Sofia, Bulgaria), Dimitar Manoylov, Milena Encheva, Sofia Zabadanova, Emilia Naseva
PA1651	**Five-year all-cause hospitalizations in patients with COPD following their first-ever exacerbation-related hospitalization** Kiki Waeijen-Smit (Horn, Netherlands), Peter A. Jacobsen, Sarah Houben-Wilke, Sami O. Simons, Frits M. E. Franssen, Martijn A. Spruit, Christian T. Pedersen, Kristian H. Kragholm, Ulla M. Weinreich
PA1652	**Over-the-counter (OTC) short-acting β2-agonist (SABA) purchase and asthma outcomes in SABINA III** Hisham Farouk (Dubai, United Arab Emirates), Walter Javier Mattarucco, Rocio Martina Barriga, Hao-Chien Wang, Dina Diaz, Adel Khattab, Manuel Pacheco Gallego, Ashraf Al Zaabi, David Price
PA1653	**Severe eosinophilic asthma with paradoxal worsening T2 bronchial inflammation despite sequencial treatment with mepolizumab and benralizumab** Nicolas Migueres (Strasbourg, France), Christophe Marcot, Naji Khayath, Frederic De Blay

PA1654 **Three sensitization patterns to mugwort, timothy, birch and their main allergen components revealed by latent class analysis**
Wu Liting (Guangzhou, China), Luo Wenting, Hu Haisheng, Zheng Xianhui , Chen Yuemin, Sun Baoqing

PA1655 **Effect of positive airway pressure (PAP) therapy in patients with excessive dynamic airway collapse (EDAC)**
Neeraj Shah (New Malden (Surrey), United Kingdom), Kinjal Jadeja, Michael Cheng, Philip Marino, Michelle Ramsay, Shelley Srivastava, Joerg Steier, Nicholas Hart, Eui-Sik Suh, Patrick Murphy, Georgios Kaltsakas

PA1656 **Nasal high flow oxygen therapy compared to conventional oxygen therapy in hospitalised patients with respiratory illness: a systematic review and meta-analysis**
Daniel Seow (Singapore, Singapore), Yet Hong Khor, Su Wei Khung, David Smallwood, Yvonne Ng, Natasha Smallwood

PA1657 **Extended-release morphine for chronic breathlessness in COPD: a randomized controlled trial with blinded up-titration over three weeks**
Diana Ferreira (Adelaide (SA), Australia), Magnus Ekström, Sungwon Chang, Sandra Louw, Miriam Johnson, Danny Eckert, Belinda Fazekas, Katherine Clark, Meera Agar, David Currow

TP-10 in thematic poster area — Session 223 — 08:30 - 09:30

Thematic poster: Comorbidities in chronic airway diseases

Disease(s) : Airway diseases

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

Chairs : Renaud Louis (Liège, Belgium), Chair to be confirmed

PA1658 **Characterizing healthcare resource use among adults with COPD by presence of comorbidities**
Meredith Barrett (Portland, United States), Vy Vuong, Elroy Boers, Ann Cameron, Leanne Kaye, Caleb Woodford, Carlos M. Nunez, Kimberly L. Sterling

PA1659 **Healthcare resource utilization among adults with asthma by disease severity and presence of comorbidities**
Meredith Barrett (Portland, United States), Vy Vuong, Elroy Boers, Ann Cameron, Leanne Kaye, Caleb Woodford, Carlos M. Nunez, Kimberly L. Sterling

PA1660 **Airflow obstruction as a marker of prognosis in rheumatoid arthritis**
Anna Denis (Liège, Belgium), Céline Regnier, Monique Henket, Nathalie Maes, Marie Thys, Renaud Louis, Michel Malaise, Julien Guiot

PA1661 **Are obesity and visceral adipose tissue a trait of asthma?**
Alina Ofenheimer (Zürich, Switzerland), Caspar Schiffers, Emiel Wouters, Patricia Puchhammer, Robab Breyer-Kohansal, Marie-Kathrin Breyer, Otto Chris Burghuber, Renaud Louis, Sylvia Hartl

PA1662 **Early alterations in lung function in a cohort of patients with non-affective psychotic disorder and a control group.**
Carlos Antonio Amado Diago (Santander (Cantabria), Spain), Ana Viejo Casas, Javier Vazquez Bourgon, Juan Agüero Calvo, Benedicto Crespo Facorro, Mario Ruiz Nuñez, Roberto Garastazu

PA1663 **RISK OF IN-HOSPITAL MORTALITY DUE TO COVID-19 IN PATIENTS WITH BRONCHIAL ASTHMA: APPLICATION OF 4C MORTALITY SCALE.**
IRENE MILAGROS DOMINGUEZ ZABALETA (Madrid, Spain), Gabriella Manzanares Cavi, Walther Ivan Giron Matute, Zichen Ji, Beatriz Recio Moreno, Paola Benedetti, Alicia Oliva Ramos, Luis Puente Maestu, Javier De Miguel Diez

PA1664 **Small airway dysfunction detected by oscillometry in asthma, COPD, and asthma-COPD overlap**
Toshihiro Shirai (Shizuoka, Japan), Keita Hirai, Yasuhiro Gon

PA1665 **The association between transfer coefficient of the lung and the risk of exacerbation in asthma-COPD overlap**
Hiroaki Ogata (Fukuoka, Japan), Katsuyuki Katahira, Aimi Enokizu-Ogawa, Yujiro Jingushi, Akiko Ishimatsu, Kazuhito Taguchi, Atsushi Moriwaki, Makoto Yoshida

PA1666 **Integrating Care: screening for anxiety and depression in COPD**
Thomas Mason (London, United Kingdom), Amy Dewar, Jocelin Hall

PA1667 **Bronchiectasis on chronic obstructive pulmonary disease patients: what special features?**
Imen Bachouch (Ariana, Tunisia), Chaima Habouria, Nidhal Balloumi, Khaoula Bouguerra, Nour El Houdauda Khezemi, Asma Zargouni, Fatma Chermiti, Sorraya Fennich

PA1668 **Impact of COVID-19 on hospital admissions, health status and behavioral changes of patients with severe COPD**
Eva Pappe (Berlin, Germany), Ralf Hammerich, Jacopo Saccomanno, Leonore Erdmann, Thomas Sgarbossa, Martin Witzenrath, Norbert Suttorp, Ralf-Harto Hübner

PA1669	**Factors underlying the increasing prevalence of comorbidities over time and their mutual relationship in COPD: Results from COSYCONET** Peter Alter (Marburg, Germany), Kathrin Kahnert, Franziska C. Trudzinski, Robert Bals, Henrik Watz, Tim Speicher, Sandra Söhler, Stefan Andreas, Tobias Welte, Klaus F. Rabe, Emiel F.M. Wouters, Christoph Lange, Hubert Wirtz, Joachim H. Ficker, Claus F. Vogelmeier, Rudolf A. Jörres
PA1670	**Right heart changes depending on the functional status of patients with COPD combined with hypertension** Anastasiia Melenevych (Kharkiv, Ukraine)
PA1671	**Detection of progressive airway disease on chest computed tomography in the Ataluren CF cohort using an airway-artery algorithm** Qianting Lv (Rotterdam, Netherlands), Leticia Gallardo Estrella, Eleni-Rosalina Andrinopoulou, Pierluigi Ciet, Jean-Paul Charbonnier, Mariette P.C. Kemner - Van De Corput, Daan Caudri, Marleen De Bruijne, Harm A.W.M. Tiddens
PA1672	**Longitudinal variation of nasal nitric oxide in patients with Primary Ciliary Dyskinesia and healthy controls.** Charlotte Olivia Pioch (Berlin, Germany), Niklas Ziegahn, Marcus A. Mall, Jobst F. Röhmel
PA1673	**Vocal biomarkers in COPD: capturing disease severity using voice** Iris Lina Michels (Maastricht, Netherlands), Iris Michels, Visara Urovi, Helmer Strik, Hanneke A. C. Van Helvoort, Sami O. Simons
PA1674	**Evolution of asthmatic patients at 6 and 12 months after acute COVID-19 recovery** Ricardo Antonio Camperos Moreno (Madrid, Spain), Paul Kent Ernesto Freund, Jaime Pavón Guede, Inés Fernández-Concha Llona, Isamar De Agrela Mendes, Katherine Pose, Daniel Laorden Escudero, David Romero Ribate, Carlos Javier Carpio Segura, Itsaso Losantos García, Pablo Marical Aguilar, Isabel Fernández Navarro, María Victoria Arnalich Montiel, Luis Gómez Carrera, Carmen Alegre Segura, Alberto Manuel Borobia Pérez, Concepción Prados Sánchez, Santiago Quirce, Javier Domínguez Ortega, Francisco Arnalich Fernández, Rodolfo Álvarez-Sala Walther
PA1675	**Vaccination and hospitalization of COVID-19:what difference does it make?** Abir Hedhli Ep Cherni (tunis, Tunisia), Rihab Jebali, Abir Hedhli, Yassine Ouahchi, Sana Cheikhrouhou, Samira Merai, Sonia Toujani, Meriem Mjid, Bessma Dhahri
PA1676	**Exercise induced laryngeal obstruction in asthma** Aase Johnsen Rogde (Bergen, Norway), Sverre Lehmann, Haakon Kristian Kvidaland, Ola Drange Røksund , Hege Synnøve Havstad Clemm, Thomas Halvorsen, Maria Vollsæter, Tiina Maarit Andersen
PA1677	**Incidental pulmonary emphysema and COPD cases in a national lung cancer screening program feasibility study.** Anneli Poola (Tartu, Estonia), Anneli Poola, Vahur Makke, Marianna Frik, Piret Viiklepp, Tarvo Kiudma, Urmas Takker, Anneli Rätsep, Kaja-Triin Laisaar, Tanel Laisaar

TP-11 in thematic poster area — Session 224 — 08:30 - 09:30

Thematic poster: Allergy and asthma: biomarkers, phenotypes and real-world evidence

Disease(s) : Airway diseases

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

Chairs : Christina Bal (Wien, Austria), Marek Lommatzsch (Rostock, Germany)

PA1678	**Bronchodilator reversibility in patients with severe asthma included in the GAN registry.** Katrin Milger-Kneidinger (Munich, Germany), Dirk Skowasch, Eckhard Hamelmann, Carlo Mümmler, Marco Idzko, Christian Taube, Annette Holtdirk, Hartmut Timmerman, Roland Buhl, Stephanie Korn
PA1679	**Interrelationships between body mass index, total IgE, and blood eosinophils count in healthy subjects** Rita Amaral (Porto, Portugal), Tiago Jacinto, Andrei Malinovschi, Christen Janson, David Price, João Fonseca, Kjell Alving
PA1680	**Bronchiectasis in severe asthma is associated with eosinophilic airway inflammation and activation** Laurits Frøssing (Copenhagen V, Denmark), Anna Von Bülow, Celeste Porsbjerg
PA1681	**Increase in blood eosinophil count over time and sputum IL8 are associated with FEV1 decline in asthma** Sophie Graff (Liège, Belgium), Catherine Moermans, Sara Gerday, Monique Henket, Virginie Paulus, Françoise Guissard, Renaud Louis, Florence Schleich
PA1682	**Type 2 biomarker expression according to age of asthma onset: an analysis of the German severe asthma registry (GAN)** Marek Lommatzsch (Rostock, Germany), Christian Taube, Eckard Hamelmann, Katrin Milger-Kneidinger, Dirk Skowasch, Margret Jandl, Florian Simon Schmitz, Cordula Koerner-Rettberg, Marco Idzko, Roland Buhl, Stephanie Korn

PA1683	**The German Asthma Net: Anti-IL5(R) therapy reduces disease burden in a real-life severe asthma cohort** Christina Bal (Wien, Austria), Marco Idzko, Katrin Milger, Dirk Skowasch, Christian Schulz, Christian Taube, Eckard Hamelmann, Roland Buhl, Stephanie Korn
PA1684	**FeNO is not affected by spirometry, IOS or walking in healthy subjects or well controlled asthma patients** Helle Haagensen Andersen (Brabrand, Denmark), Lene Mølgaard Pedersen , Maha Mousa, Nuha Mousa, Anne-Sofie Bjerrum, Tina Skjold, Torben Smidt-Hansen , Hans Jürgen Hoffmann, Johannes Martin Schmid
PA1685	**Association between Staphylococcal Enterotoxin (SE)-specific IgE and specific IgE for house dust mites (HDM) in Brazilian patients with Chronic Rhinosinusitis with Nasal Polyps (CRSwNP).** Sergio Dortas Junior (Rio De Janeiro (RJ), Brazil), Priscilla Campos Dos Santos, José Elabras Filho, Fabiana Da Cruz, Solange Valle, Priscila Ferraiolo
PA1686	**Application of urinary proteomics for biomarker discovery in respiratory diseases** Laura Martelo-Vidal (santiago de compostela, Spain), Sara Vázquez-Mera, Pablo Miguéns-Suárez, Francisco Javier Salgado-Castro, Marina Blanco-Aparicio, Mar Mosteiro-Añón, Gabriel Martínez-Capoccioni, Paula Méndez-Brea, Susana Belén Bravo , Francisco-Javier González-Barcala, Juan José Nieto-Fontarigo
PA1687	**Overall response to anti-IL5/anti-IL5Rα treatment in severe asthma does not depend on initial bronchodilator responsiveness** Carlo Mümmler (München, Germany), Hendrik Suhling, Nikolaus Kneidinger, Roland Buhl, Moritz Kayser, Nora Drick, Jürgen Behr, Tobias Welte, Stephanie Korn, Katrin Milger
PA1688	**Factors associated with middle-aged adult obstructive lung function deficits in the grass pollen season** Sabrina Idrose (Australia, Australia), Don Vicendese, Michael Abramson, E. Haydn Walters, Garun Hamilton, Adrian Lowe, Jo Douglass, Caroline Lodge, Shyamali Dharmage
PA1689	**Polygenic risk score constituted by GWAS-identified disease markers helps predict asthma development** Yang Yie Sio (Singapore, Singapore), Fook Tim Chew
PA1690	**The epidemiology of sensitization to perennial aeroallergens in adult patients with severe asthma in Belgium. The Belgian IgE (BEIgE) study** Florence Schleich (Liège, Belgium), Sandra Gurdain, Eleonore Maury, Jan Van Schoor
PA1691	**ICS-LABA prescribing in asthma (maintenance only and MART), clinical and symptom unmet need in Japan** Shiyuan Zhang (Collegeville, United States), Alexandrosz Czira, Julia Harley, Kieran J Rothnie, Lauren Lee, Mark Small
PA1692	**High prevalence of sensitisation to house dust mite in ethnic minority severe asthma patients** Jennifer Kerks (Telford (Shropshire), United Kingdom), Julie Marsh, Ali Bahron, Thirumala Krishna, Gareth Walters, Fiona O'Riordan, Lisa White, Julie Sullivan, Adel Mansur
PA1693	**Asthma comorbidities: frequency, risk factors, and associated burden in children and adolescents** Giovanni Viegi (Pisa (PI), Italy), Salvatore Fasola, Giovanna Cilluffo, Velia Malizia, Laura Montalbano, Amelia Licari, Giuliana Ferrante, Stefania La Grutta
PA1694	**A comprehensive analysis of the components of the common weed pollens and related allergens in patients with allergic diseases in southern China** Wenting Luo (Guangzhou (Guangdong), China), Baoqing Sun
PA1695	**The impact of national lockdown in 2020 on admission rates for exacerbations in asthma; a nationwide cohort study.** Louise Toennesen (København K, Denmark), Barbara Bonnesen, Pradeesh Sivapalan, Alexander Svorre Jordan, Mohamad Isam Saeed, Josefin Eklöf, Charlotte Suppli Ulrik, Kristoffer Grundtvig Skaarup, Mats Christian Højberg Lassen, Tor Biering-Sørensen, Jens-Ulrik Stæhr Jensen
PA1696	**Clinico-demographic, radiological and immunological profile of allergic bronchopulmonary aspergillosis in a tertiary care institute of east India.** Arshad Ejazi (Patna, India), Manish Shankar, Satyadeo Chaubey, Dinesh Kumar
PA1697	**Inflammatory phenotypes and comorbidities in mild-to-moderate COPD** Thibaud Soumagne (Paris, France), Sophie Hue, Jean-Charles Dalphin, Bruno Degano

TP-12 in thematic poster area — Session 225 — 08:30 - 09:30

Thematic poster: Factors associated with lung function and prevalence of respiratory diseases

Disease(s) : Airway diseases Interstitial lung diseases

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

Chairs : elisa lopez varela (Barcelona, Spain), Jose Leonidas Alves Junior (São Paulo (SP), Brazil)

PA1698	**Period and cohort effects: consequences on lung function in Norway during the 20th century** Lucia Cestelli (Bergen, Norway), Ane Johannessen, Knut Stavem, Amund Gulsvik, Rune Nielsen
PA1699	**Associations between breast feeding and lung function in middle age** Dinh Bui (Melbourne (VIC), Australia), Jennifer Perret, Caroline Lodge, Adrian Lowe, Gayan Bowatte, Erbas Bircan, Alan James, Michael Abramson, Garun Hamilton, Haydn Walters, Shyamali Dharmage
PA1700	**Supranormal lung function by age bins in the LEAD Study** Caspar Schiffers (Vienna, Austria), Rosa Faner, Alina Ofenheimer, Patricia Puchhammer, Marie-Kathrin Breyer, Otto Chris Burghuber, Sylvia Hartl, Alvar Agusti, Robab Breyer-Kohansal
PA1701	**Cardiovascular disease linked plasma proteins relate mainly to lung volumes** Andreas Rydell (FALUN, Sweden), Elisabeth Nerpin, Xing Wu Zhou, Lars Lind, Eva Lindberg, Jenny Theorell Haglöw, Tove Fall, Christer Janson, Karin Lisspers, Sölve Elmståhl, Suneela Zaigham, Olle Melander, Peter Nilsson, Marju Orhu-Melander, Johan Ärnlöv, Andrei Malinovschi
PA1702	**Associations of black carbon with lung function in COPD patients** Ornella Salimbene (Buccino, Italy), Ivano Salimbene, Maria Chiara Zanetti, Marco Ravina, Deborah Panepinto
PA1703	**Respiratory function in patients post-infection by COVID-19** Sabrine Majdoub Fehri (Nabeul, Tunisia), WAFA MADI, Imen Ketata, Ahmed Dhia Eleuch, Racem Ammar, Rahma Sallami , Hamida Kwass
PA1704	**BMI increase – A determinant of FEV1 decline for overweight and obese adults with asthma** Nicolas Bermudez Baron (Luleå, Sweden), Hannu Kankaanranta, Linnea Hedman, Martin Andersson, Caroline Stridsman, Anne Lindberg, Eva Rönmark, Helena Backman
PA1705	**Changes in COPD prevalence in Madrid from 2007 to 2017** Elena Garcia Castillo (Madrid, Spain), Tamara Alonso Pérez, Jose María Eiros Bachiller, Adrián Peláez Laderas, Patricia Pérez González, Elena Ávalos Pérez-Urría, Elisa Martínez Besteiros, Joan B. Soriano, Julio Ancochea
PA1706	**Incidence, prevalence and regional distribution of systemic sclerosis and associated interstitial lung disease: a nationwide cohort study** Malene Knarborg (Ry, Denmark), Charlotte Hyldgaard, Elisabeth Bendstrup, Jesper Rømhild Davidsen, Anders Løkke, Saher Burhan Shaker, Ole Hilberg
PA1707	**Prevalence of respiratory viruses in COPD exacerbations: A meta-analysis** Alexander Mathioudakis (Stockport, United Kingdom), Anastasia Kefala, Gioulinta Alimani, Victoria Chatzimavridou-Grigoriadou, Nikolaos Papadopoulos, Apostolos Beloukas, Jørgen Vestbo
PA1708	**Among both men and women with COPD ever-smokers have higher disease burden and worse prognosis than never-smokers** Ann Lindberg (Boden, Sweden), Erika Szakacs, Caroline Stridsman, Sami Sawalha, Ulf Nilsson, Linnea Hedman, Eva Rönmark, Helena Backman
PA1709	**A descriptive cross-sectional study on prevalence of respiratory diseases among patients visiting Jiri District Hospital, Nepal.** Kiran Paudel (Kathmandu, Nepal), Tara Ballav Adhikari, Durga Rijal, Bhoj Raj Kalauni, Biplav Aryal, Rajan Paudel, Milan Gaihre, Surya Devkota
PA1710	**Prevalence of and factors associated with respiratory symptoms among patients with inflammatory bowel disease: a prospective study** Brian Renel (Kockelscheuer, Luxembourg), Simon Valentin, Florian Manneville, Bénédicte Caron, Myriam Choukour, Anne Guillaumot, Ari Chaouat, Mathias Poussel, Thomas Chateau, Carina Peyrin-Biroulet, Hamza Achit, Laurent Peryin-Biroulet, François Chabot
PA1711	**Comparative study of smoking and non-smoking chronic obstructive pulmonary disease.** Ankita Mandal (Lucknow, India), Ajay Kumar Verma, Anuj Kumar Pandey, Arpita Singh, Surya Kant, Ved Prakash, Rakesh Kumar Dixit, Umesh Pratap Singh, Shyam Chand Chaudhari
PA1712	**Trends in burden of COPD in Saudi Arabia** Jaber Alqahtani (Dammam, Saudi Arabia)
PA1713	**Prevalence of respiratory viruses in stable COPD: A meta-analysis** Alexander Mathioudakis (Stockport, United Kingdom), Anastasia Kefala, Gioulinta Alimani, Victoria Chatzimavridou-Grigoriadou, Nikolaos Papadopoulos, Apostolos Beloukas, Jørgen Vestbo
PA1714	**The disease burden and quality of life of chronic cough patients in South Korea and Taiwan** Woo-Jung Song (Seoul, Republic of Korea), Chong-Jen Yu, Sukhyun Kang

PA1715 **PERSISTING SYMPTOMS IN A COHORT OF 1966 SUBJECTS WITH SARS-COV-2 INFECTION: 1 YEAR FOLLOW-UP**
Maria Cinta Cumpli Gargallo (Amposta, Spain), Oswaldo Antonio Caguana Vélez, Merce Comas serrano, Margarita Posso Rivera, Xavier Duran Jordà, Eva Balcells Vilarnau, Mireia Admetllo Papiol, Anna Herranz Blasco, Judith Villar Garcia, Diana Badenes Bonet

PA1716 **Burden of chronic respiratory diseases in population in four South/South-East Asian low-and middle-income countries (LMICs).**
BISWAJIT PAUL (Vellore, India), Dhiraj Agarwal, Nik Sherina Hanafi, Ee Ming Khoo, Richard A. Parker, Deesha Ghorpade, Sundeep Salvi, Ahmad Ihsan Abu Bakar, Karuthan Chinna, Deepa Das, Monsur Habib, Norita Hussein, Rita Isaac, Mohammad Shahidul Islam, Mohsin Saeed Khan, Su May Liew, Yong Kek Pang, Samir K Saha, Li Ping Wong, Osman M Yusuf, Shahida O Yusuf, Sanjay Juvekar, Hilary Pinnock

PA1717 **Epidemiology and healthcare impact of IPF in Ontario from 2013-17.**
Shannon Tang (Kingston, Canada), Onofre Morán-Mendoza, Shahriar Khan, Ana Johnson

TP-13 in thematic poster area — Session 226 — 08:30 - 09:30

Thematic poster: Occupational chronic airway, interstitial, pleural and neoplastic diseases

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

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

Chairs : Benoit Nemery (Leuven, Belgium), Mª Jesus Cruz Carmona (Barcelona, Spain)

PA1718 **Immunopathological mechanisms of bird-related hypersensitivity pneumonitis in an acute and chronic murine model**
Silvia Sánchez-Díez (Barcelona, Spain), Miquel De Homdedeu, María Jesús Cruz, Iñigo Ojanguren, Christian Romero Mesones, David Soler, Xavier Muñoz

PA1720 **Mortality in association with occupational exposure and respiratory diagnosis in Helsinki, Finland – a 24-year follow-up**
Juuso Jalasto (Helsinki, Finland), Paula Kauppi, Ritva Luukkonen, Ari Lindqvist, Arnulf Langhammer, Hannu Kankaanranta, Helena Backman, Eva Rönmark, Anssi Sovijärvi, Päivi Piirilä

PA1721 **COPD in a sample of retired persons from Skopje region**
Sasho Stoleski (Skopje, North Macedonia), Jordan Minov, Dragan Mijakoski, Aneta Atanasovska, Dragana Bislimovska, Jovanka Karadzinska-Bislimovska

PA1722 **Cardiopulmonary function in women exposed to biomass fuel smoke: Cross-sectional study in rural Maharashtra, India**
Rohan Shah (Pune, India), Aboli Bhalerao, Dhiraj Agarwal, Nitin Vanjare, Sapna Madas, Sanjay Juvekar

PA1723 **Asthma and respiratory symptoms as related to traditional textile industry in Guatemala: a cross-sectional pilot study in Mayan communities**
Juan Pablo López-Cervantes (Bergen, Norway), Shokouh Makvandi-Nejad, Fernando Jerez, Ana Lorena Ruano, Cecilie Svanes

PA1724 **Fitness to work and quality of life after pulmonary emphysema surgery**
Imene MAGROUN (Ariana, Tunisia), Soumaya Chebbi, Faten Mhiri, Latifa Ben Afia, Dorra Zarati, Adel Merghali, Sarra Zairi

PA1725 **Respiratory health in artisanal copper-cobalt miners in DR Congo**
Joseph PYANA KITENGE (Lubumbashi, Democratic Republic of the Congo), Paul Musa Obadia, Trésor Carsi Kuhangana, André Nyongoni, Celestin Banza Lubaba, Jean-Marie Kayembe Ntumba, Antoine Froidure, Benoit Nemery

PA1726 **Mixed dust pneumoconiosis in flour mill workers**
Anita Anokar, Himanshu Pophale, Divya Patel, Ram Deoskar, Medha Bargaje

PA1727 **Modelling silica-induced immune response in silica exposed patients**
Nirosha Ganesan (Leuven, Belgium), Steven Ronsmans, Peter Hoet

PA1729 **Hypoxemia and radon exposure during underground work in artisanal cobalt mines**
Paul Musa Obadia (Lubumbashi, Democratic Republic of the Congo), Joseph Pyana Kitenge, Trésor Carsi Kuhangana, Tony Kayembe Kitenge, André Ndala Nyongonyi, Patrick De Marie Katoto, Boris Dehandschutter, Célestin Banza Lubaba Nkulu, Benoit Nemery

PA1730 **A comparison of the EQ-5D-5L and the AQoL-8D in people living with idiopathic pulmonary fibrosis**
Ingrid A. Cox (Bellerive (TAS), Australia), Julie Campbell, Barbara De Graaff, Petr Otahal, Tamera Corte, Yuben Moodley, Peter Hopkins, Sacha Macansh, Haydn Walters, Andrew Palmer

PA1731	**Behavior and effect of nanoparticles on neutrophil recruitment in the pulmonary microcirculation** Chenxi Li (munich, Germany), Qiongliang Liu, Tobias Stoeger, Markus Rehberg
PA1732	**Occupational Pulmonary Fibrosis** Ons Grissa (Tunis, Tunisia), Slim Ernez, Saloua Ismail, Nihel Khouja, Amani Dallagi, Aida Benzarti, Jihen Hsinet, Abdelmajid Ben Jemaa
PA1733	**Occupational Exposures associated with Pulmonary Sarcoidosis: A Systematic Review and Meta-analysis** Christopher C. Huntley (Bromsgrove, United Kingdom), Ketan Patel, Aishah Mughal, Shirley Coelho, P. Sherwood Burge, Alice M. Turner, Gareth I. Walters
PA1734	**Outbreak of silicosis in workers producing silica-based composite skirting boards** Steven Ronsmans (Leuven, Belgium), Pieter Goeminne, Naïm Jerjir, Vicky Nowé, Eline Vandebroek, Stephan Keirsbilck, Birgit Weynand, Peter H M Hoet, Jeroen A J Vanoirbeek, Wim A Wuyts, Jonas Yserbyt, Benoit Nemery
PA1735	**Late Breaking Abstract - A major outbreak of artificial stone silicosis in Australia: Results from the Victorian Silica -associated Disease Registry** Ryan Hoy (Melbourne (VIC), Australia), Deborah Glass, Dimitriadis Christina, Stellamay Gwini, Fiona Hore-Lacy, Michael Abramson, Karen Walker-Bone, Malcolm Sim
PA1736	**Late Breaking Abstract - Effects of face masks on cardiopulmonary performance in a partly double-blinded randomized cross-over study** Eike Marek (Bochum, Germany), Vera Van Kampen, Birger Jettkant, Benjamin Kendzia, Bianca Strauß, Kirsten Sucker, Melanie Ulbrich, Anja Deckert, Hans Berresheim, Christian Eisenhawer, Frank Hoffmeyer, Simon Weidhaas, Thomas Behrens, Thomas Brüning, Jürgen Bünger
PA1737	**Late Breaking Abstract - Influence of different face masks on the subjective impairment at different physical workloads** Vera van Kampen (Bochum, Germany), Eike Marek, Birger Jettkant, Kirsten Sucker, Benjamin Kendzia, Anja Deckert, Melanie Ulbrich, Hans Berresheim, Frank Hoffmeyer, Simon Weidhaas, Christian Eisenhawer, Thomas Bruening, Juergen Buenger

TP-14 in thematic poster area — Session 227 — 08:30 - 09:30

Thematic poster: Paediatric lung function: new recommendations and evolution in ex-preterm

Disease(s) : Airway diseases

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

Chairs : Enrico Lombardi (Florence, Italy), Iulia Cristina Ioan (Vandoeuvre-Les-Nancy, France)

PA1738	**Childhood Re-Admission Following Preterm Birth Predicts Respiratory Morbidity at 19 Years** Elizabeth Smith (Beaconsfield (WA), Australia), Naomi Hemy, Jasmine Grdosic, Andrew Wilson, Conor Murray, Denby Evans, Graham Hall, Shannon Simpson
PA1739	**Association of air pollution exposure at birth and in childhood with lung function in preterm-born school-aged children** Chris Course (Cardiff, United Kingdom), John Watkins, Sarah Kotecha, Sailesh Kotecha
PA1740	**Effect of IUGR and catch-up growth on later lung function in preterm children: prospective cohort study** Sarah Kotecha (Cardiff (South Glamorgan), United Kingdom), Michael Cousins, Kylie Hart, W John Watkins, Sailesh Kotecha
PA1741	**Extremely preterm born adults from the pre-surfactant era have increased COPD risk** Tonje Bårdsen (Bergen, Norway), Merete Benestad, Ola Røksund, Hege Clemm, Thomas Halvorsen, Maria Vollsæter
PA1742	**Combined inhaled corticosteroids with long-acting beta-2 receptor agonists improve spirometry deficits in school-aged children with preterm lung disease** Michael Cousins (Cardiff (South Glamorgan), United Kingdom), Nia Goulden, Kylie Hart, Alison Jenkins, Gill Willetts, Louise Yendle, Iolo Doull, E Mark Williams, A John Henderson, Zoe Hoare, Sailesh Kotecha
PA1743	**Detecting reversible airway disease in those born preterm – which is the best test?** Tiffany Bradshaw (Perth, Australia), Shannon Simpson, Denby Evans, Naomi Hemy, Rhea Urs, Elizabeth Smith
PA1744	**Oscillometry in preterm-associated obstructive and non-obstructive lung disease** Michael Cousins (Cardiff (South Glamorgan), United Kingdom), Kylie Hart, Chris Course, Bence Radics, Zoltan Hantos, Peter Sly, Sailesh Kotecha

PA1745	**Specific respiratory conductance by forced oscillations reveals ventilation inhomogeneity in patients with cystic fibrosis** Sotirios Fouzas (Patras, Greece), Maria Gioulvanidou, Christos Kogias, Elisavet-Anna Chrysochoou, Aris Bertzouanis, Michael Anthracopoulos, John Tsanakas, Elpis Hatziagorou
PA1746	**Feasibility and Inter-Test Reproducibility of Lung Clearance Index in Children with Neuromuscular Disorders** Grace Pettigrew (Perth, Australia), Jenny Lam, Adelaide Withers, Andrew Wilson
PA1747	**Feasibility of respiratory muscle assessment tests in children with neuromuscular disease** Yama Latif (Cambridge, United Kingdom), Matthew Rose, Theofilos Polychronakis
PA1748	**Retrospective assessment of changes in bronchial obstruction severity interpretation in children according to new recommendations** Nicole Beydon (Paris, France), Jessica Assouline, Marc Koskas, Marie-Claude La Rocca, Fatma Lacin, Lucia Maingot-Sandu, Noria Medjahdi, Houda Saleh-Guillo
PA1749	**Retrospective assessment of changes in bronchial reversibility interpretation in children according to new recommendations** Nicole Beydon (Paris, France), Jessica Assouline, Marc Koskas, Marie-Claude La Rocca, Fatma Lacin, Lucia Maingot-Sandu, Noria Medjahdi, Houda Saleh-Guillo
PA1750	**Evaluation of lung volumes in Caucasian and African-Caribbean asthmatic children using GLI reference equations** Iulia Cristina Ioan (Vandoeuvre-Les-Nancy, France), Nicole Beydon
PA1751	**Late Breaking Abstract - Does infant lung function affect clinical management in children with cystic fibrosis?** Michele Arigliani (London, United Kingdom), Sidrah Chaudhry, Rossa Brugha, Ranjan Suri, Paul Aurora
PA1752	**Late Breaking Abstract - Impact of routine spirometry on clinical decisions and quality of life in children: an open -label randomised controlled trial** Wicharn Boonjindasup (Bangkok, Thailand), Julie Marchant, Margaret Mcelrea, Stephanie Yerkovich, Ian Masters, Ann Chang
PA1753	**Late Breaking Abstract - Effect of different stimulating waveforms on the derivation of oscillometry spectral parameters in asthmatic children** Pasquale Pio Pompilio (Milano (MI), Italy), Giuliana Ferrante, Alessandro Gobbi, Laura Venditto, Michele Piazza, Raffaele Dellacà, Giorgio Piacentini
PA1754	**Late Breaking Abstract - Prediction of adolescent asthma outcomes using childhood lung function** Hans Jacob Koefoed (Groningen, Netherlands), Jenny Hallberg, Jolanda Boer, Ulrike Gehring, Roel Vermeulen, Inger Kull, Anna Bergström, Judith M. Vonk, Gerard H. Koppelman, Erik Melén
PA1755	**Late Breaking Abstract - Type 2-high airway inflammation in childhood asthma distinguishes a more severe phenotype** Frederikke Rosenvinge Skov (Gentofte, Denmark), Bo Chawes, Klaus Bønnelykke, Jakob Stokholm, Hans Bisgaard, Ann-Marie Malby Schoos

TP-15 in thematic poster area — Session 228 — 08:30 - 09:30

Thematic poster: Lung infections in children: from COVID-19 to postinfectious bronchiolitis obliterans

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

Chairs : Refiloe Masekela (Pretoria, South Africa), Mieke Boon (Wilsele, Belgium)

PA1756	**Respiratory functions in the follow-up of children with COVID-19 infection** Sule Selin AKYAN SOYDAŞ (ANKARA, Turkey), Ece Ocak, Murat Yasin Gençoğlu, Salih Uytun, Satı Özkan Tabakçı, Sanem Eryılmaz Polat, Gökçen Dilşa Tuğcu, Saniye Girit, Yetkin Ayhan, Gülseren Esen Besli, Sevliya Öcal Demir, Erkan Çakır, Hakan Yazan, Özden Türel, Burcu Bursal Duramaz, Haluk Çokuğraş, Ayşe Ayzıt Kılınç, Azer Kılıç Başkan, Pınar Önal, Sevgi Pekcan, Gökçen Ünal, Aslı Imran Yılmaz, Özge Metin Akcan, Gökçen Kartal Öztürk, Burçin Beken, Bülent Karadağ, Ela Ertem Eralp, Yasemin Gökdemir, Mina Hızal, Emine Vezir, Ayşe Tana Aslan, Tuğba Şişmanlar Eyüboğlu, Anıl Aktaş Tapısız, Tuğba Bedir Demirdağ, Sedat Öktem, Emine Atağ, Füsun Ünal, Güzin Cinel
PA1757	**Respiratory function and symptoms after acute COVID-19 infection in children and adolescents** Alicia Mitchell (Sydney, Australia), Brendan Kennedy, Brooke Bailey, Beth Weldon, Tatiana Diaz Rodriguez, Philip Britton, Hiran Selvadurai
PA1758	**Prospective respiratory follow-up of children with COVID-19, 6-months post-diagnosis** Marita Antoniadi (Athens, Greece), Dimitra-Irinna Vitoratou, Patra Koletsi, Despina-Zoe Mermiri, Athina Papadopoulou, Stavroula Kostaridou

PA1759	**Evaluation of Pulmonary Function Tests of Patients Diagnosed with Multisystem Inflammatory Syndrome in Children (MIS-C)** Salih Uytun (Ankara, Turkey), Murat Yasin Gençoğlu, Şule Selin Akyan Soydaş, Ece Ocak, Satı Özkan Tabakçı, Gökçen Dilşa Tuğcu, Sanem Eryılmaz Polat, Tuğba Bedir Demirdağ, Güzin Cinel
PA1760	**Clinical features of COVID-19 among children with recurrent respiratory infections in Ukraine** Tetiana Harashchenko (Kyiv, Ukraine), Tetiana Umanets, Volodymyr Lapshyn, Tetiana Kaminska, Yuriy Marushko, Victoria Khomenko, Yurii Antipkin
PA1761	**Varying numbers of acute wheezing cases presenting to paediatric emergency during the COVID-19 pandemic** Kah Wee Teo (Glenfield, United Kingdom), Deepa Patel, Shilpa Sisodia, Damian Roland, Erol Gaillard, Julian Wei-Tze Tang
PA1762	**Pediatric admissions due to respiratory diseases during the COVID-19 pandemic** Dana Pe'er Moscovich (Jerusalem, Israel), Diana Averbuch, Dana Wolf, Oded Breuer
PA1763	**RSV circulation during SARS-CoV-2 pandemic era: what happened in Italy** Luigi Matera (Rome, Italy), Raffaella Nenna, Antonella Frassanito, Maria Giulia Conti, Greta Di Mattia, Laura Petrarca, Enrica Mancino, Domenico Paolo La Regina, Gian Luigi Marseglia, Amelia Licari, Salvatore Leonardi, Sara Manti, Luana Nosetti, Alessandra Pierangeli, Carolina Scagnolari, Margherita Di Jorgi, Alessia Solco, Chiara Moriano, Simone Crinò, Enea Bonci, Fabio Midulla
PA1764	**Features of an aseasonal 2021 RSV epidemic in the UK and Ireland: analysis of the first 10,000 patients** Steve Cunningham (Edinburgh (Scotland), United Kingdom), Damian Roland, Thomas Williams, Mark Lyttle, Robin Marlow, Pia Hardelid, Ian Sinha, Olivia Swann, Abigail Maxwell-Hodkinson
PA1765	**Prognostic value of vitamin D status in young children with viral-induced wheeze** Kateryna Hodiatska (Dnipro, Ukraine)
PA1766	**The clinical significance of thrombocytosis in children with viral respiratory tract infections** Sergei Elber-Dorozko (Jerusalem, Israel), Liya Kerem, Dana G. Wolf, Yaacov Berkun, Rebecca Brooks, Oded Breuer
PA1767	**Respiratory syncytial virus (RSV) infection in children with neuromuscular diseases (NMD): a literature review & a survey of Palivizumab prophylaxis in the UK** Andrew Willard (Leicester, United Kingdom), Trinity Axelson, Kamini Jain
PA1768	**Rapid mobilisation of parent champions empowers vulnerable families on bronchiolitis.** Alice Lee (Liverpool, United Kingdom), Hazel Blackham, Hibba Khalil, Kalina Mlodawska, Katie Parry, Katie Sefton, Nicola Lynch, Bernie Carter, Daniel Hawcutt, Ian Sinha
PA1769	**Clinical features, bronchoscopic findings and microbiology of children with chronic endobronchial suppuration in Greece** Maria Eleni Papakonstantinou (Athens, Greece), Konstantinos Douros, Alexndra Krontsi, Adamadia Savvopoulou, Olympia Sardeli, Dafni Moriki, Angeliki Galani
PA1770	**Efficacy of antibiotic eradication therapy of early Pseudomonas aeruginosa infection in children with primary ciliary dyskinesia** Dvir Gatt (Beer Sheva, Israel), Michelle Shaw, Wallace B Wee, Melinda Solomon, Sharon Dell, Felix Ratjen
PA1771	**The airway microbiota in siblings with primary ciliary dyskinesia: related factors and correlation with clinical characteristics** Dilber Ademhan Tural (Ankara, Turkey), Merve Kasikci, Ozlem Altay, Sanem Eryilmaz Polat, Beste Ozsezen, Mina Hizal, Birce Sunman, Halime Nayir Buyuksahin, Ismail Guzelkas, Tugba Yuksel Dolgun, Nagehan Emiralioglu, Ebru Yalcin, Deniz Dogru, Nural Kiper, Gulsen Hascelik, Kadir Serdar Diker, Ugur Ozcelik
PA1772	**Title: Bacterial profile by age in paediatric Non-CF Bronchiectasis (NCFB)** Kirstin Unger (Edinburgh, United Kingdom), Mohammad Dazham, Stefan Unger
PA1773	**Outcome of post-infectious bronchiolitis obliterans (PIBO) among children in Malaysia** Sze Chiang Lui (Kuala Lumpur, Malaysia), Che Zubaidah Che Daud, N.Fafwati Faridatul Akmar Mohammad, Maria Kamal, Azizah Musa, Nor Khailawati Sharibudin, Hafizah Zainuddin, Farizah Mohd Hairi , Eu Ann Gan, Pavithira Devi Kailasam, Eunice Chin Nien Ng, Cheng Guang Gan, Alifah Alias, Mohd Shahrulfahmi Abu Osman, Hasliza Razak, Siti Aishah Abd Rahim, Wen Ying Ng, Asiah Kassim
PA1774	**Evaluation of machine learning to detect adventitious lung sounds using digital auscultation to aid childhood pneumonia diagnosis** Salahuddin Ahmed (Dhaka, Bangladesh), Harish Nair, Steven Cunningham, Abdullah Baqui, Eric Mccollum
PA1775	**Discriminating between paediatric bacterial and viral lower respiratory tract infection (LRTI) to guide antibiotic decision making: a systematic review** Jonathan Twynam-Perkins (Edinburgh, United Kingdom), Bohee Lee, Steve Cunningham, David Dockrell

TP-16 in thematic poster area — Session 229 — 08:30 - 09:30

Thematic poster: Surgery for mediastinal and benign thoracic diseases

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

Method(s) : Imaging | Surgery | Pulmonary function testing | Public health | Cell and molecular biology | Epidemiology

Chairs : Stefano Elia (Roma (RM), Italy), Kalliopi Athanassiadi (Athens, Greece)

PA1776	**Dyspnoea improves following composite repair of giant hiatus hernia** Gregory Falk (Lindfield, Australia), Oleksandr Khoma, Ngar Lok Joshua Wong, Miho Mugino, Maite Jeanne Khoma, Hans Van Der Wall
PA1777	**Reflux cough and LPR: The utility of fundoplication** Gl Falk (Lindfield, Australia), Sashidhar Yeluri, David Mitchell, Hans Van Der Wall
PA1778	**Impact of diaphragmatic surgery on spirometric parameters** YOSR BEN ATTIG (Tunis, Tunisia), Emna Ben Jemia, Rime Essid, Kaouther Ben Amara, Mohamed Sadok Boudaya
PA1779	**Contribution of ultrasound in the postoperative evaluation of the diaphragmatic function after surgery for intrathoracic occurrence of hepatic hydatid cyst** YOSR BEN ATTIG (Tunis, Tunisia), Emna Ben Jemia, Kaouther Ben Amara, Siwar Hamdi, Mohamed Sadok Boudaya
PA1780	**Pulmonary decortication: indications and results** Abdessalem Hentati (Sfax, Tunisia), Mouna Nasri, Walid Abid, Ahmed Ben Ayed, Zied Chaari, Imed Frikha
PA1781	**One-stop-shop diagnosis and surgical therapy for small nodules of early stage lung cancer in a hybrid theatre** Claudio Caviezel (Zürich, Switzerland), Konstantinos Kostopanagiotou, Gilbert Puippe, Raphael Werner, Isabelle Opitz
PA1782	**Thoracic approach of concomitant lung and liver hydatid cysts** Sarra Zairi (Tunis, Tunisia), Wissem Jendli, Hela Kamoun, Mahdi Abdennadher, Hazem Zribi, Monia Attia, Taher Mestiri, Saoussen Hantous, Adel Marghli
PA1783	**Conservative Surgical Management in Giant Lung Hydatid Cyst** amina abdelkbir (ben arous, Tunisia), Mahdi Abdennadher, WIFEK SAIDANI, Mariem Hadj Dahmen, Hazem Zribi, Imen Bouacida, Amina Abdelkebir, Sonia Ouerghi, Sarra Zairi, Adel Marghli
PA1784	**Intrathoracic hemangioma : Report of 8 cases** amina abdelkbir (ben arous, Tunisia), Mahdi Abdennadher, Nouha Boubaker, Hazem Zribi, Sarra Zairi, Amina Abdelkabir, Imen Bouacida, Mouna Mlika, Sonia Ouerghi, Adel Marghli
PA1785	**Primary Mediastinal Germ Cell Tumors in Children and Adolescents: a report of 6 cases** amina abdelkbir (ben arous, Tunisia), Kaouther Ben Amara, Mahdi Abdennadher, Amina Abdelkebir, Hazem Zribi, Aida Kaddour Ayadi, Sonia Ouerghi, Sarra Zairi, Adel Marghli
PA1786	**Primary muscular hydatid cyst of the anterior chest wall: the pectoralis major muscle, four cases** amina abdelkbir (ben arous, Tunisia), Asma Saad, Imen Bouacida, Mahdi Abdennadher, Chaker Jaber, Amira Dridi, Hazem Zribi, Adel Marghli
PA1787	**Management of pulmonary abscesses in a surgical setting** Sabrine Maddeh (Bizerte, Tunisia), Bechir Ben Radhia, Chrif Taieb, Kortas Chokri, Sofiane Jerbi
PA1788	**One-stage surgery of bilateral pulmonary hydatidosis** amina abdelkbir (ben arous, Tunisia), Nouha Boubaker, Mahdi Abdennadher, Amina Abdelkabir, Hazem Zribi, Henda Neji, Faouzi Mezni, Sonia Ouerghi, Sarra Zairi, Adel Marghli
PA1789	**Post-CABG pleural effusions : Does previous asbestos exposure increase the risk?** Hugh Welch (Bristol, United Kingdom), Jessica Harris, Maria Pufulete, Arnaldo Dimagli, Umberto Benedetto, Nick Maskell
PA1790	**Hemoptosis revealing Pulmonary arteriovenous malformation: A rare indication of surgical treatment** amina abdelkbir (ben arous, Tunisia), WIFEK SAIDANI, Imen Bouassida, Mahdi Abdennadher, Hazem Zribi, Amina Abdelkabir, Sarra Zairi, Amira Dridi, Adel Marghli
PA1791	**Minimally invasive surgery for mediastinal tumorsAbdelkbir A, Labidi A, Abdennadher M, Zribi H, Zairi S, Marghli A** Aymen Labidi (tunis, Tunisia), Amina Abdelkbir, Mehdi Abdennadher, Hazem Zribi, Sarra Zairi, Merghli Adel

PA1792 **Primary chest wall Ewing sarcoma: peculiarities of management**
Sarra Zairi (Tunis, Tunisia), Emna Brahem, Hela Kamoun, Mehdi Abdennadher, Hazem Zribi, Monia Attia, Taher Mestiri, Saoussen Hantous, Faouzi El Mezni, Adel Marghli

PA1793 **Neurogenic tumors of the chest wall: a report of 30 cases**
amina abdelkbir (ben arous, Tunisia), Kaouther Ben Amara, Mahdi Abdennadher, Hazem Zribi, Sarra Zairi, Adel Marghli

PA1794 **Surgery of malignant neurogenic tumors of the mediastinum: a series of 13 cases**
amina abdelkbir (ben arous, Tunisia), Asma Saad, Imen Bouacida, Mariam Hadj Dahmen, Chaker Jaber, Sonia Ouerghi, Hazem Zribi, Adel Marghli

PA1795 **The role of alveolar macrophages and smoking in the development of postoperative pulmonary complications after lung cancer surgery.**
Sebastian Lugg (Birmingham (West Midlands), United Kingdom), Rahul Mahida, Lauren Davis, Dhruv Parekh, Babu Naidu, Aaron Scott, David Thickett

TP-17 in thematic poster area — Session 230 — 08:30 - 09:30

Thematic poster: Respiratory physiotherapy: technology, e-health and (tele)rehabilitation

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

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

Chairs : Michele Vitacca (Gussago (BS), Italy), Jana De Brandt (Umeå, Sweden)

PA1796 **The effect of telerehabilitation-based chest physiotherapy on anxiety level and the perception of pain, dyspnea and fatigue in patients undergoing lung surgery**
Esra Pehlivan (Istanbul, Turkey), Ayça Evkaya Acar, Yaman Khoraki, Sibel Gayretli Atan, Burcu Kılıç, Akif Turna

PA1797 **Preferences for an eHealth tool to support physical activity and exercise training in COPD**
Pernilla Sönnerfors (Stockholm, Sweden), Kirsti Skavberg Roaldsen, Sara Lundell , Annika Toots , Karin Wadell , Alexandra Halvarsson

PA1798 **Technological features of smartphone apps for physical activity promotion in patients with COPD: A systematic review**
Joana Cruz (Leiria, Portugal), João Silva, Nádia Hipólito, Pedro Machado, Sofia Flora

PA1799 **Effectiveness of a remote pulmonary rehabilitation program for patients with Chronic Obstructive Pulmonary Disease: A case series.**
Shaemen Stallwood (London, United Kingdom), Caitlin Smyth, John R Hurst, Heidi Ridsdale

PA1800 **Experiences of using an electronic health (eHealth)-tool among healthcare professionals involved in COPD management - a qualitative analysis.**
Andre Nyberg (Umeå, Sweden), Anna Sondell, Sara Lundell, Sarah Marklund, Malin Tistad, Karin Wadell

PA1801 **End-users' perspectives of an eHealth platform to promote physical activity in COPD: a qualitative study**
Nádia Hipólito (LEIRIA, Portugal), Sofia Flora, Marcelo Brites-Pereira, Cândida G. Silva, Jessica Gordo, Nuno Morais, José Ribeiro, Fernando Silva, Chris Burtin, Dina Brooks, Alda Marques, Joana Cruz

PA1802 **Is pulmonary tele rehabilitation effective and safe for people with respiratory conditions?**
Joshua Bishop (Balmain, Australia), Lissa Spencer, Amanda Mcanulty, Wendy Denniss, Jennifer Alison

PA1803 **Pulmonary rehabilitation including interactive 3D visualization technique, in COPD - a randomized controlled study**
Ulrika Einarsson (Huddinge, Sweden), Pernilla Sönnerfors, Anna-Karin Nordlin, Gun Faager

PA1804 **Curating audio-visual self-management digitalresources for people with Chronic Obstructive Pulmonary Disease (COPD): A novel process report.**
Kirsti Loughran (Middlesbrough, United Kingdom), Sian Williams, Katya Jouravleva, Philip Mordue, Isabel Saraiva, Matthieu Bremond, Clare Cook, Mark Orme, Deborah Turnbull, Nathaniel Skidmore

PA1805 **Digital pulmonary rehabilitation (PR)**
Samantha Pilsworth (Liverpool (Merseyside), United Kingdom), Samantha Pilsworth, David Barber, Simon Taylor, Rosemary Hughes, Michelle Coleiro

PA1806 **Physical therapy follow-up before and during COVID-19 pandemic of patients with amyotrophic lateral sclerosis**
Karen Pondofe (Natal, Brazil), Ozana De Fatima Costa Brito, Rayane Grayce Da Silva Vieira, Esther Beatriz Camara Da Silva, Lariza Maria Da Costa, Tatiana Ribeiro, Mario Emilio Teixeira Dourado Junior, Antonio Jose Sarmento, Guilherme Fregonezi, Vanessa Resqueti

PA1807 **iLiFE-Lifestyle Integrated Functional Exercise for people with interstitial lung disease: the experience of patients**
Cátia Paixão (Aveiro, Portugal), Pedro Ferreira, M Aurora Mendes, Dina Brooks, Alda Marques

PA1808 **Successful provision of a specialised Interstitial Lung Diseases (ILD) pulmonary rehabilitation program during COVID-19 using recorded ILD educational videos developed by allied health professionals**
Hana Alsomali (Newcastle upon Tyne, United Kingdom), Francesca Chambers, Evelyn Palmer, Claire Donaldson, Lyndsey Langlands, Isobel Bowe, Anne-Marie Bourke, Chris Ward, Ian Forrest

PA1809 **Impact of urban circuits in increasing exercise capacity in COPD**
Santiago Larrateguy (Paraná, Argentina), Guillermo Mazzucco, Elena Gimeno-Santos, Rodrgio Torres-Castro, Nicolas Decarlo

PA1810 **The Effect of Pulmonary Rehabilitation on Exercise Capacity and Quality of Life in Patients with SCLC Receiving Chemotherapy**
Seda Saka (Istanbul, Turkey), Merve Hasgül, Nur Tunalı, Süleyman Furkan Hangün, Salih Emri

PA1811 **Expert survey-based experiences on performing and adjusting endurance exercise training in patients with chronic respiratory disease**
Rainer Gloeckl (Schoenau am Koenigssee, Germany), Ralf Zwick, Ulrich Fürlinger, Inga Jarosch, Tessa Schneeberger, Daniela Leitl, Rembert Koczulla, Ioannis Vogiatzis, Martijn A. Spruit

PA1812 **REPERCUSSION OF PHYSIOTHERAPY ORIENTATION ON FUNCTIONAL CAPACITY AND QUALITY OF LIFE AFTER CORONARY BYPASS GRAFTING ARTERY**
Andre Luiz Cordeiro (Feira De Santana (BA), Brazil), Dalyla Gomes, Lucas Soares, Hayssa Mascarenhas, André Guimarães

PA1813 **Reliability of computerised adventitious respiratory sounds in people with stable bronchiectasis**
Beatriz Herrero Cortina (Zaragoza, Spain), Marina Francin-Gallego, Juan Antonio Saez-Perez, Marta San Miguel-Pagola, Cristina Jácome

PA1814 **Late Breaking Abstract - InspiAir, the mHealth App to monitor asthma symptoms for people with asthma**
Celso Ricardo Fernandes de Carvalho (São Paulo (SP), Brazil), Leandro Velloso, Regina Carvalho-Pinto, Renata Yasiro, Carlos Farfan, Giselle Jensen, Lucia Filgueiras

TP-18 in thematic poster area — Session 231 — 08:30 - 09:30

Thematic poster: Basic science of respiratory infection

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

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

Chairs : James D. Chalmers (Dundee (Angus), United Kingdom), Gernot G.U. Rohde (Frankfurt am Main, Germany)

PA1815 **Non-typeable Haemophilus influenzae activates respiratory epithelial cell innate immune responses independently of intracellular internalisation**
Timothy Hinks (Oxford, United Kingdom), Mary Brown, Sophie Morgan, Gillian Donachie, Ian Pavord, Carolina Arancibia

PA1816 **Acute lung inflammation in mice by inhaled aerosolized LPS: effects of various forms of human alpha1-antitrypsin**
Sabine Wrenger (Hannover, Germany), Kokilavani Sivaraman, Dirk Schaudien, Christina Hesse, Katherina Sewald, Tobias Welte, Sabina Janciauskiene

PA1817 **Mucosal administration of anti-bacterial antibody (Ab) provides long-term cross-protection against Pseudomonas aeruginosa respiratory infection**
Thomas Secher (Tours, France), Aubin Pitiot, Marion Ferreira, Christelle Parent, Chloé Boisseau, Mélanie Cortes, Laura Bouvart, Nicolas Aubrey, Christophe Paget, Nathalie Heuzé-Vourc'H

PA1818 **Lack of S100A9 aggravates pneumococcal pneumonia in mice**
Lena Ostermann (Hannover, Germany), Konstantina Katsarou, Regina Maus, Martin Christmann, Konstantin Neumann, Korbinian Brand, Benjamin Seeliger, Frank Bühling, Dorothee Viemann, Tobias Welte, Ulrich A. Maus

PA1819 **The airway metagenome in Pseudomonas aeruginosa associated severe asthma**
Fransiskus Xaverius Ivan (Singapore, Singapore), Pei Yee Tiew*, Kai Xian Thng, Tavleen Kaur Jaggi, Esther Pang Pee Hwee, Ong Thun How, John Arputhan Abisheganaden, Mariko Siyue Koh, Sanjay H. Chotirmall

PA1820 **Triple combinations of ferulic acid, quercetin and glycyrrhizic acid inhibit influenza virus H5N1 hemagglutinin-induced acute lung injure by targeting Janus tyrosine kinase 3 and cAMP-dependent CFTR channel**
Cao Ke (Jinzhou, China), Wang Yansheng, Sun Qiang, Xu Jun

PA1821	**Histone deacetylase-6 (HDAC6) promotes protective responses during murine influenza A virus (IAV) infection** Katie Daly (Booker Bay, Australia), Alan Hsu, Kristy Nichol, Jay Horvat, Jemma Mayall, Phil Hansbro, Peter Wark
PA1822	**Effect of novel LasB inhibitor ANT3273 on activation of IL-1β in macrophage and mouse Pseudomonas aeruginosa infection models** Martin Everett (Labege, France), Nicolas Sprynski, Larock Doris, Larock Christopher, Magdalena Zalacain
PA1823	**IL-4 levels in sputum correlate with increased mucus production and ciliary dysfunction** Erin Cant (Dundee, United Kingdom), Mathieu Bottier, Morven Shuttleworth, Farheen Daudvohra, Ross J Urquhart, Amy Gilmour, Megan L Crichton, Diane Cassidy, Thomas Burgoyne, Claire Hogg, Jeffrey T J Huang, James D Chalmers, Amelia Shoemark
PA1824	**The influence of the storage medium on respiratory ciliary beating** Noemie Bricmont (Liège, Belgium), Romane Bonhiver, Lionel Benchimol, Anne-Lise Poirrier, Philippe Lefèbvre, Renaud Louis, Marie-Christine Seghaye, Céline Kempeneers
PA1825	**Crucial role of iron metabolism in determining outcomes of influenza A virus infection and disease** Jemma Mayall (Newcastle, Australia), 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
PA1826	**Clinically relevant administration of naive and activated mesenchymal stromal cells for the treatment of bacterial induced pulmonary sepsis** Declan Byrnes (Galway (County Galway), Ireland), Claire Masterson, Hector Gonzalez, Sean Mccarthy, Daniel O'Toole, John Laffey
PA1827	**LSC - 2022 - Single cell transcriptomic dissection of virus induced immunopathology in interferon gamma recepto r null mice** Lin Yang (Oberschleißheim, Germany), Ilias Angelidis, Lukas Heumos, Mesha Ansari, Shuhong Zhou, Christoph Mayr, Lukas Simon, Maximilian Strunz, Fabian Theis, Heiko Adler, Herbert Schiller
PA1829	**LSC - 2022 - Identification of a host antiviral and anti-inflammatory metabolite that protects against influenza viru s-driven morbidity and mortality** Adeline Cezard (Tours, France), Déborah Brea-Diakite, Virginie Vasseur, Loic Gonzales, Ronan Le Goffic, Bruno Da Costa, Delphine Fouquenet, Thomas Baranek, Christophe Paget, Antoine Guillon, Mustapha Si-Tahar
PA1830	**A phage cocktail against Pseudomonas aeruginosa lung infection: results from experimental studies** Markus C. Brack (Berlin, Germany), Moritz Vollgraf, Geraldine Nouailles, Imke Korf, Sarah Wienecke, Antonia Dannheim, Holger Ziehr, Judith Bushe, Anne Voss, Achim D. Gruber, Andreas C. Hocke, Stefan Hippenstiel, Mario Toennies, Jasmin Lienau, Manfred Rohde, Christine Rohde, Sandra-Maria Wienhold, Martin Witzenrath
PA1831	**Delayed immunological reaction of Human Microvascular Lung Endothelium in response to Human Coronavirus 229E infection.** Robert Szewczyk (Łódź, Poland), Mateusz Gawrysiak, Adrian Gajewski, Maciej Chałubiński
PA1832	**Late Breaking Abstract - Nebulized mesenchymal stem cells derived conditioned media retains the capacity to mitigate lung injury in vivo.** Hector Gonzalez Esteban (Galway, Ireland), Sean Mccarthy, Claire Masterson, Declan Byrnes, Ronan Macloughlin, John Laffey, Daniel O'Toole
PA1833	**Late Breaking Abstract - Single cell transcriptomic dissection of virus induced immunopathology in interferon gamma receptor null mice** Lin Yang (Oberschleißheim, Germany), Lukas Heumos, Ilias Angelidis, Meshal Ansari, Shuhong Zhou, Christoph H. Mayer, Lukas M. Simon, Maximilian Strunz, Fabian J. Theis, Heiko Adler, Herbert Schiller
PA1834	**Molecular characterisation of COPD exacerbations** Holly R. Keir (Dundee (Angus), United Kingdom), Hollian Richardson, Abirami Veluchamy, Daniela Alferes De Lima, Amy Gilmour, Chandani Hennayake, Alison Dicker, Megan Crichton, James D. Chalmers

TP-19 in thematic poster area — Session 232 — 08:30 - 09:30

Thematic poster: COVID prognosis

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

Method(s) : Epidemiology | Respiratory intensive care | General respiratory patient care | Cell and molecular biology | Public health

Chairs : Oriol Sibila Vidal (Barcelona, Spain), Eric Mortensen (Simsbury, United States)

PA1835	**Identification and validation of prognostic models of critical COVID-19 at hospital admission** Gabriela Cárdenas-Fuentes (Barcelona, Spain), Magda Bosch De Basea , Inés Cobo, Mario Ceresa , Ernest Famada , Elena Gimeno-Santos , Laura Delgado-Ortiz, Rosa Faner , María Molina, Àlvar Agustí , Xavier Muñoz, Oriol Sibila , Joaquim Gea, Judith Garcia-Aymerich
PA1836	**Relevance of IFNAR2 variants in the mortality of patients with severe COVID-19** Ingrid Fricke-Galindo (Mexico City, Mexico), Alfonso Martínez-Morales, Gloria Pérez-Rubio, Ivette Buendía-Roldán, Leslie Chávez-Galán, Rafael De Jesus Hernández-Zenteno, Iris Paola Guzmán-Guzmán, Ramcés Falfán-Valencia
PA1837	**MORTALITY PREDICTORS IN COVID-19 PNEUMONIA: RESULTS OF LARGE ROC-ANALISIS** Yuliia Huba (Dnipropetrovsk, Ukraine), Kseniia Bielosludtseva, Lyudmyla Konopkina, Tetyana Pertseva
PA1838	**Hospital admissions in patients with COPD before and during the COVID-19 pandemic** Niklas Andreen (Göteborg, Sweden), Johan Westin, Lowie Vanfleteren
PA1839	**Prognostic factors in hospitalized community-acquired pneumonia** Sabrine Majdoub Fehri (Nabeul, Tunisia), Rahma Sellami, Imen Ketata, Wafa Madi, Racem Ammar, Hamida Kwass
PA1840	**Mortality of hospitalized COVID-19 patients that were residents of nursing homes** Galateia Verykokou (Athens, Greece), Vassiliki Apollonatou, Andriana Papaioannou, Anastasios Vogiatzoglou, Konstantinos Roukas, Diamantis Chloros, Christos Kyriakopoulos, Christos Chronis, Christina Aggelopoulou, Deniz Gundogdu, Pinelopi Schoini, Dimitra Kavatha, Effrosyni Manali, Spyros Papiris, George Tsoukalas, Konstantinos Kostikas, Evangelia Fouka, Dimitrios Boumpas, Stelios Loukides
PA1841	**Risk factors for long term hospitalization in patients with COVID19** Sabrine Majdoub Fehri (Nabeul, Tunisia), Imen Ketata, Wafa Madi, Rahma Sellami, Hamida Kwass
PA1842	**IMPACT SHORT-LONG TERM EXPOSURE OF AIR POLLUTION ON COVID-19 OUTCOME.** Elien De Waele (Sint-Niklaas, Belgium), Stijn Vos, Dries Martens, Esmée Bijnens, Geert Mistiaen, Geert Dewyspelaere, Tim Nawrot, Pieter Goeminne
PA1843	**what relationship between eosinophilia and covid19 prognosis?** Sabrine Majdoub Fehri (Nabeul, Tunisia), Imen ketata, Wafa Madi, Rahma Sellami, Hamida Kwass
PA1844	**Elevated serum levels of soluble ST2 in severe COVID-19: as a potential biomarker for invasive mechanical ventilation** Hideki Inoue (Tokyo, Japan), Yosuke Fukuda, Shin Ohta, Tetsuya Homma, Kaoru Mochizuki, Hitoshi Ikeda, Takaya Ebato, Hatsuko Mikuni, Tomoko Okazaki, Tomoki Uno, Yoshitaka Uchida, Tomoyuki Kimura, Yoshito Miyata, Kuniaki Hirai, Sojiro Kusumoto, Shintaro Suzuki, Akihiko Tanaka, Hironori Sagara
PA1845	**Vitamin D deficiency is not related to adverse COVID-19 outcomes** Balamugesh Thangakunam (Vellore (Tamil Nadu), India), Barney Isaac, Flavita John, Rajasekar Sekar, Prasanna Samuel, Deepa Shankar, Devasahayam J Christopher
PA1846	**Prognostic implications of comorbidity patterns in critically ill COVID-19 patients.** Jordi De Batlle Garcia (Lleida, Spain), Iván D Benítez, Gerard Torres, Jessica González, David De Gonzalo-Calvo, Adriano D S Targa, Antoni Torres, Ferran Barbé
PA1847	**COVID-19 in Ventilated Elderly Patients: Data from 52 Intensive Care Units in Spain** Catia Cilloniz Campos (Barcelona, Spain), Anna Motos, Albert Gabarrus, Juan Manuel Pericas, Laia Fernandez, Tatiana Guadalupe Castañeda, Andrea Palomeque, Adrian Cecato, Antoni Torres
PA1848	**Endocrine, metabolic and hepatic dysfunction in patients with COVID-19 pneumonia with severe and critically ill status** Ahmed Elesdoudy (Menouf (el menoufia), Egypt)
PA1849	**Overweight, obesity and COVID19 pneumonia in a real life clinical setting; Does size really matter?** ANTONIS XIPOLITOS (ATHENS, Greece), Elli Keramida, Elena Bellou, Thodoris Daskalos, Ioannis Karampinis, Panagiotis Demertzis, Georgia Hardavella
PA1850	**Retrospective evaluation of high dose systemic steroids therapy on mortality of hospitalized COVID pneumonia patients** Vratislav Sedlák (Hradec Králové 9, Czech Republic), Vladimír Koblížek, Michal Kopecký, Ivo Jarolímek, Martin Sedláček
PA1851	**Predictive factors of mortality in hospitalized patients with 2019 novel coronavirus pneumonia.** Nouha Boubaker (Nabeul, Tunisia), Sabrine Louhaichi, Besma Hamdi, Jamel Ammar, Agnès Hamzaoui

PA1852	**Back to basics: complete blood count parameters and the neutrophil-to-lymphocyte ratio as prognostic factors in hospitalized patients with COVID-19** Marija Topalovic (Nis, Republic of Serbia), Borislav Bozanic, Tatjana Pejcic, Aleksandra Ignjatovic, Vuk Pejcic, Desa Nastastijevic Borovac, Marko Bjelakovic, Marija Marinkovic
PA1853	**Is smoking a risk factor for severe outcomes in COVID-19?** Souha Abdenneji (Tunis, Tunisia), Wafa Fekih, Iheb Ben Krayen, Jamel El Ghoul
PA1854	**Prognosis for ICU Admission in hospitalized patients with Coronovirus diseases -19 (COVID-19)** Adamadia Liapikou (Athens, Greece), Nikos Tselonis, Eleni Dionelli, Alexandra Kote, Aggeliki Sotiropoulou, Panagiotis Peristeris, Ioanna Augerinou, Ioannis Dimitroulis

TP-2 in thematic poster area — Session 233 — 08:30 - 09:30

Thematic poster: Methods and innovation in pulmonary rehabilitation

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

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

Chairs : Ipek Çaylı Candemir (Ankara, Turkey), Matthew Armstrong (Bournemouth, United Kingdom)

PA1855	**International perspectives on outcome measurement in pulmonary rehabilitation of COPD** Sara Souto-Miranda (Aveiro, Portugal), Anouk W. Vaes, Rainer Gloeckl, Anita Grongstad, Martijn A. Spruit, Alda Marques
PA1856	**Contribution of muscular retraining in a post-COVID-19 exercise rehabilitation program** Khadija Ayed (Nabeul, Tunisia), Islam Mejri, Rihab Alouane, Zied Moatemri
PA1857	**Modified six-minutes walking test in children with medical complexity and chronic lung disease.** Gregory Villarroel Silva (Santiago, Chile), Paula Vera Tapia, Barabara Moya Torres, Maria José Miranda, Gonzalo Moscoso Altamira, Macarena Faúndez Silva, Ignacio Oyarzún Aguirre
PA1858	**Longitudinal change in Ultrasound derived Rectus Femoris cross sectional area (RFCSA) in patients with COPD** Timothy Jenkins (London, United Kingdom), Suhani Patel, Jane Canavan, Samantha Kon, Sarah Jones, Ruth Barker, Hannah Littlemore, Jennifer Harvey, Claire Nolan, William Man
PA1859	**The minimal important difference (MID) of the five-repetition sit to stand test (5STS) in IPF** Puja Trivedi (Middlesex, United Kingdom), Oliver Polgar, Suhani Patel, Ruth Barker, William Man, Claire Nolan
PA1860	**Subjective experience of eccentric and one-legged cycling in COPD** Thomas Ward (Leicester, United Kingdom), Martin Lindley, Charlotte Bolton, Rachael Evans, Michael Steiner
PA1861	**Non-invasive ventilation (NIV) during exercise training in people with COPD and chronic hypercapnic respiratory failure (CHRF) - a randomized controlled trial** Tessa Schneeberger (Schönau am Königssee, Germany), Antje Stegemann, Daniela Leitl, Inga Jarosch, Rainer Gloeckl, Maximilian Leidinger, Wolfgang Hitzl, Clancy Dennis, Klaus Kenn, Andreas Rembert Koczulla
PA1862	**Impact of cognitive capacity on physical performance in chronic obstructive pulmonary disease (COPD) patients: a scoping review** Peter Rassam (Woodbridge, Canada), Eli Maria Pazzianotto-Forti, Umi Matsumura, Antenor Rodrigues, Dmitry Rozenberg, W Darlene Reid
PA1863	**Greater walking distance during acute intermittent, compared to the same ground speed, endurance shuttle protocol in COPD: an interim analysis** Charikleia Alexiou (Newcastle Upon Tyne, United Kingdom), Dimitrios Megaritis, Emily Hume, Francesca Chambers, Lynsey Wakenshaw, Laura Mcneillie, Carlos Echevarria, Ioannis Vogiatzis
PA1864	**Experiences of singing for people with chronic respiratory diseases: qualitative meta-synthesis** Natasha Smallwood (Melbourne (VIC), Australia), Lena Ly, Jennifer Philip, Peter Hudson
PA1865	**Respiratory Muscle Training Can Improve Cognitive, Lung Function, and Diaphragmatic Performance in Patients with Chronic Obstructive Pulmonary Disease: A Randomized Con-trolled Trial** Pin-Kuei Fu (Taichung, Taiwan), Yuan-Yang Cheng
PA1866	**Effects of inspiratory muscle training in patients with chronic obstructive pulmonary disease after stratification by the degree of static hyperinflation** Maurice J.H. Sillen (Horn, Netherlands), Anouk W. Vaes, Miriam T.J. Groenen, Frits M.E. Franssen , Martijn A. Spruit

PA1867	**Exploring the impact of comorbidities in individuals after a Covid hospital admission or community infection in those referred to a rehabilitation programme** Nikki Gardiner (Leicester, United Kingdom), Emma Chaplin, Sarah Ward, Enya Daynes, Molly Baldwin, Sally Singh
PA1868	**Validation of the one minute sit to stand test (1MSTS) for identification of exertional oxygen desaturation in chronic respiratory disease** Jennifer Harvey (Uxbridge, United Kingdom), Suhani Patel, Hannah Littlemore, Timothy Jenkins, Claire Nolan, William Man
PA1869	**Effect of hybrid rehabilitation on exercise tolerance in patients with long COVID-19 syndrome: an interim analysis** ANGELOS VONTETSIANOS (ATHENS, Greece), Nikolaos Chynkiamis, Christina Anagnostopoulou, Evaggelia Koukaki, Eleni Stagaki, Ioannis Vogiatzis, Antonia Koutsoukou, Nikolaos Koulouris
PA1870	**Impact of nasal high-flow on exercise capacity and dyspnea in severe/very severe COPD.** Tristan Bonnevie (Saint Léger Du Bourg Denis, France), Francis-Edouard Gravier, Pauline Smondack, Helena Brunel, Yann Combret, Guillaume Prieur, Clément Médrinal, Fairuz Boujibar, Jean-François Muir, Antoine Cuvelier, Maxime Patout
PA1871	**Benefits of Whole Body Vibration Training in Patients with COPD Exacerbations** Fanying Yu (Changchun, China), Hongjing Lin, Qinglin Li, Xiuyun Jia, Ting Yu, Jiahui Ma, Zeyu Qin, Wenlong Liu
PA1872	**The obstacles to expectorating sputum in cystic fibrosis (CF) patients** Ivana Arnaudova Danevska (Skopje, North Macedonia), Tatjana Jakjovska, Ani Vidoevska, Sonja Momchilovikj, Elena Gjinovska Tasevska, Gorica Popova, Dimitar Arnaudov, Katerina Boshkovska
PA1874	**DECANNULATION AFTER COVID-19 ARDS: ARE THERE DIFFERENCES BETWEEN REHABILITATION AND RESPIRATORY WARDS?** Cinzia Lastoria (, Italy), Francesca Cemmi, Abramo Bazza, Manuela Bergonzi, Roberta Marra, Federica Fioretti, Matteo Vigna, Chiara Mele, Annalisa Carlucci

TP-20 in thematic poster area — Session 234 — 08:30 - 09:30

Thematic poster: Fungal infections and other relevant COVID-19 findings

Disease(s) : Airway diseases, Respiratory critical care

Method(s) : General respiratory patient care, Respiratory intensive care, Epidemiology, Cell and molecular biology, Public health

Chairs : Anand Shah (London, United Kingdom), Sanjay Haresh Chotirmall (Singapore, Singapore)

PA1875	**Aspergillus co-infection in critically ill COVID-19 patients** Gordana Pavliša (Zagreb, Croatia), Ivana Majdandzic, Andrea Vukic Dugac, Mateja Jankovic Makek, Lidija Ljubicic, Miroslav Samarzija
PA1876	**Effect of omalizumab on glucocorticoid use, lung function and asthma control in the treatment of allergic bronchopulmonary aspergillosis: a systematic review and meta-analysis** Jo Douglass (Parkville, Australia), Meiling Jin, J Stuart Elborn, Ritesh Agarwal, William J Calhoun, Xavier Jaumont, Slawomir Lazarewicz, Meng Yan
PA1877	**Anti-IgE therapy for management of recurrent ABPA exacerbations: successful outcome in 8 patients** Manu Chopra (Delhi, India), Meenakshi Chopra, Shafin Babu Ps
PA1878	**Aspergillus sensitization as a treatable trait in COPD** Pei Yee Tiew (Singapore, Singapore), Jayanth Kumar Narayana, Marilynn Swee Li Quek, Yan Ying Ang, Fanny Wai San Ko, Mau Ern Poh, Tavleen Kaur Jaggi, Huiying Xu, Kai Xian Thng, Mariko Siyue Koh, Augustine Tee, John Arputhan Abisheganaden, Krasimira Tsaneva-Atanasova , Fook Tim Chew, Sanjay Haresh Chotirmall
PA1879	**Azole resistance screening in Aspergillus species isolated from patients with COVID-associated pulmonary aspergillosis from Pakistan** Kauser Jabeen (Karachi, Pakistan), Sadaf Zaka, Joveria Farooqi, Syed Faheem Naqvi
PA1880	**Critical COVID-19 Associated Pulmonary Mucormycosis (CAPM): The underreported life-threatening spectrum of the Mucormycosis epidemic** Sameer Bansal (Navi Mumbai (Maharashtra), India), Hariprasad Kalpakam, Parikshit Thakare, Ravindra Mehta
PA1881	**Invasive fungal infections in COVID-19 patients from Pakistan** Kauser Jabeen (Karachi, Pakistan), Nosheen Nasir, Joveria Farooqi, Syed Ahsan Ali, Syed Faisal Mahmood, Najia Ghanchi, Muhammad Irfan, Rumina Hasan, Afia Zafar

PA1882	**Fungal infections in the ICU during the COVID-19 era** Evangelia Koukaki (SALAMINA, Greece), Nikoleta Rovina, Kimon Tzannis, Sevasti Ampelioti, Vasiliki Romanou, Antonia Koutsoukou, Georgios Dimopoulos
PA1883	**Efficacy of LD Bio Aspergillus ICT Lateral flow assay for serodiagnosis of chronic pulmonary aspergillosis** Animesh Ray (Kolkata (West Bengal), India), Mohit Choudhury, Prayas Sethi, Ved Prakash Meena, Gagandeep Singh, Immaculata Xess, Sanjeev Sinha, Naveet Wig, Sunil Kumar Kabra
PA1884	**Comparison of clinical features, risk factors and outcome of invasive pulmonary aspergillosis in critically ill COVID-19, influenza and community acquired pneumonia patients** Muhammad Irfan (Karachi (Sindh), Pakistan), Syed Ahsan Ali, Kauser Jabeen, Joveria Farooqi, Safia Awan
PA1885	**Absence of invasive mucormycosis in ventilated critically-ill COVID-19 patients: an autopsy study in a tertiary care university hospital** Job Schippers (Amsterdam, Netherlands), Paul Verweij, Leo Heunks, Karin Van Dijk
PA1886	**Late Breaking Abstract - Persistence of inflammatory and vascular damage mediators 5 months after acute COVID -19** Nayia Petousi (Oxford (Oxfordshire), United Kingdom), James Melhorn, Asma Alamoudi, Mark Cassar, Anastasia Fries, Emily Fraser, Alexander Mentzer, Betty Raman, Nick Talbot
PA1887	**Late Breaking Abstract - Long-term follow-up of SARS-CoV-2 IgM and IgG production in the patients with COVID -19 in Japan** Tomoiro Matsunaga (Tokyo, Japan), Shin Ohta, Fumihiro Yamaguchi, Kosuke Suzuki, Akihiko Tanaka, Issei Tokimatsu, Hironori Sagara
PA1888	**Late Breaking Abstract - THE ROLE OF LABACS IN LONG COVID-19 PATIENTS IN PRINGSEWU, IND0NESIA** Retno Ariza Soemarwoto (Bandar Lampung, Indonesia), Pralia Winda Sari, Jordy Oktabiannobel, Diyan Ekawati, Anse Diana Valentiene Messah, Adityo Wibowo, Ibnu Darmajati
PA1889	**Late Breaking Abstract - Clinical performance evaluation of an anti-SARS-CoV-2 IgG enzyme-linked immunosorbent assay** Timothy Ferguson (Belfast (Belfast), United Kingdom), Julie Moore, Louise Robertson, Elisha Cain, Joanne Goodman, Caroline Colley, Maria Orr, Tara Moore
PA1890	**Late Breaking Abstract - Hospital-onset COVID-19 and antivirals** Ghulam Haider Khan (Westmalling, United Kingdom), Milad Jeilani, Shelby Bryant, Charlotte Butler, Eftichia Iossifidis, Jaweriah Shoaib, Matthew Szeto
PA1891	**Late Breaking Abstract - The economic burden of pertussis among adults aged above 50 years, in England: post-hoc analyses of a retrospective database study in England** Nicolas Jamet (Wavre, Belgium), Emmanuel Aris, J. Romario F. De Melo, Anna Ramond, Jason Simeone, Valérie Berlaimont
PA1892	**Late Breaking Abstract - Post-acute sequelae of SARS-CoV-2 among previously hospitalised individuals with COVID-19: a systematic literature review and meta-analysis>** Rikisha Shah Gupta (LONDON, United Kingdom), J. Daniel Kelly, Tristan Curteis, Aaditya Rawal, Molly Murton, Rikisha Shah-Gupta, Aprille Espinueva, Linda Chen, Mazin Abdelghany, Daniel A. Sweeney, Jennifer K. Quint
PA1893	**Late Breaking Abstract - COVID-19 treatment and outcomes: trends over 20 months in 338,930 US hospital patients with COVID-19 and pneumonia** Linda Chen (Foster City, United States), Robert L Gottlieb, Aastha Chandak, Richard Haubrich, Celine Der-Torossian, Eunyoung Lee, Mark Thrun, James Jarrett, Alan Smith, Agnese Restuccia, Stijn Hollemeersch, Sonia Sandhu, Thomas Oppelt, Pauline Herscu, Rikisha Gupta
PA1894	**Late Breaking Abstract - A randomized study to evaluate safety and pharmacokinetics of CT-P63 in healthy subjects** Jihyun Kim (Incheon, Republic of Korea), Monika Tomaszewska-Kiecana, Anna Wolowik, Agnieszka Kulesza, Keumyoung Ahn, Nahyun Jung, Yeonmi Lee, Sunghyun Kim, Michal Maciej Nowicki

TP-21 in thematic poster area — Session 235 — 08:30 - 09:30

Thematic poster: Epidemiological assessments and public health studies on tuberculosis and NTM

Disease(s) : Airway diseases

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

Chairs : Alberto Garcia-Basteiro (Maputo, Mozambique), Raquel Duarte (Porto, Portugal)

PA1895	**A summary of contact tracing incident investigation outcomes in congregate settings from a large UK city over a 7-year period** Darryl Braganza Menezes (Birmingham (West Midlands), United Kingdom), Tom Marshall, Emmanouil Tranos, Hanna Kaur, Esther Robinson, Grace Smith, Martin Dedicoat
PA1896	**Relatıonshıp Between Bıologıc Agents and Development OfLatent Tuberculosıs In Pedıatrıcs** Gökçen Dilsa Tugcu (Ankara, Turkey), Tugba Bedir Demirdag, Fatma Aydın, Beytullah Santaflıoglu, Saliha Kanık Yüksek, Belgin Gulhan, Aslinur Ozkaya Parlakay, Banu Celikel Acar, Guzin Cinel
PA1897	**The impact of nontuberculous mycobacteria species on non-cancer mortality in patients with nontuberculous mycobacterial lung disease** Chin-Chung Shu (Taipei, Taiwan), Ping-Huai Wang, Chin-Hao Chang
PA1898	**A prospective cohort study comparing frailty in nontuberculous mycobacterial lung disease and bronchiectasis** Kohei Fujita (Kyoto, Japan), Yutaka Ito, Takuma Imakita, Issei Oi, Yuki Yamamoto, Osamu Kanai, Tadashi Mio
PA1899	**Cannabis and negative tuberculosis treatment outcomes association: a systematic review and meta-analysis** Max Arangoitia Fernandez Baca (Lima, Peru), Daniel Bustamante, Felix Cuti, Paulo Ruiz-Grosso, Cesar Ugarte-Gil
PA1900	**Tuberculosis in the Roma population in southwestern Romania (2010-2020)** Andreea Mihai (Staicu) (craiova, Romania), Cristina Calarasu, Floarea Mimi Nitu, Victor Ionel Grecu, Alina Marinela Miulescu (popa)
PA1901	**Epidemiology of non-tuberculous mycobacterial (NTM) infections in bronchiectasis patients using the US Bronchiectasis/NTM Research Registry (BRR)** Simon Tiberi (London, United Kingdom), Myriam Drysdale, Radmila Choate, Noah Lininger, Amanda Brunton, Hema Sharma, Susan Shrimpton, David Mannino, Kevin Winthrop
PA1902	**Immunonutritional status predicts poor prognosis of active pulmonary tuberculosis** shuichi sugiyama (shizuoka, Japan), Taisuke Akamatsu, Yutaro Kishimoto, Kazuhiro Asada, Toshihiro Shirai
PA1903	**Healthcare seeking pathways and diagnostic delays among extra-pulmonary tuberculosis patients: a study from Pakistan** Ahmad Wali (Quetta, Pakistan), Nauman Safdar, Atiqa Ambreen, Sabira Tahseen, Tehmina Mustafa
PA1904	**Spirometry, DLCO, lung volumes and PET/CT findings after completion of tuberculosis treatment - preliminary findings of the StatinTB trial** Karen Wolmarans (Cape Town, South Africa), Sandra Mukasa, Antonetta Mashinyira, Patrick Katoto, Fareda Jakoet-Bassier, Tessa Kotze, Reto Guler, Gunar Gunther, Friedrich Thienemann
PA1905	**Profile of patients with tuberculous mastitis in a UK district general hospital** Olutobi Ojuawo (Birmingham, United Kingdom), Shahbaz Piracha, Sannaan Irshad, Mehboob Mirza, Guy Hagan
PA1906	**Active tuberculosis and malignance: a 5 year retrospective study** Margarida V. Matias (Lisbon, Portugal), Joana A. Ribeiro, Joana Carvalho, Conceição Gomes
PA1907	**FACTORS ASSOCIATED WITH THROMBOEMBOLIC EVENTS IN PULMONARYTUBERCULOSIS** Abir Hedhli Ep Cherni (tunis, Tunisia), safa marzouki, Ouahchi Yassine, Toujani Sonia, Cheikhrouhou Sanna, Merai Samira, Mjid Meriem, Dhahri Besma
PA1908	**Outcomes of Tuberculosis contact tracing and predictors of success: a 10-year retrospective cohort analysis** Felicity Andrews (COVENTRY, United Kingdom), Hanna Kaur, Martin Dedicoat
PA1909	**Predictors of anxiety depression disorders during active pulmonary tuberculosis** Amani Ben Mansour (Tunisia, Tunisia), Imene Nouira, Med lemine Sidi Oumar, Hafaoua Daghfous, Soumaya Ben Saad, Fatma Tritar
PA1910	**Mycobacterium avium complex pulmonary disease. Risk factors.** Eva Tabernero Huguet (Bilbao (Bizkaia), Spain), Lander Altube, Julia Amaranta Garcia Fuertes, Maria Victoria Leal Arranz, Javier Ugedo Urruela, Nerea Ortiz Laza, Borja Ortiz De Urbina, Alejandro Rezola Carasusan, Ana Gomez Larrauri, Larraitz Garcia Echeberria, Borja Santos Zorrozua
PA1911	**The survival of mycobacterium abscessus over twenty years** Carolina Santamaría Valencia (Maspalomas, Spain), Miriam Rodríguez De Rivera Socorro, Iovanna Socorro Ávila, Guillermo José Perez Mendoza, María Isolina Campos-Herrero Navas, Jose Antonio Caminero Luna
PA1912	**Prevalence and predictive factors of sleep disorders in active pulmonary tuberculosis** Amani Ben Mansour (Tunisia, Tunisia), Imene Nouira, Med lemine Sidi Oumar, Hafaoua Daghfous, Soumaya Ben Saad, Fatma Tritar

PA1913 **Characteristics of children and adolescents with rheumatologic diseases and diagnosis of active and latent tuberculosis in tertiary hospital in Rio de Janeiro – retrospective study**
Lenita De Melo Lima (Rio de Janeiro, Brazil), Ana Alice Amaral Ibiapina Parente, Rafaela Baroni Aurílio, Adriana Rodrigues Fonseca, Flávio Sztajnbok, Marta Cristine Felix Rodrigues, Claudia Stella Pereira Battaglia, Michely Alexandrino De Souza Pinheiro, Belize Marques Barreto, Sidnei Ferreira, Maria De Fátima Bazhuni Pombo Sant'Anna, Clemax Couto Sant'Anna

PA1914 **TB death: A 5 year retrospective analysis of tuberculosis mortality in Bristol, North Somerset and South Gloucestershire (BNSSG), United Kingdom**
Fraser Easton (bristol, United Kingdom), Joshua Hrycaiczuk, Georgina Prestwich, Sabine Bellamy, Rajeka Lazarus

TP-22 in thematic poster area — Session 236 — 08:30 - 09:30

Thematic poster: Identification of therapeutic strategies in lung cancer

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

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

Chairs : Assia Konsoulova-Kirova (Varna, Bulgaria), Andriani Charpidou (Athens, Greece)

PA1915 **To stop or not to stop immunotherapy after 2 years in Non Small Cell Lung Cancer (NSCLC)? Results of a cross sectional survey among French thoracic oncologist.**
Simon Storme (Lyon, France), Didier Debieuvre, Pierre-Jean Souquet, Sébastien Couraud

PA1916 **The therapeutic potential of ADAMTS8 in lung cancer patients without Immune checkpoint inhibitors/EGFR mutation**
Ying-Ming Tsai (Kaohsiung, Taiwan), Yung-Chi Huang, Chao-Yuan Chang, Lian-Xiu Liu, Kuan-Li Wu

PA1917 **Clinical determinants of immunotherapy outcomes in non-small cell lung cancer patients with checkpoint inhibitor pneumonitis**
Ioannis Vathiotis (Cholargos, Greece), Kyriaki Tavernaraki, Ioannis Trontzas, Eirini-Chrysovalanti Antonogiannaki, Evangelia Koukaki, Nikolaos Syrigos, Ioannis Gkiozos, Elias Kotteas, Andriani Charpidou

PA1918 **Cellular and plasmatic immune profile of anti-PD-1 therapy in phase IIIB/IV non-small cell lung cancer: relevance of immunosuppressive factors**
Paulo Rodrigues-Santos (Coimbra, Portugal), Jani Sofia Almeida, Luana Madalena Sousa, Manuel Santos-Rosa, Fernando Barata, Ana Figueiredo

PA1919 **Long-term outcomes in patients with Non Small Cell Lung Cancer (NSCLC) treated by Immune Checkpoint Inhibitors (ICIs) for a minimal duration of 2 years: a cohort study in a tertiary hospital.**
Simon Storme (Lyon, France), Lize Kiakouama, Marie Darrason, Gilles Devouassoux, Michael Duruisseaux, Sebastien Couraud

PA1920 **Pulmonary complications after surgical resection of lung cancer - analysis of thousands cases.**
Anna Trojnar (Warszawa, Poland), Joanna Domagała-Kulawik, Anna Sienkiewicz-Ulita, Marcin Zbytniewski, Grzegorz Gryszko, Marcin Cackowski, Michał Dziedzic, Katarzyna Woźnica, Tadeusz Orłowski, Dariusz Dziedzic

PA1921 **Right intrapericardial pneumonectomy; is it still a forbidden procedure?**
Ioannis Karampinis (Athens, Greece), Georgia Hardavella, Antonios Katsipoulakis, Nikolaos Anastasiou

PA1922 **Povidone Iodine use as effective pleurodesis treatment for prolonged air leak ?**
Abdessalem Hentati (Sfax, Tunisia), Zied Chaari, Aymen Ben Ayed, Ghassen Ben Hlima, Walid Abid, Imed Frikha

PA1923 **Longitudinal changes in pulmonary function and patient reported outcomes after lung cancer surgery**
Hye Yun Park (Seoul, Republic of Korea), Sumin Shin, Sunga Kong, Danbee Kang, Genehee Lee, Jong Ho Cho, Young Mog Shim, Juhee Cho, Hong Kwan Kim

PA1924 **Effect of HIIT-based interventions on exercise capacity in lung cancer survivors: Meta-Analysis**
Alejandro Heredia Ciuró (Granada, Spain), Javier Martin Nuñez, Antonio Lazo Prados, Araceli Ortiz Rubio, Andres Calvache Mateo, Marie Carmen Valenza

PA1925 **Characteristics and clinical courses in a monocentric NSCLC cohort with MET exon 14 skipping mutations**
Carolin Lips (Berlin, Germany), Gesa Rafflenbeul, Torsten Gerriet Blum, Manuel Hollmann, Jens Kollmeier, Daniel Misch, Susann Stephan-Falkenau, Anna Streubel, Sebastian Thiel, Thomas Mairinger, Torsten Bauer

PA1926 **Impact of dose modification of immune-checkpoint inhibitors in lung cancer patients during the COVID-19 pandemic.**
Marie Veron (La Tronche, France), Thomas Pierret, Maurice Perol, Justin Benet, Natacha Denis, Denis Moro-Sibilot, Aurélie Swalduz, Anne Claire Toffart

PA1927 **Osimertinib as neoadjuvant therapy for resectable non-small cell lung cancer: a single-center real-world study**
Yan Hu (Changsha, China), Siying Ren, Lulu Yang, Zhongyi Tong, Ruoyao Wang, Wei Han, Fenglei Yu, Wenliang Liu

PA1928 **The impact of the COVID-19 pandemic on delay in diagnosis and management of lung cancer in developing countries**
Imen Bachouch (Ariana, Tunisia), Nourelhouda Khézami, Chaima Habouruia, Nidhal Belloumi, Bougurra Khawla, Asma Zargouni, Fatma Chermiti, Soraya Fenniche

PA1929 **Response evaluation with FDG PET-CT after 2 years of immune checkpoint inhibition**
Reinier R.L. Wener (Edegem, Belgium), Annemiek Snoeckx, Laurens Carp, Jo Raskin, Charlotte De Bondt, Jan P. Van Meerbeeck, Annelies Janssens

PA1930 **Best first-line therapy for patients with advanced non-small cell lung cancer, performance status 2 without a targetable mutation.**
Rolof G.P. Gijtenbeek (Leeuwarden, Netherlands), Kim De Jong, Ben J.W. Venmans, Femke Van Vollenhoven, Anthonie J. Van Der Wekken, Wouter H. Van Geffen

TP-23 in thematic poster area — Session 237 — 08:30 - 09:30

Thematic poster: Promising new approaches in idiopathic interstitial pneumonias

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

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

Chairs : Claudia Valenzuela (Madrid, Spain), Sara Tomassetti (Florence, Italy)

PA1931 **GLPG1205 shows reduction in lung volume decline over 26 weeks vs placebo when measured with novel volumetric CT analysis in IPF patients**
muhunthan thillai (CAMBRIDGE, United Kingdom), Kiril Kirov, Eva Santermans, Michael Roberts, Philip Molyneaux, Fahdi Kanavati, Darren Gallagher, Angela De Haas-Amatsaleh, Tom Van Der Aa, Paul Ford, Christian Seemayer, Bernt Van Den Blink, Alessandro Ruggiero

PA1932 **GALACTIC-1: Galectin-3 inhibition in idiopathic pulmonary fibrosis (IPF) – rationale, objectives and design of a 52-week, Phase IIb study of GB0139**
Toby Maher (Los Angeles, United States), Marlies Wijsenbeek, Nikhil Hirani, Bertil Lindmark, De Phung, Alison Mac Kinnon, Tariq Sethi, Vassilios Aslanis, Catherine Mc Clinton, Elin Andersen, Hans Schambye, Jie Wang-Jairaj

PA1933 **A phase 2b randomized trial to evaluate LYT-100 in patients with idiopathic pulmonary fibrosis (IPF)**
Toby Maher (Los Angeles, United States), Paul Ford, Vincent Cottin, Kevin Flaherty, Paul Noble, Marlise Wijsenbeek, Michael Chen, Eric Elenko, Liza Micioni, Heather Paden, Mark Harnett, Julie Krop

PA1934 **Study Design and Rationale for the TETON Phase 3 Clinical Trials of Inhaled Treprostinil in the Treatment of Idiopathic Pulmonary Fibrosis**
Steven D Nathan (Falls Church, United States), Jürgen Behr, Vincent Cottin, Lisa Lancaster, Peter Smith, Cq Deng, Natalie Pearce, Heidi Bell, Leigh Peterson, Kevin Flaherty

PA1935 **Continued nintedanib treatment in patients with progressive fibrosing ILDs: interim analysis of INBUILD-ON**
Wim A Wuyts (Leuven, Belgium), Francesco Bonella, Nazia Chaudhuri, Francesco Varone, Danielle Antin-Ozerkis, Heiko Mueller , Carl Coeck, Klaus B Rohr, Vincent Cottin

PA1936 **Efficacy of pirfenidone in patients with advanced IPF**
Juergen Behr (München, Germany), Wim Wuyts, Harold Haller Jr, Katerina Samara, Klaus-Uwe Kirchgässler, Frank Gilberg, Steven D Nathan

PA1937 **Nebulization performance and lung biodistribution profile of PRS-220, an inhaled CTGF antagonist for the treatment of IPF**
Vanessa Neiens (Hallbergmoos, Germany), Marina Pavlidou, Claudia Wurzenberger, Thomas Jaquin, Eva-Maria Hansbauer, Antonio Konitsiotis, Josefine Morgenstern, Theresia Mosebach, Marleen Richter, Cornelia Wurzenberger, Matthias Hagner, Joe Alexander Wrennall, Robert Tarran, Gabriele Matschiner, Shane Olwill

PA1938 **Combination antifibrotic therapy in Idiopathic Pulmonary Fibrosis patients: real life experience in an ILD Unit.**
Elisa Martinez Besteiro (Madrid, Spain), Maria José Beceiro, María Churruca Arróspide, Daniel Mouhtar, Adrián Peláez, Tamara Alonso, Julio Ancochea, Claudia Valenzuela

PA1939 **Interstitial lung disease with pulmonary hypertension and the potential for inhaled Treprostinil: A single centre perspective**
Sheila Ramjug (Altrincham, United Kingdom), Conal Hayton, Pilar Rivera-Ortega, Colm Leonard, Helen Morris , Katie Zakis, Jenna Swale, Theresa Garfoot, Kate Newman, Cristina Avram, John Blaikley, Nazia Chaudhuri

PA1940 **Effects of a twelve-week course of azithromycin on respiratory microbiota in idiopathic pulmonary fibrosis**
Pieter-Jan Gijs (Lutry, Switzerland), Cécile Daccord, Eric Bernasconi, Martin Brutsche, Christian Clarenbach, Sabina Guler, Katrin Hostettler, Manuela Funke-Chambour, Christophe Von Garnier

PA1941 **Drug-drug interactions and safety assessment between selective Prolyl-tRNA Synthetase inhibitor, DWN12088, and "pirfenidone" or "nintedanib" in healthy subjects**
Min Young Park (Seoul, Republic of Korea), Jihyeon Kim, Jun Hee Nam, Jongwon Choi, Wonsuk Shin, Hyounggyoon Yoo, Anhye Kim

PA1942 **Comparative analysis of fibroblastic foci in patients with idiopathic pulmonary fibrosis and pulmonary sarcoidosis**
Jan-Christopher Kamp (Hannover, Germany), Lavinia Neubert, Helge Stark, Jan B. Hinrichs, Caja Boekhoff, Allison D. Seidel, Fabio Ius, Axel Haverich, Jens Gottlieb, Tobias Welte, Peter Braubach, Florian Laenger, Marius M. Hoeper, Mark P. Kuehnel, Danny D. Jonigk

PA1943 **INV-101, a cannabinoid receptor-1 inverse agonist, reduces fibrosis in a bleomycin mouse model of IPF**
Glenn D. Crater (Raleigh, United States), Genevieve Gaucher, Michael Harvey, Francois Ravenelle

PA1944 **Changes in Serum Metabolomics in Idiopathic Pulmonary Fibrosis and effect of approved antifibrotic medication**
Benjamin Seeliger (Hannover, Germany), Alfonso Carleo, Pedro David Wendel-Garcia, Jan Fuge, Ana Worboys, Sven Schuchardt, Maria Molina-Molina, Antje Prasse

PA1945 **Serum biomarkers of wound healing and basement membrane remodelling are related to disease severity and prognostic for mortality in idiopathic pulmonary fibrosis**
Jannie M. B. Sand (Herlev, Denmark), Pernille Juhl, Nils Hoyer, Thomas S. Prior, Peder Frederiksen, Morten Karsdal, Henrik Jessen, Diana J. Leeming, Elisabeth Bendstrup, Saher B. Shaker, Pernille Juhl

PA1946 **Harnessing the therapeutic power of secretomes to treat IPF**
Michael Timaner (Jerusalem, Israel), Tali Fishman-Jacob, Barak Pertzov, Boaz Tadmor, Jason Laufer, Mordechai Kramer, Yuval Shaked

PA1947 **Does hypoxia drive alveolar macrophages to potentiate fibrosis in idiopathic pulmonary fibrosis?**
Lauren Davis (Birmingham, United Kingdom), Louise Crowley, Ellen Jenkins, Dhruv Parekh, Elizabeth Sapey, David Thickett, Aaron Scott

PA1948 **Late Breaking Abstract - Patients with a genomic classifier result positive for UIP show a greater decline in lung function when treated with combination immunosuppressive therapy**
Athol Wells (London, United Kingdom), Chris Ryerson, Lisa Lancaster, Marla Johnson, Jing Huang, Jeremy Burbanks-Ivey, Eric Morrie, Lori Lofaro, William Bulman, Giulia Kennedy, Ganesh Raghu, Mary Beth Scholand

PA1949 **Late Breaking Abstract - The effect of antifibrotics in patients with different forms of pulmonary fibrosis: data from the Dutch PF registry**
Aernoud van Batenburg (Nieuwegein, Netherlands), Gizal Nakshbandi, Catharina Moor, Marlies Wijsenbeek, Jan Grutters

PA1950 **Late Breaking Abstract - National data on prevalence of idiopathic pulmonary fibrosis and antifibrotic drug use in Finnish specialised care**
Johanna Salonen (Oulu, Finland), Minna Purokivi, Ulla Hodgson, Riitta Kaarteenaho

TP-24 in thematic poster area — Session 238 — 08:30 - 09:30

Thematic poster: Clinical course and management of interstitial lung diseases

Disease(s) : Interstitial lung diseases

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

Chairs : Elena Bargagli (Siena, Italy), Marta Garcia Moyano (Barakaldo, Spain)

PA1951 **Ultrasound may detect subclinical interstitial lung disease in systemic sclerosis**
Marwin Gutierrez (Mexico City, Mexico), Chiara Bertolazzi, Denise Clavijo-Cornejo, Fausto Salaffi

PA1952 **Progressive interstitial lung disease is frequent also in late disease stages in systemic sclerosis patients from EUSTAR**
Anna Maria Hoffmann-Vold (Oslo, Norway), Cathrine Brunborg, Paolo Airò, Lidia P Ananyeva, László Czirják, Serena Guiducci, Eric Hachulla, Mengtao Li, Carina Mihai, Gabriela Riemekasten, Petros P Sfikakis, Gabriele Valentini, Otylia Kowal-Bielecka, Yannick Allanore, Oliver Distler

PA1953 **Anti-Ro52 antibodies positivity in antisynthetase syndrome: a single centre cohort study**
Sara Lettieri (Pavia, Italy), Emanuele Bozzalla-Cassione, Giovanni Zanframundo, Valentina Vertui, Matteo Della Zoppa, Vittorio Chino, Francesco Bertuccio, Lorenzo Cavagna, Federica Meloni

PA1954	**Radiological Patterns and Pulmonary Function Value of Lung Involvement in Primary Sjögren's Syndrome** Claudio Candia (Naples, Italy), Roberto Rega, Ilaria Mormile, Michela Williams, Eliana Sferra, Amato De Paulis, Francesca Wanda Rossi, Antonio Molino
PA1955	**Adherence to daily home-based spirometry during a 3-month period in patients with ILD: The RALPMH Study** Malik A Althobiani (London, United Kingdom), Yatharth Ranjan, Joseph Jacob, Michele Orini, Richard Dobson, John R. Hurst, Joanna C. Porter, Amos A. Folarin
PA1956	**Gratitude perception during Mindfulness-Based Intervention (IBM) in patients with interstitial lung disease (ILD)** Siliana Maria Duarte Miranda (,), Eliane Viana Mancuzo, Gabriela Assis Pires, Luiz Fernando Ferreira Pereira, Andrew Nogueira Albuquerque Leal, Sara Cunha Paiva
PA1957	**Progressive fibrosing interstitial lung disease in hypersensitivity pneumonitis** Maria Laura Alberti (Buenos Aires, Argentina), Jose Maria Malet Ruiz, Leandro Fassola, Santiago Auteri, Martin Fernandez, Pablo Donati, Fabian Caro
PA1958	**Baseline characteristics and survival of Progressive Fibrosing Interstitial Lung Disease in Rheumatoid Arthritis. A single center retrospective study.** Fabián Matias Caro (Ciudad Autónoma Buenos Aires, Argentina), Pablo Donati, Rocio Ruiz, Santiago Auteri, Leandro Fassola, Martín Eduardo Fernández, Tatiana Barbich, María Laura Alberti
PA1959	**Effectiveness of immunosuppressive therapy in the progression of rheumatoid arthritis-associated interstitial lung disease in adult patients. A systematic review and meta analysis** Josefa López Herrera (Santiago, Chile), Mercedes Tapia, Luis Toro, Nataly Ruiz, Mauricio Salinas
PA1960	**Clinical outcomes of patients with acute exacerbations in interstitial lung diseases** Mariana Ramos Martins (Faro, Portugal), David Barros-Coelho, Pedro Ribeirinho-Soares, André Terras-Alexandre, Natália Melo, Patrícia Caetano-Mota, Hélder Novais-Bastos, António Morais
PA1961	**ILD associated with primary Sjögren's syndrome is frequently progressive** Anna Maria Hoffmann-Vold (Oslo, Norway), Håvard Fretheim, Phuong Phuong Diep, Karoline Lerang, Helena Andersson, Øyvind Midtvedt, Torhild Garen, Michael Durheim, Trond Mogens Aaløkken, Øyvind Palm, Øyvind Molberg
PA1962	**Clinical difference of interstital lung disease patients positive for anti-amnioacyl-tRNA (ARS) synthetase antibodies between dermatomyositis/polymyositis (PM/DM) group and non-myosits group** Masashi Momose (Kurashiki, Japan), Machiko Arita, Tadashi Ishida
PA1963	**PAD4 is associated with the predominance of fibrosis in interstitial lung diseases-rheumatoid arthritis** Karol Jazmin Nava Quiroz (México, Mexico), Gloria Pérez-Rubio, Ivette Buendía-Roldán, Mayra Mejía, Jorge Rojas-Serrano, Pedro Rodríguez-Henríquez, Ramcés Falfán-Valencia
PA1964	**Estimating the addition clinical workload required for nintedinib treatment in PF-ILD** Alana Livesey (Birmingham (West Midlands), United Kingdom), Manbir Duggal, Anjali Crawshaw, Davinder Dosanjh, David Thickett
PA1965	**UK Pigeon Fanciers display a high prevalence of symptoms normally associated with connective tissue disease ILD** Mark Spears (Stirling (Stirlingshire), United Kingdom), Louise Wain, Bibek Gooptu, Stephen J Bourke, Matthew Embley, Philip Lynch, Gavin Boyd, Charles Mcsharry
PA1966	**Assessment of initial dyspnea predicts progression of systemic sclerosis-associated interstitial lung disease (ILD-SSc) at 5 years.** Eliane Viana Mancuzo (Belo Horizonte (MG), Brazil), Luiz Arreguy Nogueira, Ricardo Amorim Correa, Luiz Fernando Ferreira Pereira
PA1967	**Computed tomography morphometric analysis of idiopathic inflammatory myopathy related interstitial lung disease correlates with forced vital capacity** Patrick Coghlan (Dublin 4, Ireland), Alex O'Mahony, Patrick Henry, Claire Crowley, David Ryan, Niamh Moore, Michael Maher, Owen J O'Connor, Michael Henry
PA1968	**Profile of patients with Connective disease associated ILD presenting to a tertiary care hospital in South India** Balamugesh Thangakunam (Vellore (Tamil Nadu), India), Shona Christopher, Barney Isaac, Devasahayam J Christopher
PA1969	**Evolution of fibrotic interstitial lung diseases (ILD) after COVID-19** Mariana Ramos Martins (Faro, Portugal), Mariana Serino, Beatriz Martins, Inês Carvalho, Carolina Valente, Miguel Barbosa, Catarina Cascais-Costa, Marina Alves, André Terras-Alexandre, Natália Melo, Patrícia Caetano-Mota, Hélder Novais-Bastos, António Morais
PA1970	**Progressive Idiopathic Inflammatory Myopathy-associated Interstitial Lung Diseases (IIM-ILDs)** Gioele Castelli (Padova, Italy), Elisabetta Cocconcelli, Elisabetta Zanatta, Chiara Giraudo, Nicol Bernardinello, Giordano Fiorentù, Cristina Dartora, Luca Iaccarino, Paolo Spagnolo, Elisabetta Balestro

TP-25 in thematic poster area — Session 239 — 08:30 - 09:30

Thematic poster: Diagnosis and epidemiology in pulmonary hypertension

Disease(s) : Pulmonary vascular diseases

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

Chairs : Frédéric Lador (Genève 14, Switzerland), Marion Delcroix (Leuven, Belgium)

PA1971	**Fully automatic deep learning pulmonary hypertension diagnosis using CT pulmonary angiography** krit Dwivedi (Sheffield, United Kingdom), Michael Sharkey, Kavitasagary Karunasaagarar , Christopher S. Johns, Smitha Rajaram, Pankaj Garg, Dheyaa Alkhanfar, Samer Alabed, Peter Metherall, Jonathan Taylor, Rob J. Van Der Geest, Robin Condliffe, Michail Mamalakis, David G. Kiely, Andrew J. Swift
PA1972	**Concordance between hemodynamic variables and echocardiographic in patients from the Colombian pulmonary hypertension network** Rafael Enrique Conde Camacho (Bogotá, Colombia), Alejandro Londoño, Manuel Pacheco, Carlos Jaime Velásquez, Ricardo Gómez-Palau, Diana Tiga, Juliana De Luque, Alba Ramírez-Sarmiento, Mauricio Orozco-Levi
PA1973	**External validation of machine learning prediction model for pulmonary hypertension due to left heart disease** Kenneth Verstraete (Leuven, Belgium), Katleen Swinnen, Claudia Baratto, Maarten De Vos, Marko Topalovic, Guido Claessen, Rozenn Quarck, Catharina Belge, Jean-Luc Vachiery, Wim Janssens, Marion Delcroix
PA1974	**Identification of pulmonary arterial hypertension patients in coded healthcare databases: a clinical evaluation study** Eva-Maria Didden (Allschwil, Switzerland), Di Lu, Andrew Hsi, Haley Hedlin, Monika Brand, Roham T. Zamanian
PA1975	**Completeness of right heart catheterization procedures-comparison of community hospitals and a PH center** Karen M Olsson, Da-Hee Park, Jan C Kamp, Jan Fuge, Marius M Hoeper
PA1976	**Hypochromic erythrocytes as prognostic indicator of survival among patients with systemic sclerosis screened for pulmonary hypertension** Christina Eichstaedt (Heidelberg, Germany), Ojan Gordjani, Panagiota Xanthouli, Nicola Benjamin, Benjamin Egenlauf, Satenik Harutyunova, Alberto Marra, Vivienne Theobald, Nicklas Milde, Christian Nagel, Norbert Blank, Hanns-Martin Lorenz, Ekkehard Grünig
PA1977	**INFLUENCE OF LUNG IMPAIRMENT ON ONSET OF PULMONARY HYPERTENSION IN PATIENTS WITH COVID-19-ASSOCIATED PNEUMONIA** Olha Shchudro (Dnipro, Ukraine), Mariia Krykhtina, Kseniia Bielosludtseva, Konopkina Lyudmila, Botvinikova Larysa
PA1978	**Conduction disease in IPAH: prevalence and clinical implications** Ashwin Reddy (Cambridge, United Kingdom), Sarah Nethercott, Wen Teh, Eckaart De Bie, Joanna Pepke-Zaba, Claire Martin, Mark Toshner
PA1979	**CT-derived vascular pruning assessment in portopulmonary hypertension** Emmy Mai (Cincinnati, United States), Jose Gomez-Arroyo, Akshay Pillai, Christine Zhou, Kaitlin Snapp, Sharp-Dimitri Demetrio, Dana Kay, Amin Raouf, Jean Elwing, Arun Jose, Mylavarapu Goutham
PA1980	**Multidimensional CT approach to predict hemodynamics in PH** Pedro Alves da Silva (Lisboa, Portugal), Joana Brito, Pedro Silverio-Antonio, Sara Couto Pereira, Beatriz Valente Silva, Ana Margarida Martins, Beatriz Garcia, Catarina Oliveira, Tatiana Guimarães, Nuno Lousada, Fausto J Pinto, Rui Plácido
PA1981	**Serum uric acid and long-term survival in patients with pulmonary arterial hypertension(group 1 and 4) – results from a single pulmonary hypertension centre in Slovenia** Anže Žgank (Ljubljana, Slovenia), Barbara Salobir, Matevž Harlander, Polona Mlakar, David Lestan, Matjaž Turel, Janez Toplišek, Vojka Gorjup, Irene Lang
PA1982	**Genetics in pulmonary arterial hypertension** Stephanie Lua (Glasgow, United Kingdom), Harrison Stubbs, Alexander Maclellan, Melanie Brewis, Colin Church, Martin Johnson
PA1983	**The right ventricle as treatment target in pulmonary arterial hypertension** Lucas Celant (Amstelveen, Netherlands), Lilian Meijboom, Harm Jan Bogaard, Frances S De Man, Anton Vonk Noordegraaf
PA1984	**Characteristics of risk strata in patients diagnosed with pulmonary hypertension in Colombia.** Mauricio A. Orozco-Levi (Barcelona, Spain), Juliana De Luque, Diana Tiga-Loza, Rafael Conde, Alejandro Londoño, Manuel Pacheco, Carlos Jaime Velásquez, Angie Pabón, Ricardo Gómez-Palau, Julián Cortés-Colorado, Alba Ramírez-Sarmiento

PA1985 **Phenotyping Pulmonary Hypertension in Costa Rican population: Epidemiology and treatment response.**
Adriana Valverde Zuñiga (Heredia, Costa Rica), Marlene Jimenez Carro, Benjamin Ramirez Cisneros

PA1986 **Incidence and outcomes of pulmonary hypertension in the Republic of Ireland**
Sarah Cullivan (Dublin, Ireland), Brian Mccullagh, Sean Gaine

PA1987 **Underweight/overweight syndrome in patients with pulmonary hypertension in Colombia: a prevalence study.**
Alejandro Londoño, Rafael Conde, Manuel Pacheco, Carlos Jaime Velásquez, Ricardo Gómez-Palau, Diana Tiga, Juliana De Luque, Alba Ramírez-Sarmiento, Mauricio Orozco-Levi

PA1988 **Childhood Trauma in patients with PAH -prevalence, impact on QoL and mental health - a preliminary report**
Da-Hee Park (Hannover, Germany), Tanja Meltendorf, Kai G. Kahl, Jan C. Kamp, Manuel J. Richter, Henning Gall, Hossein A. Ghofrani, Marius M. Hoeper, Karen M. Olsson, Jan Fuge

PA1989 **Late Breaking Abstract - Cytokines as prognostic biomarkers in pulmonary arterial hypertension**
Athénaïs Boucly (Le Kremlin Bicètre, France), Ly Tu, Christophe Guignabert, Christopher Rhodes, Pascal De Groote, Grégoire Prévot, Emmanuel Bergot, Arnaud Bourdin, Antoine Beurnier, Anne Roche, Mitja Jevnikar, Xavier Jaïs, David Montani, Martin R Wilkins, Marc Humbert, Olivier Sitbon, Laurent Savale

PA1990 **Late Breaking Abstract - Improvement of risk in patients with severe chronic thromboembolic pulmonary hypertension after 24weeks treatment with subcutaneous treprostinil**
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 Lang

TP-26 in thematic poster area — Session 240 — 08:30 - 09:30

Thematic poster: Updates in imaging COVID pneumonia, emphysema and interstitial lung diseases

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

Method(s) : Imaging | Respiratory intensive care | Public health | Endoscopy and interventional pulmonology | General respiratory patient care

Chairs : David Laszlo Tarnoki (Budapest, Hungary), Veronika Müller (Budapest, Hungary)

PA1991 **COVID-19 diagnosis and disease severity prediction assessment through an innovative AI-based model**
Julien Guiot (Liège, Belgium), Benoit Ernst, Monique Henket, Renaud Louis, Paul Meunier, Dirk Smeets, Arne Brys, Simon Van Eyndhoven

PA1992 **Automatic detection of COVID-19 pneumonia through artificial intelligence applied to chest X-rays**
Enrique Añorbe (Vitoria, Spain), Arantza Bereciartua, Pilar Aisa, Andrea García-Tejedor, Andrea Valero, Artzai Picón, Teodoro Palomares, Estíbaliz Garrote

PA1993 **Three and six months follow up chest CT findings after COVID-19 pneumonia**
Sabrine Majdoub Fehri (Nabeul, Tunisia), WAFA MADI, Racem Ammar, Ahmed Dhiaa Eleuch , Rahma Sellami , Imen Ketata, Hamida Kwass

PA1994 **Impact of pre-existing respiratory disease on radiological outcomes in COVID -19 pneumonia**
Hafiz Gulzeb Kamil (Chester, United Kingdom), Ammar Abdelaziz, Aravind Ponnuswamy

PA1995 **Collateral benefits of doing HRCT for COVID 19 pneumonia**
Deepak Muthreja (Nagpur (Maharashtra), India), Nilay Nimbalkar, Hardik Gopani

PA1996 **Post-Acute Squeal of COVID-19 Pneumonia: Three-month Chest CT Follow-up**
Soumaya Bouchareb (Ksar Hellal, Tunisia), Nadia Boudawara, Fadia Boubaker, Cyrine Ben Taleb, Ameni Hamdi, Boutheina Ben Rejeb, Ameni Ben Salem, Aya Zaara, Imen Touil, Leila Boussoffara, Jalel Knani

PA1997 **Lung volumetry correlates with P/F ratio and inflammatory biomarkers in COVID-19 patients**
Martina Sciolla (Torino, Italy), Rouslan Senkeev, Giuseppe Stranieri, Luciano Cardinale, Thomas Fraccalini, Emiliano Gatti

PA1998 **Natural evolution of COVID19 pneumonia radiological findings**
Irma Bracka (GALATSI ATHENS, Greece), Eleni Bellou, Ioannis Karampinis, Elli Keramida, Thodoris Daskalos, Panagiotis Demertzis, Georgia Hardavella

PA1999 **Socio economic deprivation and its Impact on COVID-19 recovery -analysis of radiological outcome from an English Hospital**
Hafiz Gulzeb Kamil (Chester, United Kingdom), Aravind Ponnuswamy

PA2000	**Rate and spectrum of incidental findings on CT pulmonary angiogram of COVID-19 patients.** Georgia Clarke (Salford, United Kingdom), Sophie Ashley, Moneeba Malik, Rajesh Kumar Yadavilli
PA2001	**CO-RADS, COVID-PCR and prognosis relationship in patients followed in intensive care unit with the diagnosis of COVID-19** Güntuğ Batıhan (Izmir, Turkey), Funda Cansun, Seher Susam
PA2002	**Role of 'Radiological Phenotypes' in Diagnosis, Treatment and Assessment of Covid-19 Pneumonia: Multicentric study of 6000 cases in tertiary care setting in India** Shital Vishnu Patil (Latur (Maharashtra), India), Ganesh Narwade, Rajesh Patil, Atul Deshmukh, Gajanan Gondhali
PA2003	**CXR severity as a predictor for post-COVID-19 related ILD** Da Wit Kim (New Malden, United Kingdom), Irilda Budaj, Hussein Chreif, Sharon Power, Nisar Tosia
PA2004	**Effect of kernel use on emphysema score in severe COPD patients evaluated for lung volume reduction** Jens Thomas Bakker (GRONINGEN, Netherlands), Karin Klooster, Hendrik Joost Wisselink, Gert Jan Pelgrim, Rozemarijn Vliegenthart, Dirk-Jan Slebos
PA2005	**Quantitative CT evaluation of lobar ventilation and perfusion in emphysematous candidate patients for Lung Volume Reduction** Arafa Aboelhassan (Assiut, Egypt), Eric Tenda, Safaa Wafy, Gamal Agmy, Pallav Shah
PA2006	**Comparing CT-based fissure completeness scores across software packages to predict interlobar collateral ventilation** Iwein Gyselinck (Leuven, Belgium), Pieter Hoeben, Hannelore Geysen, Frederik De Keyzer, Christophe Dooms, Dirk Van Raemdonck, Geert Verleden, Laurens Ceulemans, Wim Janssens, Johan Coolen
PA2007	**Correlation between radiological scores and respiratory function in patients with bronchiectasis** Soumaya Debiche (Le Kram, Tunisia), Snène Houda, Guemri Malika, Blibech Hana, Daoud Sirine, Kaabi Line, Daghfous Jalloul, Leila Ben Farhat, Mehiri Nadia, Nozha Ben Salah, Bechir Louzir
PA2008	**Quantifying morphological airway damage in idiopathic pulmonary fibrosis** Ashkan Pakzad (London, United Kingdom), Wing Keung Cheung, Kin Quan, Nesrin Mogulkoc, Coline H.M. Van Moorsel, Brian J. Bartholmai, Hendrik W. Van Es, Alper Ezircan, Frouke Van Beek, Marcel Veltkamp, Ronald Karwoski, Tobias Peikert, Ryan D Clay, Finbar Foley, Cassandra Braun, Recep Savas, Carole Sudre, Tom Doel, Daniel C. Alexander, Peter Wijeratne, David Hawkes, Yipeng Hu, John R Hurst, Joseph Jacob
PA2009	**(Early) Economic Evaluation of the AI-based software "icolung" for the detection and prognosis of COVID cases from CT scans** Benoit Ernst (Liège, Belgium), Giovanni Esposito, Julien Guiot, Renaud Louis, Paul Meunier, Philippe Kolh

TP-3 in thematic poster area — Session 241 — 08:30 - 09:30

Thematic poster: Management of respiratory chronic conditions in primary care

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

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

Chairs : Janwillem W. H. Kocks (Groningen, Netherlands), María Mar Martínez Vázquez (Bilbao (Bizkaia), Spain)

PA2010	**Symptom profile in obese COPD (Chronic Obstructive Pulmonary Disease) patients compared with non-obese patients: retrospective evaluation in the French overseas department of Reunion Island (period 2015-2020).** Bashir Omarjee (Saint-Denis (La Réunion), Reunion), Suren Budhan
PA2011	**ANXIETY SCREENING IN PATIENTS WITH COPD** Enrique Barrueco-Otero (,), Belén Refoyo-Matellán, Tamara Clavero-Sánchez, Maria Bartol-Sánchez, Laura Gil-Pintor, Cristina Juliá-Alvarez, Vanesa Hidalgo-Sierra, Miguel Barrueco-Ferrero, Javier Perez-Rodriguez, Miguel Angel Hernandez-Mezquita
PA2012	**Simple clinical phenotypes as predictor of all-cause mortality in the real-life COPD cohort (post-hoc analysis of the Czech data from POPE Study)** Vladimir Koblizek (Hradec Králové, Czech Republic), Michal Svoboda, Jana Kocianova, Stanislav Holub, Vladimir Zindr
PA2013	**Using UK primary care electronic health records to understand diagnostic pathways for chronic breathlessness** Urvee Karsanji (Leicestershire, United Kingdom), Claire A Lawson, Jennifer K Quint, Kamlesh Khunti, Emily Petherick, Michael C Steiner, Rachael A Evans
PA2014	**Is CPAP Therapy improving the Cardiovascular Outcome in Patients with Obstructive Sleep Apnea?** Anca Diana Maierean (,), Damiana Maria Vulturar, Ioana Maria Chetan, Doina Adina Todea

PA2015	**Sleep-tracking device compared to polysomnography for respiratory events and sleep architecture analysis** Maria De Los Angeles Zambrano Chacon (MADRID, Spain), Julia Herrero Huertas, María Fernanda Troncoso Acevedo, Marcel José Rodríguez Guzmán, Cristina Patricia Esteban Amarilla, Laura Núñez García, Laura De La Dueña Muñóz, Carlos López Chang, María Jesús Rodríguez Nieto
PA2016	**Subjective swallowing symptoms in COPD, a 2-year follow up** Margareta Gonzalez Lindh (Gävle, Sweden), Björn Ställberg, Maria Hårdstedt, Andrei Malinovschi, Kristina Bröms, Karin Lisspers, Andreas Palm, Christer Janson, Marieann Högman
PA2017	**The STREET (Structured Efficient E-Tracking) Project for early COPD Diagnosis and Care** Manlio Milanese (Pietra ligure (SV), Italy), Roberta Pennazio, Adriana Brusa, Giancarlo Conte, Alessandro Cavaliere, Giovanni Cavallaro, Monica Cirone
PA2018	**Factors associated with COPD exacerbations in emergency services** Angela María Giraldo Montoya (Pereira, Colombia), Giovanni García Castro
PA2019	**Perceptions of Australian general practitioners on e-cigarettes as a smoking cessation aid** Melis Selamoglu (Melbourne, Australia), Bircan Erbas, Hester Wilson, Jamie Brown, Chris Barton
PA2020	**Ther relationship betweeen peak inspiratory flow rate (PIFR) and COPD severity measured as FEV1%predicted, and other lung function parameters in 33304 tests in patients at two different sites in Karolinska University Hospital in Stockholm, Sweden.** Martin Anderson (Hägersten, Sweden), Esther Sailer, Evelina Björk, Thomas Gustafsson
PA2021	**Informing an intervention to improve referral to Pulmonary Rehabilitation (PR) for patients with Chronic Obstructive Pulmonary Disease (COPD): A survey of primary health care practitioners.** Jane Watson (Epsom, United Kingdom), Rachel Jordan, Peymane Adeb, Sheila Greenfield
PA2022	**Multidisciplinary perspectives on the role of primary care in managing chronic breathlessness** Anthony Paulo Sunjaya (Sydney, Australia), Allison Martin, Clare Arnott, Christine Jenkins
PA2023	**Maximizing the benefit from the Inhaler In Order to Minimize Carbon Footprint** Mark Nagel (London (ON), Canada), Cathy Doyle, Rubina Ali, Jason Suggett
PA2024	**To Assess Metered-dose Inhalers With Spacer Technique Among Postgraduate Trainee Doctors** Raza Ullah (peshawar, Pakistan), Tahir Iqbal , Shahida Naz
PA2025	**Relation of health-related quality of life and caregiver anxiety and depression in primary ciliary dyskinesia** Mina Hizal (Ankara, Turkey), Pinar Zengin Akkus, Dilber Ademhan Tural, Sanem Eryilmaz Polat, Nagehan Emiralioğlu, Elif Ozmert, Sevilay Karahan, Ebru Yalcin, Deniz Dogru, Nural Kiper, Ugur Ozcelik
PA2026	**Carbon footprint of inhalers in respiratory treatment: SABA CARBON International** Ashraf Alzaabi (Abu Dhabi, United Arab Emirates), John Bell, Felicia Montero-Arias, David Price, David Jackson, Hao-Chien Wang, Nigel Budgen, Hisham Farouk, Ekaterina Maslova
PA2027	**Knowledge about practical aspects of use of inhaler devices among primary care practitioners in India** Sapna Madas (Pune (Maharashtra), India), Monica Barne, Medha Bargaje, Swati Joshi, Amit Karad, Vaishali Naik, Sundeep Salvi
PA2028	**Frontline health care worker delivered interventions for improving outcomes in people with chronic respiratory diseases in resource limited settings** Paul Jebaraj (Vellore, India), RITA ISAAC, Biswajit Paul , Deepa Das, Hilory Pinnock, John Norrie, David Weller

TP-4 in thematic poster area — Session 242 — 08:30 - 09:30

Thematic poster: Topics in respiratory and muscle function

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

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

Chairs : Samuel Verges (Grenoble, France), Christina M. Spengler (Zürich, Switzerland)

PA2029	**The effect of nostril occlusion and mouth sealing in the measurement of sniff nasal inspiratory pressure** Anne Rossel (London, United Kingdom), Neeraj M. Shah, Shauna Sheridan, Gill Arbane, Eui-Sik Suh, Joerg Steier, Nicolas Hart, Patrick B. Murphy, Michelle Ramsay, Georgios Kaltsakas

PA2030	**A simple approach for assessing leg muscle oxygenation during incremental exercise in fibrotic interstitial lung disease** Mathieu Marillier (Echirolles, France), Anne-Catherine Bernard, Samuel Vergès, Denis E. O'Donnell, Onofre Moran-Mendoza, J. Alberto Neder
PA2031	**Capacity of PImax and SNIP for the diagnosis of respiratory muscle weakness** Walther Ivan Giron Matute (Madrid, Spain), Sergio Suarez Escudero, Zichen Ji, Alicia Cerezo Lajas, Beatriz Recio Moreno, Katiuska Liendo Martínez, Irene Milagros Domínguez Zabaleta, Virginia Parra León, Cristina Sánchez Fernández, Cristhian Alonso Correa Gutiérrez, Paola Antonella Benedetti, José Javier García López, Luis Puente Maestú
PA2032	**Exercise Induced Laryngeal Obstruction (EILO) while breathing cold air.** Haakon Kvidaland (BERGEN, Norway), Hege Clemm, Ola Drange Røksund, Maria Vollsæter, Silje Mæland, Jon Hardie
PA2033	**Exercise Induced Laryngeal Obstruction (EILO) – diagnosis and therapy response** Siobhan Ludlow (Cheshire, United Kingdom), Stephen Fowler, Thomas Pantin
PA2034	**Can six weeks with Inspiratory Muscle Training (IMT) with individualized pressure-settings improve Exercise induced laryngeal obstruction (EILO)-symptoms?** Petrine Solli Veierod (Bergen, Norway), Haakon Kvidaland, Thomas Halvorsen, Hege Clemm, Ola D. Røksund, Maria Vollsæter
PA2035	**Short-term repeatability of maximal respiratory pressures in healthy volunteers measured with a novel respiratory health meter.** Herkko Ryynänen (Helsinki, Finland), Ilpo Kuronen, Essi Ahokas, Maarit Valtonen, Johanna K. Ihalainen, Anssi Sovijärvi, Juhani Multanen
PA2036	**Respiratory muscle pressures in ALS patients: Can we do without them? (Correlation of FVC decrease from erect to supine position with maximum inspiratory muscle pressure)** Evangelia Koukaki (SALAMINA, Greece), Vasiliki Panou, Petros Bakakos, Nikolaos Koulouris, Antonia Koutsoukou
PA2037	**Prognostic value of a low resting inspiratory capacity and reduced inspiratory muscle strength in COPD** Matthew D. James (Kingston (ON), Canada), Devin Phillips, Matthew James, Sandra Vincent, Juan Pablo De-Torres, J Alberto Neder, Daniel Langer, Denis O'Donnell
PA2038	**The effect of pulmonary rehabilitation on respiratory and peripheral muscle weakness following SARS-CoV-2 infection: an interim analysis** Nikolaos Chynkiamis (Ilion, Greece), Angelos Vontetsianos , Christina Anagnostopoulou , Aikaterini Bakiri, Nektarios Anagnostopoulos, Kyriaki Cholidou, Ioannis Vogiatzis, Antonia Koutsoukou, Nikolaos Koulouris
PA2039	**Validating RespMech: an automated, free and open-source platform for diaphragmatic electromyography analysis at rest and in exercise** Annie Liu (Richmond Hill, Canada), Nathaniel Y. W. Yuen, Yannick Molgat-Seon, Matthew D. James, Denis E. O'Donnell, Nicolle J. Domnik, Emil Schwarz Walsted
PA2040	**Post-Covid-19 peripheral muscle weakness is not associated with muscle ultrasound echogenicity or muscle thickness** Anouk Stoffels (Nijmegen (GE), Netherlands), Nicol Voermans, Hieronymus Van Hees, Jeannette Peters, Hanneke Van Helvoort, Esther Van Voorthuizen, Jonne Doorduin, Bram Van Den Borst
PA2041	**The role of extracellular matrix proteins on exercise training-induced muscle fibre adaptations in COPD** Ioannis Vogiatzis (Blyth, United Kingdom), Efpraxia Kritikaki, Kay Padget, Gerasimos Terzis, Davina Simoes
PA2042	**Respiratory function in subjects recovered from covid-19 with sarcopenia** Laura Cornejo-Cornejo (México City, Mexico), Arturo Orea-Tejeda, Carlos Sanchez-Moreno, Dulce Gonzalez-Islas, Mariana Salvarierra-Escobar, Iris Lopez-Vazquez, Jorge Aguilar-Meza, Juan Marquez-Cordero, Alejandra Rios-Pereda, Mariana Salgado-Fernandez, Angelia Jimenez-Valentin, Samanta Hernandez-Lopez
PA2043	**Effects of inspiratory muscle training on thoracoabdominal muscle kinematics during exercise in older adults** James Manifield (Newcastle upon Tyne, United Kingdom), Charikleia Alexiou, Dimitrios Megaritis, Katherine Baker, Nicola Adams, Gill Barry, Ioannis Vogiatzis
PA2044	**Post-COVID Assessment of Pulmonary Function and Muscles Strength Test in Healthy Subjects** Josuel Ora (Roma (RM), Italy), Paola Rogliani, Marilisa Vignuoli, Letizia Valentino, Giancarlo Pontoni, Francesca Di Ciuccio, Roberto Ferrara, Tommaso Sciarra
PA2045	**How does Sarcopenia effect elderly COPD Patients?** Seda Tural Önür (Istanbul, Turkey), Kaan Kara, Fatma Akyıl Tokgöz, Hülya Abalı, Sinem Nedime Sökücü
PA2046	**A model of peripheral edema and its impact on the quantification of leg strength in COPD and healthy subjects** Jason Peng (Maywood, United States), Paul Chung, Stefano Pini, Hameeda Shaikh, Lissette Orozco-Bersoza, Martin Tobin, Franco Laghi

PA2047 **Unobtrusive estimation of ventilatory and muscle activity for COPD assessment**
Dolores Blanco-Almazán (Barcelona, Spain), Willemijn Groenendaal, Manuel Lozano-García, Luis Estrada-Petrocelli, Lien Lijnen, Rana Önder, Christophe Smeets, David Ruttens, Francky Catthoor, Raimon Jané

PA2048 **Self-monitoring to detect early signs of altitude illness in COPD. A diagnostic accuracy study.**
Michael Furian (Zürich, Switzerland), Maamed Mademilov, Konstantinos Bitos, Simone Buenzli, Ainura Abdraeva, Benoit Champigneulle, Arcangelo Carta, Meret Bauer, Tanja Ulrich, Philipp M Scheiwiller, Julian Mueller, Ahmet Sevik, Stefanie Ulrich, Laura Mayer, Mirjam Grimm, Simon R Schneider, Ulan Sheraliev, Aichurok Alymbekova, Nurdin Shakiev, Aijan Taalaibekova, Aigul Ozonova, Kamilla Magdieva, Gulzada Mirzalieva, Azamat Akylbekov, Saltanat Shabykeeva, Talant M Sooronbaev, Silvia Ulrich, Konrad E Bloch

TP-5 in thematic poster area — Session 243 — 08:30 - 09:30

Thematic poster: Advanced models for drug discovery and functional changes in lung disease

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

Method(s) : Cell and molecular biology | Imaging | Physiology

Chairs : Arunima Sengupta (Bern, Switzerland), Simon D. Pouwels (Zuidhorn, Netherlands)

PA2049 **Bleomycin-induced in vitro 3D spheroid model to emulate pulmonary fibrosis**
Ozlem Goksel (Izmir (Bornova), Turkey), Ecem Saygili, Utku Devamoglu, Bakiye Goker-Bagca, Cigir Biray-Avci, Tuncay Goksel, Özlem Yesil-Celiktas

PA2050 **Reticular basement membrane proteins modulate basal airway epithelial attachment and barrier formation in asthmatic airways**
Aileen Hsieh (Vancouver, Canada), Emmanuel Osei, May Fouadi, Kauna Usman, Yolanda Yang, Tillie-Louise Hackett

PA2051 **Late Breaking Abstract - An apical-out airway organoid model to study viral infections and assess antiviral drug effects**
Georgios Stroulios (Cambridge, United Kingdom), Tyler Brown, Douglas Kondro, Alessandro Dei, Allen Eaves, Sharon Louis, Juan Hou, Wing Chang, Salvatore Simmini

PA2052 **Aging Induces Stiffening of the Lung Extracellular Matrix**
Isaac Almendros Lopez (Barcelona, Spain), Maria Narciso, Anna Ulldemolins, Daniel Navajas, Ramon Farre, Nuria Gavara

PA2053 **Autosomal recessive mutations in TP73 cause a mucociliary clearance disorder and lissencphaly**
Heymut Omran (Münster, Germany), Julia Wallmeier, Diana Bracht, Hessa S. Alsaif, Ggerard W. Dougherty, Heike Olbrich, Sandra Cindric, Mark Dzietko, Christoph Heyer, Norbert Teig, Charlotte Thiels, Fowzan Alkuraya, Cordula Koerner-Rettberg

PA2054 **An in vivo genetic screen of lung function candidate genes using tissue-specific RNAi in Drosophila melanogaster**
Emma Szamek (Nottingham, United Kingdom), Ian Sayers, Marios Georgiou, Zsuzsa Markus

PA2055 **Humanized Patient-derived xenograft models for developing personalized therapy against Small Cell Lung Cancer**
Ralph Meuwissen (Izmir, Turkey), Hadi Rouhrazi, Sevgi Erdem, Venus Zafari, Giti Esmailnia

PA2056 **Airspace dilatation is present at birth and increases with age in mice with cystic-fibrosis like lung disease**
Pinelopi Anagnostopoulou (Nicosia, Cyprus), Sanja Blaskovic, Dominik Schittny, Elena Borisova, Florian Kronig, Sai K. Ganesh, Zhe Zhou-Suckow, Marcus A. Mall, Christian M. Schlepütz, Marco Stampanoni, Johannes C. Schittny

PA2057 **Respiratory disease modeling using submerged differentiated airway epithelial cells**
Gimano Amatngalim (Utrecht, Netherlands), Hetty Raeven, Lisa Rodenburg, Loes Oosterhoff, Shannon Smits, Isabelle Van Der Windt, Cornelis Van Der Ent, Jeffrey Beekman

PA2058 **An amplification-free, innovative, multiplex assay to quantify microRNAs in single cells from COPD patients**
Vanessa Ho (London, United Kingdom), Jonathan R Baker, Keith R Willison, David R Klug, Peter J Barnes, Louise E Donnelly

PA2059 **Novel strategies for genetic manipulation of human iPSC-derived organoid platforms**
Irene Oglesby (Dublin 9, Ireland), Chiara De Santi, Anja Schweikert, Sally Ann Cryan, Killian Hurley

PA2060 **Development of a bronchial epithelium model innervated by sensory neurons from human induced pluripotent stem cells**
FLORENT FOISSET (ILLKIRCH CEDEX, France), Christine Lehalle, Amel Nasri, Carine Bourdais , Isabelle Vachier , Said Assou , Quentin Muller, Vincent Flacher , Arnaud Bourdin , John De Vos , Nelly Frossard

PA2061	**Prolonged 3D culture leads to telomere length attrition in induced pluripotent stem cell-derived type 2 alveolar epithelial cells** Anja Schweikert (Dublin, Ireland), Mari Ozaki, Irene Oglesby, Killian Hurley
PA2062	**High through-put computerised image analysis for primary ciliary dyskinesia diagnostics** Claire L Jackson (Southampton (Hampshire), United Kingdom), Nevetha Pathmanathan, Janice L Coles, David Chatelet, Gemma Fryatt, Jane S Lucas
PA2063	**Cross-talk between alveolar epithelial cells and pulmonary arterial endothelial cells modulates activity of the L-arginine–dimethylarginine–NO pathway in hypoxia.** Rainer Böger (Hamburg, Germany), Lena Schmidt-Hutten, Fiona Franke, Mariola Kastner, Melanie Reckordt, Juliane Hannemann
PA2064	**Defining spatial secretome and ciliome across multiciliated epithelia** Md. Miraj Kobad Chowdhury (Dhaka, Bangladesh), Lynne Bingle, Colin Bingle
PA2065	**Defining the functions of PIERCE1 and C15ORF65 during ciliogenesis of HBEC3-KT cells** Md. Miraj Kobad Chowdhury (Dhaka, Bangladesh), Priyanka Anujan, Lynne Bingle, Colin Bingle
PA2066	**Relating ciliary dysfunction to clinical phenotypes in COPD** James Tonkin (London, United Kingdom), Andrew Rogers, Christopher M Orton, Francesca M Conway, Bavithra Vijayakumar, Ley Chan, Anand Tana, Cielito Caneja, Laura Avanzi, Rebecca Wawman, Alexandra Baikov, Pankaj K Bhavsar, Pallav L Shah
PA2067	**An artichoke-derived compound increase [Ca2+i by inhibiting Sarco/Endoplasmic Reticulum Ca2+-ATPase (SERCA) and activates airway ciliary beating in humans** Shigekuni Hosogi (Kyoto, Japan), Nobuhisa Todo, Kouta Noriyama, Nobuyo Tamiya, Masaki Shigeta, Seikou Nakamura, Koichi Takayama, Eishi Ashihara
PA2068	**Comparative secretome analysis of differentiated epithelial cells grown at the Air liquid interface (ALI)** Zeyad Alharbi (Sheffield (England), United Kingdom), Lynne Bingle, Colin Bingle

TP-6 in thematic poster area — Session 244 — 08:30 - 09:30

Thematic poster: Molecular pathology and cellular biology of pulmonary diseases

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

Method(s) : Cell and molecular biology | Imaging | Epidemiology | Physiology

Chairs : Pauline BARDIN (Paris, France), Janice Koranteng (London, United Kingdom)

PA2069	**Transcriptome analysis indicates more AT2-to-AT1 transition in COPD** Zhiheng Cheng (Groningen, Netherlands), Sabine Bartel, Jos L.L. Van Nijnatten, Rene Bults, Corry-Anke Brandsma, Wim Timens, Alen Faiz, Reinoud Gosens, Maarten Van Den Berge, Machteld N. Hylkema
PA2071	**Aging and senescence in alveolar epithelial type II cells affect progenitor cell function and aggravate acute lung injury** Christina Brandenberger (Hannover, Germany), Merle Hirsch, Christina Hildebrand, Christian Mühlfeld, Dirk Wedekind
PA2072	**Activation of the PPARg pathway to restore mesenchymal stem cell niche properties and induce alveolar regeneration in elastase induced emphysema** Grégoire Justeau (Angers, France), Marylène Toigo, Laure Crepin, Jorge Boczkowski, Bruno Ribeiro, Laurent Boyer
PA2073	**Oxidative stress is a key driving mechanism in the pathogenesis of inflammatory lung diseases** Karosham (Diren) Reddy (Glebe, Australia), patrick he, Michael Papanicolaou, Sandra Rutting, Diren Reddy, Alaina Ammit, Dikaia Xenaki, David Van Reyk, Brian Oliver
PA2074	**Hydrogen sulfide attenuates cigarette smoke-induced oxidative stress and inflammation in human primary bronchial epithelial cells and experimental COPD** Vinod Kumar (North Lambton, Australia), Jay Horvat, Peter Wark, Matt Whiteman, Philip Hansbro
PA2075	**Effect of cigarette smoke exposure on airway epithelial barrier function in never-smokers and ex-smokers with and without COPD** Kingsley Okechukwu Nwozor (Vancouver, Canada), Qing Chen, Yolanda Yang, Xinzi Zheng, Tessa Kole, Dirk-Jan Slebos, Karin Klooster, Maarten Van Den Berge, Tillie-Louise Hackett, Corry-Anke Brandsma, Irene H. Heijink
PA2076	**Electronic cigarette liquids impair protein synthesis and alter proteomic profiles in V79 cells** Mila Ljujic (Belgrade, Republic of Serbia), Sara Trifunovic, Katarina Smiljanic, Fiorella Solari, Albert Sickmann, Aleksandra Divac Rankov

PA2077 **Translational chronic drug-induced ILD mouse model, characterized by low-grade inflammation, fibrosis and dilated large airways**
Irma Mahmutovic Persson (Lund, Sweden), Jian Liu, René In 'T Zandt, Nina Fransén Petterson, Anders Örbom, Hanna Falk-Håkansson, Carla Carvalho, Karin Von Wachenfeldt, Lars E. Olsson

PA2078 **Exposure to nicotine containing e-cigarette vapor leads to endothelial barrier dysfunction and increased susceptibility to LPS in-vitro**
Benjamin Seeliger (Hannover, Germany), Thorben Pape, Paul Horn, Klaus Stahl, Julius J Schmidt, Tobias Welte, Antje Prasse, Natascha Sommer, Sascha David

PA2079 **Fibroblast from IPF patients produces glycosaminoglycans with higher affinity for FGF2**
Zackarias Söderlund (Lund, Sweden), Roberto Mastio, Daniel Willén, Emil Tykesson, Ulf Ellervik, Gunilla Westergren-Thorsson

PA2080 **A lung and kidney specific fragment of type IV collagen is associated with increased mortality in idiopathic pulmonary fibrosis**
Annika Hummersgaard Hansen (Herlev, Denmark), Thomas Skovhus Prior, Diana Julie Leeming, Morten Asser Karsdal, Jannie Marie Bülow Sand, Elisabeth Bendstrup

PA2081 **Disruption of prostaglandin F2α receptor signaling attenuates fibrotic remodeling in a preclinical murine model of idiopathic pulmonary fibrosis**
Michael Beers (Philadelphia, United States), Soon Yew Tang, Luis Rodriguez, Yaniv Tomer, Aditi Murthy, Tian-Quan Cai, Caitlin Connelly, Astrid Gillich, Yao Wong, Garret Fitzgerald

PA2082 **WNK1 signaling after loss of CFTR function in pneumonia-induced lung barrier failure**
Laura Kneller (Berlin, Germany), Lasti Erfinanda, Wolfgang M Kuebler, Martin Witzenrath, Birgitt Gutbier

PA2083 **Air pollution induced emphysema in ageing rats via Hippo signaling pathway**
Vincent Laiman (Taipei, Taiwan), Hsiao-Chi Chuang

PA2084 **Interleukin-1 alpha counteracts transforming growth factor-β2 signaling in lung extracellular matrix remodeling.**
Kauna Usman (Vancouver, Canada), May Fouadi, Emmanuel Osei, Tillie-Louise Hackett

PA2085 **Greenspace and children's lung function in China**
Tingting Ye (Melbourne, Australia), Yuming Guo, Michael Abramson, Tiantian Li, Shanshan Li

PA2086 **Late Breaking Abstract - Exposure to particulate matter alters neutrophil lysosomal function and activation status**
Emily Watts (Edinburgh, United Kingdom), Ryan Huff, Christoher Rider, Moira Whyte, Sarah Walmsley, Christopher Carlsten

PA2087 **Late Breaking Abstract - A novel neuropilin-2 (NRP2) antibody for immunohistochemical staining of patient tissue samples**
Yeeting Chong (San Diego, United States), Sarah Förster, David Siefker, Yvonne Becker, Erik Escobedo, Luke Burman, Kaitlyn Rauch, Suzanne Paz, Christoph Burkart, Andrea Cubitt, Michael Muders, Leslie Nangle

TP-7 in thematic poster area — Session 245 — 08:30 - 09:30

Thematic poster: Pathophysiological consequences of sleep apnoea: insights from basic research

Disease(s) : Airway diseases Sleep and breathing disorders

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

Chairs : Martino Pengo (Milano (MI), Italy), Ulla Anttalainen (Paimio, Finland)

PA2088 **Overnight oxygen saturation is higher at the forehead compared to fingertip measurements**
Hartmut Schneider (Frankfurt, Germany), Hartmut Schneider, Sandra Mukasa, Syuyumbeki Mueller, Adelina Varavinova, Felix Fronek, Flavio Raschella, Pieter Ermers, Marjolein Vliexs, Ruben De Francisco

PA2089 **Predictors of chronic hypercapnia in obese patients with suspected breathing sleep disorder**
Abid Sourour (Sfax, Tunisia), Hanen Krichen, Rim Kammoun, Amina Kotti, Issraa El Wadhane, Sameh Msaad, Amin Bahloul, Walid Feki, Samy Kammoun

PA2090 **Combined ECG and breathing frequency measurements for sleep apnea assessment using a multi-sensor monitoring device**
Florent Baty (St. Gallen, Switzerland), Maximilian Boesch, Frederik Bauer, Simon Annaheim, Martin Brutsche

PA2092	**Sleep parameter comparison between mild and difficult-to-treat asthma using accelerometery** Varun Sharma (Glasgow, United Kingdom), Helen C Ricketts, Femke Steffensen, Anna Goodfellow, Duncan S Buchan, Douglas C Cowan
PA2093	**GENE POLYMORPHISMS OF 5-HYDROXYTRYPTAMINE (SEROTONIN) RECEPTOR 2A (HTR2A) 1438G/A AND NADPH OXIDASE (P22PHOX) A930G IN OBSTRUCTIVE SLEEP APNOEA PATIENTS** Mehmet Sezai Taşbakan (Izmir, Turkey), Ozen K. Basoglu, Huseyin Onay, Ferda Ozkinay
PA2094	**Sleep apnea syndrome and erectile dysfunction: A possible risk factor?** Warda Jelassi (TUNIS, Tunisia), Islam Mejri Ep Ajili, Souhail Ben Taher, Selsabil Daboussi, Samira Mhamdi, Chiraz Aichaouia, Zied Moatemri
PA2095	**Use of nocturnal pulsioximetry (POX) to assess the control of CPAP therapy in patients with obstructive sleeping apnea (OSA)** Isabel Muñoz Ramirez (Seville, Spain), Raquel De Andres David, Aureliano Ais Daza, Francisca Montoro Ballesteros, Alfonso Marin Andreu, Aurelio Arnedillo Muñoz
PA2096	**Impact of shift work on quality of sleep in healthcare workers** Sarra Ben Sassi (ariana, Tunisia), Sourour Abid, Mariem Friha, Ons Badri, Rahma Gargouri, Sameh Msaad , Hajeur Ayedi
PA2097	**Position trainer device for Obstructive Sleep Apnea.** Jorge Rodriguez Sanz (ZARAGOZA (SPAIN) , Spain), Laura Torralba García , Maria Aguado Agudo , Maria Teresa Martin Carpi
PA2098	**Anxiety and depression in patients with obstructive sleep apnea** Imen Touil (Mahdia, Tunisia), Imen Touil, Braham Yosra, Omrane Amira, Boujneh Soumaya, Bouchareb Soumaya, Hamdi Amani, Zaara Eya, Belhadj Ines, Khalfallah Taoufik, Boussoffara Leila, Knani Jalel, Keskes Boudawara Nadia
PA2099	**Nasal symptoms in patients with obstructive sleep apnoea and the association with continuous positive airway pressure** Kallirroi Lamprou (Oxford, United Kingdom), Konstantinos Chaidas, Amberley Munnings, John Stradling, Annabel Nickol
PA2100	**Lung function and sleep disorder in general population: RHINESA study** Rajesh Shigdel (Bergen, Norway), Elin H Thorarinsdottir, Nils Oskar Jögi, Leopoldo Palacios Gómez, Chamara V. Senaratna, Andrei Malinovschi, Þórarinn Gíslason, Randi Jacobsen Bertelsen
PA2101	**Sleep disorders in healthcare workers** Améni Nâaroura (Tunis, Tunisia), Soumaya Ben Sâad, Amani Ben Mansour, Azza Slim, Hafaoua Daghfous, Fatma Tritar

TP-8 in thematic poster area — Session 246 — 08:30 - 09:30

Thematic poster: COPD management: comorbidities, cohorts and real-world studies

Disease(s) : Airway diseases

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

Chairs : Carolina Maria Gotera Rivera (Madrid, Spain), Lowie E.G.W. Vanfleteren (Gothenburg, Sweden)

PA2102	**Changes in critical inhaler technique errors in inhaled COPD treatment – a one-year follow-up study in Sweden** Johanna Sulku (Gävle, Sweden), Christer Janson, Håkan Melhus, Björn Ställberg, Kristina Bröms, Marieann Högman, Karin Lisspers, Andrei Malinovschi, Elisabet Nielsen
PA2103	**Exacerbation outcome definitions in clinical trials of COPD interventions: a systematic review** Thomas Bradbury (Newtown, Australia), Sachin Ananth, Sikandar Hussaini , Alexander Mathioudakis , Rebecca Nguyen , Christine Jenkins
PA2104	**Clinically important deterioration in patients with COPD: a post-hoc analysis of ETHOS** John R Hurst (London, United Kingdom), Dave Singh, Fernando J Martinez, Meilan Han, Patrick Darken, Mehul Patel
PA2105	**Estimation and visual representation of hospital costs after an acute exacerbation of COPD. COHERENT-COPD study.** Maria Teresa Tejedor Ortiz (Madrid, Spain), Joaquín Sánchez-Covisa Hernández, Clara Goñi Echeverría, Héctor Bueno Zamora, José Luis Bernal Sobrino, Mónica Juarez Campo, Maria Piñeiro Roncal, Gema María Siesto López, Carlos José Alvarez Martínez
PA2106	**Effect of a technology-enabled respiratory in-reach service on reduction in the inappropriate use of oral corticosteroids (OCS) for suspected Airways Disease exacerbations (ADE) in an acute general hospital** Paul Ellis (Solihull, United Kingdom), Alain Al Helou, Gajan Chellappah, Kayleigh Jones, Adel Mansur, Rahul Mukherjee

PA2107	**Clinical efficacy of anemia of chronic disease treatment in patients with COPD.** Anna Kovchun (Sumy, Ukraine), Vladyslava Kachkovska, Anna Bondarkova, Lyudmyla Prystupa
PA2108	**Time trends (2012-2020) and sex differences for influenza vaccination uptake among individuals with chronic obstructive pulmonary disease in Spain.** IRENE MILAGROS DOMINGUEZ ZABALETA (Madrid, Spain), Marta Fuentes Alonso, Cristhian Alonso Correa Gutiérrez, Cristina Sanchez Gutierrez, Gabriella Manzanares Cavi, Manuel Mor Martinez, Luis Puente Maestu, Javier De Miguel Diez
PA2109	**Reduced exacerbations following switch from multiple-inhaler to once-daily single-inhaler triple therapy in COPD patients in a real-world primary care setting in England** Kieran Rothnie (London, United Kingdom), Robin Wood, Alexandros Czira, Vicky Banks, Lucinda Camidge, Olivia Massey, Monica Seif, Chris Compton, Raj Sharma, Afisi Ismaila
PA2110	**Identifying risk of first COPD exacerbation in COPD patients in GOLD group A/B in the UK** Kieran Rothnie (London, United Kingdom), Steven Gelwicks, Beade Numbere, Yifel Lu, Raj Sharma, Chris Compton, Afisi Ismaila
PA2111	**COPD as a risk factor for Coronary Artery Disease (CAD): Overview of 10-year atherosclerotic cardiovascular disease (ASCVD) risk assessment** Daniela Buklioska Ilievska (Skopje, North Macedonia), Jordan Minov, Nade Kochovska Kamchevska, Ivana Mickovski, Taner Hasan, Marjan Baloski, Radmila Neshovska, Natasha Nedeska Minova, Biljana Prgova-Veljanova, Daniela Doneva, Vanche Trajkovska, Magdalena Simeonova, Jane Bushev
PA2112	**Utilization of exacerbation-related drugs by COPD patients with Arg16Gly polymorphism of ADRB2 gene** Kostiantyn Dmytriiev (Vinnitsya, Ukraine), Yuriy Mostovoy, Nataliia Slepchenko, Yuliia Smereka, Dmytro Dmytriiev, Kateryna Dmytriieva
PA2113	**Compliance to pharmacological therapy of COPD patients with skeletal muscle dysfunction** Vitalii Poberezhets (Vinnytsia, Ukraine), Anna Demchuk, Yuriy Mostovoy
PA2114	**Risk factors and guideline adherence of empiric antibiotic use in community-acquired pneumonia** Sergi Pascual Guardia (Barcelona, Spain), Judith Marin-Corral, Francesco Amati, Stefano Aliberti, Manuela Carugati, Oriol Sibila, Francisco Sanz, Alejandro Rodriguez, Giovanni Sotgiu, Pedro J. Marcos, Marcos I. Restrepo, . On Behalf Of Glimp Investigators
PA2115	**The role of physical rehabilitation in the treatment of COPD** Kostiantyn Shvets (Ivano-Frankivsk, Ukraine), Mykola Ostrovskyy, Oleksandr Varunkiv, Iryna Savelikhina, Mariana Kulynych-Miskiv, Galyna Korzh, Nadiia Korzh, Kseniia Ostrovska
PA2116	**A 7-year retrospective evaluation of incidence of exacerbations in COPD patients pre and post pneumococcal vaccination. Results from RETRIEVE study.** Efthymia Papadopoulou (Thessaloniki, Greece), Maria Bertoli, Alexandros Ginis, Stavros Tryfon
PA2117	**Association between sub-optimal medication adherence and risk of COPD diagnosis in patients with physician-diagnosed asthma: A propensity score-based analysis** Michael Asamoah-Boaheng (St John's, Canada), Jamie Farrell, Kwadwo Osei Bonsu, Alwell Oyet, William K Midodzi
PA2118	**Rescue medication use in patients with chronic obstructive pulmonary disease receiving umeclidinium/vilanterol versus tiotropium bromide/olodaterol in England** Gema Requena (Brentford, United Kingdom), Alexandrosz Czira, Victoria Banks, Robert Wood, Theo Tritton, Catherine Castillo, Jie Yeap, Rosie Wild, Chris Compton, Maria Duarte, Kieran Rothnie, Afisi Ismaila
PA2119	**Comparative effectiveness of umeclidinium/vilanterol versus indacaterol/glycopyrronium on acute exacerbations in patients with chronic obstructive pulmonary disease in England** Gema Requena (Brentford, United Kingdom), Alexandrosz Czira, Victoria Banks, Robert Wood, Theo Tritton, Catherine Castillo, Jie Yeap, Rosie Wild, Chris Chris Compton, Maria Duarte, Kieran Rothnie, Afisi Ismaila
PA2120	**A 7-year retrospective evaluation of lung function in COPD patients pre and post pneumococcal vaccination. Results from RETRIEVE study.** Efthymia Papadopoulou (Thessaloniki, Greece), Maria Bertoli, Alexandros Ginis, Stavros Tryfon
PA2121	**Nebulizer use in tobacco-exposed SPIROMICS participants with or at risk of COPD** Jane Fazio (Los Angeles, United States), Andrew Hong, Daniela Markovic, R. Graham Barr, Eugene Bleecker, Russell P. Bowler, David Couper, Jeffrey L. Curtis, Brad Drummond, Spyridon Fortis, Meilan Han, Lindsay Holland, Victor Kim, Fernando J. Martinez, Jill Ohar, Victor E. Ortega, Robert Paine, Michael Wells, Prescott Woodruff, Russell Buhr, Christopher B. Cooper, Donald Tashkin, Igor Barjaktarevic

TP-9 in thematic poster area — Session 247 — 08:30 - 09:30

Thematic poster: Studies targeting IL-5 pathways in asthma

Disease(s) : Airway diseases

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

Chairs : Celeste Michala Porsbjerg (Copenhagen, Denmark), Juan José Nieto Fontarigo (Santiago De Compostela, Spain)

PA2122	**Temporal trend of benralizumab safety profile in severe asthma: a cumulative meta-analysis** Luigino Calzetta (Roma (RM), Italy), Josuel Ora, Francesco Cavalli, Rossella Laitano, Paola Rogliani
PA2123	**Reduction in work and activity impairment within 6 months of benralizumab initiation in Canadians with severe eosinophilic asthma** Erika Penz (Saskatoon, Canada), Sheena Kayaniyil, Brett Lancaster, Bruno Francoeur, Jason K Lee, Marcel Mallet, Olga Tourin, Warren Ramesh, Masoud Mahdavian, Brandie L Walker , Zenon Belak, Amin Thawer, Vivek Dhawan, Lawrence Mbuagbaw, Stephen G Noorduyn
PA2124	**Influence of baseline FEV1 on improvement in severe eosinophilic asthma with mepolizumab** Francisco-Javier Gonzalez Barcala (Santiago de Compostela, Spain), Marina Blanco-Aparicio, Ana Gómez-Bastero, Gregorio Soto-Campos, David Bañas Conejero, M Guadalupe Sánchez-Herrero
PA2125	**REDES study: Mepolizumab is effective in patients with severe eosinophilic asthma and comorbid NP** Ebymar Arismendi Nunez (Vilassar de Dalt, Barcelona, Spain), Carolina Cisneros, Marina Blanco-Aparicio, David Bañas Conejero, Abraham L. Moure, M Guadalupe Sánchez-Herrero
PA2126	**Clinical effectiveness of benralizumab in clinical practice in Spain.** Pilar Ausin Herrero (Barcelona, Spain), Alberto Levy, Alicia Padilla Galo, Isabel Moya Carmona, Elisa Luzón Alonso, Jesús Sánchez Tena, Gustavo Resler
PA2127	**Arthritis, a new adverse effect of anti-IL5 biologics in severe asthma patients?** Clairelyne Dupin (Paris, France), Lise Morer, Mathilde Phillips-Houlbracq, Lou Deneuville, Mathilde Lebrun, Laure Tabeze, Pierre-Antoine Juge, Camille Taille
PA2128	**Sustained improvement of asthma control over 6 months of benralizumab treatment in Canadians with severe asthma** Sheena Kayaniyil (Mississauga, Canada), Stephen Noorduyn (Mississauga, Canada), Stephen G Noorduyn, Brett Lancaster, Bruno Francoeur, Jason K Lee, Marcel Mallet, Olga Tourin, Warren Ramesh, Masoud Mahdavian, Brandie L Walker, Zenon Belak, Amin Thawer, Vivek Dhawan, Lawrence Mbuagbaw, Erika Penz
PA2129	**Benralizumab continues to improve quality of life after 6 months of treatment in Canadians with severe eosinophilic asthma** Erika Penz (Saskatoon, Canada), Sheena Kayaniyil, Brett Lancaster, Bruno Francoeur, Jason K Lee, Marcel Mallet, Olga Tourin, Warren Ramesh, Masoud Mahdavian, Brandie L Walker, Zenon Belak, Amin Thawer, Vivek Dhawan, Lawrence Mbuagbaw, Stephen G Noorduyn
PA2130	**First Outcomes of Anti-IL5 Biological Therapy in Patients with Severe Asthma in Croatia** Dina Rnjak (Zagreb, Croatia), Anamarija Štajduhar, Sanja Popović-Grle, Nikola Ferara, Iva Jelavić, Marina Lampalo
PA2131	**Effects of benralizumab in patients affected by severe eosinophilic asthma and chronic rhinosinusitis with nasal polyps** Carla Santomasi (Bari, Italy), Enrico Buonamico, Silvano Dragonieri, Ernesto Lulaj, Leonardo Maselli, Ilaria Iorillo, Sara Piccinno, Alessandro Capuano, Madiha Ahroud, Ilaria Dei Lazzaretti, Lucia Iannuzzi, Giovanna Elisiana Carpagnano
PA2132	**Clinically relevant benefit of mepolizumab and benralizumab in asthma following EGPA in real-life settings** Charlène Desaintjean (Lyon, France), Mouhamad Nasser, Kais Ahmad, Julie Traclet, Ségolène Turquier, Jean-Charles Glérant, Vincent Cottin
PA2133	**Dual Biologic therapy- is it safe in patients with concomitant severe asthma and other immune-mediated diseases?** María Eugenia Navarrete Rouco (Barcelona (Barcelona), Spain), Nuria Carballo, Irina Bobolea, Eva Martínez-Moragón, Silvia Pascual.Erquicia, Moises Labrador, Miguel Angel Rancionero, Pilar Ausin
PA2134	**Clinical improvement in REDES study stratified by blood eosinophil reduction after mepolizumab treatment** Christian Domingo Ribas (Sabadell (Barcelona), Spain), Rocío Díaz-Campos, Tamara Hermida-Valverde, Ebymar Arismendi, David Bañas Conejero, M Guadalupe Sánchez-Herrero
PA2135	**Real world use of mepolizumab in Severe Asthma according to smoking status** Juan Luis García Rivero (Argoños (Cantabria), Spain), Eva Martínez-Moragón, Celia Pinedo, Nuria Marina, David Bañas Conejero, M Guadalupe Sánchez-Herrero

PA2136	**Real-life biomarker response to anti-IL5 and anti-IgE therapies in severe asthma patients** John Townend (Norwich, United Kingdom), Sarah Burkill, Celeste M. Porsbjerg, Arnaud Bourdin, Trung N Tran, Neil Martin, Rohit Katial, Peter Barker, Michael E Wechsler, Jorge Maspero, Sinthia Bosnic-Anticevich, Li Ping Chung, Gregory Katsoulotos, George C Christoff, Todor A Popov, Mohsen Sadatsafavi, Carlos A Torres-Duque, Charlotte Ulrik, Karin Dahl Assing, Susanne Hansen, Alan Altraja, Lauri A Lehtimaki, Nikolaos G Papadopoulos, Konstantinos Kostikas, Sundeep Salvi, Richard W Costello, Puggioni Francesca, Takashi Iwanaga, Chin Kook Rhee, Mona Al-Ahmad, Desiree Larenas-Linnemann, Joao A Fonseca, Rita Amaral, Kjell Alving, Riyad Al-Lehebi, Luis Perez De-Llano, Bruce Kirenga, Ming-Ju Tsai, Bassam Mahboub, Paul E Pfeffer, William Henley, Yang Liu, Juntao Lyu, Celine Goh, Thendral Uthaman, David Price
PA2137	**Cost-effectiveness of benralizumab in patients with uncontrolled severe eosinophilic asthma in Spain** Maria Mareque (Madrid, Spain), Mónica Climente, Eva Martínez-Moragon, Alicia Padilla, Itziar Oyagüez, Carolina Touron, Covadonga Torres
PA2138	**Effect of biological therapies on the rate of exacerbations in patients with severe eosinophilic asthma** Antonio Menéndez (Granada, Spain), Susana Rojo-Tolosa, Cristina Pérez-Ramírez, Jose Antonio Sánchez-Martínez, María Victoria González-Gutiérrez, Alberto Jiménez-Morales, Concepción Morales-García
PA2139	**Benralizumab leads to sustained asthma control improvement after 1 year in real-life severe asthmatics.** Andreas Renner (Wien, Austria), Katharina Marth, Karin Patocka, Marco Idzko, Wolfgang Pohl
PA2140	**Response to reslizumab in a real-life setting: biologic-naïve asthma patients versus switchers.** Luis Pérez De Llano (Lugo, Spain), Bg Cosío, Ignacio Lobato Astiárraga, Gregorio Soto Campos, Miguel Ángel Alonso Tejedor, Nuria Marina Malanda, Alicia Padilla Galo, Isabel Urrutia Landa, Javier Michel De La Rosa, Ismael García Moguel
PA2141	**Impact of biological therapy on cumulative corticosteroid dose reduction in patients with severe asthma.** David Rodríguez Plaza (Barcelona (Barcelona), Spain), Mireia Vivas Roca, Héctor Cabrerizo Carreño, Blanca Gómez Martínez, Salud Santos Pérez, Mariana Muñoz-Esquerre

Studio - online — Session 248 — 08:45 - 09:15

News from the Studio: Day 2 highlights not to miss

Chairs : Thierry Troosters (Leuven, Belgium), Silke Meiners (Sülfeld, Germany)

08:45	**Discussion and Q&A** All Speakers	**2142**

Studio - online — Session 249 — 09:30 - 12:15

Online skills lab: Interventional pulmonology

Aims : To demonstrate bronchoscopic techniques for the diagnosis, nodal staging and treatment of lung cancer
To provide update on novel interterventional techniques
To demonstrate how to perform cryobiopsy in ILD
To demonstrate how do to rigid thoracoscopy and pleuro desis for suspected pleural malignancy.
To demonstrate TUS in various pulmonary diseases including interventions

Chairs : Jouke T. Annema (Amsterdam, Netherlands), Daniela Gompelmann (Vienna, Austria)

09:30	**Introduction** All Speakers	**2143**
09:35	**Diagnostic bronchoscopic procedures: Cryobiopsy for ILD** Claudia Ravaglia (Forlì, Italy)	**2144**
09:50	**Diagnostic bronchoscopic procedures: Bronchoscopic Access to peripheral lesions using conebeam + radial ebus** Erik H.F.M. van der Heijden (Nijmegen, Netherlands)	**2145**
10:05	**Diagnostic bronchoscopic procedures: Combined EBUS and EUS-B for lung cancer staging** Artur Szlubowski (Kraków, Poland)	**2146**
10:20	**Diagnostic bronchoscopic procedures: Cryo – TBNA for lung and mediastinal diagnosis** Felix J.F. Herth (Heidelberg, Germany)	**2147**
10:35	**Q&A** All Speakers	**2148**
10:45	**Break** All Speakers	**2149**

11:00	**Therapeutic bronchoscopic/pleural procedures: Airway recanalization for central airway obstruction** Jiri Votruba (Prague, Czech Republic)	**2150**
11:15	**Therapeutic bronchoscopic/pleural procedures: Radiofrequent ablation for bronchoscopic lungtumor treatment** Judith Brock (Heidelberg, Germany)	**2151**
11:30	**Therapeutic bronchoscopic/pleural procedures: One stop Rapid Pleurodesis - Thoracoscopic Talc Poudrage for malignant pleural effusions** Mohammed Munavvar (Preston (Lancashire), United Kingdom)	**2152**
11:45	**Therapeutic bronchoscopic/pleural procedures: Bronchial thermoplasty and Optical Coherance Tomography for severe asthma** Peter I. Bonta (Amsterdam, Netherlands)	**2153**
12:00	**Q&A** All Speakers	**2154**

8A - live streamed Session 250 09:30 - 11:00

State of the art session: Interstitial lung diseases

Trends, controversies and open questions in ILD

Aims : to present significant insights gained recently about many different forms of rare lung diseases, i.e cystic lung diseases (lymphangioleiomyomatosis), fibrosing lung diseases. To discuss new treatment options that have been licensed for different pulmonary complications of autoimmune diseases, which commonly affect the lungs; to provide an update about drug-induced lung diseases that are an important differential diagnosis of ILDs; to discuss challenges in diagnosis and treatment. to emphasize the importance of acute exacerbations which are one of the most debilitating complications of mainly fibrosing ILDs and are a neglected field.

Disease(s) : Interstitial lung diseases

Method(s) : Imaging Respiratory intensive care

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Medical Student, Respiratory critical care physician, Physician in Pulmonary Training, Radiologist

Chairs : Katerina Antoniou (Heraklion, Greece), Karen Moor (Rotterdam, Netherlands), Sergio Harari (Milano (MI), Italy)

09:30	**New trends in cystic lung diseases** Cormac McCarthy (Dublin 4, Ireland)	**2155**
09:45	**Acute exacerbations of fibrosing ILDs: controversies and new insights** Michael Kreuter (Heidelberg, Germany)	**2156**
10:00	**Pulmonary manifestations in autoimmune diseases** Elisabeth Bendstrup (Aarhus N, Denmark)	**2157**
10:15	**Drug-induced lung diseases: past, present and future** Philippe Camus (Dijon, France)	**2158**
10:30	**Discussion and Q&A** All Speakers	**2159**

8B - live streamed Session 251 09:30 - 11:00

Clinical trials session: ALERT 2: Digital and paediatric

Aims : Including the ALERT sessions (Abstracts Leading to Evolution in Respiratory Medicine Trials), these formats showcase important and very late-breaking clinical trial data from all respiratory disease areas. Presenters, session chairs and viewers will take part lively discussions on the presented trials.

Disease(s) : Thoracic oncology Airway diseases

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

Tag(s) : Clinical

Chairs : Anita Simonds (London, United Kingdom), Ayşe Arzu Yorgancıoğlu (Konak, Turkey)

Discussants : Andrea Aliverti (Milan, Italy), David Drummond (Paris, France)

RCT2160	**Late Breaking Abstract - Clinically relevant effects on physical activity with web-based self-management support in people with COPD: a randomized controlled trial** Andre Nyberg (Umeå, Sweden), Tobias Stenlund, Åsa Karlsson, Per Liv, Karin Wadell	

RCT2161	**Effect of an immediate, remote smoking cessation intervention vs usual care among participants enrolled in lung health check: QuLIT2 study.** Parris Williams (London, United Kingdom), Keir Philip, Navjot Kaur-Gill, Deirdre Flannery, Sara Buttery, Emily Bartlett, Anand Devaraj, Jamie Addis, Samuel Kemp, Michelle Chen, Jane Derbyshire, Katie Morris, Anthony Laverty, Nicholas Hopkinson
RCT2162	**RCT Abstract - Effect of pharmacy-supported digital medicine program on asthma control** Luca Ponti (Milan, Italy), Cristina Onnis, Sebastian Ferri, Job Van Der Palen, John Pritchard, Mauro Citterio, Giuseppe Recchia, Luca Ponti, Martijn Grinovero
RCT2163	**Wrap-up by discussant and discussion** Andrea Aliverti (Milan, Italy)
RCT2164	**Antibiotic use during severe RSV bronchiolitis may increase subsequent recurrent wheeze risk** Avraham Beigelman (Petah Tikva, Israel), Mythili Srinivasan, Charles Goss, Jinli Wang, Yanjiao Zhou, Kelly True, Elizabeth Ahrens, Dana Burgdorf, Matthew Haslam, Jonathan Boomer, Sarah Bram, Carey-Ann Burnham, Timothy Casper, Andrea Coverstone, Watcharoot Kanchongkittiphon, Cadence Kuklinski, Gregory Storch, Meghan Wallace, Huiqing Yin-Declue, Mario Castro, Kenneth Schechtman, Leonard Bacharier
RCT2165	**Late Breaking Abstract - Inhaled corticosteroids to improve lung function in survivors of very preterm birth: PICSI RCT** Shannon Simpson (Perth (WA), Australia), Rhea Urs, Denby Evans, Tiffany Bradshaw, Rachel Foong, Elizabeth Smith, James Gibbons, Andrew Wilson
RCT2166	**Wrap-up by discussant and discussion** David Drummond (Paris, France)
RCT2167	**Closing remarks** All Speakers

8C - live streamed Session 252 09:30 - 11:00

Symposium: Treatment of acute respiratory failure in chronic obstructive pulmonary disease patients

Aims : to provide an update on and discuss existing and new treatment options for acute respiratory failure due to chronic obstructive pulmonary disease (COPD) exacerbations; to discuss long-term outcomes and treatment options to change the long-term consequences of severe COPD exacerbations.

Disease(s) : Airway diseases Respiratory critical care

Method(s) : Palliative care Respiratory intensive care

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Medical Technical Assistant, Nurse, Respiratory critical care physician, Respiratory physiotherapist, Journalist

Chairs : Leo Heunks (Amsterdam, Netherlands), Miriam Barrecheguren Fernandez (Barcelona, Spain)

09:30	**Evidence-based recommendations for non-invasive ventilation in patients with acute COPD exacerbations** Marieke L. Duiverman (Groningen, Netherlands)	**2168**
09:45	**Nasal high-flow therapy for acute COPD exacerbations: the new kid on the block** Paolo Navalesi (Padova, Italy)	**2169**
10:00	**Invasive mechanical ventilation and extracorporeal CO2 removal in patients with acute COPD exacerbations** Christian Karagiannidis (Cologne, Germany)	**2170**
10:15	**Long-term outcomes after severe COPD exacerbations** Rebecca D'Cruz (London, United Kingdom)	**2171**
10:30	**Discussion and Q&A** All Speakers	**2172**

8G - live streamed Session 253 09:30 - 11:00

Symposium: Dangers in the air we breathe

Aims : to present recent scientific highlights about the effects of airborne pollution factors, especially allergens, diesel exhaust particles, microplastics and microtextiles, on the lungs; to compare their effects in children and adults; to discuss the biology of allergen-induced lung disease; to describe biological sex differences in response to exposure to these factors. The dangers of airborne environmental factors to the human lung are of great and diverse interest due to the current strong international focus on climate change and air pollution.

Disease(s) : Airway diseases Paediatric respiratory diseases

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

Tag(s) : Translational

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Paediatrician, Scientist (basic, translational)

Chairs : Charlotte Suppli Ulrik (Virum, Denmark), Catherine Greene (Dublin 9, Ireland)

09:30	**Overview of environmental factors affecting allergic airway disease** Cezmi A. Akdis (Davos, Switzerland)	**2173**
09:45	**Smoke, smog and aeroallergens: effects on children and adults** Mary Rice (Boston, United States)	**2174**
10:00	**Microplastics and microfibres in the air we breathe** Barbro N. Melgert (Groningen, Netherlands)	**2175**
10:15	**Effects of inhaled diesel exhaust particles on airway inflammation** Neeloffer Mookherjee (Winnipeg (MB), Canada)	**2176**
10:30	**Discussion and Q&A** All Speakers	**2177**

8H - live streamed Session 254 09:30 - 11:00

Hot topics: Bronchiectasis: how recent advances in research can support personalised medicine in practice

From research to personalised medicine in bronchiectasis

Aims : To provide the most recent advances in the understanding of bronchiectasis and in potential applications in clinical practice; to improve the clinical management of the disease through a personalised medicine approach.

Disease(s) : Respiratory infections

Method(s) : Cell and molecular biology Imaging Pulmonary rehabilitation

Tag(s) : Translational

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Technical Assistant, Patient, Radiologist, Respiratory physiotherapist, Scientist (basic, translational), Respiratory therapist, Journalist

Chairs : Eva Polverino (Barcelona, Spain), Giovanni Sotgiu (Sassari, Italy)

09:30	**The role of microbiome analysis in the pathophysiology and clinical management of bronchiectasis** Sanjay Haresh Chotirmall (Singapore, Singapore)	**2178**
09:45	**Bronchiectasis: is airways inflammation more important to tag than infections?** James D. Chalmers (Dundee (Angus), United Kingdom)	**2179**
10:00	**How technological innovation can support physicians regarding decision making in bronchiectasis** Harm Tiddens (Rotterdam, Netherlands)	**2180**
10:15	**What we need to build a multidisciplinary team for the optimal management of bronchiectasis** Stefano Aliberti (Milano (MI), Italy)	**2181**
10:30	**Discussion and Q&A** All Speakers	**2182**

8N Session 255 09:45 - 11:00

Oral presentation: Chronic and acute lung infections in children

Disease(s) : Airway diseases

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

Chairs : Marijke Proesmans (Leuven, Belgium), Stefan Unger (Edinburgh (Edinburgh), United Kingdom)

OA2183	**Reticular basement membrane thickness for prediction of subsequent lung function in children with primary ciliary dyskinesia: follow up study.** Václav Koucký (Tanvald, Czech Republic), Jiří Uhlík, Petr Pohunek
OA2184	**Distinct inflammatory responses and effect of Azithromycin on respiratory cells in PCD** Žofia Varényiová (Prague, Czech Republic), Laura Rojas, Jacquelyn Spano, Tyson Holmes, Carlos Milla
OA2185	**Mannose-binding lectin genotype in relation to childhood respiratory infection and atopy outcomes: a multi-centre cohort study** Tom Ruffles (hove, United Kingdom), Kaninika Basu, Sarah Inglis, Stephen Bremner, Heike Rabe, Anjum Memon, Paul Seddon, Roger Tavendale, Colin Palmer, Somnath Mukhopadhyay, Katy Fidler
OA2186	**Proteomics of paediatric airway secretions to identify potential biomarkers to guide antibiotic decision making in LRTI** Jonathan Twynam-Perkins (Edinburgh, United Kingdom), Anna Karagianni, Samir Saha, Judit Aguilar, Dominic Thekkedath Kurian, Hafizur Rahman, David Dockrell, Steve Cunningham
OA2187	**Investigating markers of pulmonary aspiration in bronchoalveolar lavage from children with severe neurodisability** Rosie Maher (Liverpool, United Kingdom), Robert Beynon, Ruth Trinick, Paul Mcnamara
OA2188	**Pulmonary genetic basis of bronchiolitis obliterans in children** Hasan Yuksel (Manisa, Turkey), Gülsüm Kayhan, Mahmut Turğut, Merve Öçalan, Özge Yılmaz
OA2189	**Fish oil and vitamin D supplementations in pregnancy protect against childhood croup** Nicklas Brustad (Gentofte, Denmark), Luo Yang, Bo Chawes, Jakob Stokholm, Gözde Gürdeniz, Klaus Bønnelykke, Hans Bisgaard
OA2190	**Plasma steroid metabolite profiles are strongly associated with childhood respiratory infection proneness (CRIP)** Craig Wheelock (Stockholm, Sweden), Nicole Prince, Min Kim, Rachel Kelly, Hans Bisgaard, Bo Chawes, Jessica Lasky-Su
OA2191	**Surgery for hydatid cyst of the lung in children: over 30-years bi-centric experience.** Abdessalem Hentati (Sfax, Tunisia), Zied Chaari, Aymen Ben Ayed, Emna Krichen, Saloua Ammar, Walid Abid, Riadh Mhiri, Imed Frikha
OA2192	**Late Breaking Abstract - The monopoly of minor group rhinovirus in respiratory virus infection in children during the SARS-CoV-2 pandemic** Chun Sang PUN (Hong Kong, Hong Kong), Shaojun Liu, K.P. Tao, Yan Wang, Joseph G.S. Tsun, Agnes S.Y. Leung, Zigui Chen, Paul K.S. Chan, Kate C.C. Chan, Albert M. Li, Renee W.Y. Chan
OA2193	**Discussion** All Speakers

8F Session 256 09:45 - 11:00

Mini symposium: The two sides of every story: New translational insights into the heterogeneity of the obstructive sleep apnea effect and its treatment

Aims : to describe the latest evidence supporting the heterogeneous effects of OSA and its treatment in different pathologies associated with this sleep breathing disorder; to identify the heterogenous effects of OSA and its treatment with CPAP, and its relationship with the genetic background of the patient; to explain the latest the potential dual effect of OSA as a deleterious disorder or potential promoter of protective mechanisms.

Disease(s) : Airway diseases Sleep and breathing disorders

Method(s) : Cell and molecular biology Epidemiology Physiology

Tag(s) : Translational

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

Chairs : Manuel Sanchez De La Torre (Lleida, Spain), Athanasia Pataka (Thessaloniki, Greece)

09:45	**Differential effects of OSA and the response to its treatment: role of the genetic background** Olivia Veatch (Kansas City, United States)	**2194**
10:00	**Potential dual effect of OSA on ischemic myocardium: from animal models to clinical data** Claire Arnaud (Grenoble, France)	**2195**
10:15	**From basic to clinical science in the relationship between OSA and cancer** Isaac Almendros Lopez (Barcelona, Spain)	**2196**

10:30	**Discussion and Q&A** All Speakers	**2197**

8L Session 257 09:45 - 11:00

Oral presentation: Pearls in airway immunology: from mouse to man

Disease(s) : Airway diseases

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

Chairs : Marco Idzko (Wien, Austria), Lena Uller (Lund, Sweden)

OA9002	**Late Breaking Abstract - DESTINATION: tezepelumab long-term safety and efficacy versus placebo in patients with severe, uncontrolled asthma** Andrew Menzies-Gow (London, United Kingdom), Michael E. Wechsler, Christopher E. Brightling, Stephanie Korn, Artur Bednarczyk, Sandhia Ponnarambil, Gun Almqvist, Kaitlyn Lawson, Scott Caveney, Karin Bowen, Gene Colice
OA2199	**Unravelling the role of miR-223 in the regulation of pollutant-aggravated allergic airway inflammation** Tania Maes (Ghent, Belgium), Mirjam Roffel, Annelies Bontinck, Joyceline De Volder, Corry-Anke Brandsma, Sonja Skevin, Filip Van Nieuwerburgh, Guy Joos, Guy Brusselle, Ken Bracke, Maarten Van Den Berge, Irene Heijink
OA2200	**LSC - 2022 - G-CSF drives pathophysiology of RV-induced allergic asthma exacerbations by potentiating neutrophilic inflammation and ILC2 function** Nicoletta Bruno (London, United Kingdom), Aran Singanayagam, Hugo A. Farne, Julia Aniscenko, Nicholas Glanville, Chloe J. Pyle, Dhiren F. Patel, Sebastian L. Johnston, Robert J. Snelgrove
OA2201	**Nasal polyposis in severe asthma is associated with airway autoimmunity towards eosinophils and macrophages** Lise Lotte Eriksen (Copenhagen NV, Denmark), Anna Von Bülow, Laurits Frøssing, Morten Hvidtfeldt, Ditte Kjærsgaard Klein, Manali Mukherjee, Parameswaran Nair, Celeste Porsbjerg
OA2202	**IL-6high asthma is associated to a downmodulation of several exosomal microRNAs** Sara Vázquez-Mera (Santiago de Compostela, Spain), Pablo Miguéns-Suárez, Laura Martelo-Vidal, Juan José Nieto-Fontarigo, Coral González-Fernández, Uxío Calvo-Álvarez, Ana Faraldo-García, Christian Calvo-Henríquez, Paula Méndez-Brea, Francisco-Javier González- Barcala, Francisco Javier Salgado-Castro
OA2203	**Reduced ACE2 and TMPRSS2 immunopositive bronchial cells in asthmatics after inhaled allergen challenge.** Christiane Whetstone (Hamilton, Canada), Maral Ranjbar, Nadia Alsaji, Dhuha Al-Sajee, Lesley Wiltshire, Jennifer Wattie , Paul O'Byrne, Ruth Cusack, Roma Sehmi, Gail Gauvreau
OA2204	**LSC - 2022 - Distinct metabolic reprogramming of airway epithelium in asthma in response to infection with rhinovirus** Urszula Radzikowska (Davos Platz, Switzerland), Mengting Huang (Davos Wolfgang, Switzerland), Mei Ding, Urszula Radzikowska, Juan Rodriguez-Coira, Nino Stocker, Ge Tan, Anja Heider, Sebastian Johnston, Cezmi A. Akdis, Milena Sokolowska
OA2205	**Effect of exercise training on Treg cell response in severe COPD individuals: a randomized and controlled trial** Fernanda Degobbi Tenorio Quirino dos Santos Lopes (São Paulo (SP), Brazil), Juliana Tiyaki Ito, Luana M Oliveira, Luan V Alves, Rafaella F Xavier, Maria N Sato, Celso R F Carvalho, Iolanda F L C Tiberio
OA2206	**Differences in Innate Lymphoid Cell profiles between COPD, asthma, smoking controls and non-smoking healthy controls** Cathelijne van Zelst (Rotterdam, Netherlands), Johannes In 'T Veen, Geertje De Boer, Marjolein De Bruijn, Menno Van Nimwegen, Esmee Van Der Ploeg, Lisette Krabbendam, Denise Van Uden, Ralph Stadhouders, Gerdien Tramper-Stranders, Gert-Jan Braunstahl, Rudi Hendriks
OA2207	**Late Breaking Abstract - IL-23 contributes to Particulate Matter induced allergic asthma in neonatal mice** Hyun Seung Lee (Seoul, Republic of Korea), Heung-Woo Park, Kyoung-Hee Lee
OA2208	**Discussion** All Speakers

8M Session 258 09:45 - 11:00

Mini symposium: Deconstructing the developing lung at the single cell level to determine phenotypes and cell-specific targets of bronchopulmonary dysplasia

Aims : to contrast and differentiate cell-specific changes and cell-cell interdependency in the pathogenesis of bronchopulmonary dysplasia (BPD) compared with normal lung development, to provide new phenotype-directed and cell-specific targeted strategies for the prevention and treatment of BPD using systems biology approaches; to define the evolution of lung cell heterogeneity and transcriptomic diversity at single-cell resolution across late lung development; to differentiate phenotypes and endotypes of BPD using transcriptomic approaches together with clinical characteristics; to contrast individual cell types and their proportion in phenotypes of BPD using scRNASeq; to identify cell-cell communication and interdependency by combining systems biology with phenotypes of BPD; to describe new preventive and therapeutic strategies with cell-targeted approaches; and to decipher innovative avenues to protect and regenerate lungs through integration of transcriptomics, proteomics and individual risk. This symposium will not only compare new cellular and molecular insights into the origins of different phenotypes of BPD, but also contrast cell-cell interaction and interdependency in healthy lungs and phenotypes of BPD. Beyond the novel mechanistic insight, the speakers will also describe exciting new therapeutic strategies such as cell-targeted therapy and how the use of combined systems biology will drive precision medicine.

Disease(s) : Paediatric respiratory diseases | Pulmonary vascular diseases

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

Tag(s) : Translational

Target audience : Medical Student, Paediatrician, Scientist (basic, translational)

Chairs : Rory Morty (Heidelberg, Germany), Niki Ubags (Epalinges, Switzerland)

09:45	**Phenotypic diversity of the lung vasculature during a period of rapid postnatal growth** Cristina M. Alvira (Palo Alto, Stanford, United States)	**2209**
09:59	**Intercellular communication of the alveolar niche in postnatal lung health and bronchopulmonary dysplasia** Miguel Angel Alejandre Alcázar (Köln, Germany)	**2210**
10:13	**Placental impact on the developing fetal lung and phenotypes of bronchopulmonary dysplasia** Elizabeth Taglauer (Boston, United States)	**2211**
10:27	**Novel therapeutic cell-based strategies for neonatal chronic lung disease: pros and cons** Bernard Thébaud (Ottawa (ON), Canada)	**2212**
10:41	**Discussion and Q&A** All Speakers	**2213**

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

8D Session 261 10:40 - 13:00

Skills workshop: SW5 Cardiopulmonary rehabilitation beyond the basics

Aims : To describe diagnostic methods and interventions that enhance the comprehensiveness of cardiopulmonary rehabilitation programmes and contribute to a more patient-tailored approach; to describe methods of assessing physical activity level in patients referred for cardiopulmonary rehabilitation and methods of providing cognitive behavioural therapy to promote physical activity; to describe neuromuscular electrical stimulation and the patients referred for cardiopulmonary rehabilitation who could benefit from this treatment; and to describe the incorporation of mindfulness-based interventions into cardiopulmonary rehabilitation and their outcomes.

Disease(s) : Airway diseases

Method(s) : Pulmonary rehabilitation

Tag(s) : Clinical

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

Chairs : Frits M.E. Franssen (Horn, Netherlands)

10:40	**Introduction**	**2218**
10:40	**Physical activity assessment and intervention** Heleen Demeyer (Leuven, Belgium)	**2219**
10:40	**Neuromuscular electrical stimulation** Maurice J.H. Sillen (Horn, Netherlands)	**2220**
10:40	**Frailty assessment and intervention** Roberto Benzo (Rochester, United States)	**2221**
10:40	**Mindfulness interventions during cardiopulmonary rehabilitation** Alice Malpass (Bristol, United Kingdom)	**2222**

8A - live streamed Session 267 11:15 - 12:45

Clinical cases: Lungs on fire: Interstitial lung diseases?

Aims : To facilitate the presentation of 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

Tag(s) : Clinical

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

Chairs : Katerina Antoniou (Heraklion, Greece), Sergio Harari (Milano (MI), Italy), Michael Kreuter (Heidelberg, Germany)

Discussants : Maria Molina Molina (Barcelona, Spain), Paolo Spagnolo (Padova (PD), Italy)

11:15	**Case 1 incl. panel discussion and Q&A - Author: D. M. Spitaleri (Italy)** Maria Molina Molina (Barcelona, Spain)	**2223**
11:37	**Case 2 incl. panel discussion and Q&A - Author K. Kumar (India)** Paolo Spagnolo (Padova (PD), Italy)	**2224**
11:59	**Case 3 incl. panel discussion and Q&A - Author: M. J. Fröhlich (Germany)** Maria Molina Molina (Barcelona, Spain)	**2225**
12:21	**Case 4 incl. panel discussion and Q&A - Author: I. Dimiene (Lithuania)** Paolo Spagnolo (Padova (PD), Italy)	**2226**

8B - live streamed Session 268 11:15 - 12:45

Symposium: How a crisis impacts health care providers and patients

Congress chair award session

Aims : This congress chair session aims to discuss the impact of health crisis such as the war in Ukraine on health care providers (in the frontline and those taking care of refugees) and on patients. It will also illustrate how international organizations can support during health crisis.

Disease(s) : Airway diseases Respiratory infections

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

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Respiratory critical care physician, Patient, Physician in Pulmonary Training, Respiratory physiotherapist, Thoracic surgeon, Respiratory therapist, Journalist

Chairs : Anita Simonds (London, United Kingdom), Ayşe Arzu Yorgancıoğlu (Konak, Turkey)

11:15	**The role of WHO during (regional and global) health crises.** Hans Henri P. Kluge (Copenhagen, Denmark)	**2227**
11:30	**How a war changes respiratory medicine. Reflections as a health care provider in Ukraine.** Vitalii Poberezhets (Vinnytsia, Ukraine)	**2228**
11:45	**Being a patient at (or away from depending on the patient) the frontline. My reflections as a patient** Olena Yurchenko (, Ukraine)	**2229**
11:50	**Impact of a war on the organization of respiratory health care** Yurii Feshchenko (Kyiv, Ukraine)	**2230**
11:55	**Respiratory Healthcare and challenges in caring for refugees**	**2231**
12:10	**Supporting frontline respiratory teams in 2022 - an ERS perspective** Joanna Chorostowska-Wynimko (Warsaw, Poland)	**2232**
12:20	**Discussion and Q&A** All Speakers	**2233**

8C - live streamed Session 269 11:15 - 12:45

Journal session: Acute respiratory distress syndrome: the path to precision medicine

A joint ERS/Lancet session

Aims : To present the most recent papers commissioned by The Lancet and The Lancet Respiratory Medicine, to provide insights into the pathophysiology and phenotypes of acute respiratory distress syndrome (ARDS), to review current approaches for diagnosis and management of paediatric and adult patients, to consider therapeutic options in development for this heterogeneous syndrome, to discuss the needs of patients with long-term sequelae of ARDS and to set out future directions for research and clinical practice. This forward-looking session will provide new insights into mechanisms and management for both nonspecialists and specialists, with a focus on the goal of precision medicine.

Disease(s) : Paediatric respiratory diseases Respiratory critical care

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

Tag(s) : Clinical

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

Chairs : Leo Heunks (Amsterdam, Netherlands), Rebecca Craven (London, United Kingdom), Miriam Barrecheguren Fernandez (Barcelona, Spain)

11:15	**Causes, pathophysiology, and phenotypes of acute respiratory distress syndrome** Lorraine Ware (Nashville, United States)	**2234**
11:30	**Acute respiratory distress syndrome in adults: diagnosis, management, outcomes and long-term sequelae** Danny Mcauley (Belfast (Belfast), United Kingdom)	**2235**
11:45	**Paediatric acute respiratory distress syndrome: developing management strategies to improve outcomes** Martin Kneyber (Groningen, Netherlands)	**2236**
12:00	**Opportunities for improved clinical trial designs in acute respiratory distress syndrome** Michael A. Matthay (San Francisco, United States)	**2237**
12:15	**Discussion and Q&A** All Speakers	**2238**

8G - live streamed Session 270 11:15 - 12:45

Hot topics: The Human Lung Cell Atlas: a universal reference for all respiratory scientists

The closing symposium of the discovAIR H2020 project

Aims : to empower the participants to use the Human Lung Cell Atlas for their own translational or basic research. To achieve this, the hot topic symposium at ERS2022 will introduce the Human Lung Cell Atlas, provide examples of the use of the Atlas, and illustrate the value of the Atlas for basic and translational research into lung diseases. After this symposium, the participants will be able to find the Human Lung Cell Atlas, to access the Atlas for gene- or cell-type-oriented queries for their own research activities, to use the Atlas for harmonised cell-type annotation of their own datasets and to contrast their own data from lung disease samples to the universal healthy reference present in the Atlas.

Disease(s) : Airway diseases Interstitial lung diseases Paediatric respiratory diseases

Method(s) : Cell and molecular biology Physiology

Tag(s) : Basic science

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

Chairs : Catherine Greene (Dublin 9, Ireland), Charlotte Suppli Ulrik (Virum, Denmark)

11:15	**Introduction of the “discovAIR consortium”** Martijn C. Nawijn (Groningen, Netherlands)	**2239**
11:20	**The Human Lung Cell Atlas: how to use this universal reference of the cellular landscape of the healthy lung to answer your own research questions** Malte Lücken (Oberschleissheim, Germany)	**2240**
11:35	**Spatial transcriptomics reveals variation in cellular neighbourhoods and transcriptional programmes in healthy and diseased lung tissue** Alexandra Firsova (Stockholm, Sweden)	**2241**
11:50	**A unique IgA-producing plasma cell niche in submucosal glands revealed by spatially informed single-cell transcriptomic analyses** Amanda Oliver (Cambridge, United Kingdom)	**2242**

12:05	**Multimodal analysis of subtissular niches and cell circuits in chronic lung disease** Herbert Schiller (Munich, Germany)	**2243**
12:20	**DIscussion and Q&A** All Speakers	**2244**

8H - live streamed Session 271 11:15 - 12:45

Respiratory medicine meets other disciplines: Fight to antimicrobial resistance: the role of new diagnostics

A European perspective from the Value-Dx consortium

Aims : to present the appropriate use and development of diagnostic tools for respiratory infections, which are one of most valuable tools to reduce the occurrence of antimicrobial resistances; to review major advances in diagnostic tests for lower respiratory tract infections (LRTI) and the expected impact on epidemiology and health economics and clinical perspective.

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

Method(s) : General respiratory patient care | Public health | 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, Paediatrician, Scientist (basic, translational)

Chairs : Eva Polverino (Barcelona, Spain), Giovanni Sotgiu (Sassari, Italy)

11:15	**Accuracy of rapid diagnostics for community-acquired pneumonia in the emerging room** Maurizio Sanguinetti (Rome, Italy)	**2245**
11:30	**Changing the epidemiology of microbial etiology of CAARTI** surbhi malhotra-kumar (wilrijk, Belgium)	**2246**
11:45	**Optimal management of CAARTI from a health economic perspective** Maarten Postma (Groningen, Netherlands)	**2247**
12:00	**How rapid diagnostic tests can improve antibiotic stewardship** Bojana Beović (Ljubljana, Slovenia)	**2248**
12:15	**Discussion and Q&A** All Speakers	**2249**

8N Session 272 11:15 - 12:30

Oral presentation: Clinical and translational studies of asthma and COPD: novel mechanisms

Disease(s) : Airway diseases

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

Chairs : Lena Uller (Lund, Sweden), Francisco Javier Salgado Castro (Santiago De Compostela, Spain)

OA2250	**Calcaratarin D reduces airway inflammation and oxidative damage by modulating alveolar macrophages via Michael acceptor system** Wupeng Liao (Singapore, Singapore), Yu Ci Hazel Foo, Thi Ngoc Quy Tran, Wai-Shiu Fred Wong	
OA2251	**Effect of tezepelumab on seasonal exacerbations in patients with severe, uncontrolled asthma grouped by blood eosinophil count** Andrew Menzies-Gow (London, United Kingdom), Jonathan Corren, Christopher S Ambrose, Gene Colice, Stephanie L Roseti, Åsa Hellqvist, Kamil Kmita, Andrew W Lindsley, Bill Cook	
OA2252	**Extracellular HSP60 induces airway wall remodeling via Toll-Like-Receptors in mice** Lei Fang (Basel, Switzerland), Junling Li, Liang Zhou, Noria Segueni, Bernhard Ryffel, Michael Tamm, Michael Roth	
OA2253	**Identification of steroid-response pathways related to FeNO levels in asthma bronchial epithelium** Mandy Menzel (Lund, Sweden), Morten Hvidtfeldt, Ditte Klein, Juan Jose Nieto-Fontarigo, Asger Sverrild, Lena Uller, Celeste Porsbjerg	
OA2254	**Tozorakimab: a dual-pharmacology anti-IL-33 antibody that inhibits IL-33 signalling via ST2 and RAGE/EGFR to reduce inflammation and epithelial dysfunction** Ian C. Scott (Cambridge, United Kingdom), Elizabeth England, D. Gareth Rees, Teodor Erngren, Catherine Chaillan Huntington, Kirsty F. Houslay, Dorothy A. Sims, Claire Hollins, Elizabeth C. Hinchy, Caroline Colley, Dominic J. Corkill, E. Suzanne Cohen	

OA2255	**Effects of anti-IL 17 on inflammation in Asthma, COPD and Asthma-COPD models** Francine Maria Almeida (São Paulo (SP), Brazil), Leandro Nascimento Camargo, Nilo Martins, Juliana Dias Lourenço, Suellen Karoline Moreira Bezerra, Beatriz Saraiva-Romanholo, Edna Aparecida Leick, Fernanda Degobbi Q.S. Lopes, Carla Máximo Prado, Renato Fraga Righetti, Iolanda Fatima Lopes Calvo Tibério
OA2256	**The impact of anti-IL5 therapies on patients with severe eosinophilic asthma: a proteomic approach** Paolo Cameli (Siena (SI), Italy), Lorenza Vantaggiato, Miriana D'Alessandro, Laura Bergantini, Enxhi Shaba, Alfonso Carleo, Fabrizio Di Giuseppe, Stefania Angelucci, Luca Bini, Elena Bargagli, Claudia Landi
OA2257	**Montelukast reverses β2-adrenoceptor tolerance in airway smooth muscle and shows a synergic effect in vivo** Ida Cerqua (Napoli, Italy), Elisabetta Granato, Marcelo Nicolas Muscarà, Giuseppe Cirino, Beatrice Severino, Rocco Pavese, Antonio Petti, Giuseppe Caliendo, Fiorentina Roviezzo
OA2258	**THE PDE4 INHIBITOR TANIMILAST SHOWS DISTINCT IMMUNOMODULATORY PROPERTIES ASSOCIATED WITH A TYPE 2 ENDOTYPE AND CD141 UPREGULATION** Fabrizio Facchinetti (Parma (PR), Italy), Hoang Oanh Nguyen, Valentina Salvi, Laura Tiberio, Mirco Govoni, Gino Villetti, Maurizio Civelli, Ilaria Barbazza, Carolina Gaudenzi, Mauro Passari, Tiziana Schioppa, Francesca Sozio, Annalisa Dal Prete, Silvano Sozzani, Daniela Bosisio
OA2260	**Discussion** All Speakers

8F Session 273 11:15 - 12:30

Oral presentation: Lung cancer: from screening to early diagnosis

Disease(s) : Thoracic oncology Airway diseases

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

Chairs : Georgia Hardavella (Athens, Greece)

OA2261	**Implementation of lung cancer screening: an European survey** Jan van Meerbeeck (Edegem (Antwerp), Belgium), Annemiek Snoeckx
OA2262	**Radiomics to increase the effectiveness of lung cancer screening programs. Radiolung preliminary results.** Antoni Rosell Gratacos (Badalona (Barcelona), Spain), Sonia Baeza, Samuel Garcia-Reina, José Luis Mate, Ignasi Guasch, Isabel Nogueira, Ignasi Garcia-Olivé, Guillermo Torres, Carles Sànchez-Ramos, Debora Gil
OA2263	**Pilot lung cancer screening program results in Serbia during 1-year period** Jelena Djekic Malbasa (Novi Sad, Republic of Serbia), Tomi Kovacevic, Darijo Bokan, Bojan Zaric, Snezana Bojanic, Dragan Dragisic
OA2264	**Radiology quality assurance in the Yorkshire Lung Screening Trial.** Sara Upperton (Leeds, United Kingdom), Claire Bradley, Bobby Bhartia, Philip Crosbie, Michael Darby, Rhian Gabe, Neil Hancock, Martyn Kennedy, Matthew Callister
OA2265	**A novel method exhale breath fingerprinting for lung cancer diagnosis by selected ion monitoring mode** Ozlem Goksel (Izmir (Bornova), Turkey), Levent Pelit, Tugberk N. Dizdas, Aycan Arın, Su Özgür, Ilknur Erbaş, Fusun Pelit, Burak Ordin, Haydar S. Karakuş, Arif Gursoy, F.Nil Ertaş, Tuncay Göksel
OA2266	**Diagnosing non-small cell lung cancer by exhaled-breath profiling using an electronic nose: a multicentre validation study.** Sharina Kort (Enschede, Netherlands), Marjolein Brusse - Keizer, Hugo Schouwink, Emanuel Citgez, Frans De Jongh, John Van Putten, Ben Van Den Borne, Lisanne Kastelijn, Daiana Stolz, Milou Schuurbiers, Michel Van Den Heuvel, Wouter Van Geffen, Job Van Der Palen
OA2267	**Particles in exhaled air – a new diagnostic tool for patients with lung adenocarcinoma** Jesper Andreasson (, Sweden), Embla Bodén, Gabriel Hirdman, Camilla Von Wachter, Oskar Hallgren, Mohammed Fakhro, Franziska Olm, Sandra Lindstedt
OA2268	**Late Breaking Abstract - Incidence of lung cancer in Chronic Obstructive Pulmonary Disease (COPD) patients: Prognostic factors and survival analysis** Parichat Niyomthong (Phrae, Thailand)
OA2269	**Late Breaking Abstract - Safety and feasibility of a novel externally cooled bronchoscopic radiofrequency ablation catheter for ablation of peripheral lung tumours: a first-in-human dose escalation study** Daniel Steinfort (Parkville, Australia), Phillip Antippa, Kanishka Rangamuwa, Louis Irving, Michael Christie, Ewan Chan, Don Tanaka, Ken Yoneda, Jemma Christie, Felix Herth, Shashank Raina

OA2270	**Discussion** All Speakers

8L Session 274 11:15 - 12:30

Oral presentation: Novelties in pulmonary hypertension management

Disease(s) : Pulmonary vascular diseases Interstitial lung diseases

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

Chairs : Sheila Ramjug (Altrincham, United Kingdom), Olivier Sitbon (Le Kremlin-Bicêtre, France)

OA2271	**Impact of pulmonary arterial hypertension on employment, work productivity and quality of life - results of a cross -sectional multi-center study** Jan Fuge (Hannover, Germany), Da-Hee Park, Thomas Von Lengerke, Manuel Richter, Henning Gall, Hossein A. Ghofrani, Jan C. Kamp, Marius M. Hoeper, Karen M. Olsson
OA2272	**A combined measure of pulmonary vascular resistence and compliance variations in Pulmonary Hypertension (PH)** Edoardo Airò (Pisa (PI), Italy), Carolina Bauleo, Renato Prediletto, Bruno Formichi, Ivana Pavlickova, Mauro Raciti, Simonetta Monti
OA2273	**Effect of sotatercept on multicomponent improvement in the PULSAR study** Marius M. Hoeper (Hannover, Germany), Hossein-Ardeschir Ghofrani, J. Simon Gibbs, Mardi Gomberg-Maitland, Marc Humbert, Vallerie Mclaughlin, Ioana Preston, Rogerio Souza, Aaron Waxman, Janethe Pena, Solaiappan Manimaran, Marcie Fowler, David Badesch
OA2274	**Characteristics and management of chronic thromboembolic pulmonary disease patients without pulmonary hypertension in an expert centre** Benoit Lechartier (Lausanne, Switzerland), Mitja Jevnikar, Elie Fadel, Philippe Brenot, Antoine Beurnier, David Montani, Laurent Savale, Olivier Sitbon, Marc Humbert, Xavier Jais
OA2275	**Metabolic modulation of the right ventricle and pulmonary circulation in pulmonary arterial hypertension: an interventional study using a Glucagon-like-peptide-1 (GLP-1) agonist** Chinthaka Samaranayake (London, United Kingdom), Aleksander Kempny, Laura C Price, Joy Pinguel, Eleanor Morris, Eva Moriarty, Mahitha Gummadi, Konstantinos Dimopoulos, S John Wort, Lan Zhao, Colm Mccabe
OA2276	**Baseline characteristics of patients included into the ERS Clinical Research Collaboration: "Pulmonary Hemodynamics during Exercise - Research Network" (PEX-NET) registry** Gabor Kovacs (Graz, Austria), Marc Humbert, Philippe Herve, Alexander Avian, Nazzareno Galie, Gregory Lewis, Rogerio Souza, Silvia Ulrich, Anton Vonk Noordegraaf, Mads Andersen, Joan Albert Barbera, Isabel Blanco, Robin Condliffe, Michele D'Alto, Benjamin Egenlauf, Ralf Ewert, Ekkehard Gruenig, Alexander Heine, Simon Herkenrath, Steven Hsu, Krzysztof Kasperowicz, Susanna Mak, Bradley Maron, Colm Mccabe, Rudolf Oliveira, Stephan Rosenkranz, Laurent Savale, Stephanie Saxer, David Systrom, Ryan Tedford, Adam Torbicki, Horst Olschewski
OA2277	**New diagnostic criteria and PVR thresholds in SSc-associated PH: Insights from the ASPIRE registry** Robin Condliffe (Sheffield (South Yorkshire), United Kingdom), Ashraful Haque, Athanasios Charalampopoulos, Krit Dwivedi, Charlie Elliot, Abdul Hameed, Neil Hamilton, Rob Lewis, Sheila Ramjug, Alex Rothman, Roger Thompson, Andy Swift, David Kiely
OA2278	**The preponderance of genetic involvement in paediatric pulmonary hypertension** Julien GRYNBLAT (Paris, France), Sophie Malekzadeh Milani, Mathilde Meot, Isabelle Szezepanski, Marilyne Levy, Damien Bonnet
OA2279	**Inhaled treprostinil in patients with pulmonary hypertension due to interstitial lung disease: event-free survival in INCREASE study open-label extension** Steven D Nathan (Falls Church, United States), Rahul Argula, Sudarshan Rajagopal, Shilpa Johri, David De La Zerda, Dana Mcglothlin, Peter Smith, Cq Deng, Melissa Miceli, Victor Tapson, Aaron Waxman
OA2280	**Late Breaking Abstract - Risk stratification in pulmonary veno-occlusive disease** Athénaïs Boucly (Le Kremlin Bicêtre, France), Laurent Savale, Xavier Jaïs, Antoine Beurnier, Mitja Jevnikar, Marc Humbert, Olivier Sitbon, David Montani
OA2281	**Discussion** All Speakers

8M Session 275 11:15 - 12:30

Oral presentation: Obstructive sleep apnea consequences and management

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

Method(s) : Epidemiology | Imaging | Physiology

Chairs : Silke Ryan (Dublin, Ireland), Raphael Heinzer (Lausanne, Switzerland)

OA2282	**Long-term effect of OSA and CPAP on blood pressure in patients with acute coronary syndrome: A post-hoc analysis of the ISAACC study.** Manuel Sanchez De La Torre (Lleida, Spain), Andrea Zapater, Gerard Torres, Esther Gracia-Lavedan, Ivan David Benitez, Alicia Sánchez-De-La-Torre, Jordi De Batlle, Adriano Targa, Olga Mínguez, Lydia Pascual, Anunciacion Cortijo, Dolores Martinez, Mireia Dalmases, Ferran Barbé
OA2283	**Percentage of sleep time with increase in respiratory effort is a strong predictor of prevalent hypertension in obstructive sleep apnea patients** Jean-Louis Pépin (Grenoble, France), NHAT-NAM LE-DONG, Jean-Benoit Martinot, Renaud Tamisier
OA2284	**Pulse wave amplitude drops (PWAD) index: a biomarker of cardiovascular risk in patients with obstructive sleep apnea in three cohorts.** Raphael Heinzer (Lausanne, Switzerland), Geoffroy Solelhac, Manuel Sánchez-De-La-Torre, Margaux Blanchard, Mathieu Berger, Nicola Andra Marchi, Camila Hirotsu, Giulio Bernardi, Monica Betta, Peter Vollenweider, Julien Vaucher, Andrea Zapater, Esther Gracia-Lavedan, Pedro Marques-Vidal, Ferran Barbé, Frédéric Gagnadoux
OA2285	**The effect of CPAP therapy on aortic inflammation in obstructive sleep apnoea: data from a proof-of-concept PET-CT study** Cliona O'Donnell (Dublin 4, Ireland), Shane Crilly, Anne O'Mahony, Jonathan Dodd, Donal O'Shea, David Murphy, Silke Ryan
OA2286	**Impact of sulthiame on endotypic traits in OSA - a RCT** Jan A. Hedner (Göteborg, Sweden), Erik Hoff, Christian Strassberger, Kaj Stenlöf, Ding Zou, Ludger Grote
OA2287	**Obstructive sleep apnea and cognitive decline in the elderly population: the HypnoLaus study** Raphael Heinzer (Lausanne, Switzerland), Nicola Marchi, Geoffroy Solelhac, Mathieu Berger, José Haba-Rubio, Bogdan Draganski
OA2288	**Sleep apnea and incident unprovoked venous thromboembolism: Data from the French Pays de la Loire Sleep Cohort** Wojciech Trzepizur (Angers, France), Chloé Gervès-Pinquié, Baptiste Heude, Margaux Blanchard, Nicole Meslier, Marie Jouvenot, Sandrine Kerbat, Raphael Le Mao, Eline Magois, Jean-Louis Racineux, Abdelkebir Sabil, Jérémie Thereaux, Francis Couturaud, Frédéric Gagnadoux
OA2289	**Sleep characteristics and cardio-metabolic comorbidities in the OSA-COPD overlap syndrome: Data from the European Sleep Apnea Database (ESADA)** Mafalda van Zeller (Porto, Portugal), Ozen K. Basoglu, Johan Verbraecken, Carolina Lombardi, Walter T. Mcnicholas, Jean Louis Pepin, Paschalis Steiropoulos, Pawel Sliwinski, Daniela Correia, Maria R. Bonsignore, Sophia E. Schiza, Jan Hedner, Ludger Grote, Marta Drummond
OA2290	**Cancer prevalence is increased in obstructive sleep apnea – the population-based DISCOVERY study** Andreas Palm (Uppsala, Sweden), Jenny Theorell-Haglöw, Johan Isaksson, Mirjam Ljunggren, Josefin Sundh, Magnus Ekström, Ludger Grote
OA2291	**Late Breaking Abstract - Predictors of BP reduction in patients with OSA treated with CPAP therapy – an individual patient data meta-analysis** Martino Pengo (Milano (MI), Italy), Esther I Schwarz, Ferran Barbe, Peter Cistulli, Cristiano Fava, Flavio D Fuchs, Kelly Loffler, Macy Lui, Miguel Angel Martinez-Garcia, Craig L Phillips, Tim Quinnel, Joerg Steier, John Stradling, Antonella Zambon, Gianfranco Parati
OA2292	**Discussion** All Speakers

Studio - online | Session 276 | 12:45 - 14:00

Online skills lab: Thoracic ultrasound

Aims : To demonstrate bronchoscopic techniques for the diagnosis, nodal staging and treatment of lung cancer
To provide update on novel interterventional techniques
To demonstrate how to perform cryobiopsy in ILD
To demonstrate how do to rigid thoracoscopy and pleuro desis for suspected pleural malignancy.
To demonstrate TUS in various pulmonary diseases including interventions

Chairs : Jouke T. Annema (Amsterdam, Netherlands), Pia Iben Pietersen (Odense NØ, Denmark)

12:45	**Introduction** All Speakers	**2293**

12:50	**Transthoracic Ultrasound: Realtime image-guided interventions in pleural disease** Rahul Bhatnagar (Bristol, United Kingdom)	**2294**
13:05	**Transthoracic Ultrasound: LUS in the diagnosis and management of respiratory failure** Casper Falster (Odense, Denmark)	**2295**
13:20	**Transthoracic Ultrasound: Contrast enhanced ultrasound in lung and pleural disease** Eihab Bedawi (Oxford (Oxfordshire), United Kingdom)	**2296**
13:35	**Transthoracic Ultrasound: The role of LUS in the diagnosis and management of interstitial lung disease** Jesper Rømhild Davidsen (Odense C, Denmark)	**2297**
13:50	**Q&A** All Speakers	**2298**

8N Session 282 12:45 - 14:00

Oral presentation: Latest news from paediatric population-based and clinical cohort studies

Disease(s) : Airway diseases

Method(s) : Epidemiology Public health Pulmonary function testing

Chairs : Myrofora Goutaki (Bern, Switzerland), Maribel Casas (Barcelona, Spain)

OA2300	**Association of Early Life Factors with Prematurity-Associated Lung Disease : Prospective Cohort Study** Sarah Kotecha (Cardiff (South Glamorgan), United Kingdom), Kylie Hart, Michael Cousins, W John Watkins, A John Henderson, Sailesh Kotecha	
OA2301	**Maternal pesticides exposure in pregnancy and wheezing in early childhood** Franca Rusconi (Pisa, Italy), Giovenale Moirano , Maja Popovic, Milena Maule, Antonio D'Errico , Lorenzo Richiardi, Silvia Maritano	
OA2302	**Maternal diet during pregnancy with allergic and respiratory profiles in children** Rosalie Delvert (Paris, France), Marie-Aline Charles, Orianne Dumas, Bénédicte Leynaert, Rachel Nadif, Sabine Plancoulaine, Chantal Raherison, Mohammed Sedki, Raphaëlle Varraso, Blandine De Lauzon-Guillain, Annabelle Bédard	
OA2303	**Trends in the incidence of asthma in children and adolescents in Catalonia, 2010-2021: a large population-based cohort study** Alicia Abellan (Barcelona, Spain), Berta Raventós, Edward Burn, Andrea Pistillo, Talita Duarte-Salles	
OA2304	**Respiratory impedance reference values in children and adolescents: the Austrian LEAD Study.** Christoph Valach (Vienna, Austria), Emiel F. M. Wouters, Alina Ofenheimer, Patricia Puchhammer, Pasquale P. Pompilio, Alessandro Gobbi, Marie K. Breyer, Sylvia Hartl, Otto C. Burghuber, Robab Breyer-Kohansal	
OA2305	**Lung function and cognitive ability in children: a UK birth cohort study** Jack Grenville (Bristol, United Kingdom), Raquel Granell, James Dodd	
OA2306	**Otologic features in patients with Primary Ciliary Dyskinesia- an EPIC-PCD study** Myrofora Goutaki (Bern, Switzerland), Yin Ting Lam , Mihaela Alexandru, Andreas Anagiotos, Miguel Armengot, Mieke Boon, Andrea Burgess, Nathalie Caversaccio, Suzanne Crowley, Sinan Ahmed D Dheyauldeen, Nagehan Emiralioglu, Ela Erdem, Onder Gunaydin, Eric G Haarman, Amanda Harris, Hasnaa Ismail-Koch, Celine Kempeneers, Bulent Karadag, Sookyung Kim, Philipp Latzin, Natalie Lorent, Ugur Ozcelik, Anne-Lise Ml Poirrier, Isolde Rangnau, Ana Reula, Jobst Roehmel, Christine Van Gogh, Panayiotis Yiallouros, Jean-François Papon	
OA2307	**Comparison of longitudinal outcomes in children with primary ciliary dyskinesia and cystic fibrosis** Margaret Rosenfeld (Seatle, United States), Breanna Kinghorn, Frankline Onchiri, Erin Sullivan, Stephanie Davis, Margaret Leigh	
OA2308	**Late Breaking Abstract - Predictors associated with critical care need and in-hospital mortality among children with laboratory-confirmed Covid-19 infection in a high HIV burden region** Liliane Byamungu (Durban, South Africa), Jean Nachega, Ashendri Pillay, Prakash Jeena, Lindsay Zurba, Refiloe Masekela	
OA2309	**Discussion** All Speakers	

8F Session 283 12:45 - 14:00

Oral presentation: COVID-19 acute respiratory distress syndrome and beyond

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

Method(s) : Respiratory intensive care | Epidemiology | Physiology | Transplantation | Public health | Imaging | Pulmonary function testing

Chairs : Leo Heunks (Amsterdam, Netherlands), Maxime Patout (Paris, France)

OA2310	**A Novel Anti-Thrombotic, Glenzocimab, in Covid-19 acute respiratory distress syndrome (Cov-ARDS).** Julien Pottecher (Strasbourg, France), Victor A. H. Sato, Yannick Plétan, Andrea Comenducci, Violaine Desort-Henin, Martine Jandrot-Perrus, Sophie Binay, Adeline Meilhoc, Gilles Avenard
OA2311	**Higher versus lower dose corticosteroids for moderate to severe COVID-19: a systematic review, dose response and network meta-analysis.** Tyler Pitre (Kitchener, Canada), Jasmine Mah, Wryan Helmeczi, Johnny Su, Sharef Danhoe, William Plaxton, Stephen Giilck, Dena Zeraatkar
OA2312	**Impact of Dexamethasone on pathogen profile of COVID-19 patients requiring intensive care: a multicentre retrospective study** Cathrin Kodde (Berlin, Germany), Finja Timmen, Sven Hohenstein, Andreas Bollmann, Marzia Bonsignore, Ralf Kuhlen, Irit Nachtigall, Selcuk Tasci
OA2313	**SUSTAINED ALVEOLAR FIBROPROLIFERATION IN PATIENTS WITH NON-RESOLVING COVID-19 RELATED ARDS DOES NOT LEAD TO PULMONARY FIBROSIS.** Jan Willem Duitman (Lelystad, Netherlands), Esther J. Nossent, Lilian J. Meijboom, Heder De Vries, Leonoor S. Boers, Siebe G. Blok, Anno Saris, Alex R. Schuurman, Tom D.Y. Reijnders, Juan J. Garcia Vallejo, Hetty J. Bontkes, Lieuwe D.J. Bos, Alexander P.J. Vlaar, W. Joost Wiersinga, René Lutter, Tom Van Der Poll, Harm Jan Bogaard, Leo M.A. Heunks
OA2314	**Extracorporeal life support allows lung transplant in anti-MDA5+ rapidly progressive-interstitial lung disease.** Pierre Bay (Creteil, France), Marc Pineton De Chambrun, Antoine Roux, Vincent Bunel, Alain Combes, Dominique Israël Biet, Benjamin Zuber, Hilario Nunes, Yves Allenbach, Yurdagul Uzunhan
OA2315	**Recirculation in venovenous extracorporeal membrane oxygenation** Christoph Fisser (Regensburg, Germany), Oscar Palmer, Marko Sallisalmi, Michael Paulus, Maik Foltan, Alois Philipp, Maximilian Malfertheiner, Matthias Lubnow, Thomas Müller, Lars Broman
OA2316	**Early prediction of mortality of septic patients visiting emergency room using machine learning** Jeongwon Heo (Chuncheon-si, Republic of Korea), Yeonjeong Heo, Da Hye Moon, So Hyeon Bak, Woo Jin Kim, Seon-Sook Han, Se-Heon Choi, Do-Won Kim, Yoon Kim, Hyun-Soo Choi
OA2317	**Prognostic value of serum chemerin in critically ill patients with sepsis: a prospective study** Irene Karampela (Athens, Greece), Gerasimos-Socrates Christodoulatos, Natalia Vallianou, Dimitrios Tsilingiris, Evangelia Chrysanthopoulou, George Skyllas, Georgios Antonakos, Ioanna Marinou, Evaggelos Vogiatzakis, Apostolos Armaganidis, Maria Dalamaga
OA2318	**Effect of phosphodiesterase inhibitors on lung function, oxidative damage and inflammation in a rabbit model of acute respiratory distress syndrome** Petra Kosutova (Martin, Slovakia), Pavol Mikolka, Daniela Mokra, Andrea Čalkovska
OA2319	**Late Breaking Abstract - Effect of N-acetyl cysteine in a patient cohort with severe or very severe COVID-19 pneumonia** Carolina Maria Gotera Rivera (Madrid, Spain), Carlos López Chang, Laura De La Dueña, Lucia Llanos Jiménez, Rocio Cortés, Olga Sánchez Pernaute, Cesar Pérez Calvo, Ana Ioan, Juan Pérez, Arnoldo Santos Oviedo, Sarah Heili Frades, Alba Naya Prieto, Itziar Fernández Ormaechea, M. Del Pilar Carballosa De Miguel, María Jesús Rodríguez Nieto, Germán Peces Barba
OA2320	**Discussion** All Speakers

8L Session 284 12:45 - 14:00

Oral presentation: Best abstracts in COVID-19

Disease(s) : Airway diseases

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

Chairs : Pradeesh Sivapalan (Gentofte, Denmark), Georgios Kaltsakas (Athens, Greece)

OA2321	**THE COURSE OF COVID-19 IN PATIENTS WITH ASTHMA DEPENDS ON GLN27GLU ADRβ2 GENE POLYMORPHISM** Anna Bondarkova (Sumy, Ukraine), Vladyslava Kachkovska, Anna Kovchun, Lyudmyla Prystupa

OA2322	**Small airways disease post COVID-19: 1 year follow up** Bavithra Vijayakumar (thame (Oxfordshire), United Kingdom), Andrew Ritchie, James Tonkin, Christopher M Orton, Jadwiga Wedzicha, Pallav L Shah
OA2323	**Long-term home oxygen therapy as a strategy to reduce hospitalization time in patients affected by COVID-19 with persistent hypoxemia** Robson Prudente (Botucatu (SP), Brazil), Douglas Silva, Estefânia Franco, Vitória Marcondes, Kely Oliveira, Luiz Machado, Luís Brizola, Maércio Santos, Edris Savadkouhi, Camila Colombo, Amanda Peralta, Suzana Tanni
OA2324	**Similar pulmonary functional outcomes at 3 months in critical COVID-19 survivors of the first, second and third pandemic waves** Marie Bruyneel (Brussels, Belgium), Cecile Dusart, David De Bels, Alain Roman, Marc Claus, Nathalie De Vos, Stephane Alard, Stephanie Andre
OA2325	**Network analysis uncovers relationship between immune profiles and severity of COVID-19** Milan Sova (Olomouc, Czech Republic), Eva Kriegova, Samuel Genzor, Milos Kudelka, Jan Mizera, Petr Jakubec
OA2326	**Inflammation profiling and recovery clusters five months post-hospitalisation for COVID-19** Omer Elneima (Leicester, United Kingdom), Matthew Richardson, Olivia C Leavy, Hamish J C Mcauley, Ruth M Saunders, James D Chalmers, Ling-Pei Ho, Alex Horsley , Michael Marks, Betty Raman, Rachael A Evans, Christopher E Brightling , Louise V Wain
OA2327	**Therapeutic stategies in hospitalised patients with SarsCov-2 hipoxemic pneumonia** Pedro Cunha (Guimarães, Portugal), Cecília Castro, Helena Sarmento, Isabel Vila, Mecia Vieira, Ana Sofia Costa, Ana Paula Amorim, Margarida Correia-Neves, Jorge Cotter
OA2328	**Comparison of the 1-minute sit-to-stand test with the 6-minutes walk test for the evaluation of the functional status of post-COVID-19 patients** Maria Marta De Sampaio Nunes Duarte Silva (Estoril, Portugal), Pedro Fiuza, Neuza Reis , Miguel Toscano Rico
OA2329	**Phenotyping dyspnea in patients suffering from post-COVID syndrome** Enrico Buonamico (Bari (BA), Italy), Andrea Portacci, Fabrizio Diaferia, Paola Pierucci, Giuseppe Di Gioia, Cristian Locorotondo, Sara Quaranta, Ilaria Iorillo, Alessandro Capuano, Giovanna Elisiana Carpagnano
OA2330	**Late Breaking Abstract - Efficacy of Breathoxdevice inhalation on acute symptoms associated with COVID-19 (BREATH study)** Suzana Erico Tanni (Botucatu (SP), Brazil), Robson Prudente, Marina Okoshi, Felipe Damatto, Fernando Wehrmeister, Leiliane Oliveira, Carlos Breda Neto, Luana Pagan, Mariana Gatto, Letícia Vieira, Liana Coelho, Diane Rezende, Luiz Machado, Gustavo Mota, Marina Gaiato, Felipe Santaella, Elisangela Campos, Lize Hosoume, Estefânia Franco, Ulla Weinreich
OA2331	**Discussion** All Speakers

13:00-14:00
INDUSTRY VIRTUAL SYMPOSIUM

SEE PAGE 1

13:00-14:00
INDUSTRY LUNCHTIME SYMPOSIUM

SEE PAGE 1

TP-1 in thematic poster area — Session 293 — 13:00 - 14:00

Thematic poster: Clinical problems in respiratory medicine: 2

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

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

Chairs : Margarida Afonso (Castelo Branco, Portugal), Afroditi Boutou (Thessaloniki, Greece)

PA2365	**Does preexisting immuncompromised status prevent mortality in COVID-19 patients: friend or foe?** Duygu Vezir (İSTANBUL, Turkey), Şehnaz Olgun Yıldızeli, Derya Kocakaya, Zeynep Mercancı, Baran Balcan, Caner Çınar, Emel Eryüksel, Sait Karakurt

PA2366	**Clinical effectiveness of 13-valent and 23-valent pneumococcal vaccination among adults with immunocompromising conditions.** cinta de diego cabanes (tarragona, Spain), Eva Satué-Gracia, Angel Vila-Rovira, Clara Rodríguez-Casado, Olga Ochoa-Gondar, Angel Vila-Córcoles
PA2367	**Lung manifestation of Common variable immunodeficiency – the results from the nationwide multicenter study** Tomas Milota (Prague, Czech Republic)
PA2368	**Chemotherapy-induced anemia: What are predictive factors in lung cancer?** Darine Sakka (sfax, Tunisia), Nesrine Kallel, Rim Khemakhem, Ilhem Yangui, Hajer Ayedi, Sami Kammoun
PA2369	**Phenotypic features of >300 suspected severe asthma attacks** Mouaid Aljehani (Nottingham, United Kingdom), Tim Harrison, Matthew Martin
PA2370	**Information and Counselling Offered to Women of Childbearing Age, When Starting Biological Therapy for Severe Asthma Across the UK.** Susan Frost (Birmingham (West Midlands), United Kingdom), Ann Mcmurray, Prasad Nagakumar
PA2371	**The effect of fatigue in patients with acute exacerbation of COPD:A prospective cohort study.** Ziyan Fang (ANHUI, China), Ziyan Fang, Xueer Li, Xuening Yang, Jing Liu
PA2372	**Hypersensitivity pneumonitis: clinical and radiological profile** Soukaina Hallouli (CASABLANCA, Morocco), Meryem Zadi, Hajar Arfaoui, Hasna Jabri, Wiam Elkhattabi, Hicham Afif
PA2373	**What goes bump in the night? An analysis of unplanned contacts to a Regional UK Children's Long Term Ventilation team** Elizabeth Queen (Nottingham, United Kingdom), Elisabeth Queen, Rachel Gregory, Adele Frost, Nicky Mcnarry, Hannah Borrill, Andrew Prayle, Matthew Hurley
PA2374	**Sociodemographic and clinical characteristics of patients with asthma who were prescribed ≥3 SABA canisters/year in the SABINA International study** Ashraf Alzaabi (Abu Dhabi, United Arab Emirates), Walter Javier Mattarucco, Rocio Martina Barriga, Hao-Chien Wang, Dina Diaz, Adel Khattab, Manuel Pacheco Gallego, Hisham Farouk, David Price
PA2375	**Pulmonary function, muscular strength and quality of life according to mechanical ventilation use in post-Covid patients** Diane Rezende Batista (Botucatu (SP), Brazil), Rodrigo Barcellos, Robson Prudente, Bruno Lima, Vitor Nishiyama, Estefânia Franco, Luiz Henrique Machado, Luis Fernando Brizola, Maércio Santos, Edris Savadkouhi, Camila Colombo, Suzana Ruiz, André Albuquerque, Eloara Machado Ferreira, Suzana Tanni
PA2376	**Home initiation of Long Term Ventilation in children and young people, UK Regional service experience.** Meera Kumar (Nottingham, United Kingdom), Hannah Borrill, Adele Frost, Rachel Gregory, Nicky Mcnarry, Andrew Prayle, David Thomas, Matthew Hurley
PA2377	**Effects of Salbutamol upon lung ventilation, hemodynamics and oxygen transport by arterial blood in chronic obstructive pulmonary disease (COPD)** Valentin Calancea (Chisinau, Codru, Republic of Moldova), Eudochia Terna, Constantin Martiniuc, Svetlana Eremciuc, Ion Sirbu, Elena Calancea, Constantin Matcovschi, Sergiu Matcovschi
PA2378	**Birch pollen-induced seasonal allergic rhinitis and bronchial asthma: implication for allergen-specific immunotherapy in adults.** Jiri Nevrlka (Brno, Czech Republic), Iveta Selingerova, Zlatica Nevrlkova, Katarina Ditetova, Lenka Zdrazilova-Dubska
PA2379	**Assessment of the relationship between cognitive functions and inhaler device compliance in elderly COPD patients** Oğuz Karcioğlu (Ankara, Turkey), Mert Eşme, Sevinç Sarınç Ulaşlı, Burcu Balam Doğu
PA2380	**Analysis of Characteristics and Outcomes of 223 Patients Admitted to Our Unit due to Respiratory Insufficiency Secondary to Pneumonia from SARS-COV2.** Marialma Berlendis (Chiari (BS), Italy), Alberto Valsecchi, Nicola Venturoli, Sabrina Arondi, Giovanni Vitrone, Paola Sinigaglia, Maroon Salameh, Denise Modina, Paolo Ceruti, Giampietro Marchetti
PA2381	**Provision of home high flow therapy is feasible and associated with positive patient experience and reduced admissions** Chris Carlin (Glasgow (Glasgow), United Kingdom), Anna Taylor, Maureen Manthe, Grace Mcdowell, David Lowe
PA2382	**Efficacy estimation of filter pads in expiratory filter/valve sets by means of Tc-99m-labeled graphite aerosol** Hubertus Hautzel (Essen, Germany), Timo Bartel, Kaid Darwiche, Clemens Aigner, Christian Taube, Ken Herrmann

PA2383	**Evolution of the Use of Noninvasive Mechanical Ventilation in Chronic Obstructive Pulmonary disease** Leila Douik El Gharbi (Ariana, Tunisia), Imen Sahnoun, Tasnim Znegui, Ines Moussa, Imen Nouira, Salma Mkaddem, Asma Allouch, Ksouti Chiraz, Mouhamed Rafik Guerfallah, Saloua Jameleddine, Leila Douik Elgharbi
PA2384	**Risk stratified physician associate asthma review** Sonika Jalota (Liverpool, United Kingdom), Sophie Wotherspoon, Hassan Argomandkhah, Shauna Johnston, Joanne Halewood, Sarah Sibley, Hassan Burhan

TP-10 in thematic poster area — Session 294 — 13:00 - 14:00

Thematic poster: Asthma biologics in real life studies

Disease(s) : Airway diseases

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

Chairs : Francisco Javier Salgado Castro (Santiago De Compostela, Spain), Chair to be confirmed

PA2385	**Inter-observer agreement on biological treatment decision for severe asthma.** Andreanne Cote (Quebec, Canada), Marie-Eve Boulay, Rosalie Beaulé, Louis-Philippe Boulet, Krystelle Godbout, David Price
PA2386	**A single-centre retrospective review of asthma and pregnancy outcomes after exposure to monoclonal antibody therapy for severe asthma** Hannah Joplin (Liverpool (Merseyside), United Kingdom), Amy G Nuttall, Seher Zaidi, Gareth Jones, Livingstone Chishimba, Hassan Burhan
PA2387	**Perceptions on home-administration of biologics in severe asthma: an international qualitative study.** Bertine Flokstra - De Blok (Groningen, Netherlands), Janwillem Kocks, Hans Wouters, Chantal Arling, Josh Chatelier, Jo Douglass, Liam Heaney, Joshua Holmes, Marc Humbert, Mary Kolanowski, Jeanet Landsman, Njira Lugogo, Alice Malpass, Jiska Meijer, Boyd Metz, Bibicha De Mul, Frank Postma, Marika Leving
PA2388	**Real-world effectiveness of anti-IL-5/5R therapy in severe eosinophilic asthma with comorbid bronchiectasis** Sarah Bendien (Den Haag, Netherlands), Hans Kroes, Anke-Hilse Maitland- Van Der Zee, Anneke Ten Brinke
PA2389	**RELIght: A two-year REal-LIfe study of mepolizumab in patients with severe eosinophilic asTHma in Greece: evaluating the multiple components of response** Maria Kallieri (Aspropyrgos, Greece), Eleftherios Zervas, Evangelia Fouka, Konstantinos Porpodis, Marija Hadji Mitrova, Eleni Tzortzaki, Michael Makris, Maria Ntakoula, Andriana I. Papaioannou, 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
PA2390	**Real-world effectiveness (RWE) of dupilumab in reducing healthcare resource utilization among moderate-to-severe asthma patients** Ajinkya Pawar (Cambridge, United States), Michael S. Blaiss, Brian D. Modena, Asif H. Khan, Lucia De Prado Gómez, Yi Zhang, Shahid Siddiqui, Juby A. Jacob-Nara
PA2391	**Real-life experience with biologic therapies in severe uncontrolled asthma** Marina Saad (Cesano Boscone, Italy), Francesca Mandurino Mirizzi, Giuseppe Fuccia, Alessandro Zuffi, Eleonora Maratta, Lisa Milani, Juan Camilo Signorello, Dejan Radovanovic, Pierachille Santus
PA2392	**Biologic therapies could prevent lung function decline in severe asthma: a 3 years real life observational study** Nicolas Bougard (Liège, Belgium), Florence Schleich, Sophie Graff, Anne-Noel Frix, Virginie Paulus, Françoise Guissard, Renaud Louis
PA2393	**The experience of dual biologic therapy in patients with eosinophilic asthma and autoimmune diseases** Andreas M. Matthaiou (Heraklion, Greece), Nikoleta Bizymi, Leo Ettronier, Eleni Bibaki, Jacques Morel, Nikolaos Tzanakis, Arnaud Bourdin, Katerina Antoniou
PA2394	**Impact of co-existing chronic rhinosinusitis on the effect of biological therapy in severe asthma - Danish nationwide cohort study** Joachim Bruun (København N, Denmark), Susanne Hansen, Christel Lajer, Truls Sylvan Ingebrigtsen, Charlotte Suppli Ulrik, Anne-Sofie Bjerrum, Anna Von Bülow, Claus Johnsen, Ole Hilberg, Sofie Lock Johansson, Karin Dahl Assing, Linda Rasmussen, Kjell Håkansson, Johannes Schmid, Marianne Søndergaard, Lycely Dongo, Celeste Porsbjerg
PA2395	**Severe asthma in obese patients: what to expect with Mepolizumab?** Ana Da Cunha Fonseca (Vila Nova de Gaia, Portugal), Daniela Machado, Ivone Pascoal, Inês Franco, Ricardo Lima

PA2396 **Decision outcomes following referral to a tertiary severe asthma service for MAb therapy.**
Amy Nuttall (Liverpool, United Kingdom), Hannah Joplin, Catherine Lowe, Gareth Jones, Seher Zaidi, Hassan Burhan, Livingstone Chishimba

PA2397 **Heterogeneity in the use of biologics for severe asthma in Europe: a SHARP ERS study**
Anne-Noëlle Frix (Liege, Belgium), Liam G Heaney, Barbro Dahlén, Florin Mihaltan, Svetlana Sergejeva, Daniel Doberer, Sanja Popović-Grle, Vratislav Sedlak, Lauri Lehtimäki, Arnaud Bourdin, Stephanie Korn, Eleftherios Zervas, Zsuzsanna Csoma, Dora Lúðvíksdóttir, Marcus Butler, Giorgio Walter Canonica, Ineta Grisle, Kristina Bieksiene, Anneke Ten Brinke, Piotr Kuna, Claudia Chaves Loureiro, Natalia Nenasheva, Zorica Lazic, Sabina Škrgat, David Ramos-Barbon, Joerg Leuppi, Bilun Gemicioglu, Apostolos Bossios, Celeste M Porsbjerg, Elisabeth H Bel, Ratko Djukanovic, Renaud Louis

PA2398 **Real life benralizumab effectiveness in patients with severe eosinophilic asthma after a 24 month observation**
Giulia Lo Muzio (Roma, Italy), Olimpia Calò, Cecilia Cisternino, Paola Scarano, Arianna Sanna, Francesca De Filippis, Alessia Steffanina, Maria Teresa Leporini, Paolo Palange, Elda Graziani

PA2399 **Impact of biological therapies in lung function in patients with severe asthma**
Antonio Menéndez (Granada, Spain), Susana Rojo-Tolosa, Jose Antonio Sánchez-Martínez, Cristina Pérez-Ramírez, Gonzalo Jiménez-Gálvez, Alberto Jiménez-Morales, Concepción Morales-García

PA2400 **Burden of severe asthma by biologic use and eligibility: an analysis of the International Severe Asthma Registry**
Trung Tran (Gaithersburg, United States), Tham Le, Clement Erhard, David Price, Ekaterina Maslova, Bill Cook, Anna Quinton, Rohit Katial, George C Christoff, Luis Perez-De-Llano, Victoria Carter, Trung N Tran

PA2401 **Therapeutic approach with mepolizumab (anti-IL-5) in a series of patients with eosinophilic granulomatosis with polyangiitis**
Nikoleta Bizymi (Heraklion Crete, Greece), Andreas M. Matthaiou, Georgios Stathakis, Styliani Viziriannaki, Eleni Bibaki, Nikolaos Tzanakis, Katerina Antoniou

PA2402 **Real-world effectiveness of reslizumab in patients with severe eosinophilic asthma – "first initiators" and "switchers"**
Simone Hashimoto (Amsterdam, Netherlands), Johannes A Kroes, Katrien Eger, Pearl Mau-Asam, Hendrik B Hofstee, Sarah A Bendien, Gert-Jan Braunstahl, Marielle E.A.C Broeders, Leonie M Imming, Bas Langeveld, Anke H. Maitland-Van Der Zee , Karen T.M Oud, Kornelis Wiebe Patberg, Frank W.J.M Smeenk, Elisabeth A.P. Romme, Maarten J Van Bezouw, Marjo J.T. Van De Ven , Anneke Van Veen , Edwin Van Velzen , Ilonka H.P.A.A Van Veen , Els J.M Weersink, Anneke Ten Brinke , Jacob K Sont, Elisabeth H Bel, R. A. P. S. O. D. I Team

PA2403 **Mepolizumab therapy in severe asthma – a study of long term efficacy and safety**
Christopher Reilly (Birmingham, United Kingdom), Rajarajan Anandavelu, Julie Marsh, Julie Sullivan, Fiona O'Riordran, Sarah Cotterill, Lisa White, Adel Mansur

PA2404 **Dupilumab leads to sustained improvement of asthma control in real-life severe asthmatics.**
Andreas Renner (Wien, Austria), Katharina Marth, Karin Patocka, Marco Idzko, Wolfgang Pohl

TP-11 in thematic poster area — Session 295 — 13:00 - 14:00

Thematic poster: Chronic airway diseases and infections: management and prevalence

Disease(s) : Airway diseases

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

Chairs : Lies Lahousse (Ghent, Belgium), Hannu Kankaanranta (Seinäjoki, Finland)

PA2405 **"Smart" inhalers: is there a role in the management of severe asthma?**
Yee Yong See (Scarborough, United Kingdom), Evon Chee Yin Chow, Michael Crooks, Mandy Robinson, Karen Watkins, Francesca Turner, Joanne Thompson, Shoaib Faruqi

PA2406 **Utility of "smart" inhaler and suppression of fractional exhaled nitric oxide (FeNO): does it make a difference to patient outcomes?**
Evon Chee Yin Chow (Hull, United Kingdom), Yee Yong See, Michael Crooks, Mandy Robinson, Karen Watkins, Francesca Turner, Joanne Thompson, Shoaib Faruqi

PA2407 **Dry powder inhaler (DPI) resistance: human behaviour and psychology of patient inspiratory effort**
Monbi Chakma (London, United Kingdom), Sally Meah , Martyn Biddiscombe, Darragh Murnane, Omar Usmani

PA2408 **Dry Powder Inhalers (DPIs) vs Metered Dose Inhaler (MDI) with valved spacer: Using Functional Respiratory Imaging (FRI) to assess modelled lung deposition in a COPD patient**
Jason Suggett (London (ON), Canada), Vlad Kushnarev, Hosein Sadafi

PA2409 **Cardiovascular system side-effects of salbutamol: A systematic review and meta-analysis**
Xuan Li (Shenzhen, China), Lanhong Ma, Li Jia, Canghong Zhi, Honglin Li, Ling Bai

PA2410	**Safety profile of triple ICS/LABA/LAMA FDC in the treatment of asthma: a meta-analysis** Luigino Calzetta (Roma (RM), Italy), Francesco Cavalli, Alfredo Chetta, Mario Cazzola, Paola Rogliani
PA2411	**Association of Short-Acting-β-2 Agonist (SABA) Overuse and Risk of COPD among Adult Asthma Patients** Michael Asamoah-Boaheng (St John's, Canada), Jamie Farrell, Kwadwo Osei Bonsu, William K Midodzi
PA2412	**Improvement of asthma control after 3 months of treatment with extrafine single-inhaler triple therapy in asthmatics: a real-world view from Germany** Timm Greulich (Marburg, Germany), Berktan Akyildiz, Renata Slawinska, Andreas Wendt, Valentina Bogoevska, Christian Gessner
PA2413	**Improvement of treatment adherence after 3 months of treatment with extrafine single-inhaler triple therapy in asthmatics: a real-world view from Germany** Christian Gessner (Leipzig, Germany), Berktan Akyildiz, Veronika Grickschat, Tanja Borucki, Frederik Trinkmann
PA2414	**Dose delivery characteristics and lung deposition of indacaterol/glycopyrronium/mometasone furoate (IND/GLY/MF) and IND/MF via Breezhaler device: An Alberta Idealised Throat (AIT) evaluation** Xavier Jaumont (La Madeleine, France), Jürgen Jauernig, Katrin Fiebich, Dilraj Singh, Karen Mezzi
PA2415	**Inhaled Corticosteroids in Patients with Chronic Obstructive Pulmonary Disease and Risk of Acquiring Streptococcus Pneumoniae Infection. A Multiregional Epidemiological study** Christian Kjer Heerfordt (Hellerup, Denmark), Josefin Eklöf , Pradeesh Sivapalan , Truls Sylvan Ingebrigtsen , Tor Biering-Sørensen , Zitta Barrella Harboe, Jesper Koefod Petersen, Christian Østergaard Andersen , Jonas Bredtoft Boel , Anne Katrine Bock, Alexander G. Mathioudakis , John R. Hurst, Shailesh Kolekar, Sofie Lock Johansson , Jette Marie Bangsborg, Jens Otto Jarløv, Ram Dessau , Christian Borbjerg Laursen , Michael Perch , Jens-Ulrik Stæhr Jensen
PA2416	**Disease burden and treatment patterns among patients with asthma on GINA 4/5 therapies in China** Victoria S. Benson (Uxbridge (Middlesex), United Kingdom), Ge Liu, Adam Haq, Mark Small, James Siddall, Rafael Alfonso-Cristancho, Anna Richards
PA2417	**Disease burden and treatment patterns among patients with asthma in China** Victoria S. Benson (Uxbridge (Middlesex), United Kingdom), James Siddall, Ge Liu, Anna Richards, Adam Haq, Rafael Alfonso-Cristancho, Mark Small
PA2418	**A randomised controlled trial of the effects of a total diet replacement programme in uncontrolled asthma associated with obesity** Varun Sharma (Glasgow, United Kingdom), Helen C Ricketts, Lousie Mccombie, Naomi Brosnahan, Luisa Crawford, Lesley Slaughter, Anna Goodfellow, Femke Steffensen, Rekha Chaudri, Michael Ej Lean, Douglas C Cowan
PA2419	**Two-month treatment with Zataria multiflora affected inflammatory cytokines, pulmonary function testes and respiratory symptoms in patients with chronic obstructive pulmonary disease (COPD)** Mohammad Hossein Boskabady (Mashhad, Islamic Republic of Iran), Vahideh Ghorani, Mohammad Reza Khazdair, Majid Mirsadraee, Omid Rajabi
PA2420	**The availability, cost and affordability of essential medicines for asthma and COPD in low- and middle-income countries: A systematic review** Marie Stolbrink (Liverpool (Merseyside), United Kingdom), Helen Thomson, Ruth M. Hadfield, Obianju B. Ozoh, Rebecca Nantanda, Shamanthi Jayasooria, Brian Allwood, David M.G. Halpin, Sundeep Salvi, Maria Montes De Oca, Kevin Mortimer*, Sarah Rylance*
PA2421	**Characterization of a Colombian cohort of high-risk phenotypes of COPD according to GesEPOC 2021** Carlos Andrés Celis Preciado (Bogotá (Cundinamarca), Colombia), Olga Milena García Morales, Alejandra Cañas Arboleda, Fanny Paola Rodriguez Torres, Javier Leonardo Galindo Pedraza, Juan Pablo Alzate Granados
PA2422	**Physical activity, sedentary behaviour and sleep of Sri Lankan adults living with COPD: cross-sectional study** Akila Randika Jayamaha (Colombo, Sri Lanka), Chamilya Perera, Ilaria Pina, Thamara Amarasekara, Anthony Seneviratne, Ravini Karunatillake, Amitha Fernando, Andy Barton, Michael Steiner, Savithri Wimalasekera, Sally Singh, Mark Orme
PA2423	**EDAC PREVALENCE AND ASSOCIATED FACTORS IN PATIENTS WITH SEVERE BRONCHIAL ASTHMA** Isabel Alfaya Fiaño (barcelona, Spain), Alan Jhunior Solis Solis, Felipe Andreo Garcia, Pere Serra Mitja, Astrid Crespo Lessmann, Alfons Torrego Fernández, David Ramos Barbón, Toni Zapata Comas, Ignasi Garcia Olivé, Vicente Plaza Moral, Antoni Rosell Gratacós, Jorge Abad Capa, Carlos Martínez Rivera
PA2424	**Asthma patients discharged from the emergency department in Ireland: an unmet need?** Cameron Forward (Galway, Ireland), Rory O'Loghlin, Helen Mulryan, Donna Langan, Michael Harrison, Robert Rutherford, Ruth Cusack

TP-12 in thematic poster area — Session 296 — 13:00 - 14:00

Thematic poster: Alpha-1 antitrypsin deficiency and chronic airway obstructive diseases

Disease(s) : Airway diseases Thoracic oncology

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

Chairs : Alice Turner (Birmingham (West Midlands), United Kingdom), Kenneth R. Chapman (Toronto (ON), Canada)

PA2425	**Prevalence of cardiovascular disease in alpha-1 antrypsin deficiency** Paul Ellis (Solihull, United Kingdom), Emily Bailey, Alice Turner
PA2426	**Alpha-1 antitrypsin deficiency associates with asthma exacerbations** Elena Martín González (La Laguna, Spain), José M. Hernández-Pérez, Mario González-Carracedo, Javier Pérez-García, Ruperto González-Pérez, Elena Mederos-Luis, Inmaculada Sánchez-Machín, Paloma Poza-Guedes, María Jesús Cruz, Francisco Javier González-Barcala, Carlos Martínez-Rivera, Joaquim Mullol, Xavier Muñoz, José María Olaguibel, Vicente Plaza, Santiago Quirce , Antonio Valero, Joaquín Sastre, Victoria Del Pozo, Jesús Villar, José A. Pérez, María Pino-Yanes
PA2427	**The effect of SERPINA1 mutations on α1-antitrypsin levels in COPD** Csilla Páska (Budapest, Hungary), Imre Barta, Anita Kecskés, Anna Kerpel-Fronius, Diána Solymosi, Balázs Antus
PA2428	**Association between α1-antitrypsin deficiency and its clinical manifestations – an observational study in a Portuguese cohort** Maria João Silva (Torres Novas, Portugal), Diana Amorim, Maria João Canotilho, Savato Feijó
PA2429	**Longitudinal follow-up in adults with severe alpha-1 antitrypsin deficiency (Pi*ZZ genotype): non-invasive fibrosis tests predict liver-related endpoints** Malin Fromme (Aachen, Germany), Samira Amzou, Barbara Burbaum, Philipp Striedl, Mattias Mandorfer, Monica Pons, Joan Genesca, Marc Miravitlles, Elmar Aigner, Christian Trautwein, Pavel Strnad
PA2430	**The effect of alpha-1 antitrypsin (AAT) augmentation therapy on the liver phenotype in individuals with homozygous Pi*Z AAT mutation (genotype Pi*ZZ)** Malin Fromme (Aachen, Germany), Karim Hamesch, Carolin V. Schneider, Mattias Mandorfer, Katrine Holtz-Thorhauge, Vitor Pereira, Monica Pons, Matthias C. Reichert, Samira Amzou, Robert Bals, Rembert Koczulla, Marc Miravitlles, Sabina Janciauskiene, Joan Genesca, Federica Benini, Joanna Chorostowska-Wynimko, William J. Griffiths, Elmar Aigner, Alexander Teumer, Michael Trauner, Aleksander Krag, Christian Trautwein, Pavel Strnad
PA2431	**A1-ANTITRYPSIN DEFICIENCY IN GREEKS: FOCUS ON RARE VARIANTS** Effrosyni D. Manali (Athens, Greece), Spyros Papiris, Martina Veith , Andriana I Papaioannou, Vasiliki Apollonatou , Ilaria Ferrarotti, Stefania Ottaviani, Argyrios Tzouvelekis, Vasilios Tzilas, Nikoletta Rovina, Grigorios Stratakos, Irini Gerogianni, Zoe Daniil, Lykourgos Kolilekas, Aimilia Tsaroucha, Katerina Dimakou, Georgios Pitsidianakis, Nikolaos Tzanakis, Stavros Tryfon, Ilias Papanikolaou , Michael Kitrou, Aggeliki Haritou, Frangiskos Fragopoulos, Elvira-Markela Antonogiannaki , Aggeliki Lazaratou, Zafeirios Sardelis, Eleni Stagaki, Gerasimos Apollonatos, Evangelia Fouka, Despoina Papakosta, Maria Tsiamita, Panagiota Loukopoulou, David Tsoukas, Stamatia Markou, Panagiotis Mavroudis, Phillip Emmanouil, Nektarios Anagnostopoulos, Theodoros Karampitsakos, Ioanna Korbila, Katerina Vlami, Galateia Verykokou, Maria Kallieri, Georgia Papadaki, Maria Maniati, Konstantinos Kagouridis, Panagiotis Lyberopoulos, Konstantinos Douros, Smaragdi Fessatou, Ino Kanavaki , Vassiliki Papaevangelou, Iraklis Tsangaris, Nikolaos Koulouris, Stylianos Loukides, Demosthenes Bouros, Malika Balduyck, Christine Lombard, Vincent Cottin, Jean-François Mornex, Claus Franz Vogelmeier, Timm Greulich
PA2432	**Familiarity and use of ERN-LUNG centres for the management of Alpha 1 Antitrypsin Deficiency** Joanna Chorostowska-Wynimko (Warsaw, Poland), A. Rembert Koczulla, Maria Sucena
PA2433	**Association between lung disease severity and cardiovascular event risk in alpha-1 antitrypsin deficiency** Daniella Spittle (Birmingham, United Kingdom), Anita Pye, Paul Ellis, Alice Turner
PA2434	**Heterozygous alpha 1 antitrypsin mutations (HA1AT) and lung cancer (LC) in a chronic obstructive pulmonary disease (COPD) population.** Alfredo Marín Muñiz (Castelldefels, Spain), Lidia Méndez Mangas, Montserrat Navarro Rodríguez, Javier Burgos Lozano, Isabel Brao Pérez, Mónica Arellano Vengoechea, Marta López Sánchez, Susana Padrones Sánchez, Samantha Aso González, Salud Santos Pérez
PA2435	**Diagnosing Alpha 1 Antitrypsin Deficiency in Europe – insights from a European survey** Maria Campos Miranda Duarte Sucena (Porto, Portugal), A. Rembert Koczulla, Joanna Chorostowska-Wynimko
PA2436	**Clinical features of a severe asthma population eligible for biologics: a real life study** Sonia Garino (Leini, Italy), Elisa Riccardi, Andrea Sprio, Fabiana Giannoccaro, Andrea Baroso, Stefano Pizzimenti, Fabio Luigi Massimo Ricciardolo

PA2437 **Predictors of fixed airflow obstruction (FAO) in patients with severe asthma (SA) in the Wessex Severe Asthma Cohort (WSAC)**
Vipula Bataduwaarachchi (Portsmouth, United Kingdom), Thomas Brown , Laura Wiffen , Thomas Jones, Clare Barber , Peter Howarth , Anoop Chauhan

PA2438 **Characteristics of patients and exacerbations in the ongoing Asthma: Phenotyping Exacerbations (APEX) studies.**
Ashish Pradhan (Nottingham, United Kingdom), Robert Needham, Karen Shaw, Matthew Martin, Micheal Portelli, Ian Sayers, Tim Harrison

PA2439 **Infectious exacerbation of asthma**
Salma Msika (casablanca, Morocco), Hajar Arfaoui, Hasna Jabri, Wiam El Khattabi, Hicham Afif

PA2440 **Clinical features of asthmatics with high serum total IgE**
Martina Sciolla (Torino, Italy), Andrea Sprio, Andrea Baroso, Giulia Orpheu, Chiara La Sala, Antonino Di Stefano, Fabio Luigi Massimo Ricciardolo

PA2441 **Small airway dysfunction assesed by forced oscillation technique**
Priyanka Singh (New Delhi, India), Nitin Ahuja, Aseem Yadav, Saurabh Tiwari

PA2442 **How consistent are blood eosinophil counts in a general population?**
Sylvia Hartl (Wien, Austria), Marie Kathrin Breyer, Otto Burghuber, Caspar Schiffers, Patricia Puchhammer, Alina Ofenheimer, Robab Breyer-Kohansal

PA2443 **Late Breaking Abstract - Developing a point of care (POC) breath test to accurately predict asthma exacerbations**
Victor Higgs (London, United Kingdom), Hanya Ahmed, Jona Angelica Flavier, Farida Hegarzy

PA2444 **Late Breaking Abstract - Clinical differences between male and female SEO-COPD patients**
Tessa Kole (Groningen, Netherlands), Jorine Hartman, Dirk-Jan Slebos, Maarten Van Den Berge

TP-13 in thematic poster area — Session 297 — 13:00 - 14:00

Thematic poster: Diagnosis, prevention and management of infectious respiratory diseases

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

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

Chairs : Barbara Bonnesen Bertelsen (Hellerup, Denmark), Hye Yun Park (Seoul, Republic of Korea)

PA2446 **Predictors of severe COVID-19 among patients with uncontrolled asthma: a register- based study**
Stina Selberg (Luleå, Sweden), Johanna Karlsson Sundbaum, Jon R. Konradsen, Helena Backman, Linnea Hedman, Anne Lindberg, Caroline Stridsman

PA2447 **Symptoms persisting after hospitalization for COVID-19: 12 months interim results of the CO-FLOW study**
L. Martine Bek (Maassluis, Netherlands), J.C. Berentschot, M.H. Heijenbrok-Kal, G.M. Ribbers, J.G.J.V. Aerts, R Van Den Berg-Emons, M.H. Hellemons

PA2448 **COVID-19 infection in children through lung radiographic imaging changes**
Oxana Munteanu (Chișinău (Chișinău), Republic of Moldova), Ana Goloborodico, Rodica Selevestru, Diana Rotaru-Cojocari, Corina Conica, Svetlana Sciuca

PA2449 **A fast point-of-care PCR test for infectious diseases, based on aerosol capturing.**
Bert Verbruggen (Leuven, Belgium), Joren Raymenants, Tim Stakenborg, Filip Paeps, Elisabeth Marchal, Alejandra Jauregui Uribe, Wout Duthoo, Andrey Kossarev, Tho Dam, Youssef El Jerrari, Rodrigo Sergio Wiederkehr, Zhenxiang Luo, Marco Peca, Luis Mcrea, Aduen Darriba Frederiks, Abdulkadir Yurt, Koen Ongena, Rabea Hanifa, Joost Van Duppen, Soumia El Mahmoudi, Mehdi Humbert, Erik Emmen, Ben Jones, Ahmed Taher, Andy Lambrechts, Emmanuel André, Peter Peumans

PA2450 **Covid-19 in children: disease spectrum and risk factors**
Enrica Mancino (Roma (RM), Italy), Raffaella Nenna, Greta Di Mattia, Luigi Matera, Laura Petrarca, Maria Giulia Conti, Antonella Frassanito, Domenico Paolo La Regina, Elio Iovine, Virgili Fabrizio, Mattia Spatuzzo, Sara Ialongo, Flaminia Bonci, Fabio Midulla

PA2451 **One-year dynamics of antibody titers after three doses of SARS-CoV-2 BNT162b2 vaccine**
Anna Breslavsky (Rishon LeTsiyon (Center District), Israel), Amir Bar-Shai, Natalya Bilenko, Ori Wand

PA2452	**Acute Lower Respiratory Tract Disease (aLRTD) is a complex clinical syndrome causing significant disease burden in a prospective cohort study** Catherine Hyams (Bristol, United Kingdom), Elizabeth Begier, Jo Southern, Jade King, Anna Morley, Zsuzsa Szasz-Benczur , Maria Garcia Gonzalez, Jane Kinney, James Campling, Sharon Gray, Jennifer Oliver, Robin Hubler, Srinivas Valluri, Andrew Vyse, Gillian Ellsbury, John Mclaughlin, Bradford D Gessner, Adam Finn
PA2453	**Trends in influenza vaccination rates in subjects with airflow limitation: The Korean National Health and Nutrition Examination Survey (KNHANES) 2007–2018** Yong Suk Jo (Seoul, Republic of Korea), Hyun Lee, Hayoung Choi
PA2454	**Standardized 3- and 12-months imaging and clinical-functional pulmonary follow-up in patients hospitalized for COVID-19** DAVIDE CHIMERA (Pisa, Italy), Francesco Pistelli, Laura Tavanti, Giovanna Manfredini, Chiara Romei, Annalisa De Liperi, Ferruccio Aquilini, Micol Micheli, Alessandro Celi, Roberta Pancani, Massimiliano Desideri, Nicoletta Carpenè, Luciano Gabbrielli, Laura Carrozzi
PA2455	**Correlation between post-vaccination titres of anti-Spike antibodies and protection against breakthrough SARS-CoV-2 infection in 7530 UK adults** Giulia Vivaldi (Romford, United Kingdom), David A. Jolliffe, Sian Faustini, Hayley Holt, Mohammad Talaei, Florence Tydeman, Alex G. Richter, Seif O. Shaheen, Adrian R. Martineau
PA2456	**One-year physical recovery in patients admitted to ICU and ward for COVID-19** Julia Berentschot (Rotterdam, Netherlands), Majanka Heijenbrok-Kal, Martine Bek, Gerard Ribbers, Joachim Aerts, Rita Van Den Berg-Emons, Merel Hellemons
PA2457	**Trends on pneumococcal and all-cause pneumonia incidence in Catalonian adults after universal PCV13 implementation in children.** cinta de diego cabanes (tarragona, Spain), Angel Vila-Córcoles, Eva Satué-Gracia, Olga Ochoa-Gondar, Angel Vila-Rovira, Domingo Ribas-Seguí
PA2458	**Post COVID syndrome in health care workers in Tunisia: is there any correlation withSARS-CoV-2 IgG level?** Ons Grissa (Tunis, Tunisia), Amani Dallagi, A Benzarti, Meriem Mjid, safa marzouki, Maya Zribi, Mnel Battikh, Imen Ismail, Nawel Khouja, Janet Hssinet, Mm Sallemi, Lam Laadhar, Besma Dhahri, Abir Ben Jemaa
PA2459	**Epidemiology analysis of bacterial co-infections in SARS-CoV-2 community-acquired pneumonia (CAP)** Alina V. Martynova (Kiev, Ukraine), Olga S Pavlova, Svetlana Uskova
PA2460	**Respiratory Outcomes in COVID-19 patients 3-6 months after admission to Public Health Hospital Maciel. Montevideo, Uruguay. A Follow up Cohort Study.** Jimena Nuñez Artigas (Montevideo, Uruguay), Monica Mamchur, Cecilia Chao, Cecilia Rodriguez Flores, Edilberto Pacheco, Analia Tempone, Karen Rabuñal, Carolina Silva, Fernando Gimenez, Ana Ines Gruss, Cecilia Acosta, Victoria Iraola, Maria Victorina Lopez Varela
PA2461	**Recurrent community-acquired pneumonia hospitalizations: Characteristics description in a 9-year follow-up period** Ezequiel Pessoa (Lisbon, Portugal), Cristina Bárbara, Andreia Costa, Paulo Jorge Nogueira
PA2462	**Prospective cohort study of adults hospitalised with acute COPD exacerbations: SARS-CoV-2-associated patient characteristics and clinical outcomes** Catherine Hyams (Bristol, United Kingdom), George Nava, Elizabeth Begier, Jo Southern, Jade King, David Adegbite, Leah Fleming, Jennifer Oliver, Jennifer L Nguyen, Bradford D Gessner, John M Mclaughlin, Adam Finn, James Dodd
PA2463	**Morbidity and mortality associated with COVID-19 patients from Luanda, Angola** Margarete Lopes Teixeira Arrais (Luanda, Angola), Welwitschia Dias, Maura Silva, Luquenia Neto, Naiol Pedro, Sónia Jungo, Avelina Miguel, Elsa Fortes-Gabriel, Cruz S. Sebastião, Jorge M.R. Gama, Miguel Brito
PA2464	**Impact of the COVID-19 pandemic on Swedish asthma and COPD care** Caroline Stridsman (Luleå, Sweden), Jon R Konradsen, Bill Hesselmar, Anne Lindberg, Lowie E.G.W Vanfleteren

TP-14 in thematic poster area — Session 298 — 13:00 - 14:00

Thematic poster: Environment and air pollution

Disease(s) : Airway diseases

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

Chairs : Christopher Carlsten (Vancouver (BC), Canada), Mª Jesus Cruz Carmona (Barcelona, Spain)

PA2465	**Air pollution and disease in a population living in a small city in Brazil** Marilyn Urrutia Pereira (Uruguaiana (RS), Brazil), Lucas Pitrez Mocellin, Veronica Riquelme Martinez, Paulo Oliveira Lima, Laiza Marques Baida, Herberto Chong-Neto, Dirceu Solé
PA2466	**The immunomodulatory and inflammatory effects of the inhalation of diesel particles in a murine model of healthy mice** David Soler Segovia (Barcelona, Spain), Miquel De Homdedeu, Sílvia Sánchez Díez, Cristian Moreno Mesones, David Espejo Castellanos, Xavier Muñoz Gall, María Jesús Cruz Carmona
PA2467	**An Observational study on Ambient Air Pollution and hospital visits of patients at tertiary care hospital in North Chennai** Vengada Krishnaraj (Chennai, India)
PA2468	**Exposure to air pollution and allergic diseases in adults** Giovanni Viegi (Pisa (PI), Italy), Sara Maio, Federico Pirona, Sofia Tagliaferro, Salvatore Fasola, Alessandro Marcon, Giuseppe Sarno, Claudio Gariazzo, Massimo Stafoggia, Stefania La Grutta, Giuseppe Verlato, Sandra Baldacci
PA2469	**Influence of overweight/obesity, lifestyle and grey space on asthma in Italy** Giovanni Viegi (Pisa (PI), Italy), Sandra Baldacci, Anna Angino, Federico Pirona, Sofia Tagliaferro, Giuseppe Sarno, Sara Maio, Stefani La Grutta, Laura Montalbano, Salvatore Fasola, Velia Malizia, Isabella Annesi-Maesano, . On Behalf Of The Earlyfood Collaborative Group
PA2470	**Asthma control and hot weather-related respiratory symptoms** Maritta S. Jaakkola (Oulu, Finland), Henna Hyrkäs-Palmu, Jouni J.K. Jaakkola
PA2471	**Asthma phenotypes as an effect of childhood upbringing** Regine Abrahamsen (Skien, Norway), Geir Klepaker, Kjell Torén, Paul K. Henneberger, Johny Kongerud, Anne Kristin Møller Fell
PA2472	**Relationship between climatic factors and emergency department visits for respiratory diseases** Jacopo Davide Giamello (Busca, Italy), Remo Melchio, Luca Bertolaccini, Cristian Rendina, Paolo Caraccio, Massimo Rega, Serena Capriotti, Tania Prinzis, Tiziana Ponza, Salvatore Franco, Daniele D'Arrigo, Giuseppe Lauria
PA2473	**Medical record review of acute childhood wheeze presentations, air pollution and deprivation** Emma Wilkinson (Liverpool, United Kingdom), Paul Mcnamara
PA2474	**Air pollution and incidence of adult-onset eosinophilic airway disease** Janneke Pepels (Leeuwarden, Netherlands), Edith Visser, Anneke Ten Brinke, Kim De Jong
PA2475	**Climate change and COPD severity: a pilot study in Taiwan** Hsiao-Chi Chuang (Taipei, Taiwan), Minh Tran Huan, Tzu-Tao Chen, Yueh-Hsun Lu, Kuan-Yuan Chen, Shu-Chuan Ho, Chih-Da Wu, Kang-Yun Lee
PA2476	**Association between residential green space and development of allergic rhinitis up to 12 years of age: a population-based birth cohort study** Inês Paciência (Oulu, Finland), Aino K. Rantala, Harri Antikainen, Timo Hugg, Maritta S. Jaakkola, Jouni J.K. Jaakkola
PA2478	**Children and air pollution monitoring** Abigail Whitehouse (London, United Kingdom), Lindsay Zurba, James Ngocho, Sindisiwe Dladla, Julieth Sebba, Ronald Mbwasi, Gioia Mosler, Bibie Said, Blandina Mmbaga, Refiloe Masekela, Jonathan Grigg
PA2479	**Prenatal exposure to air pollution: a susceptibility factor to develop Chronic Obstructive Pulmonary Disease (COPD)?** Zhuyi Lu (Villejuif, France), Cristina De Franceschi, Mathieu Cazaunau, Antonin Berge, Elie Al Marj, Audrey Der Vartanian, Rachid Souktani, Abdel Aissat, Bruno Costes, Patrice Coll, Sophie Lanone
PA2480	**Impact of air pollution and emphysema on cardiovascular and hemodynamic features** Quentin WYNANDS (Montpellier, France), Olivier Cazorla, Fares Gouzi, Pierre-Edouard Grillet, Arnaud Bourdin
PA2481	**La Palma Volcanic Ash Particles Increase Susceptibility to Pneumococcal Infection In Vitro** Lisa Miyashita (London, United Kingdom), Bevdrley Coldwell , David Wertheim, Richard Giddens, Ian Gill, Nick Petford, Nemesio Pérez, Jonathan Grigg
PA2482	**Associations between ambient air pollution and chronic cough in middle-aged adults.** Sabrina Idrose (Australia, Australia), Jingwen Zhang, Caroline Lodge, Anne Chang, Luke Knibbs, Michael Abramson, E. Haydn Walters, Dinh Bui, Bircan Erbas, Peter Frith, Jennifer Perret, Shyamali Dharmage

PA2483 **Short term exposure to respirable smoke extracts from indoor cooking in Nepal leads to altered human airway epithelial cell (AEC) gene expression, DNA methylation (mC) and hydroxymethylation (hmC)**
Poojitha Rajasekar (Nottingham, United Kingdom), Robert Hall, Binaya K C, Parth Sarathi Mahapatra, Siva Praveen Puppala, Dhruma Thakker, Julie Macisaac, David Lin, Michael Kobor, Charlotte E Bolton, Ian Sayers, Ian Hall, Rachel Clifford

PA2484 **Long-term exposure to air pollution and incidence of adult-onset asthma and COPD: systematic review and meta-analyses**
Jiawei ZHANG (Copenhagen, Denmark), Shuo Liu, Youn-Hee Lim, George Thurston, Haneen Khreis, Barbara Hofffmann, Susan Anenberg, Bénédicte Jacquemin, Mark J Nieuwenhuijsen, Zorana Jovanovic Andersen

TP-15 in thematic poster area — Session 299 — 13:00 - 14:00

Thematic poster: Assessment and follow-up of cystic fibrosis lung disease in children

Disease(s) : Airway diseases

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

Chairs : Alexander Möller (Zürich, Switzerland), Mirjam Stahl (Berlin, Germany)

PA2485 **Estimating the minimum sample size for interventional research using the lung clearance index**
Cole Bowerman (Hamilton, Canada), Felix Ratjen, Sanja Stanojevic

PA2486 **Longitudinal LCI in infants with CF using a portable multiple breath washout (LIMBuS study)**
Claire Nissenbaum (manchester, United Kingdom), Daniel Weiner, Laura Healy, Anna Shawcross, Catherine Fullwood, Rebecca Thursfield, Clare S Murray, Alexander Horsley

PA2487 **Respiratory symptom scores to capture acute respiratory events in children with cystic fibrosis**
Lucy Perrem (Toronto (ON), Canada), Sanja Stanojevic, Michelle Shaw, Melinda Solomon, Hartmut Grasemann, Neil Sweezey, Valerie Waters, Stephanie Davis, D.B Sanders, Felix Ratjen

PA2488 **Impact of Pseudomonas aeruginosa antibiotic eradication therapy on lung function decline in cystic fibrosis**
Isabel Gascon Casaredi (Barcelona, Spain), Michelle Shaw, Valerie Waters, Ryan A. Seeto, Ana C. Blanchard , Felix Ratjen

PA2489 **Automated airway-artery analysis on chest CT confirms positive effect of inhaled hypertonic saline in preschool children with cystic fibrosis**
Yuxin Chen (Rotterdam, Netherlands), Qianting Lv, Eleni-Rosalina Andrinopoulou, Leticia Gallardo-Estrella, Jean-Paul Charbonnier, Daan Caudri, Stephanie Davis, Margaret Rosenfeld, Felix Ratjen, Richard Kronmal, Karen Hinckley Stukovsky, Stephen Stick Stick, Harm Tiddens

PA2490 **The clinical effectiveness and validity of home spirometry in children with cystic fibrosis**
Philip Lawrence (Liverpool (Merseyside), United Kingdom), Sarah Mayell, Rebecca Thursfield

PA2491 **Lung ultrasound value in cystic fibrosis consolidation and atelectasis detection**
Diana Popin (Timisoara, Romania), Ioana Mihaiela Ciuca, Mihaela Dediu, Emil Robert Stoicescu, Liviu Laurentiu Pop

PA2492 **Characterization of a signal-correction error in a commercial multiple-breath washout device**
Marc-Alexander Oestreich (Bern, Switzerland), Florian Wyler, Blaise Etter, Kathryn Ramsey, Philipp Latzin

PA2493 **Lung clearance index and nutritional status in cystic fibrosis children**
Mihaela Dediu (Timisoara, Romania), Diana Popin, Liviu Laurentiu Pop, Ioana Mihaiela Ciuca

PA2494 **Comparison of sensor crosstalk-corrected N2 versus SF6 multiple breath washout outcomes**
Felix Ratjen (Toronto (ON), Canada), Angel Phanthanourak, Renee Jensen, Michelle Shaw, Roxy Chen, Fatima Adil, Denisa Niththiyanandan, Sanja Stanojevic

PA2495 **Feasibility of telehealth spirometry for patients with cystic fibrosis in a regional setting**
Elpis Hatziagorou (Thessaloniki, Greece), Athina Sopiadou, Christos Kogias, Maria Gioulvanidou, Elisavet-Anna Chrysochoou, Ioustini Kalaitzopoulou, Pauline Peftoulidou, John Tsanakas

PA2496	**One-Year Follow-Up of Cystic Fibrosis Patients Who Cannot Reach the Modulator Therapies Although Having Indications: What are Their Losses?** Salih Uytun (Ankara, Turkey), Sanem Eryılmaz Polat, Satı Özkan Tabakçı, Güzin Cinel, Nagehan Emiralioğlu, Ebru Yalçın, Nural Kiper, Velat Şen, Derya Ufuk Altıntaş, Haluk Çokuğraş, Ayşe Ayzıt Kılınç, Hakan Yazan, Abdulhamit Çollak, Selçuk Uzuner, Gökçen Ünal, Aslı Imran Yılmaz, Sevinç Çelik, Ebru Damadoğlu, İlim Irmak, Esen Demir, Gökçen Öztürk, Erdem Başaran, Ayşen Bingöl, Nihat Sapan, Ayşe Tana Aslan, Pelin Asfuroğlu, Koray Harmancı, Mehmet Köse, Melih Hangül, Ali Özdemir, Gizem Özcan, Zeynep Gökçe Gayretli, Özlem Keskin, Hasan Yüksel, Şebnem Özdoğan, Erdem Topal, Gönül Çaltepe, Demet Can, Pervin Korkmaz Ekren, Mehmet Kılıç, Ayşe Süleyman, Tuğba Şişmanlar Eyüboğlu, Sevgi Pekcan, Nazan Çobanoğlu, Erkan Çakır, Uğur Özçelik, Deniz Doğru
PA2497	**The effect of breathing exercise on the quality of life of 3-12 years old childrens with cystic fibrosis and their families** Mine Kalyoncu (Istanbul, Turkey), Hakan Mursaloğlu, Zuhal Yerlikaya, Cansu Yılmaz Yeğit, Mürüvvet Yanaz, Aynur Gulieva, Burcu Uzunoğlu, Gamze Taştan, Almala Pınar Ergenekon, Ela Erdem Eralp, Yasemin Gökdemir, Fazilet Karakoç, Bülent Karadağ
PA2498	**Increased diagnostic value of LCI in pulmonary exacerbations in cystic fibrosis paediatric patients using the corrected Exhalyzer software.** Irena Wojsyk-Banaszak (Poznań, Poland), Barbara Więckowska, Zuzanna Stachowiak, Marta Andrzejewska, Aleksandra Szczepankiewicz
PA2499	**Assessing the utility of home spirometry for managing children with cystic fibrosis during COVID-19 pandemic** Binu George Babu (Walsall, United Kingdom), Brinderjeet Heyeer, Ciaran Mcardle, Benjamin Davies, Prasad Nagakumar, Maya Desai
PA2500	**The efficacy of inhaled hypertonic saline in children with cystic fibrosis who receive daily DNase.** Murat yasin Gencoglu (Ankara, Turkey), Gökçen Dilşa Tuğcu, Şule Selin Akyan Soydaş, Güzin Cinel, Nagehan Emiralioğlu, Ebru Yalçın , Nural Kiper , Velat Şen , Derya Ufuk Altıntaş, Haluk Çokuğraş, Ayşe Ayzıt Kılınç, Hakan Yazan, Gökçen Ünal, Aslı Imran Yılmaz , Hanife Tuğçe Çağlar, Ebru Damadoğlu , İlim Irmak , Esen Demir , Gökçen Öztürk, Ayşen Bingöl, Erdem Başaran , Nihat Sapan, Ayşe Tana Aslan , Pelin Asfuroğlu , Koray Harmancı, Mehmet Köse , Melih Hangül , Ali Özdemir , Gizem Özcan , Zeynep Gökçe Gayretli, Özlem Keskin, Hasan Yüksel, Şebnem Özdoğan, Erdem Topal, Gönül Çaltepe, Demet Can, Pervin Korkmaz Ekren, Mehmet Kılıç, Tuğba Şişmanlar Eyüboğlu, Sevgi Pekcan, Nazan Çobanoğlu, Erkan Çakır, Uğur Özçelik , Deniz Doğru

TP-16 in thematic poster area — Session 300 — 13:00 - 14:00

Thematic poster: Hot topics in paediatric bronchology

Disease(s) : Airway diseases Interstitial lung diseases

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

Chairs : Raffaella Nenna (Rome, Italy), Dirk Schramm (Düsseldorf, Germany)

PA2501	**Pulmonary complications in children with primary immunodeficiency disorders** ECE OCAK (ANKARA, Turkey), Şule Selin Soydaş, Murat Yasin Gencoğlu, Salih Uytun, Satı Özkan Tabakçı, Gökçen Dilşa Tuğcu, Sanem Eryılmaz Polat, Ayşe Metin, Güzin Cinel
PA2502	**Comparison of lung ultrasonography and magnetic resonance imaging versus chest computed tomography in patients with pulmonary alveolar microlithiasis** Mina Hizal (Ankara, Turkey), Ilkin Elif Gunel , H. Nursun Ozcan , Berna Oguz, Nagehan Emiralioglu, Ebru Yalcin, Deniz Dogru, Ugur Ozcelik, Mithat Haliloglu, Nural Kiper
PA2503	**Do lower airway infections occur concomitant or subsequent to upper airway infections in children with primary ciliary dyskinesia (PCD)?** Jisha Dhanik (Leicester, United Kingdom), Marzia Nazari, Rajinder Kang, Liam Causon, Priti Kenia, Alison Claydon, Manjith Narayanan
PA2504	**Association between airway pathogens and lung function in children with Primary Ciliary Dyskinesia (PCD) - a longitudinal study** Marzia Nazari (leicester, United Kingdom), Jisha Dhanik, Priti Kenia , Liam Causon, Rajinder Kang, Alison Claydon, Manjith Narayanan
PA2505	**Evaluation of respiratory problems in children with Down syndrome** Pelin Asfuroglu (Ankara, Turkey), Tugba Ramasli Gursoy, Tugba Sismanlar Eyuboglu, Ayse Tana Aslan
PA2506	**The role of Flexible bronchoscopy in the evaluation and outcome of children with chronic cough: 20-year experience** Elpis Hatziagorou (Thessaloniki, Greece), Christos Lilos, Fotios Kirvassilis, John Tsanakas

PA2507 **Hypertensive pneumothorax with cystic lesions in a newborn**
Michele Ghezzi (Bergamo, Italy), Rossella Lamberti, Francesca Riccaboni, Giulia Canali, Alessandra Zenga, Andrea Farolfi, Enza D'Auria, Gian Vincenzo Zuccotti

PA2508 **Recurrent respiratory infections in Down Syndrome: keep in mind bronchoscopy**
Michele Ghezzi (Bergamo, Italy), Raffaella De Santis, Laura Gianolio, Francesco Bergamaschi, Andrea Farolfi, Laura Fiori, Enza D'Auria, Gian Vincenzo Zuccotti

PA2509 **Structured light plethysmography (SLP) in children after lung surgery**
Michele Ghezzi (Bergamo, Italy), Luisa Abbattista, Anna Dighera, Valeria Calcaterra, Sara Costanzo, Annalisa De Silvestri, Andrea Farolfi, Enza D'Auria, Gloria Pelizzo, Gian Vincenzo Zuccotti

PA2510 **Is genotype a guide for phenotype in primary ciliary dyskinesia?**
Pelin Asfuroglu (Ankara, Turkey), Tugba Sismanlar Eyuboglu, Ayse Tana Aslan, Tugba Ramasli Gursoy, Gulsum Kayhan

PA2511 **Comparison of bronchoalveolar lavage and upper respiratory tract cultures in children with chronic endobronchial infection**
Maria Eleni Papakonstantinou (Athens, Greece), Konstantinos Douros, Stylianos Chatzipanagiotou, Alexandra Krontsi, Elpiniki Kartsiouni, Georgia Karkouli, Angeliki Galani

PA2512 **Primary ciliary dyskinesia: genotype characterization and lung function in a group of Italian patients**
Laura Petrarca (Roma (RM), Italy), Valentina Guida, Giuseppe Cimino, Raffaella Nenna, Francesca Piceci-Sparascio, Maria Giulia Conti, Antonella Frassanito, Enrica Mancino, Greta Di Mattia, Domenico La Regina, Carlo Cappelli, Alessandro De Luca, Fabio Midulla

PA2513 **Flexible bronchoscopies in a UK tertiary paediatric respiratory unit -3 year follow up**
Mihaela Diaconu (London, United Kingdom), Hani Gowai, Omer Adam, Hemant Kulkarni

PA2514 **Laryngeal Sensation in Children with Dysphagia and Neurological Impairment**
Nadine Freitag (Krefeld, Germany), Dirk Schramm

PA2515 **Cryotherapy in pediatric airway**
Dirk Schramm (Düsseldorf, Germany), Nadine Freitag, Karsten Kötz, Ignacio Iglesias-Serrano, Mario Culebras-Amigo, Vladimir Koblizek, Santiago Pérez-Tarazona, Enrique Cases Viedma, Jt Srikanta, Peter Durdik, Kaid Darwiche, Sune Rubak, Patrick Stafler

PA2516 **Non-cystic fibrosis, non-primary ciliary dyskinesia bronchiectasis (nCFnPCD-BE) in preschool children**
Kanwal Jehanzeb (Birmingham, United Kingdom), Christopher Hine, Hollie Smith, Naomi Parsons, Maya Desai, Priti Kenia, Prasad Nagakumar

TP-17 in thematic poster area — Session 301 — 13:00 - 14:00

Thematic poster: COVID-19: highlights of respiratory physiotherapy and rehabilitation

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

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

Chairs : Chris Burtin (Diepenbeek, Belgium), Agnieszka Lewko (Coventry, United Kingdom)

PA2517 **Reliability of three functional tests via remote assessment for Post–Covid-19 patients**
Aspasia Mavronasou (Megara, Attica, Greece), Andreas Asimakos, Vassilis Vlahakos, Paraskevi Katsaounou, Eleni Kortianou

PA2518 **Improved peak exercise performance after 12 weeks of pulmonary rehabilitation in patients post COVID-19**
Thierry Troosters (Leuven, Belgium), Sephanie Everaert, Iris Coosemans, Lode Claes, Heleen Demeyer, Tim Vanhoutte, Lies Glorie, Natalie Lorent, Wim Janssens

PA2519 **Effect of pulmonary rehabilitation on functional capacity and emotional status in patients with long COVID-19 syndrome: an interim analysis**
Nikolaos Chynkiamis (Ilion, Greece), Angelos Vontetsianos, Christina Anagnostopoulou, Zoe Sotiropoulou, Stavrina Zaneli, Foteini Karakontaki, Ioannis Vogiatzis, Antonia Koutsoukou, Nikolaos Koulouris

PA2520 **Effect of a self-managed home-based rehabilitation programme for the reduction of dyspnea in non-hospitalised subjects with post-COVID-19 condition: a pilot study**
Simone Salvitti (Martignacco, Italy), Angela Doretto, Cristina Verrone, Louise Marin

PA2522	**Additive effects of rehabilitation on natural recovery of functional capacity post COVID-19.** Andreas Asimakos (Athens, Greece), Stavroula Spetsioti, Ioannis Vogiatzis, Aspasia Mavronasou, Pandelis Gounopoulos, Dimitra Siousioura, Efi Dima, Niki Gianiou, Ioanna Sigala, Spyros Zakynthinos, Anastasia Kotanidou, Paraskevi Katsaounou
PA2523	**Does virtual group treatment improve symptoms of breathlessness in the post COVID-19 patient population?** Rebecca Gore (Rochester, United Kingdom), Lauren Williamson, Terence Elliott-Cooper, Katerina Roze, Gita Ramdharry, Melissa Heightman, Toby Hillman, Rebecca Livingston
PA2524	**The effects of COVID-19 infection on respiratory muscle strength and trunk muscle endurance in healthy individuals** Ildeniz Yalniz (Istanbul, Turkey), Mehmet Alperen Pekdas, Elif Develi, Yasar Keskin
PA2525	**THE EFFECT OF STRENGTHENING AND RELAXATION EXERCISES ON PAIN, ANXIETY AND SLEEP QUALITY IN PEOPLE WITH COVID-19** Seda Saka (Istanbul, Turkey), Berat Keskin
PA2526	**Clinical profile, symptomatology and sequelae of long-COVID patients** Laura Lopez Lopez (Granada, Spain), Irene Cabrera Martos, Irene Torres Sánchez, Javier Martín Núñez, Alejandro Heredia Ciuró, Marie Carmen Valenza
PA2527	**Physical and respiratory function of people following hospital discharge for COVID-19** Isis Grigoletto (Pirapozinho, São Paulo, Brazil), Fabiano Francisco De Lima, Rafael Mesquita, Paloma Borges, Matheus André Pedroso, Beatriz Da Silva Coutinho, Karina Marcela Morro Pozo, Vinicius Cavalheri, Ercy Mara Cipulo Ramos
PA2528	**Comparison of clinical aspects according to the Post Covid Functional Status Scale in patients after COVID-19.** Rodrigo Torres Castro (Barcelona, Spain), Vicente Benavides Córdoba, Diana Guerrero-Jaramillo, Juan Carlos Ávila-Valencia, Jhonatan Betancourt-Peña
PA2529	**Implementation of pulmonary rehabilitation in post-COVID19 in Latin America: 18 months later.** Rodrigo Torres Castro (Barcelona, Spain), Vicente Benavides Córdoba, Marisol Barros-Poblete, Rodolfo P Vieira, Guillermo Mazzucco, Guilherme Fregonezi
PA2530	**Physical therapists' opinions on the effect of the COVID-19 pandemic on physical therapy management in government and private hospitals in Thailand: Preliminary results of a survey** Sauwaluk Dacha (Chiang Mai, Thailand), Busaba Chuatrakoon, Arisa Parameyong, Chanoknun Chalermboon , Nuttanicha Thumpunya
PA2532	**Functionality in healthcare workers with COVID-19 in Cali (Colombia)** Lina Marcela Orozco Mejia (Cali, Colombia), Diana Guerrero Jaramillo, Francia Torres, Julian Rivera Motta, Vicente Benavides Córdoba
PA2533	**Pulmonary telerehabilitation in patients with chronic respiratory diseases during the pandemic by COVID-19 in Argentina. A multicenter observational study.** Santiago Larrateguy (Paraná, Argentina), Guillermo Mazzucco, Silvina Dell´era, Rodrigo Torres-Castro, Nicolas De Carlo, Gonzalo Turon, Belen Quiroz, Belen Santa Cruz, Florencia Fernandez, Carla Viola, Marcelo Alvarez, Anabella Cerda, Claudio Gonzalez, Laura Fragoso, Analia Resguardo, Janina Lebus, Rita Lantschsner, Walter Schweimer, Laura Carrizo
PA2534	**Physiotherapy outcomes for treating breathing pattern disorder during the COVID-19 pandemic** Claire Somerton (Manchester, United Kingdom), Rebecca Barnes, Nicola Pott, Reyenna Sheehan, Emmeline Maidment-Fullard, Jayne Ellison, Siobhan Ludlow, Stephen Fowler
PA2535	**Late Breaking Abstract - Twenty months follow-up in non-hospitalised adults with post COVID-19 condition: a preliminary longitudinal cohort study** Carl Emil Hallberg (Stockholm, Sweden), Anna Törnberg, Anna Svensson-Raskh, Elisabeth Rydwik, Mikael Björnsson, Michael Runold, Judith Bruchfeld, Malin Nygren-Bonnier

TP-18 in thematic poster area — Session 302 — 13:00 - 14:00

Thematic poster: Best abstracts from psychologists and behavioural scientists

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

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

Chairs : Ingeborg Farver-Vestergaard (Vejle, Denmark), Eleonora Volpato (Milano (MI), Italy)

PA2536	**Pilot of a therapist-guided internet-delivered cognitive behavioral therapy intervention for anxiety and depression (eHealth CF-CBT) in Dutch adults with cystic fibrosis** Marieke Verkleij (Amsterdam, Netherlands), Anna Georgiopoulos, Heleen Barendrecht, Deborah Friedman

PA2537	**Using The Activity Barometer (TAB) to assess patient participation in diagnostic consultations** Jannie Frølund (Vejle, Denmark), Ingeborg Farver-Vestergaard, Helle Poulsen, Ole Hilberg, Anders Løkke
PA2538	**Asthma expectations predict symptoms over time: a longitudinal cohort study** Eleonora Volpato (Milano (MI), Italy), Francesco Pagnini, Valentina Poletti, Cesare Cavalera, Francesca Graziano, Francesca Spina, Paolo Banfi
PA2539	**Smoking cessation support in a hospital-based healthcare setting: the provider perspective** Ingeborg Farver-Vestergaard (Vejle, Denmark), Peter Hjorth, Anders Løkke
PA2540	**Neural processing of respiratory sensations during resistive load-induced dyspnea in patients with COPD** Lucas Vanden Bossche (Leuven, Belgium), Ysys Denutte, Thomas Reijnders, Paul W. Davenport, Wim Janssens, Thierry Troosters, Andreas Von Leupoldt
PA2541	**Relationship between COVID-19 consequences and subjective distress 6 months after hospitalization** Anna Boros (Warszawa, Poland), Magdalena Martusewicz-Boros, Piotr Boros, Andrzej Nowak
PA2542	**Patterns of psychological conditions presenting to a severe asthma psychology service** Hanan hussein (Birmingham, United Kingdom), Jodie Fellows, Julie Marsh, Ali Bahron, Adel Mansur
PA2543	**What do people with asthma think about switching to a more environmentally friendly inhaler?** Grainne d'Ancona (London, United Kingdom), Khansa Sethi, Natalie Holman, Myfanwy Morgan, Lottie Renwick, Andrew Cumella, Samantha Walker, John Weinman
PA2544	**Posttraumatic-stress disorder, and others psychological impairment in COVID-19 surviving patients.** Celia Ledesma (CDMX, Mexico), Guadalupe Lizzbett Luna Rodríguez , Viridiana Peláez-Hernández, Arturo Orea-Tejeda, Vicente Baltazar-Chávez, Celia Deyanira Ledesma-Ruíz, Fernando Casarín-López, Adrián Rosas-Trujillo, Norma Camacho-Mendoza
PA2545	**Effects of a brief behavioural cognitive e-therapy for emotional alterations, and inflammation in COVID-19 survivors.** Fernando Casarin López (Mexico City, Mexico), Viridiana Peláez-Hernádez, Guadalupe Lizzbett Luna Rodríguez , Benjamin Domínguez-Trejo, Dulce Carolina Rodríguez-Lozano, David Alberto Rodríguez-Medina, Li Erandi Tepepa-Flores, Adrián Rosas-Trujillo, Fernando Casarín-López, Celia Deyanira Ledesma-Ruíz, Vicente Baltazar-Chávez
PA2546	**Heart rate variability in post-COVID-19 patients with different anxiety levels.** Vicente Baltazar (, Mexico), Viridiana Peláez-Hernández, Fernando Casarín-López, Celia Deyanira Ledesma-Ruiz, Arturo Orea-Tejeda, Adrián Rosas-Trujillo, Norma Camacho-Mendoza
PA2547	**Sleep disturbances in post-Covid patients as a function of sex.** Celia Ledesma (CDMX, Mexico), Viridiana Peláez-Hernández, Lizzbeth Luna-Rodríguez, Fernando Casarín-López, Adrian Rosas-Trujillo, Norma Camacho-Mendoza, Vicente Baltazar-Chávez, Arturo Orea-Tejeda
PA2548	**Comparable neural gating of respiratory sensations during increasing dyspnea across different qualities of dyspnea** Ysys Denutte (Leuven, Belgium), Tristan Holk, Wim Janssens, Thierry Troosters, Andreas Von Leupoldt
PA2549	**Cognitive alterations in COVID-19 survivors with and without invasive mechanical ventilation during hospital stay.** Fernando Casarin López (Mexico City, Mexico), Viridiana Pelaéz Hernandez, Guadalupe Lizzbett Luna Rodriguez, Arturo Orea Tejada, Celia Deyanira Ledesma Ruiz, Adrian Rosas Trujillo, Vicente Baltazar Chávez, Norma Camacho Mendoza
PA2550	**Pain, fatigue and psychological sequelae in patients surviving COVID-19: results from a prospective observational controlled study** Sarah Elizabeth O'Donnel (Milan, Italy), Giuseppe Croce, Francesca Mandurino Mirizzi, Elisa Franceschi, Walid Karimeh, Fabio Giuliani, Dejan Radovanovic, Pierachille Santus
PA2551	**Psychological affectation in surviving patients of COVID-19, consideration of the use of invasive mechanical ventilation.** Celia Ledesma (CDMX, Mexico), Adrian Rosas Trujillo, Vicente Baltazar Chávez, Viridiana Peláez Hernández, Arturo Orea Tejeda, Fernando Casarín López, Norma Camácho Mendoza, Guadalupe Lizzbett Luna Rodríguez
PA2552	**Cognitive impairment as a sequel to SARS-CoV-2 infection.** Adrian Rosas Trujillo (CDMX, Mexico), Fernando Casarín López, Vicente Baltazar Chávez, Viridiana Peláez Hernández, Arturo Orea Tejeda, Celia Deyanira Ledesma Ruíz, Guadalupe Lizzbett Luna Rodríguez, Norma Camácho Mendoza
PA2553	**Technology-supported shared decision-making in chronic conditions: preliminary results of a systematic review** Roswita Vaseur (Enschede, Netherlands), Eline Te Braake, Tessa Beinema, Wendy Oude Nijeweme - D'Hollosy, Monique Tabak

PA2554 **Late Breaking Abstract - Provision of mental health care to healthcare workers during COVID-19: A call for the practice of vulnerability**
Jacqueline Hoare (Cape Town, South Africa)

TP-19 in thematic poster area — Session 303 — 13:00 - 14:00

Thematic poster: COVID experience globally

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

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

Chairs : Natalie Lorent (Leuven, Belgium), Melissa McDonnell (Oranmore (Co Galway), Ireland)

PA2555 **Seroprevalence of COVID-19 among out patients with chronic respiratory disease in a tertiary care hospital in India**
Devasahayam Jesudas Christopher (Vellore (Tamil Nadu), India)

PA2556 **Profile of patients hospitalized during the Omicron wave at Hassan II Agadir hospital**
Abdelmajid Oulahbib (agadir, Morocco), Houda Moubachir, Hind Serhane

PA2557 **COVID-19 cardiopulmonary pathology and clinical trajectories: Insights from a community-based autopsy series.**
Joaquim Majo (Newcastle Upon Tyne, United Kingdom), Luke Milross, Julian Pulle, Sam Hoggard , Nigel Cooper , Bethany Hunter , Christopher Duncan, Andrew Filby , Andrew Fisher

PA2558 **Recuperación laboral, clínica y funcional a 3 meses del alta en pacientes hospitalizados por neumonía por SARS-CoV2. Relación con la terapia recibida**
Cesar Reyes (Vina del Mar, Chile), Tomas Silva, Mónica Gutiérrez, Dominique Boisier, Felipe Martinez, Mario Santamarina, Diego Zuñiga, Marcela Gutierrez, Sebastian Ahumada, Claudia Valenzuela, Ivo Lopez

PA2559 **Outcome of hospitalized covid 19 patients with underlying respiratory illness in second and third wave.**
Jayalakshmi T.Kutty (Mumbai (Maharashtra), India), Bhumika Madhav, Dhanaji Revande, Gokul Bathe

PA2560 **Religiosity and mental health consequences of COVID-19 pandemic**
Stefan-Marian Frent (Timisoara, Romania), Maria Frent, Alexandru-Filip Popovici

PA2561 **Burnout syndrome among Tunisian medical professionals during the COVID 19 pandemic**
Abid Sourour (Sfax, Tunisia), Nour Gargouri, Rahma Gargouri, Dorra Gharbi, Ahmed Dhia Elleuch, Sabrine El Fidha, Walid Feki, Samy Kammoun

PA2562 **B.1.1.529 versus B.1.617.2 variants of severe acute respiratory syndrome corona virus 2: Is there any difference between hospitalization, intensive care unit treatment and mortality rates?**
Emine Kamiloğlu (lefkosa, Cyprus), Birdal Cihangir

PA2563 **Clean air, verandas and human contact in the battle against COVID-19; A timeless approach.**
Elli Keramida (Athens, Greece), Despoina Zorpidou, Antigoni Vasilarea, Georgia Hardavella, Spyridon Mazarakis, Irma Bracka, Maria Salomidou, Theodoros Daskalos, Panagiotis Demertzis

PA2564 **Covid19 infection in patients suffering from chronic respiratory diseases**
Abid Sourour (Sfax, Tunisia), Nour Kallel, Rahma Gargouri, Mahdi Walha, Ons Badri, Sarra Sassi, Rym Khemakhem, Sameh Msaad, Nedia Moussa, Samy Kammoun

PA2565 **Characterising SARS-CoV-2 transmission via aerosols and effective sampling methods for surveillance**
Hisham Waziri (London, United Kingdom), Gopinath Kalaiarasan, Rebecca Wawman, Faye Hobbs, Gloria Young, Emma Ransome, Ian Adcock, Pankaj Bhavsar, Vincent Savolainen, Alexandra Porter, Prashant Kumar, Kian Fan Chung

PA2566 **Comparison of the impact of ethnicity on clinical outcomes of COVID-19 patients in the United Kingdom across two waves of the pandemic**
Jesmith Perumbalath (London, United Kingdom), Jithin Selvaraj, Adam Ainley

PA2567 **Effect of the COVID-19 Pandemic on Bronchoscopy Indication and Bronchial Microbiology**
Felix Dubon (Munich, Germany), Julia Walter, Laura Sellmer, Kathrin Kahnert, Pontus Mertsch, Nikolaus Kneidinger, Katrin Milger-Kneidinger, Christian Schneider, Jürgen Behr, Amanda Tufman

PA2568 **Publication pandemic**
Oğuz Karcioğlu (Ankara, Turkey), Serdar Ceylan, Olgu Erkin Çınar

PA2569 **COVID-19 and anxiety, the role of the uncertainty**
Gorane Iturricastillo Gutierrez, José María Eiros Bachiller, Elena Ávalos Perez-Urria, Celeste Marcos, Claudia Valenzuela, Tamara Alonso Pérez, Rosa María Girón Moreno, Julio Ancochea Bermúdez

PA2570 **Impact of post-COVID-19 lung damage on Respiratory function and HRQOL in Indians**
Devasahayam Jesudas Christopher (Vellore (Tamil Nadu), India), Barney Isaac, Flavita John, Deepa Shankar, Balamugesh Thangakunam

PA2571 **COVID-19 Outcome: A One Year Follow-Up Study of Patients who Recovered from COVID-19 at Lung Center of the Philippines**
Marc Anthony Donguines (Las Piñas, Philippines), Pocholo Guadalupe, Racquel C. Ibañez Ibañez, Joven Roque Gonong

PA2572 **SARS-CoV-2 infection: a comparative study of waves.**
ALEJANDRO REZOLA CARASUSAN (Donostia San Sebastian, Spain), Leyre Leyre Serrano Fernandez, Edurne Echevarria Guerrero, Amaia Urrutia Gajate, Beatriz Gonzalez Quero, Eva Tabernero Huguet, Rafael Zalacain Jorge, Luis Alberto Ruiz Iturriaga

PA2573 **Persistent respiratory failure in severe COVID-19 patients - A tertiary centre experience in Kuala Lumpur, Malaysia.**
Leng Cheng Sia (Kuala Lumpur, Malaysia), Chee Kuan Wong, Noreen Zhi Min Ooi, Wai Yee Chan, Yong-Kek Pang, Chong Kin Liam, Chun Ian Soo, Jiunn Liang Tan, Mau Ern Poh, Ka Kiat Chin, Thian Chee Loh, Nur Husna Ibrahim, Vijayan Munusamy

PA2574 **Excess mortality in India during the COVID 19 pandemic.**
Subramanian Natarajan (Mumbai (Maharashtra), India), Poonam Subramanian

TP-2 in thematic poster area — Session 304 — 13:00 - 14:00

Thematic poster: Pulmonary rehabilitation and COVID-19

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

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

Chairs : Thomas Gille (Bobigny, France), Elena Gimeno Santos (Barcelona, Spain)

PA2575 **Evolution of symptoms and radiological lesions of patients affected by SARS-Cov-2 after acute infection**
Nourchene Khalfallah (Rades, Tunisia), Emna Ben Jemia , Nawres Brahmi, Siwar Rejeb, Mariem Nouira, Jihene Ben Amar, Haifa Zaibi, Hichem Aouina

PA2576 **Effects of pulmonary rehabilitation in post-COVID syndrome.**
Janos Tamas Varga (Budapest, Hungary), Zsofia Szarvas, Monika Fekete, Vince Fazekas-Pongor, Kinga Pete, Renata Cserjesi, Regina Bakos, Orsolya Gobel, Renata Pinter, Zsuzsanna Kovats, Gabor Horvath, Veronika Muller

PA2577 **Effects Of An Early Rehabilitation Program In COVID-19 Patients Weaned From Non-Invasive Mechanical Ventilation: The Experience Of A Respiratory Subintensive Unit**
Elena Sciarrillo (Napoli, Italy), Salvatore Musella, Anna Annunziata, Maria Rosaria Gioia, Giuseppe Fiorentino

PA2578 **Pulmonary Rehabilitation in Post-COVID-19 Patients Improves Lung Function and Mechanics and Skeletal Muscle, and Immune Response**
Rodolfo De Paula Vieira (Sao Jose Dos Campos (SP), Brazil), Maysa A. R. Brandao-Rangel, Renilson Moraes-Ferreira, Anamei Silva-Reis, Claudio R. Frison, Luis V. F. De Oliveira, Regiane Albertini

PA2579 **Impact of Covid infection on clinical outcomes of hospitalized and outpatients: a matched case control study**
Antoine EL KIK (Beirut, Lebanon), Hind Eid, Albert Riachy, Elio Mekhael, Karim Hoyek, Nabil Nassim, Georges Khayat, Ghassan Sleilaty, Moussa Riachy

PA2580 **The impact of comorbidities on recovery following hospitalisation from COVID-19.**
Enya Daynes (Leicester, United Kingdom), Molly M Baldwin, Urvee Karsanji, Hamish Mcauley, William D-C Man, Rachael Evans, Sally J Singh, + On Behalf Of The Phosp Consortium

PA2581 **POST-COVID-19 FUNCTIONAL STATUS EIGHTEEN MONTHS AFTER POST-ACUTE PULMONARY REHABILITATION FOLLOWING DISCHARGE FROM INTENSIVE CARE UNIT**
Nicoletta R. Morelli (Den Haag, Netherlands), Peter Klijn, Eline Bij De Vaate

PA2582 **Rehabilitation of work ability in patients acquiring COVID-19 in the workplace: a longitudinal study**
Katharina Zwingmann (Chemnitz, Germany), Ivo Berger, Michael Stegbauer, Katrin Müller

PA2583 **Persistent Post-COVID: The first wave, one year after.**
Sieshem M. Bindraban (Rotterdam, Netherlands), Emmely W. De Roos, Rick R. Fransman, Esther M.J. Van Noort, Marise J. Kasteleyn, Johannes C.C.M. In 'T Veen

PA2584 **Mapping UK healthcare pathways and rehabilitation provision for adults after a hospital admission with COVID-19.**
Linzy Houchen-Wolloff (Oakham (Leicestershire), United Kingdom), Charlotte Overton, Andrew Ibbetson, Archie Walters, Natalie Armstrong, Sally J Singh, Andrew Briggs, Rachael Evans

PA2585 **Effects of early physical therapy in acute severe COVID-19 pneumonia**
Jaume Bordas Martinez (barcelona, Spain), Marta Hernández Argudo, Ana Luzardo-González, Alejandro Arencibia, Franco Tormo, Lluis Matéu, Vanesa Vicens-Zygmunt, Guadalupe Bermudo , Salud Santos, Maria Molina-Molina, Rosa Planas, Guillermo Suarez-Cuartin

PA2586 **Pulmonary rehabilitation outcome in patients recovering from COVID-19 disease**
Davorka Mursic (Zagreb, Croatia), Tajana Jalusic Gluncic, Dubravka Pelicaric, Zagorka Boras, Marta Korsic, Andrea Vukic Dugac, Miroslav Samarzija

PA2587 **'Long covid' is more common, underestimated, and 'core' health issue in post covid care setting: study of 6000 cases in tertiary care setting in India.**
Shital Vishnu Patil (Latur (Maharashtra), India), Ganesh Narwade, Gajanan Gondhali, Rajesh Patil, Abhijit Acharya, Utreshwar Dhumal

PA2588 **The role of vascular density in pulmonary rehabilitation of PASC patients**
Kris Ides (Antwerpen, Belgium), Wendel Dierckx , Yinka De Meyer, Eline Lauwers , Maarten Lanclus, Jan De Backer , Wilfried De Backer

PA2589 **Gender differences in symptoms and psychological burden in Long Covid patients: results of a comprehensive multidimensional assessment protocol**
Guido Vagheggini (Volterra (PI), Italy), Francesca Marzetti Moro, Simone Meini, Mario Miniati, Giuseppa Levantno, Mauro Taccola, Roberto Andreini, Arli Veli, Giulio Bardi, Eugenia Panait, Elena Cini, Angelo Gemignani

PA2590 **MULTIDIMENSIONAL ASSESSMENT OF DYSPNEA IN POSTCOVID PATIENTS REFERRED TO PULMONARY REHABILITATION**
Miriam Dominguez Blasco (Sevilla, Spain), Cecilia López, María Dolores Dominguez, Antonio Yosvani, Rosa María Vazquez, Inmaculada Ortiz, Jose Antonio Rodrigez, Pilar Cejudo

PA2591 **Inspiratory muscle capacity in Long Covid**
Jane Dickson (Dublin 4, Ireland), Eddy Ferrufino Rivera, Abilash Sahadevan, Seamus J. Linnane

PA2592 **Exploring the Impact of Fatigue on Exercise Tolerance in Post-COVID Individuals**
Jitten Bahia (Leicester, United Kingdom), Molly Baldwin M, Charlotte Carter-Lang, Emma Chaplin, Nikki Gardiner, Sally Singh J, Enya Daynes

PA2593 **Patient-reported outcome measures 3 and 6 months after pulmonary rehabilitation following COVID-19**
Markus Hayden (Bad Reichenhall, Germany), Matthias Limbach, Michael Schuler, Gabriele Schwarzl, Steffen Merkl, Karsten Botosch, Dennis Nowak, Konrad Schultz

PA2594 **Late Breaking Abstract - Nebulization and COVID-19: Is the risk of spread actual?**
Christophe Thibon (Bruxelles, Belgium), Laurent Vecellio, Jean Christophe Dubus, Kabamba Benoit, Gregory Reychler

TP-20 in thematic poster area — Session 305 — 13:00 - 14:00

Thematic poster: COVID treatments

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

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

Chairs : Nicolas Roche (Paris, France), Adrian Ceccato (barcelona, Spain)

PA2595 **Safety and efficacy of apremilast in adults hospitalized with COVID-19**
Rani Elenjical (Centurion, South Africa), Manish Jain, Marcelo Rodrigues Bacci, Anatoliy Gavrylov, Bernardo Goecke Hochberger, Samuel Navarro Alvarez, Tomas Alvarez, Jon Persichino, Prista Charuworn, Cassandra E. Milmont, Rong Zhang

PA2596 **A phase 3 study to evaluate the efficacy and safety of reparixin in severe COVID-19 pneumonia**
Elizabeth Gavioli (New York, United States), Giovanni Landoni, Antonio Voza, Massimo Puoti, Nicola Coppola, Hana Akselrod, Enrico M. Minnella, Sophie Toya, Carolina Marsiglia, Francesco Sergio, Marcello Allegretti, Flavio Mantelli

PA2597 **Efficacy and safety of garadacimab in patients with severe COVID-19**
Alberto Papi (Cona, Ferrara, Italy), Renee Stapleton, Paul M Shore, Mihai Alexandru Bica, Younan Chen, Michael Larbig, Tobias Welte

PA2598	**Cotrimoxazole in hospitalised patients with severe COVID-19 – interim results from the CoTroxCov study** Syed Rehan Quadery (Dublin, Ireland), Thomas John, Pallabi Sinha, Minakshi Bhattacharjee, Saswata Bose, Udas Chandra Ghosh, Boudhayan Bhattacharyya, Santanu Kumar Tripathi, Bibhuti Saha
PA2599	**Outcomes of a phase 2 trial for the inhaled JAK inhibitor, nezulcitinib, in hospitalized patients with acute lung injury due to severe COVID-19** Rajeev Saggar (Paradise Valley, United States), Dave Singh, Edmund Moran, David Lombardi, Tuan Nguyen, David Bourdet, Nathan Pfeifer, Jacky Woo, John Belperio
PA2600	**Inhaled beclomethasone in the treatment of early COVID-19: a double blind, placebo-controlled trial** Channa Ranasinha (Colombo 7, Sri Lanka), Chamila Mettananda, Arunasalam Pathmeswaran, Chatura Peiris, Aloka Gunasekara, Dharani Abeyrathna, Thimira Egodage , Channaka Dantanarayana
PA2601	**Value of Montelukast as a potential treatment of Post COVID-19 Persistent cough: A randomized controlled pilot study** Aliae Abd Rabou Mohamed-Hussein (Assiut, Egypt), Islam Galal, Mohamed Eltaher Aa Ibrahim, Hoda Makhlouf, Nahed Makhlouf, Howaida Abdel Aal, Karima Kholief
PA2602	**AM3, a natural glycoconjugate, as adjuvant treatment for COVID-19 patients** DULCENOMBRE GÓMEZ-GARRE (Madrid, Spain), Adriana Ortega-Hernández, Javier Modrego, Rubén Gómez-Gordo, Laura Espino, Nieves Martell, Arturo Corbatón
PA2603	**Factors associated with non-invasive positive pressure ventilation failure in a COVID-19 Intermediate Care Unit** Inês Teixeira Farinha (Maia, Portugal), Alexandra Tenda Cunha, Filipa Costa
PA2604	**Tocilizumab reduces the need for mechanical ventilation in severe Coronavirus Disease 2019 (COVID19); the Greek Experience in a pragmatic clinical setting** Georgia Hardavella (Athens, Greece), Elena Bellou, Elli Keramida, Nefeli Papaioannou, Irma Bracka, Spiros Mazarakis, Ioannis Karampinis, Nikolaos Anastasiou, Xenophon Theiakos, Panagiotis Demertzis
PA2605	**Effect of colchicine on clinical outcomes in COVID-19** Souha Abdenneji (Tunis, Tunisia), Wafa Fekih, Iheb Ben Krayen, Jamel El Ghoul
PA2606	**Real-life prospective study on tocilizumab in severe COVID-19 infection** Lucy Power (Dublin, Ireland), Bianca Morarasu, Anam Sarfaraz, Ahmad Basirat, Hassan Rahman, Seamas Donnelly, Edward Moloney, Minesh Kooblall, Stephen Lane
PA2607	**EFFECT OF ANTICOAGULANTS ON THROMBOEMBOLIC EVENTS IN COVID-19 PATIENTS DISCHARGED FROM HOSPITAL AND OUTPATIENTS** CANER ÇINAR (istanbul, Turkey), Zeynep Ceren Balaban, Selin Kesim, Feyza Şen, Sait Karakurt, Tanju Yusuf Erdil, Tunç Öneş, Semiha Emel Eryüksel
PA2608	**No benefit of a prolonged course of corticosteroids in patients with COVID-19 secondary organizing pneumonia** Baptiste Artignan (Rennes, France), Stéphanie Dirou, Matthieu Wargny, Antoine Moui, Vivien Danielo, Claire Defrance, Renan Liberge, Olivier Morla, Marie Chauveau, Paul Le Turnier, Antoine Asquier Khati, Alexandra Espitia Thilbault, Mathieu Artifoni, Maite Agbakou, Luc Desmedt, Anne Sophie Boureau, Emmanuel Eschapasse, Francois-Xavier Blanc
PA2609	**Safety and efficacy of pamrevlumab (FG-3019) in patients with COVID-19 pneumonia: an open-label, randomized, parallel-arm phase 2 study** Giacomo Sgalla (Modena (MO), Italy), Gina Gualano, Paolo Maria Leone, Alessia Comes, Diana Verdirosi, Loona Poole, Elias Kouchakji, Fabrizio Palmieri, Luca Richeldi
PA2610	**Stabilised, synthetic sulforaphane in hospitalized patients with suspected COVID-19 pneumonia: a double-blind, placebo-controlled RCT** Hani Abo-Leyah (Perth (Perthshire), United Kingdom), Merete B Long, Yan Hui Giam, Thenmalar Vadiveloo, Rebecca C Hull, Holly R Keir, Thomas Pembridge, Daniela Alferes De Lima, Benjamin Jm New, Sarah Inglis, Amy Gilmour, Chloe Hughes, Lilia Delgado, Graeme Maclennan, Albena T Dinkova-Kostova, James D Chalmers
PA2611	**Olfactory rehabilitation in non-severe COVID-19 patients: a randomized double-blinded clinical trial** THIAGO SERRANO (CAMPINAS, Brazil), Marcelo Antonio, Lorena Giacomin, José Dirceu Ribeiro, Eulalia Sakano
PA2612	**Impact of Dexamethasone Treatment on COVID-19 Pneumonia Mortality** Konstantinos Tsitouras (Korntal-Münchingen, Germany), Alessandro Ghiani, David Ayubi, Selina Briese, Lutz Nina, Matthias Hansen, Sebastian Allgaeuer, Michael Torzewski, Katja Rothfuss, Lukas Gernhold, Claus Neurohr
PA2613	**Predictors of mortality in tocilizumab treated severe covid-19** Ilias Papanikolaou (Corfu, Greece), Konstantinos Pagkratis, Serafeim Chrysikos, Emmanouil Antonakis, Aggeliki Pandi, Chrysavgi Kosti, Eleftherios Markatis, Georgios Hillas, Antonia Digalaki, Sofia Koukidou, Eleftheria Chaini, Andreas Afthinos, Katerina Dimakou

PA2614 **Pharmacokinetics and pharmacodynamics of imatinib in COVID-19 patients**
Nadia Baalbaki (Bennekom, Netherlands), Jurjan Aman, Pierre M. Bet, Erik Duijvelaar, Jos Twisk, Cristina Longo, Kazien Mahmoud, Anke-Hilse Maitland-Van Der Zee, Eleonora L. Swart, Harm Jan Bogaard, Imke H. Bartelink

TP-21 in thematic poster area — Session 306 — 13:00 - 14:00

Thematic poster: Advances in the treatment and clinical/surgical management of tuberculosis and NTM

Disease(s) : Airway diseases Interstitial lung diseases

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

Chairs : Christoph Lange (Borstel, Germany), Cécile Fléchet (Berlin, Germany)

PA2615 **Early effectiveness and safety of a modified shorter all-oral regimen for MDR/RR-TB in China**
Naihui Chu (Beijing, China), Wenjuan Nie, Juan Du, Yufeng Liu, Qianhong Wu, Fei Ren, Qingshan Cai, Yaping Zhang

PA2616 **Drug tolerance predicts clinical outcomes in mycobacterial lung infections**
Lucas Boeck (Basel, Switzerland), Alexander Jovanovic, Frederick Bright, Basil Wicki, Loïc Sauteur, Andreas Wüst, Dorothy M Grogono, Michael Tamm, Philippe Dehio, Johannes Nemeth, Michael Abanto, Rachel Thomson, Scott Bell, Andres R Floto

PA2617 **Multifocal tuberculosis in the immunocompetent patient**
Zakaria Laklaai (casablanca, Morocco), Khadija Channoune, Nahid Zaghba, Hanane Benjelloune, Najiba Yassine

PA2618 **Factors associated with sputum culture conversion in patients with multidrug-resistant tuberculosis**
Greta Musteikiene (Kaunas, Lithuania), Skaidrius Miliauskas

PA2619 **Isoniazid-induced hepatotoxicity in latent tuberculosis patients**
Bruno S. Silva (Porto, Portugal), Nuno Faria, Inês Costa, Ricardo Reis

PA2620 **Study of rifampicin and silver nanoparticle composite efficacy on rifampicin-resistant Mycobacterium tuberculosis strains**
Nino Kiria (Tbilisi, Georgia), Teona Avaliani, Nino Bablishvili, Nana Kiria, Giorgi Phichkhaia

PA2621 **Association between PD-L1 expression in monocytes and treatment outcomes in active pulmonary tuberculosis-human and animal model**
Jia-Yih Feng (Taipei, Taiwan), Chin-Chung Shu, Sheng-Wei Pan, Jung-Jyh Hung, Po-Kuei Hsu, Wei-Juin Su, Yuh-Min Chen

PA2622 **Mathematical model for predicting the treatment effectiveness of MDR-TB based on Human-beta-defensin-1 level**
Olga Pogorelova (Kharkiv, Ukraine), Olga Shevchenko, Irina Ovcharenko, Olga Hovardovska, Olga Shvets

PA2623 **Side effects of anti-tuberculosis treatment: comparison between combined and dissociated treatment**
Soumaya Bouchareb (Ksar Hellal, Tunisia), Marwa Ammar, Ameni Ben Salem, Soumaya Boujnah, Aya Zaara, Touil Imen, Leila Boussoffara, Jalel Knani, Nadia Boudawar

PA2624 **Usage of silver nanoparticles to restore Moxifloxacin efficacy for fluoroquinolone-resistant M.tuberculosis cultures.**
Teona Avaliani (Tbilisi, Georgia), Nino Kiria, Nino Bablishvili, Nana Kiria, Giorgi Phichkhaia

PA2625 **A retrospective study evaluating the effect of Prednisolone on the radiological sequelae of Tuberculous pleurisy**
Junyi Zhang (London, United Kingdom), Usmaan Ahmed, Lottie Brown, Owais Kadwani, Ronan Breen, Parthipan Sivakumar

PA2626 **Place of surgery in the management of lymph node tuberculosis**
amina abdelkbir (ben arous, Tunisia), Kaouther Ben Amara, Mahdi Abdennadher, Hazem Zribi, Adel Marghli

PA2627 **Comparison of resolution of Tuberculous pleural effusion on Anti – tubercular treatment with and without steroids : A one-year follow–up**
ROHIT SUHAS BHINGARDEVE (SANGLI, India), Sudarshan Mante, Naman Ajwani, Siddharth Waghmare, Swapnil Thorve, Jairaj Nair

PA2628 **Improvement in the management of nontuberculous mycobacteria after lobar collapse therapy with Endobronchial valves (EBV)**
Valentina Luzzi (Firenze (FI), Italy), Jessica Mencarini, Sara Tomassetti, Lorenzo Corbetta

PA2629 **Not always COVID - pulmonary BCGosis as an unexpected cause of severe respiratory failure and massive ground glass opacities in the lungs.**
Katarzyna B. Lewandowska (Warszawa, Poland), Anna Lewandowska, Inga Baranska, Mgdalena Klatt, Ewa Augstynowicz-Kopec, Witold Tomkowski, Monika Szturmowicz

PA2630 **Prevalence of sub-optimal drug levels of Rifampicin, Isoniazid and Pyrazinamide among tuberculosis patients in Sydney, Australia. A pilot study.**
Anthony Byrne (Sydney (NSW), Australia), Ryan Wong, Debbie Marriott, Danijela Kocic, Jan-Wilem Alffenaar, Jin Gun Cho, Ben Marais

PA2631 **Chest wall tuberculosis: a surgical experience**
amina abdelkbir (ben arous, Tunisia), WIFEK SAIDANI, Imen Bouacida, Amina Abdelkebir, Hazem Zribi, Mahdi Abdennadher, Chaker Jaber, Ines Moussa, Sarra Zairi, Adel Marghli

PA2632 **Regional differences in prescribing pyrazinamide for tuberculosis treatment**
Hiromi Matsumoto (Kanagawa, Japan), Nobuaki Kobayashi, Nobuhiko Fukuda, Ayami Kaneko, Ami Izawa, Kohei Somekawa, Chisato Kamimaki, Sosuke Kubo, Katsushi Tanaka, Kenichi Seki, Hiroaki Fujii, Ayako Aoki, Yoichi Tagami, Keisuke Watanabe, Nobuyuki Horita, Yu Hara, Takeshi Kaneko

PA2633 **Priority identification in the clinical case management of multidrug resistant Tuberculosis (MDR-TB) in Bangladesh**
Farzana Zaman (Dhaka, Bangladesh), Muhammad Asaduzzaman

PA2634 **The impact of diabetes mellitus on the anti-TB treatment outcome, a series of cases study**
Tatiana Osipov (Chisinau, Republic of Moldova), Evelina Lesnic, Alina Malic

TP-22 in thematic poster area — Session 307 — 13:00 - 14:00

Thematic poster: Lung cancer patient pathways

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

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

Chairs : Katherina Bernadette Sreter (Zagreb, Croatia), Richard Lee (Beaconsfield, Buckinghamshire, United Kingdom)

PA2635 **Impact of Covid-19 pandemic on care pathways of lung cancer in Longjumeau hospital**
Alain BAKEBE (Longjumeau, France), Julien Petel, Manal Awad, Gerard Oliviero, Laurent Decoux

PA2636 **Lung cancer associated to idiopathic pulmonary fibrosis: predictor ranking and mining.**
Giulia Maria Stella (Pavia (PV), Italy), Sara Lettieri, Manuela Coretti, Francesca Mariani, Chandra Bortolotto, Francesco Agustoni, Andrea Lancia, Pietro Rinaldi, Cristiano Primiceri, Davide Piloni, Laura Saracino

PA2637 **Prognostic factors in locally advanced non-small cell lung cancer**
Yasmine Hadidene (Ariana, Tunisia), Hela Kamoun, Hathemi Rejeb, Dora Greb, Ines Akrout, Leila Fkih, Hanen Smadhi, Mohamed Lamine Megdiche

PA2638 **The association of anxiety and depression with mortality in lung cancer**
Yossr Aloulou (Manouba, Tunisia), Hadhemi Rejeb, Hela Kammoun, Dorra Greb, Ines Akrout, Hejer Ben Abdelghaffar, Hela Hassen, Leila Fekih, Hanen Smadhi, Mohamed Lamine Megdich

PA2639 **Impact of cancer cachexia on the course of chemotherapy in patients with advanced lung cancer.**
Imen Bachouch (Ariana, Tunisia), Nourelhouda Khézami, Khawla Bouguerra, Hana Mrassi, Asma Zargouni, Nidhall Belloumi, Chaima Habouria, Fatma Chermiti, Soraya Fenniche

PA2640 **Survival and prognostic factors in NSCLC patients with malignant pleural effusion**
Asma Navasakulpong (Hatyai (Songkhla), Thailand), Punchalee Kaenmuang

PA2641 **Immunotherapy in metastatic non-small cell lung cancer: EPSILoN as a prognostic score**
Maria Carolina Alves Valente (Santo Tirso, Portugal), Mariana Serino, Cláudia Freitas, Mariana Martins, Pedro Ferreira, Catarina Cardoso, Catarina Sousa, Vanessa Santos, David Araújo, Hélder Novais-Bastos, Adriana Magalhães, Henrique Queiroga, Gabriela Fernandes, Venceslau Hespanhol

PA2642 **Oncological emergencies in lung cancer patients during 2019 and SARS-CoV-2 pandemic year**
Marta Carvalho Silva (Braga, Portugal), Joana Naia, Daniela Rodrigues, Diana Pimenta, Sara Campos Silva, Joana Pereira, Eva Padrão, Lurdes Ferreira

PA2643 **Pericardial effusion and lung cancer: experience from a UK North East District General hospital**
Hussun-Ara Shah (Newcastle upon Tyne, United Kingdom), Tufayl Hannan, Karl Jackson, Philip Jones, Avinash Aujayeb

PA2644 **Complications of lung cancer in the clinical course of interstitial lung disease**
Yoichiro Noguchi (Seto, Japan), Reoto Takei, Shunsaku Hayai, Hajime Oi, Yasuhiko Yamano, Toshiki Yokoyama, Toshiaki Matsuda, Kensuke Kataoka, Tomoki Kimura, Yasuhiro Kondoh

PA2645 **A new tissue-mimicking surrogate for pulmonary lesions using for RFA**
Louisa Bühler (Stuttgart, Germany), Sarina Schulze, Markus Polke, Nicolas Kahn, Marc A. Schneider, Claus Peter Heussel, Felix J. Herth, Markus D. Enderle, Walter Linzenbold

PA2646 **Brown adipose tissue activity predicts cachexia and survival in patients with lung cancer.**
Lukas Hofmann (Leipzig, Germany), Jonas Meyer, Johanna Pappisch, Teresa Kerkhoff, Nicolas Linder, Harald Busse, Swen Hesse, Karen Geva Steinhoff, Thomas Ebert, Anke Tönjes, Sebastian Krämer, Johannes Broschewitz, Albrecht Gläser, Sabine Taubenheim, Hartmut Kuhn, Osama Sabri, Hubert Wirtz, Armin Frille

PA2647 **A single centre analysis of stage of presentation of Lung Cancer pre and post Covid-19 pandemic**
Ciara Ottewill (Dublin 4, Ireland), Fiona Mulvany, Finbarr O'Connell, Parthiban Nadarajan

PA2648 **Impact of the covid-19 pandemic on lung cancer referral and treatment**
Emma Crawford (Shropshire, United Kingdom), Julia Mcadam, Harmesh Moudgil, Jenny Nixon, Koottalai Srinivasan, Paul Wareing

PA2649 **Recurrence at site of lung cancer biopsy: experience from a UK district general hospital**
Avinash Aujayeb (Newcastle, United Kingdom)

PA2650 **Impact of the COVID-19 pandemic on suspected lung cancer referrals and subsequent lung cancer diagnosis at North Bristol NHS Trust**
Adriana Ramos Pereira (Bristol (Avon), United Kingdom), Catherine Coombs, Benjamin Masterman, Abiramy Jeyabalan, Martin Plummeridge, Anna Bibby

TP-23 in thematic poster area — Session 308 — 13:00 - 14:00

Thematic poster: How to prevent progression in idiopathic interstitial pneumonias

Disease(s) : Interstitial lung diseases Thoracic oncology

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

Chairs : Fernanda Ines Hernandez Gonzalez (Barcelona, Spain), Giacomo Sgalla (Modena (MO), Italy)

PA2651 **Humoral Response among patients with Interstitial Lung Disease Vaccinated with the BNT162b2 SARS-Cov-2 vaccine - a prospective cohort study**
Barak Pertzov (Raanana, Israel), Einat Shmueli, Haim Ben Zvi, Amir Massarweh, Tamar Barkan, Asaf Ness, Yael Shostak, Lev Freidkin, Osnat Shtraichman, Mordechai Kramer

PA2652 **SARS-CoV2 vaccination in Hungarian IPF patients**
Nora Melinda Toth (Budapest, Hungary), Tamas Nagy, Eniko Barczi, Alexandra Nagy, Noemi Eszes, Aniko Bohacs, Krisztina Vincze, Veronika Müller

PA2653 **INFLUENCE OF ATMOSPHERIC POLLUTION IN MADRID ON THE SEVERITY OF NON-IPF ILD**
Pablo Mariscal Aguilar (Madrid, Spain), Luis Gómez Carrera, Carlos Carpio Segura, Gema Bonilla Hernán, María Isabel Torres Sánchez, María Fernández Velilla-Peña, Elena Villamañán Bueno, Rita Regojo Zapata, Jaime Pavón Guede, Concepción Prados Sánchez, Rodolfo Álvarez-Sala Walther

PA2654 **Defining stakeholders' research priorities in progressive pulmonary fibrosis in the United Kingdom**
Laura Fabbri (London, United Kingdom), Louise Wright, Steve Jones, Wendy Adams, Katherine Cowan, Simon Hart, Anne-Marie Russell, Michael Gibbons, Nazia Chaudhuri, Jennifer Lynch-Wilson, Gisli Jenkins

PA2655 **Reduced immunogenicity of the mRNA vaccine BNT162b2 in patients with IPF**
Theodoros Karampitsakos (Patras, Greece), Ourania Papaioannou, Ilias Dimeas, Panagiota Tsiri, Vassilina Sotiropoulou, Ioannis Tomos, Ilias Papanikolaou, Matthaios Katsaras, Paraskevi Kirgou, Zoe Daniil, Konstantinos Gourgoulianis, Dionysios Papalexatos, Fotis Sampsonas, Effrosyni Manali, Spyridon Papiris, Demosthenes Bouros, Argyris Tzouvelekis

PA2656 **Early administration of nintedanib after the onset of acute exacerbation in patients with interstitial lung disease**
Motoyasu Kato (Tokyo, Japan), Shinichi Sasaki, Eri Hayakawa, Soichiro Soma, Yuta Arai, Shun Nakazawa, Hiroaki Motomura, Issei Sumiyoshi, Yusuke Ochi, Kotaro Kadoya, Shinsaku Togo, Kazuhisa Takahashi

PA2657 **Improved survival of IPF patients treated with antifibrotic drugs compared with untreated patients**
Mark G.J.P. Platenburg (Nieuwegein, Netherlands), Coline H.M. Van Moorsel, Ivo A. Wiertz, Pieter Zanen, Joanne J. Van Der Vis, Adriane D.M. Vorselaars, Marcel Veltkamp, Jan C. Grutters

PA2658 **Risk factors of adverse outcome after acute hospitalization in Idiopathic Pulmonary Fibrosis (IPF)**
Emilia Kassandra Achilles Åttingsberg (København, Denmark), Nils Hoyer, Saher Shaker

PA2659 **Real-world outcomes for incidental interstitial lung abnormalities diagnosed over the baseline round of the Yorkshire Lung Screening Trial.**
Sara Upperton (Leeds, United Kingdom), Claire Bradley, Paul Beirne, Bobby Bhartia, Alison Boland, Philip Crosbie, Michael Darby, Rhian Gabe, Martyn Kennedy, Tim Sutherland, Matthew Callister

PA2660 **Comparison of three dyspnea questionnaires in predicting survival of interstitial lung diseases**
Onofre Moran Mendoza (Kingston (ON), Canada), Andres Moran Macdonald, Sami Alyami, Maxine Kish, Sean Davison

PA2661 **Long-term effect of nintedanib treatment in 11 countries of Europe and Asia**
Martina Koziar Vasakova (Praha 10, Czech Republic), Martina Sterclova, Nesrin Mogulkoc Bishop, Katarzyna Lewandowska, Veronika Müller, Mordechai Kramer, Marta Hajkova, Dragana Jovanovic, Michael Studnicka, Jasna Tekavec-Trkanjec, Anton Penev, Petra Ovesna, Jakub Gregor

PA2662 **Post-hoc analysis of clinical characteristics and outcomes in patients with idiopathic pulmonary fibrosis (IPF) by elevated autoantibody (AAb) status**
Aikaterini D. Samara (Athens, Greece), Chad Newton, Tejaswini Kulkarni, Katerina Samara, Jinnie Ko, Sachin Gupta, Elana J Bernstein

PA2663 **Lessons learned from 4 years Multidisciplinary discussion (MDD) in interstitial lung diseases (ILD)**
Abdelkarim Khalifa (Pfäffikon ZH, Switzerland), Gunther Wiest, Detlef Kirsten, Anne-Marie Kirsten

PA2664 **Therapeutic decisions regarding initiation of antifibrotic therapy in IPF: a multicenter, prospective cohort study from Poland.**
Katarzyna Górska (Warszawa, Poland), Marta Maskey-Warzęchowska, Małgorzata Barnaś, Adam Białas, Adam Barczyk, Hanna Jagielska-Len, Ewa Jassem, Aleksander Kania, Katarzyna Lewandowska, Sebastian Majewski, Magdalena Martusewicz-Boros, Wojciech Piotrowski, Alicja Siemińska, Krzysztof Składek, Małgorzata Sobiecka, Marzena Trzaska-Sobczak, Witold Tomkowski, Beata Żołnowska, Rafał Krenke

PA2665 **Patterns of antifibrotic treatment changes in a cohort of idiopathic pulmonary fibrosis patients**
Inge Raadal Skov (Odense, Denmark), André Shamoun Darbrodi, Jesper Rømhild Davidsen

PA2666 **Could family history avoid lung biopsy in fibrotic interstitial lung diseases? From a clinical retrospective cohort study.**
Diego Duminy-Luppi (L'Hospitalet de Llobregat, Spain), Alex Alcaide-Aldeano, Lurdes Planas-Cerezales, Guadalupe Bermudo-Peloche, Vanesa Vicens-Zygmunt, Patricio Luburich, Belen Del Rio, Roger Llatjós, Lara Pijuan, Ignacio Escobar, Ana Montes-Worboys, Yasmina Gutiérrez-Rodríguez, Rosario Perona, Salud Santos-Pérez, Jordi Dorca, Maria Molina-Molina

PA2667 **Diagnostic delay in IPF impacts progression-free survival, quality of life and hospitalisation rates**
Nils Hoyer (København NV, Denmark), Thomas Skovhus Prior, Elisabeth Bendstrup, Saher Burhan Shaker

PA2668 **Persistence, safety, and costs of antifibrotic treatment for idiopathic pulmonary fibrosis (IPF): a US Veterans Health Administration (VHA) claims study**
Ying Qiu (Princeton, United States), Julia Zhu, Brandon Elpers, Christopher Dieyi, Clare Byrne, Risho Singh, Aryeh Fischer

PA2669 **Effects of low dose pirfenidone on lung function for patients with idiopathic pulmonary fibrosis in real practice**
Kyoung Min Moon (, Republic of Korea), Bock-Hyun Jung, Jae Guk Lee, Myung Pyo Kim

PA2670 **Late Breaking Abstract - Inhaled pirfenidone is associated with better quality of life scores in idiopathic pulmonary fibrosis**
Felix Woodhead (Coventry (West Midlands), United Kingdom), Grace Kim, Jonathan Goldin, Courtney Nichole Thompson, Michele Shaffer, Kelly Otto, Bruce Montgomery

TP-24 in thematic poster area — Session 309 — 13:00 - 14:00

Thematic poster: Treatment of pulmonary arterial hypertension

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

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

Chairs : Luis Jose JARA PALOMARES (Sevilla, Spain), Tomás Pulido Zamudio (México D.F, Mexico)

PA2672 **Acute beat blockade improves right ventricular diastolic filling in pulmonary arterial hypertension: a rodent CMR and clinical human pressure-volume study**
Chinthaka Samaranayake (London, United Kingdom), Marili Niglas, Aleksander Kempny, Nicoleta Baxan, Ali Ashek, Joy Pinguel, Konstantinos Dimopoulos, Laura C Price, Stephen J Wort, Lan Zhao, Colm Mccabe

PA2673	**Haemodynamic (HD) evaluation of LIQ861 (treprostinil) inhalation powder for the treatment of pulmonary arterial hypertension (PAH)** Benjamin Egenlauf (Heidelberg, Germany), Satenik Harutyunova, Panagiota Xanthouli, Savan Patel, Ashley Galloway, Ekkehard Grünig
PA2674	**Combination therapy prescribing in pulmonary arterial hypertension patients in a real-world setting in Latin America** Tatiana Pineda (Bogota, Colombia), Alex Bennett, Ignacio Bluro, Julia Harley, Jorge Irias, Tomás Pulido, Alicia Ramirez, Catalina Rozo Bedoya, Mark Small, Mauricio Orozco-Levi
PA2675	**Macitentan real-world experience in elderly patients over 75 years with pulmonary arterial hypertension (PAH)** Nick Kim (La Jolla, United States), Richard Channick, Kelly Chin, Lada Mitchell, Stefano Turricchia , Rose Ong, Vallerie Mclaughlin
PA2676	**CARE PAH study design: an international, prospective real-world cohort of PAH patients** David Kiely (Sheffield (South Yorkshire), United Kingdom), Marc Humbert, Nancy Dreyer, Vallerie Mclaughlin, Tomas Pulido, Neli Boyanova, Benjamin Frauchiger, Fabrice Kiefer, Cheryl Lassen, Rose Ong, Lilian Sanna, Annette Sauter
PA2677	**Tolerability,safety and survival in patients with severe pulmonary arterial hypertension treated with intravenous epoprostenol(Veletri®):6-months,open label,observational,non-interventional study** Julia Degering (Heidelberg, Germany), Satenik Harutyunova, Nicola Benjamin, Christina Alessandra Eichstaedt, Panagiota Xanthouli, Benjamin Egenlauf, Rebekka Seeger, Ekkehard Grünig
PA2678	**Retrospective on the Developing World's Participation in Pulmonary Hypertension Clinical Trials: 1999-2021** Rong Jiang (Shanghai, China), Lu Zheng, Shang Wang, Yi Yan, Ping Yuan
PA2679	**Mean Size of Atrial Shunt predicts Survival in Pulmonary Hypertension patients undergoing Atrial Septostomy** Rodrigo Zebadua (Ciudad de México, Mexico), Nayeli Zayas, Julio Lopez, Mario Pozas, Laurina Zorrila, Julio Sandoval, Tomas Pulido
PA2680	**Effect of breathing oxygen-enriched air on exercise performance in healthy and different cardiopulmonary diseasesData from 5 RCTs.** Julian Müller (Zürich, Switzerland), Mona Lichtblau, Stéphanie Saxer, Simon R. Schneider, Paula Appenzeller, Elisabeth D. Hasler, Michael Furian, Konrad E. Bloch, Silvia Ulrich
PA2681	**Effect of acetazolamide on incremental cycling exercise in precapillary pulmonary hypertension. A randomized placebo-controlled, double blind, cross-over trial** Julian Müller (Zürich, Switzerland), Paula Appenzeller, Mona Lichtblau, Stéphanie Saxer, Charlotte Berlier, Simon Rafael Schneider, Michael Furian, Esther Irene Schwarz, Konrad Ernst Bloch, Silvia Ulrich
PA2682	**Efficacy of oral treprostinil as an add-on therapy for PAH** David Kiely (Sheffield (South Yorkshire), United Kingdom), Ekkehard Grünig, Vijay Balasubramanian, Joan Barberà, Carmine Dario Vizza, Jean Elwing, Namita Sood, Youlan Rao, Louis Holdstock, Scott Seaman, Meredith Broderick, R. James White
PA2683	**Long-term clinical assessment in patients with Eisenmenger Syndrome treated with macitentan** Rodrigo Zebadua (Ciudad de México, Mexico), Julio César López, Nayeli Guadalupe Zayas, Julio Sandoval, Montserrat Villalobos-Pedroza, Abraham Cruz, Daisy Karina Hernández, Jesús Filiberto Canul, Tomás Pulido
PA2684	**Feasibility, acceptability, safety and efficacy of a remotely delivered home-based pulmonary hypertension exercise program** Ciara McCormack (Navan, Ireland), Brona Kehoe, Sarah Cullivan, Noel Mccaffrey, Sean Gaine, Brian Mccullagh, Andrew Mccarren, Sarah Hardcastle, Niall Moyna
PA2685	**Survival of patients diagnosed with Pulmonary Hypertension undergoing Atrial Septostomy** Rodrigo Zebadua (Ciudad de México, Mexico), Nayeli Zayas, Julio Lopez, Laurina Zorrilla, Mario Pozas, Montserrat Villalobos, Julio Sandoval, Tomas Pulido
PA2686	**Predictors of the response to combined therapy with phosphodiesterase-5 inhibitors and endothelin receptor antagonists in pulmonary arterial hypertension** AGUSTIN ROBERTO GARCIA (BARCELONA, Spain), Isabel Blanco, Manuel Lopez Meseguer, Juan Antonio Domingo Morera, Clara Martin Ontiyuelo, Olga Tura Ceide, Isabel Otero Gonzalez, Pilar Escribano Subías, Joan Albert Barberà
PA2687	**Effects of Molsidomin upon pulmonary hemodynamics and oxygen transport by arterial blood in chronic obstructive pulmonary disease (COPD) and decompensated cor pulmonale** Valentin Calancea (Chisinau, Codru, Republic of Moldova), Eudochia Terna, Constantin Martiniuc, Svetlana Eremciuc, Ion Sirbu, Constantin Matcovschi, Elena Calancea, Sergiu Matcovschi

PA2688 **Cardiorespiratory adaptation whilst breathing normobaric hypoxia vs. short-term exposure to altitude in patients with pulmonary hypertension.**
Simon Raphael Schneider (Zürich, Switzerland), Mona Lichtblau, Michael Furian, Laura Mayer, Julian Müller, Stephanie Saxer, Konrad Bloch, Silvia Ulrich

PA2689 **Late Breaking Abstract - Effect of 5 weeks of oral acetazolamide on patients with pulmonary vascular disease: a randomized, double-blind, cross-over trial**
Mona Lichtblau (Zürich, Switzerland), Stephanie Saxer, Julian Müller, Paula Appenzeller, Charlotte Berlier, Simon R Schneider, Laura Mayer, Michael Furian, Esther I Schwarz, Erik R Swenson, Konrad E Bloch, Silvia Ulrich

PA2690 **Late Breaking Abstract - Cannabidiol reduces lung and heart fibrosis in rats with monocrotaline-induced pulmonary hypertension**
Anna Krzyżewska (Białystok, Poland), Marta Baranowska-Kuczko, Irena Kasacka, Hanna Kozłowska

TP-25 in thematic poster area — Session 310 — 13:00 - 14:00

Thematic poster: Cutting-edge concepts in interventional bronchoscopy

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

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

Chairs : Laurence M.M.J. Crombag (Amsterdam, Netherlands), Rocco Trisolini (Roma, Italy)

PA2691 **INTRATHORACIC LYMPH NODE METASTASES FROM EXTRAPULMONARY NEOPLASMS: DIAGNOSTIC PERFOMANCE OF EBUS-TBNA.**
Alejandro Golfe (Valencia, Spain), Marina Alcaraz Barcelona, Wanda Almonte Batista, Javier Cruz Ruíz, Concepción Patricia López Miguel, Jesús Jiménez López, Francisco Javier Callejas González, Sergio Garcia Castillo, Alvaro Hurtado Fuentes, Raúl Godoy Mayoral, Ana Núñez Ares

PA2692 **Real-life comparison of diagnostic yield (DY) and sample adequacy (SA) of 22G and 25G EBUS-TBNA needles: less is more?**
Filippo Lanfranchi (Padua, Italy), Laura Mancino, Gabriele Foltran, Alberto Pavan, Gioele Castelli, Lorenzo Ciarrocchi, Licia Laurino, Lucio Michieletto

PA2693 **Diagnosing challenging pulmonary nodules with virtual bronchoscopic navigation and augmented fluoroscopy**
Faustina Funke (Essen, Germany), Jane Winantea, Kaid Darwiche

PA2694 **PD-L1 suitability rate of E(B)US-TBNA specimens: RCT of Acquire 22G TBNB vs Expect 22G TBNA needles**
Tess Kramer (Amsterdam, Netherlands), Jolanda Kuijvenhoven, Daniël Korevaar, Maarten Ninaber, Rocco Trisolini, Artur Szublowski, Maciej Gnass, Jiri Votruba, Jan Von Der Thüsen, Daniëlle Cohen, Peter Bonta, Jouke Annema

PA2695 **Prevalence and association with malignancy of intrathoracic lymph node calcifications: a cross sectional endosonographic pilot study**
Stefania Cortese (Rignano Flaminio, Italy), Fausto Leoncini, Jacopo Simonetti, Vanina Livi, Daniele Magnini, Alessandra Cancellieri, Luca Richeldi, Rocco Trisolini

PA2696 **Malignancy Risk Analysis in Patients with non-diagnostic endobronchial ultrasound-fine needle aspiration (EBUS-TBNA) of mediastinal lymph nodes**
Inbal Shafran (raanana, Israel), Lior Sluk, Nadav Furie, Ronen Mass, Michael Peled, Erik Baltaxe, Michael Segel, Tiberiu Shulimzon, Amir Onn, Sumit Chatterji, Liran Levy

PA2697 **Clinical impact of isolated mediastinal and hilar lymphadenopathy (IMHL). Insights from thoracic endosonography (EBUS/EUS-b).**
Serafeim Chrysikos (Athens, Greece), Theodoros Karampitsakos, Sofia Koukidou, Anastasia Papaporphyriou, Maria Anyfanti, Eleftherios Zervas, Georgios Hillas, Argyrios Tzouvelekis, Katerina Dimakou

PA2698 **Safety and Efficacy of EBUS guided trans-bronchial lymph node cryobiopsy (EBUS-TBLNC): A single center experience.**
Virender Pratibh Prasad (Secunderabad, India), Chetan Rao Vaddepally, Venkata Nagarjuna Maturu

PA2699 **Correlation between sonographic features of mediastinal lymph nodes and presence of malignancy when performing EBUS-TBNA**
Sara Braga (Braga, Portugal), Gabriela Fernandes, Hélder Novais E Bastos, Adriana Magalhães

PA2700 **The rise of Endobronchial Ultrasound (EBUS) and fall of Mediastinoscopy**
Haider Al-Najjar (Manchester (Greater Manchester), United Kingdom), Eman Nasr, Haval Balata, Mathhew Evison, Louise Brown, Ramachandran Sundar, Durgesh Rana, Nadira Narine

PA2701 **Involvement of the left adrenal gland in lung cancer patients evaluated by EUS-B-FNA**
Kaid Darwiche (Essen, Germany), Hubertus Hautzel, Dirk Theegarten, Filiz Oezkan, Fatih Uezer, Faustina Funke, Jane Winantea, Hanna Zellerhoff, Ruediger Karpf-Wissel

PA2702 **Real world experience of single use flexible bronchoscopy over six months in a tertiary centre**
Anne-Marie Sweeney (Dublin, Ireland), Grace Kavanagh, Patrick Coghlan, Hammad Danish, Barry Plant, Michael Henry, Marcus Kennedy

PA2703 **Single Use Flexible Bronchoscopy: An ex-vivo comparison of all commercially available scopes.**
Kevin Frederick Deasy (Ballincollig, Ireland), Anne-Marie Sweeney, Emily Margaret O'Reilly, Marcus Peter Kennedy

PA2704 **Pre-clinical testing of single use flexible bronchoscopes: clinician preference based on physical characteristics and level of experience**
Anne-Marie Sweeney (Dublin, Ireland), Kevin Deasy, Emily O'Reilly, Hisham Ibrahim, Hammad Danish, David Landers, Marcus Kennedy

PA2705 **Flexible bronchoscopy in a critically ill - improving patient and operator safety**
Anita Anokar, Samruddhi Chougale, Amarnath Prasad

PA2706 **Healthy volunteer experience following research bronchoscopy**
Hazel Morrison (Bridgwater (Somerset), United Kingdom), Raquel Lopez Ramon, Susan Jackson, Julia Marshall, Celia Mitton, Andrew Mawer, Clare Wilkins, Henry Bettinson, Timothy Hinks, Helen Mcshane

PA2707 **Factors related to Broncho-Alveolar Lavage Recovery Rate**
Mariana Conde (Guimarães, Portugal), Margarida Carvalho, Ana Cláudia Pimenta, Catarina Parra, Artur Vale, Cláudia Pinto, Joelma Silva, Rafael Noya, Ana Isabel Loureiro

PA2708 **On site evaluation of biopsy smears in respiratory samples for the diagnosis of lung cancer**
Eduard Barrio Herraiz (Barcelona, Spain), Alan Jhunior Solis Solis, Toni Zapata Comas, Pere Trias Sabriá, Marta Ávila Terzi, Nuria Mateos Mari, Pere Serra Mitjà, Carmen Centeno Clemente, Rachid Tazi Mezalek, Jorge Abad Capa, Antoni Rosell Gratacós, Felipe Andreo García

PA2709 **Clinical analysis of the patients who required intubation management and underwent Bronchial artery embolization for hemoptysis**
Manabu Suzuki (Tokyo, Japan), Momoko Morishita, Chie Morita, Akinari Tsukada, Takashi Katsuno, Yusaku Kusaba, Akane Ishida, Masao Hashimoto, Junko Terada, Satoru Ishii, Go Naka, Jin Takasaki, Motoyasu Iikura, Shinyu Izumi, Masayuki Hojo, Haruhito Sugiyama

PA2710 **Tranexamic acid versus adrenaline for controlling iatrogenic endobronchial bleeding: a double blind randomized control trial**
Goran Glodić (Zagreb, Croatia), Sonja Badovinac, Denis Baričević, Filip Popović, Dražena Srdić, Mateja Janković Makek, Feđa Džubur, Ivan Sabol, Marta Koršić, Ana Bačelić Gabelica, Ana Hećimović, Bernard Budimir, Dina Mihelčić, Miroslav Samaržija

TP-26 in thematic poster area — Session 311 — 13:00 - 14:00

Thematic poster: Medical education in the digital era

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

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

Chairs : Marjolein Brusse-Keizer (Enschede, Netherlands), Lars Konge (Virum, Denmark)

PA2711 **From virtual to hybrid: attendees' ideas for virtual conference improvements and future conferences**
Sai Ram (Bern, Switzerland), Daniel Stricker, Carine Pannetier, Nathalie Tabin, Richard Costello, Daiana Stolz, Kevin Eva, Sören Huwendiek

PA2712 **Effects of COVID-19 pandemic on medical education from trainee perspective and reinstatement of weekly departmental teaching in a respiratory ward**
Asad Anwar (Guildford, United Kingdom), Hafiza Aqsa Javed, Muhammad Haris Mir, William Mcallister, Clare Alexander, Jonathan Dakin, Ghanem Aldik

PA2713 **Training impact on COVID-19 among health care workers**
Imene MAGROUN (Ariana, Tunisia), Latifa Ben Afia, Soumaya Chebbi, Faten Mhiri, Hiba Ziedi, Jihen Rejeb

PA2714 **Bronchoscopy simulation training and its impact on novices' bronchoscopy skills**
Eveline Gerretsen (Maastricht, Netherlands), Laurence Crombag, Marleen Groenier, Erik Van Der Heijden, Walther Van Mook, Jouke Annema, Frank Smeenk

PA2715	**Physician Associates' (PAs) perceptions and experience in Pleural procedures** Sameer Nagi (Sidcup, United Kingdom), Rebecca Greenbury, Sarah White, Matthew James, Burhan Khan
PA2716	**Utilization of different aspects of digital health among pulmonology residents in Turkey during the pandemic** Aylin Özsancak Uğurlu (Istanbul, Turkey), Nazli Cetin, Maide Gozde Inam, Orkun Eray Terzi, Atalay Ozkul, Nazli Huma Teke, Mehmet Parlak
PA2717	**A virtual reality platform for training in the management of acute respiratory diseases.** Paula Bordallo Vázquez (Gasteiz, Spain), Olatz Llaguno, Camila García-López, Javier Poyo, Miguel Ángel Sánchez, Irantzu Elorza, Franciso Javier Ribas-Solis, Gaspar Sánchez
PA2718	**Practical Procedures Workshop for Physician Associates (PAs)** Rebecca Greenbury (London, United Kingdom), Sarah White, Matthew James, Sameer Nagi, Burhan Khan
PA2719	**Usefulness of a low cost digital stethoscope for remote pulmonary auscultation** Ignasi Garcia Olivé (Badalona, Spain), Agnes Hernandez Biette, Pere Serra Mitja, Elisabet Gras, Jaume Palou, Jorge Abad, Antoni Rosell
PA2720	**The quality of YouTube videos on Obstructive Sleep Apnea** Hulya Abali (Istanbul, Turkey), Fatma Tokgoz Akyil, Seda Tural Onur, Dilara Demir
PA2721	**EVALUATION OF THE GREEK TRADITIONAL MEDIA PLURALISM BEFORE AND DURING THE COVID-19PANDEMIC** Ourania Kotsiou (Larissa, Greece), Dimitra Siachpazidou, Evdoxia Gogou, Konstantinos Gourgoulianis
PA2722	**An overview of Respiratory Research funding in Europe and UK between 2012 to 2022.** Aravind Ponnuswamy (Chester (Cheshire), United Kingdom), Priyadarshinee Karthisankar, Aravind Ponnuswamy
PA2723	**Non-specialists' understanding of their role in pulmonary hypertension diagnosis is significantly improved with online case-based education** Christy Rohani-Montez (Duillier, Switzerland)
PA2724	**Purview of teleconsultation during COVID- 19 pandemic.** Sneha Tirpude (Mumbai (Maharashtra), India), VISHNU GIREESH
PA2725	**A Low-Cost Bio-Simulator and Single Use or EBUS Bronchoscopy. A Platform for Remote Training.** Kevin Frederick Deasy (Ballincollig, Ireland), Anne-Marie Sweeney, Marcus Peter Kennedy
PA2726	**Late Breaking Abstract - Improved health outcomes for Aboriginal children hospitalised with chest infections** Pamela Laird (Perth, Australia), Roz Walker, Jack Whitby, Fenella Gill, Elizabeth Mc Kinnon, Matthew Cooper, Anne Chang, André Schultz
PA2727	**Late Breaking Abstract - Physicians' preferences in the use of PROMs during asthma and allergic rhinitis clinical approach** belen intriago (guayaquil, Ecuador), Jean Bousquet, Torsten Zuberbier, Marcus Maurer, Karla Robles-Velasco, María José Farfán Bajaña, Matias Panchana Lascano, German D. Ramón, Dorota Krasowska, Pavel Kolkhir, Natasa Teovska, Alicja Kasperska-Zajac, Anna Zalewska-Janowska, Mona Al-Ahmad, Maryam Ali Al-Nesf, Tayseer Sabah, Sophia Neisinger, Florin Mihaltan, Maryam Khoshkhui, Maia Rukhadze, Kiran Godse, Ana Maria Giménez-Arnau, David Pesqué, Anja Lingnau, George Christoff, Ted Popov, Monica Rodriguez, Désirée Larenas Linnemann, Daria Fomina, Mitja Kosnik, Rabia Öztaş Kara, Juan Carlos Ivancevich, Nelson Rosario, Luis Felipe Ensina, Roberta Fachini Jardim Criado, Herberto Chong, Chrystopherson Gengyny Caballero López, Ivan Cherrez-Ojeda

TP-3 in thematic poster area — Session 312 — 13:00 - 14:00

Thematic poster: Digital health interventions in respiratory practice

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

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

Chairs : Io Hui (Edinburgh (Edinburgh), United Kingdom), Andrea Aliverti (Milan, Italy)

PA2728	**Exacerbation predictive modelling using real-world data from the myCOPD app** Henry Glyde (Bristol, United Kingdom), Alison Blythin, Tom Wilkinson, Ian Nabney, James Dodd
PA2729	**Use of a severe asthma algorithm in an asthma education center electronic medical record (EMR)** Alison Morra (port hope, Canada), Delanya Podgers, Andrew Day, Patrick Norman, Catherine Lemiere, M.Diane Lougheed

PA2730	**Exploring use of a connected Internet-Of-Things system (A4A+) with CE-marked devices to support asthma self-management? A mixed method study** Io Hui (Edinburgh (Edinburgh), United Kingdom), Brian Mckinstry, Mark Buchner, Hilary Pinnock
PA2731	**Can the generalizability problem of artificial intelligence be overcome?: Pneumothorax detection algorithm** Elvan Burak Verdi (ANKARA, Turkey), Deniz Dogan Mülazimoglu, Serhat Erol, Aslihan Gurun Kaya, Muhammed Yilmaz, Abdussamet Turker, Ahmet Murat Ozbayoglu, Ozlem Isik, Asli Bostanoglu Karacin, Ovgu Velioglu Yakut, Bulent Mustafa Yenigun, Canturk Tasci, Caglar Uzun, Atilla Halil Elhan, Ayten Kayi Cangir, Ozlem Ozdemir Kumbasar, Akin Kaya
PA2732	**Utilisation of health care and operational cost difference in telerehabilitation of COPD patients with a Virtual Autonomous Physiotherapist Agent** Jose Cerdán de las Heras (Aarhus C, Denmark), Fernanda Balbino, Daniel Catalan-Matamoros, Elisaberth Bendstrup
PA2733	**Preferred functionalities on smartphone applications for physical activity in adults with low cardiorespiratory function** Victor Dourado (Santos (SP), Brazil), Wesley Vieira, Maria Simões, Vinicius Lauria, Krom Guedes, Rodrigo Da Silva, Thatiane Ostolin, Neli Proença, Ricardo Padovani
PA2734	**Use of Pan-Canadian Respiratory Standards Initiative for Electronic Medical Health Records (PRESTINE) elements to measure performance in an asthma education centre** Alison Morra (port hope, Canada), Delanya Podgers, Andrew Day, Patrick Norman, Catherine Lemiere, M Diane Lougheed
PA2735	**Lung sounds classification with artificial intelligence** Abid Sourour (Sfax, Tunisia), Mohamed Majdi Karray, Rahma Gargouri, Ilhem Ben Salah, Walid Feki, Zied Triki, Najla Bahloul, Nesrine Kallel, Rim Khemakhem, Nadia Moussa, Samy Kammoun
PA2736	**Integrating asthma tools and clinical guidelines into primary care EMRs across Canada: A mixed-methods approach** Max Moloney (Selwyn, Canada), Madison Mackinnon, Emma Bullock, Alison Morra, David Barber, Samir Gupta, Teresa To, John Queenan, Geneviève Digby, M. Diane Lougheeed
PA2737	**Comparison of lung auscultation between smartphone and digital stethoscope in patients with asthma: a feasibility study** Henrique Ferreira-Cardoso (Porto, Portugal), Ana Catarina Moniz, Rute Almeida, Magna Alves-Correia, Ana Margarida Pereira, Filipa Lopes, Rita Amaral, José Valente, Pedro Vieira-Marques, Catarina João, Manuel Ferreira-Magalhães, Inês Azevedo, João Almeida Fonseca, Cristina Isabel Oliveira Jácome
PA2738	**Patient perceived facilitators to greater self-management using home spirometry** karen parsons (Oxford, United Kingdom), Carmine Ruggiero, Shakila Hussain, Andrew Achaiah, Vishal Nathwani, Sabrina Zulfikar, Emily Fraser, Peter Saunders, Ling-Pei Ho, Rachel Hoyles
PA2739	**Development and performance testing of a deep learning computer-aided diagnosis system for chest X-rays** Gift Gana (Harare, Zimbabwe), Thokhozani Sibanda, Tatenda Madzorera, Micah Nhemachena, Sisodwa Nkomo, Tonderai Mapako, Evander Nyoni, Haji Mupakura
PA2740	**Scoping review on environments to support digital health solutions valued by clinicians in Bangladesh, India, Indonesia, Malaysia and Pakistan** Io Hui (Edinburgh (Edinburgh), United Kingdom), Rutuja Patil, Ashish Satav, Jitendra Shah, Shweta Panwar, Hani Salim, Teck Hock Toh, Adina Abdullah, Mulya Nurmansyah Ardisasmita, Fedri Ruluwedrata Rinawan, Chowdhury Zabir Hossain Tanim, G M Monsur Habib, Parisa Khandakr, Hana Mahmood, Zakiuddin Ahmed, Aimal Rextin, Balharry Dominique, Hilary Pinnock
PA2741	**Computational modelling for enhanced management of multimorbidity** Ruben Gonzalez Colom (SANT HIPOLIT DE VOLTREGA, Spain), Carmen Herranz, Joan Carles Contel, Emili Vela, Antoni Sisó, Jordi Piera, Isaac Cano, Josep Roca
PA2742	**Defining Cases of Confirmed and Suspected Asthma in Electronic Medical Records for Sentinel Surveillance** Max Moloney (Selwyn, Canada), David Barber, John Queenan, Alison Morra, Samir Gupta, Teresa To, Geneviève Digby, Rachel Morkem, M. Diane Lougheed
PA2743	**Decision support algorithm using machine learning for the diagnosis of pulmonary embolism on chest X-ray** Elvan Burak Verdi (ANKARA, Turkey), Deniz Dogan Mülazimoglu, Serhat Erol, Aslihan Gurun Kaya, Asli Bostanoglu Karacin, Sumeyye Ayoz, Ahmet Bahadir Dal, Akin Kaya
PA2744	**Features and quality of COPD self-management apps in the Android marketplace** Shirley Quach (Concord, Canada), Adam Benoit, Ana Oliveira, Roger Goldstein, Dina Brooks
PA2745	**Tele Pulmonology in COPD patients** Sarang Patil (Dhule (Maharashtra), India)

PA2746 **Late Breaking Abstract - Adherence to inhaled drugs – more than just reminders and nudging**
Sabine Häussermann (Munich, Germany), Laura Andersen, Michalea Frisch

TP-4 in thematic poster area Session 313 13:00 - 14:00

Thematic poster: Physiologic studies of respiratory diseases

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

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

Chairs : Iulia Cristina Ioan (Vandoeuvre-Les-Nancy, France), Raffaele Dellaca (Milano (MI), Italy)

PA2747 **Lung function and exercise capacity profile in pleuroparenchymal fibroelastosis**
Ali Chour (Lyon, France), Thomas Gille, Mouhamad Nasser, Khais Ahmad, Julie Traclet, Hilario Nunes, Emilie Blais, Arthur Petat, Vincent Cottin, Segolène Turquier

PA2748 **Acute hypoxia characterises pulmonary micro-aspiration in patients with gastroesophageal reflux disease and laryngopharyngeal reflux.**
Gregory Falk (Lindfield, Australia), Leticia Burton, Daminda Weerasinghe, Hans Van Der Wall

PA2749 **Sex-specific difference in health-related altitude-effects and effect of preventive acetazolamide treatment**
Alina Häfliger (Hildisrieden, Switzerland), Aline Buergin, Laura C Mayer, Maamed Mademilov, Mona Lichtblau, Talant Sooronbaev, Silvia Ulrich, Konrad E Bloch, Michael Furian

PA2750 **Arterial oxygen partial pressure and adverse health effects in COPD at altitude**
Ahmet Sevik (Zuerich, Switzerland), Thomas Gaisl, Laura Graf, Silvia Ulrich, Konrad E Bloch, Mona Lichtblau, Michael Furian

PA2751 **Lung function at 12 years of age in children born very premature compared to term born controls and association to neonatal morbidities and sex.**
Cecilia Hagman (Lund, Sweden), Lars Björklund, Ingrid Pupp-Hansen, Ellen Tufvesson

PA2752 **What adds the dynamic lung Hyperinflation in the diagnosis of asthma in children?**
FATMA ELLEUCH (Sfax, Tunisia), Rim Kammoun, Sana Sellami, Ines Kammoun, Farah Gargouri, Hela Zouari, Kaouthar Masmoudi

PA2753 **Prevalence and predictors of hypoxemia and chronic respiratory failure in stable COPD patients.**
Giuseppe Croce (, Italy), Sarah Elizabeth O'Donnell, Elisa Franceschi, Stefano Pini, Anna Casartelli, Fiammetta Danzo, Dejan Radovanovic, Pierachille Santus

PA2754 **Exercise-induced bronchoconstriction in pediatric age: relationship between age bronchoconstriction and recovery.**
Catarina Camarinha (Lisboa, Portugal), Inês Marques, Isabel Almeida, Inês Nunes, Sara Matos, Ana Cristina Henriques, Ana Verónica Lourenço, Mário Morais-Almeida

PA2755 **Persistent exertional dyspnea post COVID-19: potential mechanisms**
Amany Elbehairy (Alexandria, Egypt), Shaimaa A. Elbialy, Nesma M. Geneidy, Ayman I. Baess, Abdel-Monem E. Metwally, Muhammad M. Elhofy

PA2756 **Time for recovery of function of alveolo-capillary membrane after COVID 19 infections**
Besim Prnjavorac (Tešanj, Bosnia and Herzegovina), Aida Mujaković, Hasan Škiljo, Tamer Bego, Lejla Prnjavorac, Elvira Corhodžić, Jusuf Mehić, Omer Bedak, Emin Brkić, Irfan Prnjavorac

PA2757 **Long-term impact of covid-19: a systematic review of the literature and meta-analysis**
Diana C Sanchez-Ramirez (Winnipeg, Canada), Kaylene Normand, Yang Zhaoyun, Rodrigo Torres-Castro

PA2758 **Impact of elexacaftor/tezacaftor/ivacaftor combination therapy on lung function in adults with cystic fibrosis: Beyond FEV1**
Maximilian Wollsching-Strobel (Köln, Germany), Doris Dieninghoff, Laura F Emrich, Doreen Kroppen, Daniel S Majorski, Tim Mathes, Friederike S Magnet, Sarah B Schwarz, Carl-Peter Criecé, Wolfram Windisch

PA2759 **Effects of different end-expiratory lung volumes on haemodynamics and gas exchange in a rodent model of type-2 diabetes**
Álmos Schranc (Szeged, Hungary), Gergely H. Fodor, Roberta Südy, József Tolnai, Barna Babik, Ferenc Peták

PA2760 **Lung function, bronchial hyperresponsiveness and respiratory symptoms in elite athletes across sports.**
Julie Stang (Oslo, Norway), Guro Pauck Bernhardsen, Thomas Halvorsen, Trine Stensrud

PA2761 **Blowing in the Wind: Use of Incentive Spirometry in Preventing Acute Respiratory Distress Syndrome for Patients with Moderate COVID**
Ann Crizette Garcia (Manila, Philippines), Jose Sarenas

PA2762 **Cardiopulmonary exercise testing in patients with COVID-19 at 3 months from hospital discharge**
Leonardo Gori (Florence, Italy), Carlo Fumagalli, Luca Ciani, Niccolò Marchionni, Francesco Fattirolli, Chiara Zocchi, Laura Rasero, Alessandra Sorano, Maria Vittoria Silverii, Iacopo Olivotto, Federico Lavorini

PA2763 **Comparison of dynamic cerebral autoregulation and cardiac baroreceptor sensitivity between residents living at different altitudes**
Michael Furian (Zürich, Switzerland), Mathilde Ulliel-Roche, Connor A. Howe, Fanny Zerizer, Mathieu Marillier, Anne-Catherine Bernard, Ivan Hancco, Benoit Champigneulle, Sébastien Baillieul, Philip N. Ainslie, Aurélien Pichon, Stéphane Doutreleau, Samuel Verges, Julien Brugniaux

PA2764 **Late Breaking Abstract - A rare case of acute eosinophilic pneumonia induced by vaping-associated lung injury: a case report**
Moath alkhouzaie (Khobar, Saudi Arabia), Abir Alsaid, Alaeldin Elfaki, Raghad Alghamdi

PA2765 **Late Breaking Abstract - Long-term durability of ivacaftor (IVA) treatment benefit in people with cystic fibrosis (PwCF)**
Teja Thorat (Roslindale, United States), Christian Merlo, Christina Scirica, Teja Thorat, Lisa Mcgarry, Maral Dersarkissian, Catherine Nguyen, Yuqian M Gu, Aruna Muthukumar, Joe Healy, M. Alan Brookhart, Jaime Rubin

PA2766 **Late Breaking Abstract - Long-term cardiopulmonary exercise outcomes among COVID-19 survivors: preliminary insights from an Italian study**
Andrea Baccelli (Milano, Italy), Rocco Francesco Rinaldo, Francesca Marchetti, Beatrice Re, Mauro Degrassi, Elena Maria Parazzini, Fabiano Di Marco, Stefano Centanni

TP-5 in thematic poster area — Session 314 — 13:00 - 14:00

Thematic poster: COVID 19: intensive care unit treatment

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

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

Chairs : Lise Piquilloud (Lausanne, Switzerland), Ignacio Martin-Loeches (Dublin, Ireland)

PA2767 **Multimorbidity drives responsiveness to rehabilitation in critical illness: A patient level meta-analysis of four randomized trials**
Jennifer Jones (South Yarra, Australia), Zudin Puthucheary, Amalia Karahalios, Michael Berry, D. Clark Files, David Griffith, Luke Mcdonald, Peter Morris, Marc Moss, Amy Nordon-Craft, Timothy Walsh, Sue Berney, Linda Denehy

PA2768 **Delirium screening in critically ill patients: validation of the Korean version of the 4 A's Test**
Young Seok Lee (Seoul, Republic of Korea), Jae Jeong Shim, Kyungsoo Chung, Chi Ryang Chung, Jongmin Lee

PA2769 **Outcomes of elderly and very elderly patients admitted to intensive care unit for sepsis**
Sharlene Ho (Singapore, Singapore), Niranjana Mahalingam, Geak Poh Tan, Jin Wen Sennen Lew

PA2770 **Early mobilisation of mechanically ventilated patients in the intensive care units: results of a Saudi-wide national survey**
Jaber Alqahtani (Dammam, Saudi Arabia), Mohammed Alahmari, Ibrahim Aldraiwiesh, Asma Alamoudi, Nawal Alotaibi, Abdullah Ghazwani, Abdulelah Aldhahir, Saeed Alghamdi, Abdullah Alqahtani, Jithin Sreedharan, Saad Alrabeeah

PA2771 **Comparing the mortality of COPD and non-COPD patients with COVID-19 in a UK hospital**
Hanif Ahmad (Harlow, United Kingdom), Neelima Akter , Ruby Varghese , Scott Waring , Shavita Kuckreja , Samir Naik, Ugochukwu Ekeowa, Peter Russell, Muhammad Anwar

PA2772 **The impact of age and gender on mortality from COVID-19 at A UK Hospital**
Sooriya Soman (Harlow, United Kingdom), Hanif Ahmad, Kamal Dewan , Ahmed Suliman , Irfan Saleem , Reena Kumari , Peter Russell, Samir Naik , Shavita Kuckreja , Ravi Ragatha , Ugochukwu Ekeowa, Michael Long , Muhammad Anwar

PA2773 **Intermediate respirtory care unit patient flow analysis during the covid-19 pandemic.**
Marina Galdeano Lozano (Montacada I Reixach (Barcelona), Spain), Antoni Marin, Leire Mendiluce, Adriana Martin, Irene Aldàs, Agnes Hernandez, Carmen Ernandez, Ignasi Garcia-Olive, Jjorge Abad

PA2774 **Use of awake prone positioning in acute COVID-19**
Ireti Adejumo (Nottingham (Nottinghamshire), United Kingdom), Mohammad R. Ali, Milind Sovani, Dominick E. Shaw

PA2775 **The diagnosis of spontaneous secondary tension pneumothorax following apparentrecovery from COVID-19 pneumonitis**
Romesh Tirimanna (Ashford, United Kingdom), Eleanor Dorman, Michael Okorie, James Myerson

PA2776 **To assess the diagnostic and prognostic ability of CXRs in COVID-19 pneumonitis**
Hanif Ahmad (Harlow, United Kingdom), Sooriya Soman , Ruby Varghese , Kamal Dewan , Robert Chapman , Jie Tong, Reena Kumari , Ugochukwu Ekeowa, Ravi Ragatha , Peter Russell, Shavita Kuckreja , Michael Long , Muhammad Anwar

PA2777 **Pneumomediastinum in COVID-19 critically ill patients**
Amani Kacem (Sousse, Tunisia), Dhouha Ben Braiek, Hend Zorgati, Imen Mighri, Hanen Brahmi, Rahma Ben Jazia, Imen Kharrat, Jihene Ayachi

PA2778 **Shunt fraction in Covid-19 related Acute Respiratory Failure**
Luca Novelli (Bergamo, Italy), Federico Raimondi, Luca Malandrino, Simone Pappacena, Chiara Allegri, Marisa Anelli, Roberta Biza, Roberta Trapasso, Carlo Catani, Francesco Caglioni, Simone Bonetti, Gianmariano Marchesi, Fabiano Di Marco

PA2780 **Vaccinated COVID-19 patients admitted in a Tunisian ICU: clinical features and outcome.**
Amira Jamoussi (ariana, Tunisia), Selim Sellaouti, Malek Kharrat, Samia Ayed, Fatma Jarraya, Emna Rachdi, Mohamed Besbes, Jalila Ben Khelil

PA2781 **CT scan in COVID-19 patients in ICU: Two evaluative methods**
Amira Jamoussi (ariana, Tunisia), Sarra Zarrouk, Samia Ayed, Emna Rachdi, Fatma Jarraya, Mohamed Besbes, Jalila Ben Khelil

PA2782 **Can initial Chest CT scan findings predict high flow nasal cannula (HFNC) failure in critically ill COVID19 patients**
Amani Kacem (Sousse, Tunisia), Hend Zorgati, Dhouha Ben Braiek, Imen Mighri, Safa Ben Mansour, Oussama Saadaoui, Rania Hidri, Arsalen Douzi, Chaima Kaabi, Asma Azaza, Oumaima Ghabi, Rahma Ben Jazia, Imen Kharrat, Jihene Ayachi

PA2783 **Chest CT scan lesions as predictors of poor prognosis in critically ill COVID-19 patients**
Amani Kacem (Sousse, Tunisia), Hend Zorgati, Dhouha Ben Braiek, Imen Mighri, Oussama Saadaoui, Rania Hidri, Safa Ben Mansour, Chaima Kaabi, Arsalen Douzi, Oumaima Ghabi, Asma Azaza, Rahma Ben Jazia, Imen Kharrat, Jihene Ayachi

PA2784 **Lung ultrasound for detection of pneumonic changes in patients with COVID-19 infection**
Ahmed Kabil (Cairo, Egypt), Moaz Atia, Ahmed Eldeeb, Mohamed Shahin

PA2785 **Predictive factors of mechanical ventilation among critically ill adults with COVID-19**
Meriem Mjid (Tunis, Tunisia), Bedis Jribi, Leith Omrane, Mariem Mjid, Arbia Chaieb, Rihab Jebali, Abir Hedhli, Yassine Ouahchi, Sana Cheikhrouhou, Sonia Toujeni, Samira Merai, Adel Ammous, Bessma Dhahri

TP-6 in thematic poster area — Session 315 — 13:00 - 14:00

Thematic poster: New mechanistic insights into acute and chronic interstitial lung disorders

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

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

Chairs : Olivier Burgy (Dijon, France), Claire Masterson (Galway (Co Galway), Ireland)

PA2786 **Partial apoptosis of epithelial cells in fibrotic lungs.**
Eirini Vasarmidi (Heraklion (Crete), Greece), Alice Guyard, Nicolas Pote, Pierre Mordant, Aurelie Cazes, Bruno Crestani, Arnaud Mailleux

PA2787 **Phenotypic drug screening in a human fibrosis model identified a novel class of antifibrotic therapeutics**
Michael Gerckens (München, Germany), Kenji Schorpp, Francesco Pelizza, Melanie Wögrath, Kora Reichau, Huilong Ma , Armando Dworsky, Arunima Sengupta, Mircea Gabriel Stoleriu, Katharina Heinzelmann, Juliane Merl-Pham, Martin Irmler, Hani N Alsafadi, Eduard Trenkenschuh, Lenka Sarnova, Marketa Jirouskova, Wolfgang Frieß, Stefanie M Hauck, Johannes Beckers, Nikolaus Kneidinger, Jürgen Behr, Anne Hilgendorff, Kamyar Hadian, Michael Lindner, Melanie Königshoff, Oliver Eickelberg, Martin Gregor, Oliver Plettenburg, Ali Önder Yildirim, Gerald Burgstaller

PA2788 **Next generation of gene-editing technologies for respiratory research and medicine**
Sara Cuevas Ocaña (Nottingham, United Kingdom), Ana Lilia Serna Valverde, Liam Reed, Nicholas R Hannan

PA2789 **Role of cellular adhesion molecules in the presence of interstitial lung disease in patients with autoimmune diseases**
Verónica Pulito-Cueto (Santander, Spain), Sara Remuzgo-Martinez, Fernanda Genre, Belén Atienza-Mateo, Virginia Portilla, Victor M. Mora-Cuesta, David Iturbe-Fernández, Leticia Lera-Gómez, Diana Prieto-Pena, Ricardo Blanco, Alfonso Corrales, Oreste Gualillo, Jóse M. Cifrián, Raquel López-Mejías, Miguel A. González-Gay

PA2790	**Spatial transcriptome analysis at single-cell resolution for understanding IPF pathogenesis** Naoaki Watanabe (Tokyo, Japan), Yu Fujita, Takashi Ishiguro, Nobumasa Takahashi, Yoshihiko Shimizu, Noboru Takayanagi, Yoshinori Kawabata, Jun Araya, Yusuke Yamamoto, Kazuyoshi Kuwano
PA2791	**Computational drug repositioning and wet-lab validation approach identifies polo-like kinase inhibitors as potential therapeutics for pulmonary fibrosis** Takeshi Imakura (Tokushima, Japan), Seidai Sato, Kazuya Koyama, Hirohisa Ogawa, Takahiro Niimura, Kojin Murakami, Yuya Yamashita, Keiko Haji, Nobuhito Naito, Kozo Kagawa, Hiroshi Kawano, Yoshito Zamami, Keisuke Ishizawa, Yasuhiko Nishioka
PA2792	**Identification of different lung immune-phenotypes in Idiopathic pulmonary fibrosis (IPF)** Tamara Cruz (Barcelona, Spain), Nuria Mendoza, Sandra Casas, Fernanda Hernandez, Nuria Albacar, John Sembrant, Mauricio Rojas, Alvar Agusti, Jacobo Sellares, Rosa Faner
PA2793	**Endothelial to mesenchymal transition (EndMT) and arterial remodelling in IPF patients** Mathew Eapen (Hobart (TAS), Australia), Archana Gaikwad, Prem Bhattarai, Surajit Dey, Collin Chia, Josie Larby, Greg Haug, Jade Jaffar, Glen Westall, Gurpreet Singhera, Tillie Hackett, Wenying Lu, Sukhwinder Singh Sohal
PA2794	**Late Breaking Abstract - Single cell RNA sequencing suggests Gαi2 is associated with ILD in pigeon fanciers** Domenico Somma (Glasgow, United Kingdom), Mark Spears, Louise V Wain, Richard J Allen, Olivia C Leavy, Bibekbrata Gooptu, Stephen J Bourke, Mariola Kurowska-Stolarska, Charles Mcsharry
PA2795	**Endothelin-1 for the differential diagnosis between interstitial lung disease associated with autoimmune diseases and idiopathic pulmonary fibrosis** SARA REMUZGO-MARTÍNEZ (SANTANDER, Spain), Belén Atienza-Mateo, Verónica Pulito-Cueto, Fernanda Genre, Víctor M. Mora-Cuesta, David Iturbe-Fernández, Virginia Portilla, Oreste Gualillo, Alfonso Corrales, Santos Castañeda, Raquel López-Mejías, José M. Cifrián, Miguel A. González-Gay
PA2796	**Involvement of microRNAs in the development of the bleomycin-induced pulmonary fibrosis model** Vanessa Pitozzi (Parma (PR), Italy), Paola Caruso, Maria Gloria Pittelli, Silvia Pontis, Martina Bonatti, Francesca Ruscitti, Maurizio Civelli, Marcello Trevisani
PA2797	**Differentially expressed genes in Diffuse Alveolar Damage (DAD) patterns of COVID-19.** Natália de Souza Xavier Costa (São Paulo, Brazil), Jhonatas Sirino Monteiro, Jonas Erjefält, Jimmie Jönsson, Olga Cozzolino, Katia Dantas, Carl-Magnus Clausson, Premkumar Siddhuraj, Caroline Lindö, Suzete Ferreira Spina Lombardi, Alfredo Mendroni Júnior, Leila Antonangelo, Caroline Silvério Faria, Amaro Nunes Duarte Neto, Renata Almeida Monteiro, João Renato Rebello Pinho, Michele Soares Gomes-Gouvêa, Roberta Verciano Pereira, Ellen Pierre De Oliveira, Jair Theodoro Filho, Caroline Sanden, Jamie Orengo, Matthew Sleeman, Luiz Fernando Ferraz Da Silva, Paulo Nascimento Saldiva, Marisa Dolhnikoff, Thais Mauad, João Carlos Setubal
PA2798	**Identification of highly immunogenic epitopes in the SARS-CoV-2 Spike protein to produce monoclonal antibodies** Laia Fernandez Barat (Barcelona, Spain), Rubén López-Aladid, Leticia Bueno, Roc Farriol, Eduard Porta, Àlex López-Gavin, Ana Motos, Ruth Aguilar, Marta Vidal, Alfons Jiménez, Roberto Cabrera, Nil Vázquez, Enric Barbeta, Miquel Ferrer, Andrea Catalina Palomeque, Gemma Moncunill, Miquel Lozano, Alberto Garcia-Basteiro, Carlota Dobaño, Antoni Torres
PA2799	**Metabolomic spittle analysis of post COVID-19 patients** Luiz Machado (Botucatu, Brazil), Robson Prudente, Estefania Franco, Mariana Gatto, Gustavo Mota, Luana Pagan, Luis Brizola, Maercio Dos Santos, Thulio Cunha, Robinson Sabino-Silva, Luiz Filho, Mario Martins, Paula Santos, Larissa Maia, André Albuquerque, Eloara Machado, Bruno Baldi, Suzana Tanni
PA2800	**Elevated plasma levels of CXCL16 in severe COVID19 patients.** Sandra Smieszek (Washington, United States)
PA2801	**TNFTNFRSF1A, and TNFRSF1B variants affect TNFR1 and TNFR2 levels in patients with severe COVID-19** Ingrid Fricke-Galindo (Mexico City, Mexico), Ivette Buendía-Roldán, Leslie Chávez-Galán, Gloria Pérez-Rubio, Andy Ruiz, Yadira Palacios-Rodríguez, Rafael De Jesus Hernández-Zenteno, Ramcés Falfán-Valencia
PA2802	**Proteomic determinants of disease, mortality and sequelae in COVID-19 patients requiring invasive mechanical ventilation** Marta Molinero García (Lleida, Spain), Silvia Gómez, Ivan D Benítez, Jj Vengoechea, Jessica González, Clara Gort-Paniello, Anna Moncusí-Moix, María C García-Hidalgo, Manel Pérez-Pons, Gerard Torres, Jesús Caballero, Carme Barberà, Adrián Ceccato, Laia Fernández-Barat, Ricard Ferrer, Dario García-Gasulla, Rosario Menéndez, Ana Motos, Óscar Peñuelas, Jordi Riera, Jesús F Bermejo-Martín, Antoni Torres, Ferran Barbé, David De Gonzalo-Calvo
PA2803	**Molecular genetic markers associated with course of severe COVID-19 pneumonia. Different pathways study.** Nataliia Gorovenko (Kyiv, Ukraine), Mykola Ostrovskyy, Zoia Rossokha, Liliya Fishchuk, Nadiia Korzh, Viktoriia Vershyhora, Olga Dubitskaya, Nataliia Medvedieva, Olena Popova

PA2804 **The dysregulation of the monocyte-dendritic cell interplay is associated with in-hospital mortality in COVID-19 pneumonia**
ludovica capitelli (san nicola la strada, Italy), Marialuisa Bocchino, Silvia Sale, Carmine Nicastro, Carmen Lombardi, Alessandro Sanduzzi Zamparelli, Luigi Atripaldi, Domenico Galati

PA2805 **Development of a Deep Learning Immune Cell Abundance Model Predict 28-Day Survival in Patients with Sepsis**
Li Li (Guangzhou City, China), Yang Gu, Xun Liu, Xinchen Li, Na Zhang, Han Li, Weiqiang Qin, Tao Yu

TP-7 in thematic poster area — Session 316 — 13:00 - 14:00

Thematic poster: Novel discoveries in immune (dys)function in lung disease

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

Method(s) : Cell and molecular biology | Imaging

Chairs : Niki L. Reynaert (Maastricht, Netherlands), Ken Bracke (Ghent, Belgium)

PA2806 **Immune signaling pathways and cell expression is linked to pulmonary fibrosis**
Mohammad Shadab Ali (New Delhi, India), Sonia Verma, Anita Chopra, Saurabh Mittal, Anant Mohan, Ashu Bhalla, Sudheer Arava, Vijay Hadda

PA2807 **Genetic deletion of SLPI results in increased protease activity and mucus clearance in a murine model of chronic lung disease**
Peter Ferris (Belfast, United Kingdom), Ryan Brown , Rebecca Delaney, Caoifa Dougan, Declan Doherty, Donna Small, Marcus Mall, Daniel Mcauley, Bronwen Connolly, Sinéad Weldon, Clifford Taggart

PA2808 **Deciphering the role of angiogenic T cells in the lung vasculopathy of rheumatoid arthritis, systemic sclerosis and other autoimmune diseases**
Verónica Pulito-Cueto (Santander, Spain), Sara Remuzgo-Martínez , Fernanda Genre, Belén Atienza-Mateo, Virginia Portilla, Victor M. Mora-Cuesta, David Iturbe-Fernández, Leticia Lera-Gómez, Javier Rodriguez-Carrio, Diana Prieto-Peña, Ricardo Blanco, Alfonso Corrales, Oreste Gualillo, José M. Cifrián, Raquel López-Mejías, Miguel A. Gónzalez-Gay

PA2809 **Macrophages – the conductor of inflammation in COPD?**
Bahareh Jouleh (Rådal, Norway), Rune Nielsen, Per Bakke, Randi Sandvik, Tharmini Kalananthan, Jonathan Ward, Susan Wilson, Tomas Eagan

PA2810 **Hypertonic saline triggers inflammatory responses in THP-1 derived macrophages**
Francesca Sposito (Liverpool, United Kingdom), Sarah Northey, Paul Mcnamara, Christian Hedrich

PA2811 **The role of airway neutrophils in primary ciliary dyskinesia**
Marfa Blanter (Leuven, Belgium), Maaike Cockx, Mirre De Bondt, Sarah Abouelasrar Salama, Liesel Wittebols, Lotte Vanbrabant, Noëmie Pörtner, Nele Berghmans, Natalie Lorent, Mieke Boon, Sofie Struyf

PA2812 **LSC - 2022 - Inflammatory blood neutrophils in COPD stem from activated bone marrow progenitors**
Theodore Kapellos (Mannheim, Germany), Kevin Bassler, Wataru Fujii, Tal Pecht, Lorenzo Bonaguro, Izabela Galvao, Adem Saglam, Erica Dudkin, Amit Frishberg, Elena De Domenico, Arik Horne, Chantal Donovan, Richard Y. Kim, David Gallego-Ortega, Matthias Becker, Kristian Händler, Thomas Ulas , Jan Hasenauer, Carmen Pizarro, Phil M. Hansbro, Dirk Skowasch, Joachim L. Schultze

PA2813 **Eosinophils sub-types differ between patients with asthma and COPD**
Carlos Cabrera Lopez (Las Palmas de Gran Canaria, Spain), Alejandra Sánchez Santos , Angelina Lemes Castellano, Sara Cazorla Rivero , Joaquin Breña Atienza , Enrique González Dávila , Juan Pablo De Torres Tajes , Miguel Divo , Víctor Pinto-Plata , Francesca Polverino, Jose María Marin, Bartolomé Celli, Ciro Casanova Macario

PA2814 **Innate lymphoid cells 2 (ILC2) in the transition from pediatric wheezing to asthma**
Matteo Bonato (Padova, Italy), Erica Bazzan, Tania Maes, Guy Brusselle, Graziella Turato, Ylenia Padrin, Martina Turrin, Manuel G Cosio, Angelo Barbato, Marina Saetta, Simonetta Baraldo

PA2815 **Activated type 2 innate lymphoid cells are elevated in children with uncontrolled asthma**
Kornel Golebski (Amsterdam, Netherlands), Sophia Bjorkander, Yoni Van Dijk, Boris Gole, Michael Kabesch, Anke H Maitland-Van Der Zee, Erik Melén, Esmee Van Der Ploeg, Uroš Potočnik, Susanne Reinartz, Elisangela Santos Valente, Ralph Stadhouders, Cornelis Van Drunen, Susanne Vijverberg

PA2816 **Identification of Irf8-dependent pulmonary DC subsets using scRNASeq in experimental model of asthma and tolerance**
Adan Chari Jirmo (Hannover, Germany), Ruth Grychtol, Svenja Gaedcke, Bin Liu, Stephanie Destefano, Christine Happle, Olga Halle , Joao Tereno Monteiro, Oliver D Breiholz, David Deluca , Gesine Hansen

PA2817 **Eosinophil-epithelial respiratory cells crosstalk in IL-33 mediated inflammation 3D models.**
Claudia Afferni (Roma (RM), Italy), Adriana Gambardella, Sara Andreone, Fabrizio Mattei, Giovanna Schiavoni

PA2818	**Visualisation of longitudinal corticosteroid-mediated changes in T2 and IL-17A-producing cell populations using multiparameter CyTOF and tSNE** Gareth Hynes (Oxford (Oxfordshire), United Kingdom), Gillian Donachie, Sophie Morgan, Matilda Downs, Ian Pavord, Timothy Hinks
PA2819	**Mechanisms of nasal epithelial cell permeability in eosinophilic Severe Asthma: effect of anti-IL5R therapy** Katie Raby (London, United Kingdom), Piers Dixey, Nazanin Zounemat Kermani, Janice Koranteng, Fan Chung, Pankaj Bhavsar
PA2820	**Effect of IL-3, IL-5 and GM-CSF on adhesion and chemotaxis of blood eosinophil subtypes in allergic asthma** Airidas Rimkunas (Kaunas, Lithuania), Andrius Januskevicius, Egle Vasyle, Jolita Palacionyte, Kestutis Malakauskas
PA2821	**Eosinophil Subtypes Affect Airway Smooth Muscle Cells Proliferation Autocrine Adjustment via Extracellular Matrix Proteins Production in Asthma** Andrius Januskevicius (Kaunas, Lithuania), Airidas Rimkunas, Egle Jurkeviciute, Jolita Palacionyte, Kestutis Malakauskas
PA2822	**Activation of blood eosinophil subtypes proliferative properties by eosinophilopoetins in severe non-allergic eosinophilic asthma** Jolita Palacionyte (Kaunas, Lithuania), Airidas Rimkunas, Egle Jurkeviciute, Andrius Januskevicius, Kestutis Malakauskas
PA2823	**LSC - 2022 - Effect of eosinophilopoetins on proliferative properties of blood eosinophil subtypes in allergic asthma** Jolita Palacionyte (Kaunas, Lithuania), Airidas Rimkunas, Egle Jurkeviciute, Andrius Januskevicius, Kestutis Malakauskas
PA2824	**The Effect of Bronchial Allergen Challenge on Blood Eosinophil Subtypes-Specific miRNAs Expression in Allergic Asthma** Egle Jurkeviciute (Kaunas, Lithuania), Paulina Malakauskaite, Andrius Januskevicius, Airidas Rimkunas, Jolita Palacionyte, Kestutis Malakauskas
PA2825	**Late Breaking Abstract - Electronic cigarette vapour suppresses human neutrophil functions and alters phenotype, irrespective of nicotine content.** Alice Jasper (Birmingham, United Kingdom), Aduragbemi Faniyi, Lauren Davis, Frances Grudzinska, Robyn Halston, Dhruv Parekh, Elizabeth Sapey, David Thickett, Aaron Scott

TP-8 in thematic poster area — Session 317 — 13:00 - 14:00

Thematic poster: Identifying therapeutic targets and novel drug strategies in pulmonary diseases

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

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

Chairs : Shyreen Hassibi (London, United Kingdom), Thomas Geiser (Bern, Switzerland)

PA2826	**scRNA sequencing on human airway epithelium reveals metabolic changes during healthy aging** Pavan Prabhala (Lund, Sweden), Sofia Wijk, Stefan Lang, Ellen Tufvesson, Leif Bjermer, Shamit Soneji, Gunilla Westergren-Thorsson, Mattias Magnusson
PA2827	**Identify Bcl3 as a novel biomarker shared between severe asthma and lung cancer using next-generation RNA sequencing from archival FFPE tissue biopsies** Laila Salameh (Dubai, United Arab Emirates), Poorna Manasa Bhamidimarri, Noha Elemam, Nival Ali, Youssef Dairi, Mouza Alsharhan, Syed Hammad Tirmazy, Qutayba Hamid, Bassam Mahboub, Saba Al Heialy, Rifat Hamoudi
PA2828	**Identification of miR-328-3p targets during wound repair of bronchial epithelial cells** Beata Narozna (Poznań, Poland), Zuzanna Stachowiak, Wojciech Langwiński, Aleksandra Szczepankiewicz
PA2829	**Correction of structural changes of lung parenchyma in induced systemic sclerosis** Bohdana Doskaliuk (Ivano-Frankivsk, Ukraine), Liubomyr Zaiats, Roman Yatsyshyn
PA2830	**Hyaluronic acid-targeted metabolism in Acute Respiratory Distress Syndrome** Fernanda Zamboni (Limerick, Ireland), Chun Kwok Wong, Maurice Collins
PA2831	**Zoledronic acid targeting of the mevalonate pathway causes reduced cell recruitment and attenuates pulmonary fibrosis** Jesper Bergwik (Lund, Sweden), Lloyd Tanner, Andrew Single, Ravi Bhongir, Jonas Erjefält, Arne Egesten
PA2832	**GTX-003 reduces the fibrotic markers in human lung fibroblast from patients with interstitial lung diseases.** Ana Montes Worboys (Sevilla, Spain), Jaume Mercade, María Molina-Molina, Eugenia Ruiz-Canovas

PA2833	**Small-molecule-mediated OGG1 inhibition attenuates pulmonary inflammation and lung fibrosis** Lloyd Tanner (Lund, Sweden), Andrew Single, Ravi Bhongir, Moritz Heusel, Tirthankar Mohanty, Christofer Karlsson, Carl-Magnus Clausson, Jesper Bergwik, Cecilia Andersson, Riya Oommen, Jonas Erjefält, Johan Malmström, Olov Wallner, Istvan Boldogh, Thomas Helleday, Christina Kalderén, Arne Egesten
PA2834	**Extracellular matrix formation reduction by nintedanib varies in the Scar-in-a-Jar fibroblast model depending on pathway induction** Jannie M. B. Sand (Herlev, Denmark), Morten Aarkrogh Christensen, Pernille Juhl, Diana Julie Leeming
PA2835	**Delayed Treatment with the Novel HSP90 inhibitor TAS-116 Ameliorate Hydrochloric Acid-Induced Pulmonary Fibrosis** Pavel Solopov (Norfolk, United States), Ruben Manuel Luciano Colunga Biancatelli, Christiana Dimitropolou, Tierney Day, John D Catravas
PA2836	**Antifibrotic effect of metformin in a rat double-hit bleomycin model** Martina Bonatti (Solna, Sweden), Paola Caruso, Vanessa Pitozzi, Silvia Pontis, Maria Gloria Pittelli, Caterina Frati, Costanza Anna Maria Lagrasta, Maurizio Civelli, Barbara Montanini, Marcello Trevisani
PA2837	**Targeting p16 to induce Krt8+ transitional stem cell state and promote alveolar regeneration** Bruno Ribeiro Baptista (Nancy, France), Gregoire Justeau, Marylene Toigo, Maeva Zysman, Charlotte Thiebaut De Menonville, Randa Belgacemi, François Chabot, Sophie Lanone, Genevieve Derumeaux, Jorge Boczkowski, Laurent Boyer
PA2838	**Inhibition of neutrophilic inflammation by targeting the airway epithelial barrier with EP395.** Jennifer Kricker (Reykjavík, Iceland), Fridrik Gardarsson, Fredrik Lehmann, Maria Bech, Thorarinn Gudjonsson, Clive Page, Michael Parnham
PA2839	**Short chain fatty acids reduce inflamm-aging and ameliorate enhanced severity of acute lung injury in old mice** Christina Hildebrand (Hannover, Germany), Andreas Pich, Christian Mühlfeld, Marius Vital, Christina Brandenberger
PA2840	**Omeg@Silica microencapsulated fish oil counteracts tumor-related inflammation in lung adenocarcinoma cells** Elisabetta Pace (Palermo (PA), Italy), Claudia D'Anna, Caterina Di Sano, Giuseppe Cammarata, Simona Taverna, Serena Di Vincenzo, Mario Pagliaro, Antonio Scurria, Rosaria Ciriminna
PA2841	**Effect of dipeptidyl peptidase-4 inhibitor on emphysema model in mice** Hyonsoo Joo (Seoul, Republic of Korea), Jin Woo Kim
PA2842	**KVX-053, a PTP4A3 inhibitor, as antidote against CEES-induced Acute Lung Injury** Ruben Manuel Luciano Colunga Biancatelli (Norfolk, United States), Pavel Solopov, John Lazo, Elizabeth Sharlow, Brittany Ruedlinger, Stephen Beebe, John Catravas
PA2843	**Mesenchymal Stromal Cells Modulate the Immune Cell Response in a Klebsiella Pneumoniae Induced Sepsis Model** Jack Brady (Galway, Ireland), Claire Masterson, Declan Byrnes, Shahd Horie, Hector Gonzalez, Sean Mccarthy, Senthilkumar Alagesan, Daniel O'Toole, John Laffey
PA2844	**Late Breaking Abstract - Airway morphogenesis in wild type and heterozygous F508del mouse embryonic lungs treated by Elexacaftor/Tezacaftor/Ivacaftor** Alice Hadchouel-Duvergé (Paris, France), Mickaël Lhuillier, Laura Aoust, Elise Dreano, Kim Landry Truchon, Christophe Delacourt, Lucie Jeanotte, Isabelle Sermet Gaudelus
PA2845	**Late Breaking Abstract - CFAP74-mutations as cause of Primary Ciliary Dyskinesia (PCD): Clinical presentation and diagnostic challenges** Luisa Biebach (Münster, Germany), Sandra Cindric, Julia Koenig, Isabella Aprea, Gerard Dougherty, Johanna Raidt, Diana Bracht, Renate Ruppel, Jens Schreiber, Rim Hjeij, Heike Olbrich, Heymut Omran

TP-9 in thematic poster area — Session 318 — 13:00 - 14:00

Thematic poster: Central sleep apnoea, hypoventilation and hypoxia in adults and children

Disease(s) : Sleep and breathing disorders

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

Chairs : Renaud Tamisier (Grenoble, France), Renata L. Riha (Edinburgh (Edinburgh), United Kingdom)

PA2846	**Registry on the treatment of central and complex sleep-disordered breathing with adaptive servo-ventilation (READ-ASV): cohort profile** Michael Arzt (Regensburg, Germany), Oliver Munt, Jean-Louis Pepin, Raphael Heinzer, Raphaela Kuebeck, Adam Benjafield, Holger Woehrle

PA2847	**Prevalence and risk factors of atrial fibrillation-Collective of the SERVE-HF Major Substudy** Christoph Fisser (Regensburg, Germany), Victoria Vaas, Lara Gall, Jannis Bureck, Joerg Priefert, Dominik Linz, Holger Woehrle, Helmut Teschler, Martin R Cowie, Michael Arzt
PA2848	**ECHOCARDIOGRAPHY MAY PREDICT TREATMENT EMERGENT CENTRAL SLEEP APNEA** Abid Sourour (Sfax, Tunisia), Issraa EL WHADHANE, Aiman Ghrab, Amina Kotti, Amine Bahloul, Sameh Msaad, Samy Kammoun
PA2849	**Transcutaneous capnography usefulness in alveolar hypoventilation and titration in a sleep unit.** María Aguado Agudo (Zaragoza, Spain), Teresa Martín Carpi, Jorge Rodríguez Sanz, Laura Torralba
PA2850	**Outcome of Long Term Ventilation (LTV) following remote initiation and monitoring in patients with Chronic Hypercapnic Respiratory Failure (CHRF) during the SARS-CoV-2 pandemic.** seif Aldeen Mansour (sheffield, United Kingdom), Duncan Nicholson, Bethen Nicholson, Sara Downs, Akshay Dwarakanath
PA2851	**Factors affecting domiciliary non-invasive ventilation compliance** Anita Saigal (Chesham (Buckinghamshire), United Kingdom), Amar Shah, Katia Florman, Nitika Kaushal, Hiu Kwong, Akul Karoshi, Laura White, Ryan Walker, Yan Lin, Ho Juen, Nikesh Devani, Stephanie Mansell, Swapna Mandal
PA2852	**Prediction of Nocturnal Ventilation by Pulmonary Function Testing in Patients with Amyotrophic Lateral Sclerosis (ALS).** Friederike Tress (Magdeburg, Germany), Eva Luecke, Anke Lux, Jens Schreiber
PA2853	**Evaluation of polysomnography findings in children with genetic skeletal disorders** Nagehan Emiralioğlu (Ankara, Turkey), Halime Nayır Büyükşahin, Pelin Ozlem Simsek Kiper, Birce Sunman, Ismail Güzelkaş, Didem Alboğa, Meltem Akgül Erdal, Koray Boduroglu, Gülen Eda Utine, Ebru Yalcın, Deniz Doğru, Nural Kiper, Ugur Ozcelik
PA2854	**A home ventilation support programme for children: Seven years of experience in a newly established center in the Czech Republic** Tereza Dousova (Praha, Czech Republic), Anna Chmelarova, Vaclav Koucky, Vendula Martinu, Eva Fürstova, David Megvinet-Chucesov, Žofia Varenyiova, Petr Pohunek
PA2855	**Creating a bedtime reading book for children starting on non-invasive ventilation** Meg Ruecroft (Wirral, United Kingdom), Liam Durkin, Ruth Trinick, Lyndsey Carlson
PA2856	**Global Field Safety Notice (FSN) – a tertiary paediatric respiratory unit's experience.** Sheila Javadpour (Dublin 18, Ireland), Susan Keogh, Fiona Ringholz, Ruth O'Reilly, Des Cox, Lisa Farrell, Fiona Healy, Dubhfeasa Slattery, Michael Williamson, Peter Greally, Basil Elnazir
PA2857	**Does cardiorespiratory polygraphy have a role in non-ventilated children with SMA?** Sidrah Chaudhry (London, United Kingdom), Aidan Laverty, Francois Abel, Martin Samuels
PA2858	**Oxygen desaturation indices as a predictor for obstructive sleep apnoea in children** Martin Samuels (London, United Kingdom), Supriya Shinde, Anna Selby, Ross Langley, Elise Buchan, Calum Presslie, Julia Mcgovern, Matthew Davies, Ruth Kingshott, Catherine Hill, Hazel Evans
PA2859	**Estimation of the apnoea-hipopnoea index from the oxyhaemoglobin desaturation index at 3%: proposition of a simple linear regression model** Miguel Lorente González (Madrid, Spain), Eva María Arias Arias, Jesús Muñoz Méndez, Sofía Valeria Yerovi Onofre, Javier Collada Carrasco, Annette Zevallos Villegas, Isabel Pina Máiquez, Trinidad Díaz Cambriles
PA2860	**Sleep and blood pressure while staying for 10 months at the Concordia Station (3233m), Antarctica** Michael Furian (Zürich, Switzerland), Paul Robach, Sébastien Baillieul, Stephane Doutreleau, Pierrick Arnal, Samuel Verges
PA2861	**The effect of transcutaneous submental electrical stimulation on the blood pressure response in healthy volunteers** ABDULAZIZ ALSHARIFI (london, United Kingdom), Niamh Carter, Irampaye Akbar, Miquel Serna Pascual, Michael Cheng, Martino Pengo, Gianfranco Parati, Gerrard Rafferty, Joerg Steier
PA2862	**Late Breaking Abstract - Analysis of impact on Pittsburgh sleep quality index in a wide spread of central sleep apnoea (CSA) treated with adaptive servo ventilation (ASV): 6-month follow-up FACIL-VAA study results.** Renaud Tamisier (Grenoble, France), Carole Philippe, Arnaud Prigent, Christelle Charley-Monaca, Jean Pierre Mallet, Thibault Gentina, Frédéric Gagnadoux, Claire Launois, Marie Pia D'Ortho, Toufik Didi, Tiphaine Guy, Frédéric Goutorbe, Christophe Perrin, Sandrine Pontier-Marchandise, Jean Louis Pépin, Jean Claude Meurice

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

Studio - online Session 321 14:15 - 15:15

Online skills lab: Respiratory sleep disorders: from diagnosis to management

CPAP to NIV, objective tests, and type 3 monitors

Aims : to demonstrate how to choose the optimal diagnostic monitoring tool for sleep and breathing (polysomnography, type III device and telemonitoring) in patients with sleep-disordered breathing; to discuss the characteristics and indications of different positive airway pressure/noninvasive ventilation modes for various types of sleep-disordered breathing and hypoventilation; to demonstrate a practical approach for the use of different positive airway pressure modes in patients with obesity hypoventilation syndrome.

Chairs : Sophia E. Schiza (Heraklion, Greece), Winfried J. Randerath (Solingen, Germany)

14:15	**Introduction** All Speakers	**2866**
14:20	**Choosing the best diagnostic monitoring tool for SDB patients** Yüksel Peker (Istanbul, Turkey)	**2867**
14:35	**Different PAP/NIV modes for SDB and hypoventilation** Dries Testelmans (Leuven, Belgium)	**2868**
14:50	**PAP treatment of obesity hypoventilation syndrome** Marta Susana Monteiro Drummond Freitas (Maia, Portugal)	**2869**
15:05	**Conclusions and Q&A** All Speakers	**2870**

8A - live streamed Session 322 14:15 - 15:45

Symposium: Evolving questions in chronic obstructive pulmonary disease management

Lessons from pathophysiology to epidemiology

Aims : to ask challenging questions faced every day when managing patients with chronic obstructive pulmonary disease (COPD); to inform clinicians and researchers about the latest updates concerning diagnosis, management and assessment of COPD covering four areas, namely, the role of eosinophils, the pathophysiology of a disease exacerbation, the relevance of mortality endpoints and the assessment of COPD patients for comorbidities; to interpret and elaborate on recent findings of clinical trials and their relevance to patient practice.

Disease(s) : Airway diseases

Method(s) : Cell and molecular biology Epidemiology Imaging

Tag(s) : Translational

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

Chairs : Omar S. Usmani (London, United Kingdom), Ayşe Arzu Yorgancıoğlu (Konak, Turkey), Daiana Stolz (Basel, Switzerland)

14:15	**Understanding the role of eosinophilic COPD management: are clinical trial data ready for application in everyday clinical care?** Mona Bafadhel (London, United Kingdom)	**2871**
14:30	**What is the best definition of an exacerbation in COPD patients to help demystify clinical trial data?** Alberto Papi (Cona, Ferrara, Italy)	**2872**
14:45	**Mortality and mortality assessment in COPD: is it possible to apply clinical trial data in everyday patient practice?** Dave Singh (Manchester, United Kingdom)	**2873**
15:00	**Should all patients with COPD undergo body plethysmography, echocardiograms and computed tomography lung scans?** MeiLan K. Han (Ann Arbor, United States)	**2874**
15:15	**Discussion and Q&A** All Speakers	**2875**

8B - live streamed Session 323 14:15 - 15:45

State of the art session: Pulmonary vascular diseases

Pulmonary hypertension in pulmonary disease

Aims : to summarise the vast progress that has been made in understanding and treatment of pulmonary hypertension related to underlying lung disease in recent years; to discuss the biology and epigenetic causes of pulmonary hypertension, and how this information may help to develop novel treatments; to provide an update about recent trials in pulmonary hypertension; to provide novel insights into the pulmonary vascular nature of low DLCO-related pulmonary hypertension.

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

Method(s) : Imaging | Physiology | Respiratory intensive care

Tag(s) : Clinical

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

Chairs : Anton Vonk Noordegraaf (Amsterdam, Netherlands), Silvia Ulrich (Zurich, Switzerland)

14:15	**The origin and consequence of pulmonary hypertension in patients with lung-related disease** Joan Albert Barberà Mir (Barcelona, Spain)	**2876**
14:30	**Pulmonary hypertension in patients with autoimmune disease** Marc Humbert (Le Kremlin-Bicêtre, France)	**2877**
14:45	**Failures and successes in treatment of pulmonary hypertension in patients with interstitial lung disease: past, present and future** Aaron Waxman (Boston, United States)	**2878**
15:00	**Low DLCO in patients with pulmonary arterial hypertension: a different vascular phenotype?** Esther Jeritza Nossent (Amsterdam, Netherlands)	**2879**
15:15	**Discussion and Q&A** All Speakers	**2880**

8C - live streamed Session 324 14:15 - 15:45

Clinical trials session: ALERT 3: COVID and interstitial lung diseases

Aims : Including the ALERT sessions (Abstracts Leading to Evolution in Respiratory Medicine Trials), these formats showcase important and very late-breaking clinical trial data from all respiratory disease areas. Presenters, session chairs and viewers will take part lively discussions on the presented trials.

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

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

Tag(s) : Clinical

Chairs : Elżbieta Magdalena Grabczak (Warszawa, Poland), Christopher E. Brightling (Leicester (Leicestershire), United Kingdom)

Discussants : Katerina Antoniou (Heraklion, Greece), Anita Simonds (London, United Kingdom)

RCT2881	**RCT Abstract - Phase 3 RCT of C5a-Specific Vilobelimab in Severe COVID-19 Pneumonia** Alexander P.J. Vlaar (Amsterdam, Netherlands), Alexander P.J. Vlaar, Greet Hermans, Martin Witzenrath, Pieter Van Paassen, Leo Heunks, Bruno Mourvillier, Sanne De Bruin, Endry Lim Lim, Michael Piagnerelli, Antoine Roquilly, Jean-Baptiste Lascarrou, Michael Bauer, Carole Schwebel, Matthijs Brouwer, Pieter Tuinman, Tobias Welte, Gernot Marx, Ulrich Jaschinski, Alexander Cornet, Anastasia Grebenyuk, Philippe Jorens, Simon Rückinger, Korinna Pilz, Claus Thielert, Dorothee Neukirchen, Lisa Ruckerbauer, Bruce Burnett, Renfeng Guo, Diederik Van De Beek, Niels Riedemann
RCT2882	**RCT Abstract - A randomised controlled trial of early intervention with oral favipiravir in patients hospitalised with COVID-19 (PIONEER Trial)** Christopher M Orton (London, United Kingdom), Pallav L Shah, Beatriz Grinsztejn, Gavin C Donaldson, Brenda Crabtree Ramírez, James Tonkin, Breno R Santos, Sandra W Cardoso, Andrew I Ritchie, Francesca Conway, Maria P D Riberio, Dexter J Wiseman, Anand Tana, Bavithra Vijayakumar, Cielito Caneja, Craig Leaper, Bobby Mann, Anda Samson, Pankaj K Bhavsar, Marta Boffito, Mark R Johnson, Anton Pozniak, Michael Pelly
RCT2883	**RCT Abstract - Dipeptidyl Peptidase-1 Inhibition in Patients Hospitalized with COVID-19: a Multicentre Randomized Double-Blind Placebo Controlled Trial** Holly R. Keir (Dundee (Angus), United Kingdom), Merete B. Long, Hani Abo-Leyah, Yan H. Giam, Thenmalar Vadiveloo, Thomas Pembridge, Rebecca C. Hull, Lilia Delgado, Margaret Band, Fiona Mclaren-Neil, Simon Adamson, Eva Lahnsteiner, Amy Gilmour, Chloe Hughes, Benjamin Jm. New, David Connell, Rebecca Dowey, Helena Turton, Hollian Richardson, Diane Cassidy, Jamie Cooper, Jay Suntharalingam, Lavanya Diwakar, Peter Russell, Jonathan Underwood, Alexander Hicks, Davinder Ps Dosanjh, Beth Sage, Devesh Dhasmana, Mark Spears, Aa Roger Thompson, Christopher Brightling, Andrew Smith, Manish Patel, Jacob George, Alison M Condliffe, Amelia Shoemark, Graeme Maclennan, James D Chalmers

RCT2884	**RCT Abstract - SPRINTER: A Randomized, Double-Blind, Placebo-Controlled, Phase 3 Trial to Determine the Efficacy and Safety of Inhaled Interferon Beta-1a (SNG001) for the Treatment of Patients Hospitalised Due to COVID-19 (NCT04732949)** Phillip D Monk (Southampton (Hampshire), United Kingdom), Jody Brookes, Victoria Tear, Toby Batten, Marcin Mankowski, Stephen Holgate, Ratko Djukanovic, Tom Wilkinson	
RCT2885	**Wrap-up by discussant and discussion** Anita Simonds (London, United Kingdom)	
RCT2886	**Late Breaking Abstract - Randomized, Double Blinded, Placebo-Controlled, Phase 2 Study of Safety, Tolerability and Efficacy of Pirfenidone in Patients with Rheumatoid Arthritis Interstitial Lung Disease** Ivan Rosas (Houston, United States), Joshua Solomon, Sonye Donoff, Felix Woodhead, Ganesh Raghu, Goldberg Hilary, Trail1 Network Investigators	
RCT2887	**Nintedanib in children and adolescents with fibrosing interstitial lung disease: the InPedILD trial** Robin Deterding (Aurora, United States), Lisa R Young, Emily M Deboer, David Warburton, Steven Cunningham, Nicolaus Schwerk, Kevin R Flaherty, Kevin K Brown, Mihaela Dumistracel, Elvira Erhardt, Julia Bertulis, Martina Gahlemann, Susanne Stowasser, Matthias Griese	
RCT2888	**Wrap-up by discussant and discussion** Katerina Antoniou (Heraklion, Greece)	
RCT2889	**Closing remarks** All Speakers	

8G - live streamed Session 325 14:15 - 15:45

Symposium: Utilising exercise testing in pre-operative assessment, rehabilitation and exercise prescription

Aims : to provide an overview of the different exercise modalities available to assess exercise capacity, assessment of exercise prescription and rehabilitation; to provide an overview of how exercise testing can be used to assess pre-operative risk and its utility in determining the most appropriate peri-operative care; to describe the importance of activity in healthy adults and patients; to demonstrate how to effectively provide an exercise prescription; to provide attendees with a global understanding of the importance of exercise and how to utilise it in their everyday practice for the benefit of patients.

Disease(s) : Airway diseases

Method(s) : Physiology Pulmonary rehabilitation Surgery

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Medical Student, Medical Technical Assistant, Nurse, Respiratory critical care physician, Paediatrician, Patient, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist, Thoracic surgeon, Journalist

Chairs : Pierantonio Laveneziana (Paris, France), Jellien Makonga-Braaksma (Woudenberg, Netherlands)

14:15	**Patient's testimony** Carlos Alberto dos Anjos de Sousa (, Portugal)	**2890**
14:20	**Modalities available to assess the exercise response and exercise rehabilitation** Sally J. Singh (Leicester (Leicestershire), United Kingdom)	**2891**
14:35	**Utilising the cardio-pulmonary exercise test to assess peri-operative risk** Sandy Jack (Liverpool (Merseyside), United Kingdom)	**2892**
14:50	**The health-related benefits of increased exercise and activity** Hayley Lewthwaite (Montreal (QC), Canada)	**2893**
15:05	**Exercise prescription in health and disease** Michael Welsch (Jackson, United States)	**2894**
15:20	**Discussion and Q&A** All Speakers	**2895**

8H - live streamed Session 326 14:15 - 15:45

Symposium: Interstitial lung diseases in connective tissue diseases: patient's journey from diagnosis and new treatment strategies to transplantation

Aims : to update attendees about the management of interstitial lung diseases (ILDs) associated with connective tissue diseases (CTD-ILDs), which has recently evolved with the increasing numbers of prescription for antifibrotics in addition to immunosuppressive drugs; to provide an update about diagnostic practice and assess the adjunctive value of a multidisciplinary approach to diagnosis; to describe therapeutic strategies and analyse the timing and contraindications of lung transplant referral as well as post-transplant management and outcomes; to discuss novel insights into the diagnostic procedure and the implication of genetics.

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

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

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Nurse, Respiratory critical care physician, Radiologist, Thoracic surgeon, Respiratory therapist

Chairs : Federica Meloni (Pavia (PV), Italy), Tobias Welte (Hannover, Germany)

14:15	**Utility of genetic assessment of patients with CTD-ILDs** Antoine Froidure (Bruxelles, Belgium)	**2896**
14:30	**CTD-ILDs: diagnosis and new treatment strategies up to transplantation** Bruno Crestani (Paris, France)	**2897**
14:45	**What are the main challenges when a CTD-ILD patient is referred for lung transplantation?** Jose Manuel Cifrian Martinez (Santander (Cantabria), Spain)	**2898**
15:00	**New trends in treatment of myositis-associated ILD** Ingrid Lundberg (Stockholm, Sweden)	**2899**
15:15	**Discussion and Q&A** All Speakers	**2900**

8N Session 327 14:15 - 15:30

Oral presentation: Clinical utility of thoracic ultrasound: new trends

Disease(s) : Pulmonary vascular diseases | Thoracic oncology | Airway diseases

Method(s) : Imaging | Respiratory intensive care | Surgery

Chairs : Eihab Bedawi (Oxford (Oxfordshire), United Kingdom), Rahul Bhatnagar (Bristol, United Kingdom)

OA2901	**Focused lung ultrasound to predict respiratory failure in patients with symptoms of COVID-19. Amulticentre prospective cohort study.** Søren Helbo Skaarup (Aarhus C, Denmark), Rasmus Aagaard, Stig Holm Ovesen, Jesper Weile, Hans Kirkegaard, Caroline Espersen, Mats Christian Højbjerg Lassen, Kristoffer Grundtvig Skaarup, Stefan Posth, Christian Laursen, Ask Bock, Michael Dan Arvig, Tor Biering-Sørensen
OA2902	**Diaphragm dysfunctions among patients recovered from COVID** Vijay Hadda (New Delhi (Delhi), India), Arafat Hussain, Tejas Suri, Saurabh Mittal, Karan Madan, Anant Mohan
OA2903	**Area method for measuring diaphragm movement in patients with unilateral pleural effusion.** Katrine Fjællegaard (Farum, Denmark), Jesper Koefod Petersen, Søren Skaarup, Paul Frost Clementsen, Christian B. Laursen, Rahul Bhatnagar, Uffe Bodtger
OA2904	**A crossover comparison of telerobotic and conventional ultrasonography in children** Celine Delestrain (Creteil, France), Catherine Belozertseva, Camille Jung, Mickael Shum, Carine Vastel, Emilie Georget, Fouad Madhi, Ralph Epaud
OA2905	**Lung ultrasound score for pediatric pneumonia surveillance** Ioana Mihaiela Ciuca (Timisoara (Timis), Romania), Monica Steluta Marc, Mihaela Dediu, Diana Popin, Pop Liviu
OA2906	**Comparison between endoscopic and ultrasonographic evaluation of subglottic stenoses** Chiara Rocchetti (Brescia, Italy), Guido Levi, Roberto Magri, Mauro Novali, Federico Quadri, Damiano Bottone, Silvia Uccelli, Giulia Palmiotto, Giampietro Marchetti, Michela Bezzi, Laura Pini
OA2907	**Diagnostic accuracy of a bespoke multiorgan ultrasound approach in suspected pulmonary embolism** Casper Falster (Odense, Denmark), Gro Egholm, Rune Wiig, Mikael Poulsen, Jacob Møller, Stefan Posth, Mikkel Brabrand, Christian Laursen
OA2909	**Routine neck ultrasound and lymph node sampling by respiratory physicians in patients with thoracic disease – a prospective study** Basma El-Shaarawy (Alexandria, Egypt), Ahmed El Hefny , Heba Gharraf , Maged Hassan

OA2910	**Discussion** All Speakers

8F Session 328 14:15 - 15:30

Science slam: Science slam

Aims : A science slam is a scientific talk where four scientists (abstract authors) present their own scientific research work in 10 minutes The focus lies on teaching current science to a diverse audience in an entertaining way. The presentation is judged by the audience.

Chairs : Amanda Oliver (Cambridge, United Kingdom), Alberto Maria Marra (Heidelberg, Germany)

8L Session 329 14:15 - 15:30

Oral presentation: Innovations in noninvasive respiratory support

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

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

Chairs : Peter J. Wijkstra (Groningen, Netherlands), Eui-Sik Suh (Beckenham (Kent), United Kingdom)

OA2911	**NIV@Home: A pilot randomised controlled trial comparing home-based versus day admission models of NIV implementation** David Berlowitz (Melbourne (VIC), Australia), Nicole Sheers, Mark Howard, Liam Hannan, Linda Rautela, Marnie Graco, Sarah Retica
OA2912	**High-flow nasal cannula (HFNC) at home as an alternative therapy in children in Spain** Ana Díez Izquierdo (Barcelona, Spain), Alba Torrent-Vernetta, Maria Morillo-Soriano, Marta Balsells-Costa, Ignacio Iglesias-Serrano, Sandra Rovira-Amigó, Ines De Mir-Messa, Silvia Gartner, Antonio Moreno-Galdó
OA2913	**Monitoring COVID-19 pneumonia undergoing non-invasive respiratory support (NIRS), correlation between oscillometric reactance and Thoracic CT** Chiara Torregiani (Trieste (TS), Italy), Chiara Veneroni, Elisa Baratella, Antonio Segalotti, Stefano Tavano, Giulia Lapadula, Chiara Bozzi, Barbara Ruaro, Marco Confalonieri, Raffaele Lorenzo Dellacà
OA2914	**Development and preliminary validation of automatic detection of patient-ventilator asynchrony during non-invasive ventilation using matrix profiles** David Berlowitz (Melbourne (VIC), Australia), Muhammad Juliandri, Uwe Aicklin, Goce Ristanoski, Liam Hannan, Nicole Sheers, Mark Howard
OA2915	**Discussion** All Speakers

8M Session 330 14:15 - 15:30

Oral presentation: Advances in cystic fibrosis research

Disease(s) : Airway diseases

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

Chairs : Susan Madge (London, United Kingdom), Felix C. Ringshausen (Hannover, Germany)

OA2916	**Early-infection Pseudomonas aeruginosa isolates from Cystic Fibrosis patients have high levels of LasB elastase activity** Agustina Llanos (Labège, France), Pauline Achard, Clarisse Lozano, Justine Bousquet, Magdalena Zalacain, Hélène Guet-Revillet, Marlène Murris-Espin, Marie Mittaine, Martin Everett
OA2917	**Real-world effects of lumacaftor/ivacaftor (LUM/IVA) in people with cystic fibrosis (pwCF): final results of a long-term safety study using US CF Foundation Patient Registry and UK CF Patient Registry data** Claire Kim (Boston, United States), Simon Tian, Rachel Zahigian, Alexander Elbert, Susan C. Charman, Siobhán Carr, Dilip Nazareth
OA2918	**Triple CFTR modulator therapy is associated with improved endocrine pancreatic function in patients with cystic fibrosis** carolin steinack (Zürich, Switzerland), Thomas Gaisl, Felix Beuschlein, Schuurmans Macé Matthew, Matthias Ernst
OA2919	**The effect of triple therapy cystic fibrosis transmembrane conductance regulator (CFTR) modulation on anxiety in people with cystic fibrosis** Orla O'Carroll (Dublin 4, Ireland), Catherine Mc Keown, Jack Bell, Trevor Nicholson, Charles Gallagher, Edward Mc Kone

OA2920	**Elexacaftor tezacaftor ivacaftor therapy alters plasma sphingolipid profiles in people with cystic fibrosis** Dirk Westhölter (Essen, Germany), Fabian Schumacher, Nuria Wülfinghoff, Sivagurunathan Sutharsan, Svenja Strassburg, Burkhard Kleuser, Peter A Horn, Sebastian Reuter, Erich Gulbins, Christian Taube, Matthias Welsner	
OA2921	**Impacts of air pollution on the pulmonary morbidity of Cystic Fibrosis: an experimental study** Marion Blayac (Créteil, France), Céline-Hivda Yegen, Elie Al Marj, Mathieu Cazaunau, Antonin Bergé, Rachid Souktani, Patrice Coll, Sophie Lanone	
OA2922	**Modelling the behaviour of the mucus layer in the small airways** James Shemilt (Manchester, United Kingdom), Alexander Horsley, Oliver Jensen, Alice Thompson, Carl Whitfield	
OA2923	**Discussion** All Speakers	

8D Session 331 14:30 - 16:50

Skills workshop: SW6 Cardiopulmonary rehabilitation beyond the basics

Aims : To describe diagnostic methods and interventions that enhance the comprehensiveness of cardiopulmonary rehabilitation programmes and contribute to a more patient-tailored approach; to describe methods of assessing physical activity level in patients referred for cardiopulmonary rehabilitation and methods of providing cognitive behavioural therapy to promote physical activity; to describe neuromuscular electrical stimulation and the patients referred for cardiopulmonary rehabilitation who could benefit from this treatment; and to describe the incorporation of mindfulness-based interventions into cardiopulmonary rehabilitation and their outcomes.

Disease(s) : Airway diseases

Method(s) : Pulmonary rehabilitation

Tag(s) : Clinical

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

Chairs : Alice Malpass (Bristol, United Kingdom)

14:30	**Introduction**	**2924**
14:30	**Physical activity assessment and intervention** Chris Burtin (Diepenbeek, Belgium)	**2925**
14:30	**Neuromuscular electrical stimulation** Anouk W. Vaes (Horn, Netherlands)	**2926**
14:30	**Frailty assessment and intervention** Roberto Benzo (Rochester, United States)	**2927**
14:30	**Mindfulness interventions during cardiopulmonary rehabilitation** Ingeborg Farver-Vestergaard (Vejle, Denmark)	**2928**

Studio - online Session 332 15:30 - 16:00

Guidelines session: Guidelines on severe community acquired pneumonia

ERS/ESICM/ESCMID/ALAT guidelines

Disease(s) : Respiratory infections

Method(s) : General respiratory patient care

Tag(s) : Clinical

Target audience : General practitioner, Physician in Pulmonary Training, Medical Student, Adult pulmonologist/Clinician, Clinical researcher

Chairs : Andrew Bush (London, United Kingdom)

15:30	**Discussion and Q&A** Antoni Torres Marti (Barcelona, Spain), Ignacio Martin-Loeches (Dublin, Ireland)	**2929**

8N Session 338 15:45 - 17:00

Mini symposium: Steps for a successful career in respiratory research

Early-career member session 2022

Aims : to present critical steps for a successful career in respiratory research and medicine; to describe how to build and manage a research team and how to publish successfully; to discuss challenges and opportunities for younger physicians and scientists in respiratory research; to provide tips for maintaining a healthy work-life balance.

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

Chairs : Daniela Gompelmann (Vienna, Austria), Maxime Patout (Paris, France)

15:45	**Building and managing a research team** Speaker to be confirmed	**2930**
16:00	**Successful publishing in a scientific journal** Anh Tuan Dinh-Xuan (Paris, France)	**2931**
16:15	**Mina Gaga lecture** Alexander Mathioudakis (Stockport, United Kingdom)	**2932**
16:30	**Time management strategies for clinical scientists and privacy** Niki Ubags (Epalinges, Switzerland)	**2933**
16:45	**Discussion and Q&A** All Speakers	**2934**

8F Session 339 15:45 - 17:00

Oral presentation: It is all about communication: novel interactions between lung structural cells and the immune system

Disease(s) : Interstitial lung diseases Airway diseases

Method(s) : Cell and molecular biology

Chairs : H. Irene Heijink (Groningen, Netherlands), Alen Faiz (Ultimo (NSW), Australia)

OA2935	**LSC - 2022 - Human CD116+ fetal liver progenitors migrate to the perinatal lung and give rise to alveola r macrophages in vivo** Elza Evren (Stockholm, Sweden), Emma Ringqvist, Jean-Marc Doisne, Anna Thaller, Natalie Sleiers, Richard A. Flavell, James P. Di Santo, Tim Willinger
OA2936	**LSC - 2022 - A high probability of short-range interactions between fibrocytes and CD8+ T cells potentiates th e inflammatory response in COPD** Edmée Eyraud (Bordeaux, France), Elise Maurat, Pierre Vallois, Jean-Marc Sac-Epée, Pauline Henrot, Maéva Zysman, Levet Florian, Jean-Baptiste Sibarita, Hugues Bégueret, Pierre-Olivier Girodet, Thumerel Matthieu, Romain Hustache-Castaing, Cécile Contin-Bordes, Patrick Berger, Isabelle Dupin
OA2937	**LSC - 2022 - The potential role of innate lymphoid cells in non-allergic neutrophilic asthma model** Anne-Charlotte Jonckheere (Leuven, Belgium), Brecht Steelant, Sven Seys, Tatjana Decaesteker, Jonathan Cremer, Ellen Dilissen, Dominique Schols, Yoichiro Iwakura, Jeroen Vanoirbeek, Lieven Dupont, Dominique Bullens
OA2938	**Altered Site-Specific Expression Patterns of Interleukin-33 and its Receptor ST2 in COPD Lungs** Caroline Sandén (Lund, Sweden), Premkumar Siddhuraj, Jimmie Jönsson, Caroline Lindö, Josquin Nys, Darren Schofield, Ian Scott, Sandra Lindstedt, Roland Kolbeck, Alison Humbles, Rene Lutter, Suzanne Cohen, Jonas Erjefalt
OA2939	**Airway myeloperoxidase (MPO) is associated with increased risk of exacerbations in COPD** Sanna Rosengren (Mölndal, Sweden), Stefan Tångefjord, Giovanna De Palo, Jenny Horndahl, Madeleine Ingelsten, Amy Gilmour, Merete B Long, Holly R Keir, Kristoffer Ostridge, James D Chalmers
OA2940	**Oxidised IL-33 signals via RAGE/EGFR to drive a COPD-associated phenotype** Sam Strickson (CAMBRIDGE, United Kingdom), Kirsty F. Houslay, Victor A. Negri, Yoichiro Ohne, Tomas Ottosson, Roger B. Dodd, Catherine Chaillan Huntington, Jingjing Li, Helen Killick, D. Gareth Rees, Sofia Koch, Gary P. Sims, Ian C. Scott, Xavier Romero Ros, E. Suzanne Cohen
OA2941	**IL-13 modulates exosome production and miRNAs cargo in bronchial epithelial cells in severe asthma** Martin Klein (Québec, Canada), Pierre-Alexandre Gagnon, Mabrouka Salem, Mahmoud Rouabhia, Jamila Chakir
OA2942	**Profiling small extracellular vesicles (EVs) in idiopathic pulmonary fibrosis (IPF)** Sabha Asghar (Cambridge, United Kingdom), Sue Monkley, Lynne Murray, Catherine Overed-Sayer, Philip Molyneaux
OA2943	**Airway epithelial gene expression is altered in survivors of preterm birth** Denby Evans (Nedlands, Australia), Jessica Hillas, Thomas Iosifidis, Shannon Simpson, Anthony Kicic, Patricia Agudelo-Romero
OA2944	**Late Breaking Abstract - Beyond barrier function – claudin-1 as a therapeutic target candidate for idiopathic pulmonary fibrosis** Jannik Ruwisch (Hannover, Germany), Benedikt Jäger, Oliver Terwolbeck, Geoffrey Teixeira, Frank Juehling, Thomas F. Baumert, Antje Prasse

OA2945	**Discussion** All Speakers

8L Session 340 15:45 - 17:00

Oral presentation: New insights into paediatric asthma diagnosis and management of severe asthma

Disease(s) : Airway diseases

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

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

OA2946	**Genome-wide exploration of inflammation-related proteins and Type 2 asthma** Natalia Hernandez-Pacheco (Stockholm, Sweden), Sophia Björkander, Susanna Klevebro, Simon Kebede Merid, Ashish Kumar, Ida Mogensen, Christer Janson, Lena Palmberg, Marianne Van Hage, Antonios Georgellis, Anna Bergström, Inger Kull, Erik Melén
OA2947	**Asthma in one breath: metabolic signatures for allergic asthma in children by real-time breath analysis** Alexander Möller (Zürich, Switzerland), Ronja Weber#, Bettina Streckenbach#, Jerome Kaeslin, Lara Welti, Demet Inci, Nathan Perkins, Renato Zenobi, Srdjan Micic
OA2948	**Evaluation of nocturnal asthma control (NAC-study): Comparative multicenter analysis of subjective and objective methods** Swantje Weisser (Göttingen, Germany), Christiane Lex, Lena Roth, Katharina Kainz, Veronika Fajgelj, Alexander Schuetzenmeier, Patrick Fischer, Volker Gross, Matthias Reinweber, Angela Zacharasiewicz, Sebastian Kerzel
OA2949	**ADRB2 Arg16Gly is associated with nocturnal asthma symptoms despite LABA use in two European pediatric asthma studies** Susanne J. H. Vijverberg (Utrecht, Netherlands), Trang My Nguyen, Javier Perez-Garcia, Simone Hashimoto, Anne H. Neerincx, Mahmoud I. Abdel-Aziz, Catarina Almqvist, Olaia Sardon Prado, Paula Corcuera, Javier Korta, Uros Potocnik, Michael Kabesch, Aletta D. Kraneveld, Maria Pino-Yanes, Anke H. Maitland Van Der Zee
OA2950	**Dupilumab efficacy in children with uncontrolled type 2 asthma with baseline high/medium ICS dose** Jorge Fernando Maspero (Ciudad Autónoma Buenos Aires, Argentina), Martii A Antila, Neal Jain, Antoine Deschildre, Leonard B Bacharier, Arman Altincatal, Elizabeth Laws, Bolanle Akinlade, Shahid Siddiqui, Juby A Jacob-Nara, Yamo Deniz, Paul J Rowe, David J Lederer, Megan Hardin
OA2951	**Detection of structural airway changes on computed tomography in paediatric severe asthma** Wytse van den Bosch (Voorburg, Netherlands), Qianting Lv, Elrozy Andrinopoulou, Hettie Janssens, Pierluigi Ciet, Harm Tiddens
OA2952	**Continuous associations of type 2 biomarkers and efficacy of dupilumab in children with uncontrolled, moderate-to-severe asthma** Leonard Bacharier (Nashville, United States), Daniel J Jackson, Ian Pavord, Jorge Maspero, Alessandro Fiocchi, Xuezhou Mao, Juby A Jacob-Nara, Yamo Deniz, Elizabeth Laws, Leda P Mannent, Bolanle Akinlade, Heribert Staudinger, David Lederer, Megan Hardin
OA2954	**Neutrophil granulocytes from Th1-high asthmatics show a reduced chemotactic response to bacterial compound ex vivo** Solveig Lemmel (Luebeck, Germany), Anna Wohlers, Tim Becker, Anna Bachmann, Thomas Bahmer, Gesine Hansen, Erika Von Mutius, Klaus F. Rabe, Oliver Fuchs, Anna-Maria Dittrich, Bianca Schaub, Christine Happle, Markus Weckmann, Matthias Volkmar Kopp
OA2955	**Late Breaking Abstract - Assessment of the long-term safety and efficacy of dupilumab in children with asthma: LIBERTY ASTHMA EXCURSION** Leonard Bacharier (Nashville, United States), Jorge F. Maspero, Constance H. Katelaris, Alessandro Fiocchi, Remi Gagnon, Ines De Mir-Messa, Theresa W. Guilbert, Daniel J. Jackson, Ning Li, Bolanle Akinlade, Elizabeth Laws, Leda P. Mannent, Jennifer Maloney, Kelsey Tawo, Faisal A. Khokhar, Megan Hardin, Raolat M. Abdulai, David J. Lederer, Lacey Robinson
OA2956	**Discussion** All Speakers

8M Session 341 15:45 - 17:00

Oral presentation: The environment and human health: from cohort to cell culture studies

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

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

Chairs : Isabella Annesi Maesano (Montpellier, France), Rafael E. de la Hoz (New York, United States)

OA2957	**Real time in vivo investigation of alveolar macrophage dynamics and immune response during nanoparticle inhalation** Qiongliang Liu (Neuherberg, Germany), Lin Yang, Chenxi Li, Otmar Schmid, Tobias Stoeger, Markus Rehberg
OA2958	**Printer toner-emitted nanoparticle exposure enhances air-airway bacterial crossover in printing floor workers** Fransiskus Xaverius Ivan (Singapore, Singapore), Micheál Mac Aogáin*, Nur A'Tikah Binte Mohamed Ali, Pei Yee Tiew, Magdiel Inggrid Setyawati, Dhimiter Bello, Philip Demokritou, Kee Woei Ng, Sanjay H. Chotirmall
OA2959	**Impact of air pollution on systemic sclerosis associated interstitial lung disease severity: a retrospective two-center cohort study** Anais Roeser (BOBIGNY, France), Lucile Sese, Guillaume Chassagnon, Benjamin Chaigne, Stéphane Tran Ba, Salma Jebri, Pierre-Yves Brillet, Marie-Pierre Revel, Frédérique Aubourg, Robin Dhote, Frédéric Caux, Luc Mouthon, Isabella Annesi-Maesano, Hilario Nunes, Yurdagül Uzunhan
OA2960	**Exposure-response relationship between personal exposure to household air pollution and blood pressure in adult women across four resource-poor settings** Laura Nicolaou (Baltimore, United States), Lindsay Underhill, Shakir Hossen, Suzanne Simkovich, Gurusamy Thangavel, Ghislaine Rosa, John Mccracken, Victor Davila-Roman, Lisa De Las Fuentes, Ashlinn Quinn, Maggie Clark, Anaite Diaz, Ajay Pillarisetti , Kyle Steenland, Lance Waller, Shirin Jabbarzadeh, Jennifer Peel, William Checkley
OA2961	**Investigating the impact of London's Ultra Emission Zone (ULEZ) on children's physical activity and travel patterns: Baseline data from the CHILL Study** James Scales (London, United Kingdom), Iva Tsocheva, Rosamund Dove, Jasmine Chavda, Harpal Kalsi, Helen Wood, Luke Sartori, Grainne Colligan, Chris Griffiths
OA2962	**Short-term effects of weather and air pollution on physical activity in COPD patients** Alícia Josa-Culleré (Barcelona, Spain), Ane Arbillaga-Etxarri, Eva Balcells, Nuria Celorrio, Alicia Marin, Mónica Monteagudo, Diego A. Rodríguez, Robert Rodríguez-Roisin, Magda Bosch De Basea, Maria Foraster, Pere Simonet, Pere Torán-Monserrat, Pere Vall-Casas, Judith Garcia-Aymerich
OA2963	**Modelling the pathophysiological effects of geography-specific landscape fire smoke** Henry Gomez (Bar Beach, Australia), Dusan Ilic, Peter Robinson, Graeme Zosky, Tatt Haw, Kanth Vanka, Ellen Small, Tesfalidet Beyene, Thava Palanisami, Doan Ngo, Elizabeth Holiday, Megan Jensen, Vanessa Mcdonald, Vanessa Murphy, Peter Gibson, Jay Horvat
OA2964	**Differential toxicity in an alveolar epithelial cell line of fine particulate matter from brakewear, roadwear, and diesel exhaust** James Parkin (Southampton, United Kingdom), Lareb Dean, Dawn Cooper, Robert Ridley, Elizabeth Davies, Franco Conforti, Joseph Bell, Yihua Wang, Julian Downward, Miriam Gerlofs-Nijland, Flemming Cassee, Donna Davies, Richard Cook, Matthew Loxham
OA2965	**LSC - 2022 - Real time in vivo investigation of the innate immune response during ventilator-assisted nanoparticle inhalation** Qiongliang Liu (Neuherberg, Germany), Yang Lin, Chenxi Li, Otmar Schmid, Tobias Stoeger, Markus Rehberg
OA2966	**Late Breaking Abstract - Specific cellular perturbation patterns in lung inflammation after nanoparticle inhalation** Carola Voss (Neuherberg, Germany), Meshal Ansari, Maximilian Strunz, Ilias Angelidis, Verena Haefner, Christopher Mayr, Carolina Ballester-Lopez, Qiongliang Liu, Lianyong Han, Ali Oender Yildrim, Thomas Conlon, Markus Rehberg, Herbert Schiller, Tobias Stoeger
OA2967	**Discussion** All Speakers

8A - live streamed | Session 342 | 16:00 - 17:30

Clinical cases: Lungs on fire: Airway diseases?

Aims : To facilitate the presentation of 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

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Paediatrician, Physician in Pulmonary Training, Respiratory critical care physician, Nurse, Radiologist, Respiratory physiotherapist, Respiratory therapist, Medical Student

Chairs : Omar S. Usmani (London, United Kingdom), Ayşe Arzu Yorgancıoğlu (Konak, Turkey), Daiana Stolz (Basel, Switzerland)

Discussants : Mina Gaga (Athens, Greece), Marc Miravitlles (Barcelona (CT), Spain)

16:00	**Case 1 incl. panel discussion and Q&A - Author: S. O'Loghlen (Canada)** Mina Gaga (Athens, Greece)	**2968**
16:22	**Case 2 incl. panel discussion and Q&A - Author: M. F. Montero Arias (Costa Rica)** Marc Miravitlles (Barcelona (CT), Spain)	**2969**
16:44	**Case 3 incl. panel discussion and Q&A - Author: D. M. Vulturar (Romania)** Mina Gaga (Athens, Greece)	**2970**
17:06	**Case 4 incl. panel discussion and Q&A - Author: H. Badri (United Kingdom)** Marc Miravitlles (Barcelona (CT), Spain)	**2971**

8B - live streamed Session 343 16:00 - 17:30

Respiratory medicine meets other disciplines: Update on the diagnosis and treatment of pulmonary hypertension

ERS/ESC guidelines on pulmonary hypertension 2022

Aims : to highlight the changes from the previous guidelines; to discuss unknown areas where the guidelines cannot fulfil the clinical need; and to discuss the new guidelines in a pro/con debate, what the clinical consequences will be and how this will change diagnosis.

Disease(s) : Pulmonary vascular diseases

Tag(s) : Clinical

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

Chairs : Anton Vonk Noordegraaf (Amsterdam, Netherlands), Silvia Ulrich (Zurich, Switzerland), Stephan Rosenkranz (Köln, Germany)

16:00	**Patient's testimony** Gergely Meszaros (Vac, Hungary)	**2972**
16:05	**ERS/ESC guidelines on pulmonary hypertension: clinical approach and changes from the previous guidelines** Marius M. Hoeper (Hannover, Germany)	**2973**
16:20	**Treatment options and recommendations** Marion Delcroix (Leuven, Belgium)	**2974**
16:35	**Comments on the guidelines: strengths and weaknesses** Sean Gaine (Dublin, Ireland)	**2975**
16:50	**Interactive cases** Mona Lichtblau (Zürich, Switzerland)	**2976**
17:05	**Discussion and Q&A** All Speakers	**2977**

8C - live streamed Session 344 16:00 - 17:30

Hot topics: Hyperpolarised gas magnetic resonance imaging: a new frontier in functional pulmonary imaging

Aims : to increase the understanding of recent advancements in lung imaging and to compare lung imaging diagnostic capabilities and effectiveness with current modalities; to discuss the role of hyperpolarised gas magnetic resonance imaging (MRI) for lung imaging in patients with various respiratory diseases.

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

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

Tag(s) : Clinical

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

Chairs : Elżbieta Magdalena Grabczak (Warszawa, Poland), Christopher E. Brightling (Leicester (Leicestershire), United Kingdom)

16:00	**The recent evolution of hyperpolarised gas MRI from medical physics theory to patient care** James M. Wild (Sheffield (South Yorkshire), United Kingdom)	**2978**
16:15	**Hyperpolarised gas MRI to guide patient management in severe asthma and COPD** Sarah Svenningsen (Hamilton, Canada)	**2979**

16:30	**Hyperpolarised gas MRI for evaluation of persistent symptoms in patients with long COVID** emily fraser (Oxford, United Kingdom)	**2980**
16:45	**Hyperpolarised gas MRI: a novel biomarker of fibrotic lung disease** Speaker to be confirmed	**2981**
17:00	**Discussion and Q&A** All Speakers	**2982**

8G - live streamed Session 345 16:00 - 17:30

Hot topics: Pharmacotherapy for sleep disordered breathing

Specific approaches to different pathophysiological traits of obstructive sleep apnea

Aims : to describe recent advances in pharmacotherapy for patients with sleep disordered breathing; to explain the impact of the identification of different pathophysiological traits, including upper airway muscle function, respiratory control, arousal from sleep and upper airway anatomy, on the choice of pharmacological drug classes; to describe novel possibilities and tools for identifying these different traits based on polysomnography.

Disease(s) : Sleep and breathing disorders

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

Tag(s) : Translational

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

Chairs : Pierantonio Laveneziana (Paris, France), Jellien Makonga-Braaksma (Woudenberg, Netherlands)

16:00	**Various pharmacological approaches to weight loss management in patients with sleep disordered breathing** Johan Verbraecken (Edegem (Antwerp), Belgium)	**2983**
16:15	**Pharmaceutical muscle activation of the upper airways** Carolina Lombardi (Milano (MI), Italy)	**2984**
16:30	**Current perspectives in pharmacotherapy targeting brain breathing regulation** Jan A. Hedner (Göteborg, Sweden)	**2985**
16:45	**Influence of pharmacotherapy on arousal** Ludovico Messineo (Boston, United States)	**2986**
17:00	**Discussion and Q&A** All Speakers	**2987**

8H - live streamed Session 346 16:00 - 17:30

Symposium: Lung involvement in common variable immunodeficiency: from diagnosis to lung transplantation

Aims : to describe the physiopathology of common variable immunodeficiency (CVID) and current diagnostic and therapeutic approaches for this disorder and update attendees about recent advances in this context. CVID-associated lung involvement might be due to respiratory infection and bronchiectasis or non-infectious immune-based diffuse interstitial disorders. This clinical picture and the possible contraindications to lung transplant candidacy and challenges in post-transplant follow-up of these patients will be addressed.

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

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

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Nurse, Paediatrician, Physician in Pulmonary Training, Respiratory physiotherapist, Thoracic surgeon, Respiratory therapist

Chairs : Federica Meloni (Pavia (PV), Italy), Tobias Welte (Hannover, Germany)

16:00	**Pathogenesis and diagnosis of CVID in paediatric and adult patients** Pere Soler (Barcelona, Spain)	**2988**
16:15	**Prevention and treatment of pulmonary and extrapulmonary infections in CVID patients** David M. Lowe (London, United Kingdom)	**2989**
16:30	**Non-infectious lung involvement in CVID diagnosis and treatment** Elisabetta Renzoni (London, United Kingdom)	**2990**

16:45	**Lung transplant in CVID patients: contraindications and outcomes** Michael Perch (København Ø, Denmark)	**2991**
17:00	**Discussion and Q&A** All Speakers	**2992**

Studio - online Session 347 16:15 - 16:45

Guidelines session: ERS Guideline on various aspects of quality in lung cancer care

ERS/ESICM/ESCMID/ALAT guidelines

Disease(s) : Thoracic oncology

Method(s) : Surgery General respiratory patient care

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Thoracic surgeon, Thoracic oncologist, Medical Student, Physician in Pulmonary Training

Chairs : Andrew Bush (London, United Kingdom)

16:15	**Discussion and Q&A** Torsten Gerriet Blum (Berlin, Germany), Joanna Chorostowska-Wynimko (Warsaw, Poland)	**2993**

Studio - online Session 348 17:00 - 17:30

Pro-Con debate: Does the aggressive management of solitary pulmonary nodules pay off?

Aims : to inform the audience about the different management approaches to solid and subsolid nodules tailored to patient characteristics and geography; to provide an understanding of the controversies that currently exist regarding aggressive and prudent management.

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, Medical Technical Assistant, Pathologist, Patient, Physician in Pulmonary Training, Physiologist, Thoracic oncologist, Thoracic surgeon

Chairs : Joanna Chorostowska-Wynimko (Warsaw, Poland), Torsten Gerriet Blum (Berlin, Germany)

17:00	**The aggressive management of solitary pulmonary nodules always pays off: Pro** Stefano Elia (Roma (RM), Italy)	**2994**
17:10	**The aggressive management of solitary pulmonary nodules always pays off: Con** Georgia Hardavella (Athens, Greece)	**2995**
17:20	**Discussion and Q&A** All Speakers	**2996**

18:00-19:30
INDUSTRY VIRTUAL SYMPOSIUM SEE PAGE 1

18:00-19:30
INDUSTRY EVENING SYMPOSIUM SEE PAGE 1

18:00-19:30
INDUSTRY EVENING MINI-SYMPOSIUM SEE PAGE 1

08:00-09:15
INDUSTRY VIRTUAL SYMPOSIUM SEE PAGE 1

08:00-09:15
INDUSTRY EARLY MORNING SYMPOSIUM SEE PAGE 1

8C - live streamed | Session 368 | 08:00 - 09:15

Joint session: Updates on inhalers for COPD and asthma

A joint ERS/Industry session, supported by Boehringer Ingelheim, Chiesi

Aims : Please note that this session is not accredited

Chairs : Frans H.C. De Jongh (Enschede, Netherlands), Fco.De Borja García Cosío Piqueras (Palma de Mallorca, Spain)

08:00	**Introduction**	**3072**
08:05	**How to choose and use an inhaler device?** Omar S. Usmani (London, United Kingdom)	**3073**
08:20	**How to monitor and improve inhaler technique?** Henry Chrystyn (Bingley (West Yorkshire), United Kingdom)	**3074**
08:35	**How to assess and improve inhaler adherence?** Federico Lavorini (Firenze (FI), Italy)	**3075**
08:50	**Panel discussion and Q&A**	**3076**

08:00-09:15
INDUSTRY EARLY MORNING MINI-SYMPOSIUM SEE PAGE 1

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

8D | Session 374 | 08:00 - 10:20

Skills workshop: SW7 Thoracic ultrasound

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	**The normal thoracic cavity** Gilles Mangiapan (Creteil, France), Jesper Rømhild Davidsen (Odense C, Denmark)	**3102**
08:30	**Pleural effusion and/or pleural thickening** Pia Iben Pietersen (Odense NØ, Denmark), Valentina Pinelli (Sarzana, Italy)	**3103**
09:00	**Case studies** Hugh Welch (Bristol, United Kingdom), Rachelle Asciak (SIGGIEWI, Malta)	**3104**
09:30	**Lymph node biopsy using models** Rachid Tazi Mezalek (Barcelona, Spain), Konstantina Kontogianni (Heidelberg, Germany)	**3105**

8N | Session 375 | 08:15 - 09:30

Oral presentation: Novel approaches to physiologic studies of lung function

Disease(s) : Airway diseases Respiratory critical care Sleep and breathing disorders Interstitial lung diseases Pulmonary vascular diseases

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

Chairs : Andrea Aliverti (Milan, Italy), Francesca Pennati (Milano (MI), Italy)

OA3106	**The Dyspnoea Challenge - a novel approach for measuring exertional dyspnoea** Craig Aitken (Brisbane (QLD), Australia), James Walsh, Glenn Stewart, Sabapathy Surendran, Lewis Adams, Norman Morris
OA3107	**Small airway function after Covid-19 infection** Sanna Kjellberg (Trollhättan, Sweden), Alexander Holm, Helena Sandén, Anna-Carin Olin
OA3108	**Ventilator driving pressure correlates with neuroinflammation in healthy pigs ventilated for 50 hours** Thiago Bassi (Burnaby, Canada), Elizabeth Rohrs, Karl Fernandez, Michelle Nicholas, Marlena Ornowska, Jessica Wittman, Matt Gani, Doug Evans, Steve Reynolds
OA3109	**COPD Origins: Understanding Extracellular Matrix (ECM) Remodelling using bio-imaging techniques** Chia Wei Kong (SOUTHAMPTON (Hampshire), United Kingdom), Tom Havelock, Michael Bennett, Jannie Marie Bülow Sand, Sarah Rank Rønnow, Cosma Mirella Spalluto, Staples Karl, Kristoffer Ostridge, Hannah Burke, Anna Freeman, Aishath Fazleen, Tom Wilkinson
OA3110	**A novel method for improving gas exchange by applying percussive ventilation in the expiratory phase** Ferenc Peták (Szeged, Hungary), Gergely H Fodor, Almos Schranc, Roberta Südy, Ádám L Balogh, André Dos Santos Rocha, Davide Bizzotto, Walid Habre, Raffaele L Dellacà
OA3111	**Pulmonary vascular biomechanics imaged with synchrotron phase contrast microtomography in live rats** Sam Bayat (Grenobe, France), Jose-Luis Cercos, Luca Fardin, Gaetano Perchiazzi, Alberto Bravin
OA3112	**Characterizing respiratory mechanics in lymphangioleiomyomatosis by oscillometry and quantitative CT** Cynthia Nohra (Toronto, Canada), Joyce Wu, Anastasiia Vasileva, John Thenganatt, Clodagh Ryan, Micheal Mcinnis, Zoltan Hantos, Chung-Wai Chow
OA3113	**Pulmonologists collaborate with explainable artificial intelligence for superior interpretation of pulmonary function tests** Wim Janssens (Leuven, Belgium), Nilakash Das, Sofie Happaerts, Anh Tuan Dinh-Xuan, Eef Vanderelst, Christel Haenebalcke, Guy Brusselle, Eric Derom, Felip Burgos, Frits Franssen, Henrik Watz, Jennie Quint, Jorges Moises, Marco Contoli, Michael Steiner, Neel Greening, Rudi Peché, Sherif Gonem, Vitali Poberezhets, William Mann, Marko Topalovic
OA3114	**Investigating breathing patterns of asthma patients during exercise using a novel parameter** Arjen Pelgröm (Enschede, Netherlands), Frans De Jongh, Ilonka Van Veen
OA3115	**Late Breaking Abstract - Diagnostic potential of forced oscillometry technique in adults with normal spirometry: data from the LEAD general population cohort** Christoph Valach (Vienna, Austria), Chiara Veneroni, Emiel Wouters, Alessandro Gobbi, Raffaele Dellaca', Marie-Kathrin Breyer, Sylvia Hartl, Owat Sunanta, Pasquale Pompilio, Robab Breyer-Kohansal
OA3116	**Discussion** All Speakers

8F Session 376 08:15 - 09:30

Oral presentation: Challenges in respiratory physiotherapy assessment and management

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

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

Chairs : Martijn A. Spruit (Horn, Netherlands), Rachael A. Evans (Leicester (Leicestershire), United Kingdom)

OA3117	**Differences in pulmonary and extra-pulmonary traits between women and men with COPD** Sara Souto-Miranda (Aveiro, Portugal), Alex J. Van 't Hul, Anouk W. Vaes, Jeanine C. Antons, Remco S. Djamin, Daisy J.A. Janssen, Frits M.E. Franssen, Alda Marques, Martijn A. Spruit
OA3118	**Reference equations for quadriceps function in COPD: a multicenter study** Didier Saey (Québec (QC), Canada), Sophie Tanguay, André Nyberg, Sarah Marklund, Erik Frykholm, Jana De Brandt, Chris Burtin, François Maltais
OA3119	**Impact of ActiGraph® cutoffs on time spent in moderate to vigorous physical activities in COPD.** Patrícia Filipa Sobral Rebelo (Trancoso, Portugal), Joana Antão, Sara Almeida, Dina Brooks, Alda Marques

OA3120	**Use of an automatic 6-minute walk test recording system in patients with chronic respiratory diseases** Rodrigo Torres Castro (Barcelona, Spain), Heribert Pascual, Gemma Roqué, María Palomo, Michelle Rodríguez, Elena Gimeno-Santos, Xavi Masip Bruin, Albert Alonso, Joan Albert Barberà, Isabel Blanco
OA3121	**Fatigue and functional capacity post COVID-19** Nicola Sante Diciolla (Madrid, Spain), David García-Pascual Abad, Ana Ampuero López, María Torres Lacomba, Alda Marques, María José Yuste Sánchez
OA3122	**The impact of Covid-19 on physical activity one year after hospital discharge** Eva Arents (Knokke, Belgium), Fien Hermans, Bihiyjga Salhi, Evelien De Burck, Katlijn Geeurickx, Wendy Van Loo, Thierry Troosters, Eric Derom, Eva Van Braeckel, Yannick Vande Weygaerde, Heleen Demeyer
OA3123	**Respiratory muscle strength in patients post infection by COVID-19** Maria Fernanda Lima Souza Saldanha (São Paulo, Brazil), Vitor Costa Souza , Mariana Lafetá Lima, Thais Carvalho Francescantonio Menezes , Fabiana Oliveira Penido, Andre Luiz Pereira Albuquerque, Suzana Erico Tanni, Jaquelina Sonoe Ota Arakaki, Luiz Eduardo Nery, Eloara V. M. Ferreira, Priscila Abreu Sperandio
OA3124	**Diagnostic accuracy of respiratory muscle assessments to predict weaning outcomes in the intensive care unit (ICU): a systematic review and meta-analysis** Diego Poddighe (Leuven, Belgium), Marine Van Hollebeke, Yasir Qaiser Choudhary, Débora Ribeiro Campos, Greet Hermans, Rik Gosselink, Daniel Langer
OA3125	**Late Breaking Abstract - Telemonitoring of home mechanical ventilation in Brazil: Clinical and economical outcomes in a private brazilian home care.** João Paulo Silveira (, Brazil), Maria Hayashi, Ruy Pires, Paola Pastri, Claudia Albertini
OA3126	**Discussion** All Speakers

8L Session 377 08:15 - 09:30

Oral presentation: Pulmonary embolism: acute and long-term management

Disease(s) : Pulmonary vascular diseases Thoracic oncology

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

Chairs : Luis Jose JARA PALOMARES (Sevilla, Spain), Francis Couturaud (Brest, France)

OA3127	**Diagnostic and prognostic value of pentraxin-3 in pulmonary thromboembolism** Rıdvan Bayler (Ankara, Turkey), Sevinc Sarinc Ulasli, Ali Batur, Fatih Tekin, Gamze Durhan, Zeliha Gunnur Dikmen, Sevilay Karahan, Yusuf Ziya Sener, Ahmet Aksan, Merve Yilmaz, Elif Babaoglu, Ergun Baris Kaya, Deniz Koksal
OA3128	**Right heart strain assessment on CTPA following acute pulmonary embolism: interobserver variability between radiologists and thoracic physicians** Chinthaka Samaranayake (London, United Kingdom), Michelle Craigie, Peter Bell, Colm Mccabe, John Upham, John Coucher, Gregory Keir
OA3129	**Baseline characteristics and Outcomes in Patients with Venous Thromboembolism and Active Lung Cancer – a Nationwide Cohort Study in France** Laurent Bertoletti (Saint Etienne Cedex, France), Gaelle Gusto, Artak Khachatryan, Nadia Quignot, Jose Chaves, Audrey Moniot, Ruth Mokgokong, Isabelle Mahé
OA3130	**Cancer Associated Thrombosis:how many lung cancer patients seen in clinical practice would be eligible to a DOAC randomized controlled trial?** Valentine Mismetti (Saint Etienne, France), Bastien Petit, Simon Soudet, Géraldine Poenou, Emma Zarrat, Théo Machuron, Sandrine Acassat, Ludovic Plaisance, Hélène Helfer, Claire Le Hello, Marie-Antoinette Sevestre, Isabelle Mahé, Laurent Bertoletti
OA3131	**Catheter-directed therapies in chronic thromboembolic pulmonary hypertension** Jenny Yang (La Jolla, United States), Nick Kim, Seth Kligerman, Timothy Fernandes, Demosthenes Papamatheakis, David Poch, Michael Madani, Victor Pretorius, Kim Kerr
OA3132	**Efficacy and safety of balloon pulmonary angioplasty for patients with chronic thromboembolic pulmonary hypertension comorbid to chronic obstructive pulmonary disease** Yu Taniguchi (Kobe, Japan), Hiroyuki Fujii, Sachiyo Yoneda, Keisuke Miwa, Kenichi Yanaka, Noriaki Emoto, Kenichi Hirata
OA3133	**Predictors of perioperative morbidity and mortality in patients with Antiphospholipid antibody syndrome (APS) and chronic thromboembolic pulmonary hypertension (CTPEH) after Endarterectomy Pulmonary.** Elyzabeth Bermudez (,), Rodrigo Zebadua, Julio Lopez, Mario Pozas, Laurina Zorrilla, Tomás Pulido, Julio Sandoval, Nayeli Zayas

OA3134	**Discussion** All Speakers

TP-1 in thematic poster area — Session 379 — 08:30 - 09:30

Thematic poster: Diagnostic approaches to dyspnoea, chronic cough and upper airway dysfunction

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

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

Chairs : Olga Huivaniuk (Chernivtsi, Ukraine), Afroditi Boutou (Thessaloniki, Greece)

PA3136	**Is chronic cough an additional marker for lung function decline?** Hazim Abozid (Wien, Austria), Miranda Kirby , Sylvia Hartl, Robab Breyer- Kohansal , Marie-Kathrin Breyer, Otto C Burghuber , Jean Bourbeau , Emiel F M Wouters, Wan Tan On Behalf Of The Cancold Collaborative Research Group And The Canadian Respiratory Research Network
PA3137	**The evaluation of Exercise Induced Laryngeal Obstruction (EILO) performed by inexperienced physicians** Petter Carlsen (, Norway), Praveen Muralitharan, Maria Vollsæter, Ida Jansrud Hammer, Thomas Halvorsen, Ola Drange Røksund, Hege Sunnøve Havstad Clemm
PA3138	**Comparison of lung function among middle-aged and elderly asthma, chronic obstructive pulmonary disease and asthma-COPD overlap:A 4-year large sample single-center retrospective study** Hui Gan (Guagnzhou, China), Zheng Zhu, Yi Gao, Xinxin Yu, Xiangqin Hou, Baoqing Sun
PA3139	**A putative link between pertussis and gastroesophageal reflux with high rates of pulmonary aspiration.** Gregory Falk (Lindfield, Australia), Leticia Burton, Daminda Weerasinghe, Hans Van Der Wall
PA3141	**Different clinical symptom patterns in patients with reflux micro-aspiration confirmed by new pulmonary aspiration scintigraphy technique** Gregory Falk (Lindfield, Australia), Oleksandr Khoma, Jin-Soo Park, Felix Lee, Hans Van Der Wall
PA3142	**Investigating the Prevalence of Oesophageal Dysmotility in Patients with Refractory Chronic Cough** Dominic Sykes (Hull, United Kingdom), Michael G Crooks, Simon P Hart, Warren Jackson, John Gallagher, Alyn H Morice
PA3143	**Impact of breathlessness on quality of life and healthcare use in Australia** Anthony Paulo Sunjaya (Sydney, Australia), Leanne Poulos, Gian Luca Di Tanna, Guy Marks, Helen Reddel, Christine Jenkins
PA3144	**Laryngeal findings during exercise in Healthy Athletes** Petter Carlsen (, Norway), Praveen Muralitharan, Maria Vollsæter, Mette Engan, Ida Jansrud Hammer, Thomas Halvorsen, Ola Drange Røksund, Hege Sunnøve Havstad Clemm
PA3145	**Swallowing dysfunction and decreased appetite in patients with chronic respiratory disease.** Ayumu Akiyama (Hamamatsu-shi, Japan), Shinichi Arizono, Yuichi Tawara, Yasuhiko Tsujimura, Tetsuo Hiramatsu
PA3146	**Structural features in chronic cough assessed by computed tomography (CT)** Hazim Abozid (Wien, Austria), Miranda Kirby , Sylvia Hartl, Robab Breyer- Kohansal , Marie-Kathrin Breyer, Otto C Burghuber , Jean Bourbeau , Emiel F M Wouters, Wan Tan On Behalf Of The Cancold Collaborative Research Group And The Canadian Respiratory Research Network
PA3147	**Obesity hypoventilation syndrome prevalence by stages of severity in obese population** delphine delample (Castries, France), Rozita Lorblanches, Nicolas Molinari, Bouziane Benhalima, Elena Ciomaga, Frederic Sanguignol, Abdelkebir Sabil, Mathieu Despeaux
PA3148	**Has the pandemic changed the test quality of the pulmonary function test laboratory?** Dorina Rama Esendagli (Ankara, Turkey), Eylem Gul, Aylin Ozsancak, Sule Akcay, Gaye Ulubay
PA3149	**Diaphragm ultrasound and respiratory functional test: a combined approach in amyotrophic lateral sclerosis** Fausta Viccaro (Roma, Italy), Letizia D'Antoni, Antonella Sotgiu, Krisstopher Richard Flores, Ernesto Di Biase, Mariaelisabetta Cardini, Paolo Palange
PA3150	**Validation of a small cough detector in the clinic** Christian F. Clarenbach (Zürich, Switzerland), Manuel Kuhn, Elif Nalbant, Dario Kohlbrenner, Mitja Agle, Alexandra Arvji, Noriane Sievi, Erich W. Russi

PA3151 **Seeing is believing: a paediatric 'Therapeutic and Dynamic Airway Assessment' (TaDAA) service**
Kushalinii Hillson (Great Kingshill, United Kingdom), Melanie Peck, Caroline Pao, Sarah Brown, Chinedu Nwokoro, Nara Oban, Surendran Thavagnanam

PA3152 **Unexplained dyspnea by cardiopulmonary exercise test**
Katiuska Herminia Liendo Martinez (madrid, Spain), Walther Ivan Girón Matute, Julia Garcia De Pedro , Ji Zichen, Luis Puente Maestu, Paola Antonella Benedetti

PA3153 **Barriers of use of patient-reported outcome measures (PROMs) in asthma and rhinitis care: preliminary insights from the multinational "PROMUSE" study**
belen intriago (guayaquil, Ecuador), Ivan Cherrez-Ojeda, Jean Bousquet, Marcus Maurer, Torsten Zuberbier, German Darío Ramón, Désirée Larenas-Linnemann, Chrystopherson Caballero-López, M.A. Al-Nesf Al-Mansouri, Tayseer Mohmmed Ibrahim, Sophia Neisinger, Daria Fomina, Anna Zalewska, Rabia Öztaş, Florin Mihaltan, Alicja Kasperska-Zając, Pavel Kolkhir, Roberta F. Criado, Luis Felipe Ensina, Herberto Jose Chong Neto, Nelson Rosario, Ana Giménez-Arnau, David Pesqué, Carolina Crespo Shijin, Romina Hinostroza Logroño, Karla Robles-Velasco

PA3154 **Comorbidities in patients with Obstructive Sleep Apnea syndrome (OSAS) in Réunion Island.**
Bashir Omarjee (Saint-Denis (La Réunion), Reunion), Suren Budhan, Christian Kichenin, Asma Omarjee, Jean François Vellin

PA3155 **Children's united airways clinic – evaluation & carer satisfaction of a UK Regional joint ENT-Respiratory clinic.**
Matthew Hurley (Nottingham, United Kingdom), Isabelle Sheeran, Rachel Gregory, Rebecca Devaney, Mat Daniel

TP-10 in thematic poster area — Session 380 — 08:30 - 09:30

Thematic poster: In vivo and in vitro studies of airway diseases

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

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

Chairs : Lena Uller (Lund, Sweden), Andrew Higham (Manchester (Greater Manchester), United Kingdom)

PA3156 **Cysteinyl-maresin 3 inhibits IL-13 induced airway hyperreactivity through alternative activation of the CysLT1 receptor**
Jesper Säfholm (Solna, Sweden), Willem Abma, Craig E. Wheelock, Sven-Erik Dahlén, Mikael Adner

PA3157 **Features of rhinovirus-induced exacerbation of HDM-challenged mice**
Sofia Tillgren (Ramlösa, Sweden), Samuel Cerps, Mandy Menzel, Irma Mahmutovic Persson, Juan José Nieto Fontarigo, Hamid Akbarshahi, Lena Uller

PA3158 **The anti-inflammatory and antifibrotic effects of a novel, pan-phosphodiesterase inhibitor in murine model of allergic asthma**
Katarzyna Wójcik-Pszczoła (Kraków, Poland), Krzysztof Pociecha, Elżbieta Wyska, Grażyna Chłoń-Rzepa, Hanna Plutecka, Monika Zadrożna, Barbara Nowak, Paulina Koczurkiewicz-Adamczyk, Elżbieta Pękala, Reinoud Gosens

PA3159 **Inhaled NXP002 attenuates LPS-induced inflammatory and fibrotic mediator production in the rat lung**
Bob Humphries (Aachen, Germany), Mark Saunders, Simon Cruwys

PA3160 **Anti-fibrotic effect and in vivo target engagement of Nintedanib administered by oral gavage or by a medicated diet in a bleomycin lung fibrosis model in the rat**
Marcello Trevisani (Parma, Italy), Paola Caruso, Vanessa Pitozzi, Silvia Pontis, Maria Gloria Pittelli, Martina Bonatti, Gino Villetti, Maurizio Civelli

PA3161 **The differential synergistic injurious effect of resistive breathing on pulmonary and extra-pulmonary lung injury**
Dimitrios Toumpanakis (Athens, Greece), Konstantinos Glynos, Vyronia Vassilakopoulou, Athanasia Chatzianastasiou, Eleftheria Mizi, Maria Dettoraki, Fotis Perlikos, Christina Magkou, Andreas Papapetropoulos, Theodoros Vassilakopoulos

PA3162 **Sphingosine-1-phosphate signaling pathway drives female asthma susceptibility**
Elisabetta Granato (Naples, Italy), Ida Cerqua, Rosalinda Sorrentino, Giusy Ferraro, Maria Francesca Nanì, Antonietta Rossi, Giuseppe Cirino, Fiorentina Roviezzo

PA3163 **The role of PPAR-γ antagonism on losartan ameliorating effect on lung injury and systemic inflammation induced by LPS in mice**
Mohammad Hossein Boskabady (Mashhad, Islamic Republic of Iran), Vajiheh Rouki, Saeideh Saadat, Arghavan Memarzia, Hossein Salmani, Zahra Gholamnezhad, Mahmoud Hosseini

PA3164 **A novel chronic guinea pig model of COPD using LPS and poly(I:C) exposure**
Loes E. M. Kistemaker (Groningen, Netherlands), Margot De Looff, Vicky Verschut, Manon E. Woest, Iris C. Gorter, Kimberley S. Belfor, I. Sophie T. Bos, Marina H. De Jager, Reinoud Gosens, Gino Villetti, Fabrizio Facchinetti

PA3165 **Targeting the carboxypeptidase activity: a promising strategy for asthma treatment**
Venkata Sita Rama Raju Allam (uppsala, Sweden), Sowsan Taha, Ida Waern, Francesc Xavier Avilés, Laurent Devel, Gunnar Pejler, Sara Wernersson

PA3166 **Extrafine triple therapy shows improved efficacy compared to ICS/LABA in a mouse model of asthma**
Daniela Miglietta (Parma (PR), Italy), Anna Rita Pisano, Andrew Allen, Debora Fragni, Giuseppina Federico, Fabio Bignami, Enrico Zambelli, Riccardo Zecchi, Francesca Boscaro, Barbara Pioselli, Valentina Mileo, Maurizio Civelli, Gino Villetti

PA3167 **In vitro and ex-vivo evaluation of anti-inflammatory and anti-fibrotic effects of NXP002 in rat and human cells and lung tissue**
Simon Cruwys (Aachen, Germany), Mark Saunders, Alastair Riddell, Bob Humphries

PA3168 **Association between dietary fibre, microbial metabolites and airway obstruction in COPD patients and murine models**
Kurtis Budden (New Lambton Heights, Australia), Saima Firdous Rehman, Shakti Shukla, Kate Bowerman, Chantal Donovan, Henry Gomez, Charlotte Alemao, Lisa Wood, Paul Dennis, Philip Hugenholtz, Peter Wark, Philip Hansbro

PA3169 **LPS-challenged equine bronchi: evidence for IL-6 as a target against AHR**
Luigino Calzetta (Roma (RM), Italy), Elena Pistocchini, Giuseppe Cito, Beatrice Ludovica Ritondo, Stefano Verri, Paola Rogliani

PA3170 **Effect of a nutraceutical drug in COPD condition: A pilot study of in vitro, in vivo and Clinical Trial**
Bijay Ranjan Pattnaik (NEW DELHI, India), Naveen Bhatraju, Seetu Kashyap, Umashankar Verma, Karan Madan, Randeep Guleria, Anurag Agrawal, Anant Mohan

PA3171 **Exogenous HSP70 regulates the expression of glucocorticoid receptor in a cell type-specific manner**
Liang Zhou (Basel, Switzerland), Lei Fang, Michael Tamm, Michael Roth, Daiana Stolz

PA3172 **Lung inhalation-on-chip: A triple co-culture cellular platform to predict toxicity of aerosolized toxicants**
Arunima Sengupta (Bern, Switzerland), Widad Hassan, Nuria Roldan, Janick Stucki, Tobias Krebs, Oliver Wisser, Nina Hobi, Olivier. T Guenat

PA3173 **Phosphoinositide-3 kinase antagonism does not reverse steroid insensitivity in severe asthma**
Anurag Bhalla (Toronto (ON), Canada), Kiho Son, Katherine Radford, Chynna Huang, Melanie Kjarsgaard, Manali Mukherjee, Parameswaran Nair

PA3174 **COPD pathogenesis is dependent on ferroptotic death of AT2 cells driven by pro-inflammatory Macrophages**
Aicha Jeridi (München, Germany), Thomas M Conlon, Gizem Günes Günsel , Mariia Novikova, Sebastian Doll , Niklas J Lang, Stijn E. Verleden , Markus Rehberg, Tobias Stöger, Herbert B. Schiller, Marcus Conrad, Ali Önder Yildirim

PA3175 **Bronchorelaxant effect of beclomethasone dipropionate in an ex vivo model of COPD exacerbation**
Luigino Calzetta (Roma (RM), Italy), Paola Rogliani, Josuel Ora, Francesco Facciolo, Enrico Melis

TP-11 in thematic poster area — Session 381 — 08:30 - 09:30

Thematic poster: Exhaled/blood biomarkers and lung function testing in chronic airway diseases

Disease(s) : Airway diseases

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

Chairs : Marc van der Schee (Cambridge, United Kingdom), Florence Schleich (Liège, Belgium)

PA3176 **An original computational framework offers new perspectives for exhaled nitric oxide**
Cyril Karamaoun (Ixelles, Belgium), Benjamin Mauroy, Médéric Argentina

PA3177 **Interval change in fractional exhaled nitric oxide (FENO) reflects short-term but not long-term change in adherence**
Tunn Ren Tay (Singapore, Singapore), Xue Ning Choo, Yiong Huak Chan, Anthony Yii

PA3178 **Short term effect of cigarette smoke on exhaled volatile organic compounds profile analyzed by an eNose.**
Silvano Dragonieri (Bari (BA), Italy), Enrico Buonamico, Agnese Caringella, Ruben Infantino, Pierluigi Intiglietta, Vincenzo Nicola Valerio, Marco Partuno, Luciana Labate, Giovanna Elisiana Carpagnano

PA3179 **Do particles in exhaled air samples differ between asthmatic and non-asthmatic adults?**
Laura Healy (Manchester, United Kingdom), Fahad Al-Huda, Emma Barrett, Lisa Willmore, Rhys Tudge, Gina Kerry, Clare S Murray, Angela Simpson, Stephen Fowler

PA3180 **FENO PREDICTS SHORT TERM RISK OF MODERATE/SEVERE COPD EXACERBATIONS**
ANA QUESADA QUESADA (granada, Spain), Gema Ramirez Rodríguez, Antonio Menéndez Lobo, Alejandro Romero Linares, Pedro J Romero Palacios, Bernardino Alcazar Navarrete

PA3182 **Biomarkers of coagulative properties in patients admitted with AECOPD.**
Peter Thobias Kamstrup, Jannie Marie Bülow Sand, Charlotte Ulrik, Julie Janner, Sarah Rank Rønnow, Diana Julie Leeming, Sidse Graff Jensen, Torgny Wilcke, Marc Miravitlles, Alexander Mathioudakis, Therese Lapperre, Ruth Frikke-Schmidt, Daniel Murray, Theis Itenov, Apostolos Bossios, Susanne Dam, Jørgen Vestbo, Tor Biering-Sørensen, Morten Karsdal, Jens-Ulrik Stæhr Jensen, Pradeesh Sivapalan

PA3183 **Forced oscillatory technique for diagnosis and monitoring of bronchiolitis obliterans syndrome following allogeneic stem cell transplantation**
Rottem Kuint (Petach Tikva, Israel), Batia Avni, Sigal Grisariu, Eran Zimran, Polina Stepensky, Neville Berkman

PA3185 **Detection of small airways disease by impulse oscillometry among smokers and non-smokers with normal spirometry.**
KETAN MALU (MUMBAI, India), Jai Mullerpattan, Ashok Mahashur

PA3186 **Accuracy of impedance measurements of a novel handheld oscillometry device**
Davide Bizzotto (Milano (MI), Italy), Pasquale Pio Pompilio, Alessandro Gobbi, Raffaele Dellaca'

PA3187 **Sputum neutrophil counts in healthy subjects: relationship with age**
Augusta Beech (Manchester, United Kingdom), Dave Singh

PA3188 **Serum osteoprotegerin (OPG) and osteopontin (OPN) in patients with COPD during two-year follow-up study**
Dimo Dimov (Stara Zagora, Bulgaria), Tanya Tacheva, Yanitsa Zhelyazkova, Tatyana Vlaykova

PA3189 **Impulse Oscillometry is a reproducible assessment of airway resistance and reactance in well-controlled asthmatics and healthy controls**
Lene Moelgaard Pedersen (, Denmark), Helle Haagensen Andersen, M Mousa, N Mousa, Anne Sofie Bjerrum, Tina Skjold, Torben Smidt-Hansen, Hans Jürgen Hoffmann, Johannes Schmid

PA3190 **The Importance of Immature Platelet Fraction in Stable and Exacerbation Periods in COPD and its Relationship with Systemic Inflammation**
Fatma Çiftci (Ankara, Turkey), Nasser Elmi Absieh, Aslıhan Gürün Kaya, Miraç Öz, Özlem Doğan, Serhat Erol, Aydın Çiledağ, Akın Kaya

PA3191 **Randomised, double-blind, placebo-controlled study to assess long-term effect of dupilumab on prevention of lung function decline (LFD) in patients with uncontrolled moderate-to-severe asthma: ATLAS trial**
Ian Douglas Pavord (Oxford (Oxfordshire), United Kingdom), Lucia De Prado Gomez, William Busse, Christopher E Brightling, Michael E Wechsler, Klaus F Rabe, Mei Zhang, Jun Xing, Juby A Jacob-Nara, Paul J Rowe

PA3192 **Diagnosis and management of Eosinophilic Granulomatosis With Polyangiitis: Perspective from the Severe Asthma Clinic**
Youxin Puan (Singapore, Singapore), Pei Yee Tiew, Kheng Yong Ong, Mariko Siyue Koh

PA3193 **Association between nasal polyposis and T2 airway inflammation in severe asthma**
Zsolt Vastag (timisoara, Romania), Emanuela Tudorache, Noemi Suppini, Cristian Oancea, Ovidiu Fira-Mladinescu

PA3194 **Bronchoconstriction status affects FENO values in asthma patients**
Maud Akset (Forest, Belgium), Alain Van Muylem, Amaryllis Haccuria, Silvia Perez Bogerd, Andrei Malinovschi, Alain Michils

PA3195 **A tool to facilitate spirometry quality control assessment using 2019 standards**
Marko Topalovic (Kessel-lo, Belgium), Brian Graham, Sanja Stanojevic, Massimo Corradi, Eva Topole, Sonia Biondaro, Isabella Montagna, Sandrine Corre, Nilakash Das

TP-12 in thematic poster area — Session 382 — 08:30 - 09:30

Thematic poster: Update on clinical trials in allergy, asthma and COPD

Disease(s) : Airway diseases Interstitial lung diseases

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

Chairs : Celeste Michala Porsbjerg (Copenhagen, Denmark), Sergio Dortas Junior (Rio De Janeiro (RJ), Brazil)

PA3197 **Onset, Maintenance, and Durability of Response with Dupilumab in Chronic Rhinosinusitis with Nasal Polyps**
Philippe Gevaert (Ghent, Belgium), Claus Bachert, Asif Khan, Wytske Fokkens, Claire Hopkins, Joseph Han, Peter Hellings, Stella Lee, Jérôme Msihid, Scott Nash, Shahid Siddiqui, Juby Jacob-Nara, Yamo Deniz, Paul Rowe

PA3198	**Itepekimab significantly reduced hospitalizations or emergency department visits in former smokers with moderate-to-severe COPD** Klaus F. Rabe (Kiel, Germany), Bartolome R. Celli, Amy Praestgaard, Michel Djandji, Xavier Soler, Raolat M. Abdulai, David J. Lederer, Hélène Goulaouic, Michael C. Nivens, Shahid Siddiqui, Juby A. Jacob-Nara, Yamo Deniz, Paul J. Rowe
PA3199	**Impact of obstructive airway diseases (OADs) treatments on adult diphtheria-tetanus-pertussis vaccine (dTap)'s immunogenicity and safety** Peter Van den Steen (Wavre, Belgium), Valérie Berlaimont, Brigitte Cheuvart, Quentin Deraedt, Laura Valdes Verelst
PA3200	**Salivary immunoglobulin E levels in patients treated with Omalizumab** Diana Hristova (Sofia, Bulgaria), Radoslava Emilova, Yana Todorova, Milena Aleksova, Maria Nikolova
PA3201	**Population PK/PD modelling of the anti-IL-33 antibody tozorakimab to predict pulmonary target engagement in patients with COPD** Muhammad Waqas Sadiq (Mölndal, Sweden), Hongtao Yu, Magnus Astrand, Ian C Scott, Adam Williams, Lisa Hewitt, Nick White, Helen Killick, Monica Gavala, Fred Reid, Chris Kell, Hitesh Pandya, Eulalia Jimenez
PA3202	**The long-term effectiveness of allergy immunotherapy in subjects with asthma is associated with a lower prevalence of sleep disturbances. Results from the REACT-study** Marco Contoli (Ferrara (FE), Italy), Benedikt Fritzsching, Nick Freemantle, Sarah Buchs, Julie Larsen, Celeste Porsbjerg
PA3203	**Allergy immunotherapy is associated with a reduced risk of asthma severity progression and lower airway infections. Results from the REACT-study** Celeste Michala Porsbjerg (Copenhagen, Denmark), Benedikt Fritzsching, Nick Freemantle, Sarah Buchs, Julie Larsen, Marco Contoli
PA3204	**Humoral immune responses to COVID-19 vaccines are reduced in patients with severe asthma** Hitasha Rupani (Southampton, United Kingdom), Diane Edwards, Rekha Chaudhuri, Steven Smith, David Jackson, Andrew Hearn, Jennifer Richards, Helen Moyses, Michael Edwards, Sebastian Johnston, Ramesh Kurukularaaratchy, Hans Michael Haitchi, Ratko Djukanovic
PA3205	**Efficacy of medical face masks on birch-induced asthma in ALYATEC EEC** Alina Gherasim (Strasbourg, France), Marine Beck, Frank Dietsch, Maude Meyer, Thibaut Riff, Nathalie Domis, Frédéric De Blay
PA3206	**Evaluation of asthma responses in ALYATEC EEC in birch allergic rhinitis (AR) with and without asthma** Alina Gherasim (Strasbourg, France), Frank Dietsch, Marine Beck, Thibaut Riff, Nathalie Domis, Frédéric De Blay
PA3207	**Beliefs about vaccination and relation to COVID-19 vaccination side-effects in asthma patients.** Apostolos Bossios (Stockholm, Sweden), Alison M. Bacon, Katrien Eger, Dóra Paróczai, Florence Schleich, Shane Hanon, Svetlana Sergejeva, Eleftherios Zervas, Konstantinos Katsoulis, Agapi Aggelopoulou, Konstantinos Kostikas, Eleni Gaki, Nikoletta Rovina, Zsuzsanna Csoma, Ineta Grisle, Kristina Bieksienė, Jolita Palacionyte, Anneke Ten Brinke, Simone Hashimoto, Florin Mihălţan, Natalia Nenasheva, Biljana Zvezdin, Ivan Čekerevac, Sanja Hromiš, Vojislav Ćupurdija, Zorica Lazic, Rekha Chaudhuri, Steven James Smith, Hitasha Rupani, Hans Michael Haitchi, Ramesh Kurukulaaratchy, Olivia Fulton, Betty Frankemölle, Peter Howarth, Celeste Porsbjerg, Elisabeth H Bel, Ratko Djukanovic, Michael Hyland
PA3208	**Efficacy and safety of Phlai capsule for allergic rhinitis: a randomized, double-blind, placebo-controlled study** Minh P. Hoang (Bangkok, Thailand), Kachorn Seresirikachorn, Steve Kerr, Jesada Kanjanaumporn, Songklot Aeumjaturapat, Supinda Chusakul, Jompol Samuthpongtorn, Wirach Chitsuthipakorn, Pornthep Kasemsiri, Virat Kirtsreesakul, Kajohnkiat Prasittivatechakool, Pongsakorn Tantilipikorn, Orapan Poachanukoon, Kornkiat Snidvongs
PA3209	**Effect of dupilumab on asthma control and asthma-related quality of life in patients with uncontrolled, moderate-to-severe type 2 asthma: TRAVERSE OLE study** Ian Douglas Pavord (Oxford (Oxfordshire), United Kingdom), William Busse, Jonathan Corren, Andrew Menzies-Gow, Enrico Heffler, Jerome Msihid, Shahid Siddiqui, David J. Lederer, Megan Hardin, Yi Zhang, Asif H. Khan, Juby A. Jacob-Nara, Yamo Deniz, Paul J. Rowe
PA3210	**Biomarkers associated with lung function decline and dupilumab response in patients with moderate-to-severe asthma** Ian Douglas Pavord (Oxford (Oxfordshire), United Kingdom), Guy Brusselle, Daniel J. Jackson, Christopher E. Brightling, Alberto Papi, Jorge F. Maspero, Klaus F. Rabe, Stephanie Korn, Mei Zhang, Nami Pandit-Abid, Megan Hardin, Lucia De Prado Gómez, Juby A. Jacob-Nara, Paul J. Rowe
PA3211	**Insilico study of COVID-19 ORF1ab protein allergenicity** Fatemeh Hajighasemi (Tehran, Islamic Republic of Iran), Atefeh Shirkavand
PA3212	**Dupilumab reduces OCS use and improves lung function in patients with severe OCS-dependent asthma** Christian Domingo Ribas (Sabadell (Barcelona), Spain), Mark Gurnell, Klaus F Rabe, Andrew Menzies-Gow, David Price, Guy Brusselle, Micheal E Wechsler, Changming Xia, Nami Pandit-Abid, Rebecca Gall, Juby A Jacob-Nara, Paul J Rowe, Yamo Deniz, Shahid Siddiqui

PA3214 **Multidisciplinary checklist approach for the "severe" phenotype: Asthma with Nasal Polyps**
Jose Antonio Castillo Vizuete (Sitges (Barcelona), Spain), Miguel Armengot, Julio Delgado, María Gil, Carlos Colás, Inmaculada Plasencia, Carolina Cisneros

PA3215 **One-year treatment with benralizumab in patients with 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

TP-13 in thematic poster area — Session 383 — 08:30 - 09:30

Thematic poster: Determinants, diagnosis and management of lung diseases in adults

Disease(s) : Airway diseases Pulmonary vascular diseases

Method(s) : Public health Pulmonary rehabilitation Epidemiology Physiology

Chairs : Sigrid Anna Vikjord (Levanger, Norway), Om Prakash Kurmi (Coventry, United Kingdom)

PA3216 **Air pollution exposure and prevalence of chronic respiratory diseases in Italy**
Alessandro Marcon (Verona (VR), Italy), Jessica Miotti, Pierpaolo Marchetti, Francesca Locatelli, Leonardo Antonicelli, Sandra Baldacci, Salvatore Battaglia, Roberto Bono, Angelo Corsico, Claudio Gariazzo, Sara Maio, Nicola Murgia, Pietro Pirina, Massimo Stafoggia, Lorena Torroni, Giovanni Viegi, Giuseppe Verlato

PA3217 **Epidemiology of COVID-19 in the Kingdom of Saudi Arabia: An Ecological Study**
Mohammad Hussain Alyami (Najran, Saudi Arabia), Abdullah Naser, Hamad Alyami, Hasan Alwafi, Mohammed Orabi

PA3218 **Tobacco use and its associated factors among undergraduate public health students in Kathmandu valley, Nepal**
Sandesh Bhusal (Kathmandu, Nepal), Birendra Chand, Kiran Paudel, Tara Ballav Adhikari, Pranil Man Singh Pradhan, Sushan Man Shrestha

PA3219 **Smoking and COPD – an exploratory overview in Brazil considering the prevalence of smoking, access to smoking cessation treatment, hospital admission and mortality from COPD. 2018 to 2020**
Rafael Stelmach (São Paulo (SP), Brazil), Telma Cassia Santos Nery, Setella Regina Martins, Naiara Santos Bispo

PA3220 **Risk factors for breakthrough COVID-19 in 15,804 UK adults after primary and booster doses of SARS-CoV-2 vaccines**
Giulia Vivaldi (Romford, United Kingdom), David A. Jolliffe, Hayley Holt, Mohammad Talaei, Florence Tydeman, Seif O. Shaheen, Adrian R. Martineau

PA3221 **Associations of low level air pollution and greenness with mortality in men and women. The Life-GAP project**
Shanshan Xu (Bergen, Norway), Alessandro Marcon , Randi Jacobsen Bertelsen, Bryndis Benediktsdottir , Camilla Geels , Thorarinn Gislason , Joachim Heinrich , Mathias Holm , Christer Janson , Rain Jogi, Iana Markevych , Hans Orru , Anna Oudin , Lise Marie Frohn , Vivi Schlünssen, Torben Sigsgaard , Ane Johannessen

PA3222 **Effects of Air Pollution in São Paulo on Asthma and COPD symptoms**
Francine Maria Almeida (São Paulo (SP), Brazil), Tiana Carla Lopes Moreira, Lucas Miranda Oliveira, Renato Fraga Righetti, Fernanda D. T. Q. Santos Lopes, Airlane P. Alencar, Thais Mauad, Nelson Cruz Gouveia, Paulo Andrade Lotufo, Isabela Bensenor, Itamar Souza Santos, Iolanda Fátima L. C. Tibério

PA3223 **Prognostic factors for COPD outcome - a nationwide cohort study**
Anne Orholm Nielsen (Roskilde, Denmark), Ole Hilberg, Rikke Ibsen, Anders Løkke

PA3224 **Lifestyle Changes and Exacerbation Frequency of COPD in Times of the Pandemic**
Seda Tural Önür (Istanbul, Turkey), Fatma Tokgöz Akyil, Sinem Sökücü, Hülya Abalı, Elif Çayirli, Neslihan Boyraci, Sedat Altin

PA3225 **RELATIONSHIP BETWEEN EARLY MENARCHE AND RESPIRATORY MUSCLE PRESSURES IN MIDDLE AGE AND OLDER WOMEN**
Karina Hunter, Ingrid Guerra Azevedo, Viviana Perez, Mayra Quintana, Catherine Llancaleo, Kimberly Gavilán, Cristiano Gomes, Maria Do Socorro Luna Cruz, Saionara Maria Aires Câmara

PA3226 **The risk factors for tuberculosis in patients with psychic pathologies**
Tatiana Osipov (Chisinau, Republic of Moldova), Evelina Lesnic, Eugeniu Cotelea, Alina Malic

PA3227 **Determinants of pre-vaccination SARS-CoV-2 seropositivity: a population-based longitudinal study (COVIDENCE UK)**
Mohammad Talaei Pashiri (London, United Kingdom), Sian Faustini, Hayley Holt, David A. Jolliffe, Giulia Vivaldi, Alex G Richter, Seif O Shaheen, Adrian R Martineau

PA3228 **RELATIONSHIP BETWEEN MATERNAL AGE OF FIRST BIRTH AND RESPIRATORY MUSCLE PRESSURES IN MIDDLE AGE AND OLDER WOMEN**
Ingrid Guerra Azevedo, Karina Hunter, Saionara Maria Aires Câmara, Mayra Quintana, Kimberly Gavilán, Catherine Llancaleo, Maria Do Socorro Luna Cruz, Alvaro Campos Cavalcanti Maciel

PA3229 **Is the oral microbiota representative for the healthy bronchial microbiota?**
Solveig Tangedal (Bergen, Norway), Rune Nielsen, Marianne Aanerud, Harald Wiker, Christine Drengenes, Gunnar Husebø, Kristel Knutsen, Sverre Lehmann, Tomas Eagan

PA3230 **Longitudinal association between healthy diet and change in asthma symptom in elderly women**
Wassila Ait-hadad (Paris Cedex 13, France), Annabelle Bédard, Sebastien Chanoine, Orianne Dumas, Nasser Laouali, Nicole Lemoual, Bénédicte Leynaert, Conor Macdonald, Valérie Siroux, Marie-Christine Boutron-Ruault, Rapahelle Varraso

PA3231 **Predictors of electronic cigarette use and its association with respiratory health and obesity in young adulthood in Sweden**
Shanzina Sompa (Huddinge, Stockholm, Sweden), Anna Zettergren, Sandra Ekström, Swapna Upadhyay, Koustav Ganguly, Antonios Georgelis, Petter Ljungman, Göran Pershagen, Inger Kull, Erik Melén, Lena Palmberg, Anna Bergström

PA3232 **Inhaled Corticosteroids as a Risk Factor for Hospitalisation with Pneumonia in COPD Patients**
Christian Philip Rønn (København Ø, Denmark), Pradeesh Sivapalan, Josefin Eklöf, Charlotte Suppli Ulrik, Jens-Ulrik Stæhr Jensen

PA3233 **What are the Direct and Indirect costs of COPD in India?**
Sapna Madas (Pune (Maharashtra), India), Jyoti Londhe, Kirti Mudliar, Kritika Powar, Nagesh Dhadge, Sanjay Gaikwad, Mahavir Modi, Balasaheb Pawar, Medha Bargaje, Gauri Godbole, Parag Khatavkar, Yogesh Agrawal, Himanshu Pophale, Yuvraj Badhe, Sahebrao Toke, Sundeep Salvi

PA3234 **Psychiatric side-effects of montelukast – a nationwide cohort study of 159 916 patients.**
Alexander Jordan (Copenhagen N, Denmark), Louise Lindhardt Tønnesen, Josefin Eklof, Pradeesh Sivapalan, Howraman Meteran, Charlotte Suppli Ulrik, Klaus Bønnelykke, Jens-Ulrik Stæhr Jensen

PA3235 **Assessment of causal relationships between eosinophils and respiratory disease using Mendelian randomization**
Martin D Tobin (Leicester, United Kingdom), Catherine John, Anna L Guyatt, Alexander T Williams, Nick Shrine, Nicola F Reeve, Ian Sayers, Ian P Hall, Louise V Wain, Nuala A Sheehan, Frank Dudbridge

TP-14 in thematic poster area — Session 384 — 08:30 - 09:30

Thematic poster: Occupational respiratory infections

Disease(s) : Interstitial lung diseases, Airway diseases

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

Chairs : Kurt Straif (Ste. Foy-les-Lyon, France), Sara De Matteis (Cagliari, Italy)

PA3236 **Comparison of humoral immune responses to initial and booster SARS-CoV-2 vaccination among respiratory health professionals**
Imre Barta (Budapest, Hungary), Viktória Schmidt, Imola Mán, Márta Valyon, Lilla Lőrinczi, Balázs Antus

PA3237 **Severity of SARS-CoV-2 pneumonia according to occupational exposure to asbestos**
Galo David Granados Rosales (Barcelona, Spain), Maria Sáez López, Cristina Aljama Vizcarra, Julia Sampol Sirvent, María Jesús Cruz Carmona, Jaume Ferrer Sancho

PA3238 **Pandemic Covid-19 and the risk of burnout among health personnel at Hassan II Hospital in Agadir, Morocco.**
fatiha bounoua (AGADIR, Morocco), Abdelkrim Khannous, Houda Moubachir, Hind Serhane

PA3239 **COVID-19-disease prevalence and its characteristics among health care workers of specialized respiratory clinics in Germany one year after the start of vaccination campaign**
Maria Ada Presotto (Heidelberg, Germany), Stella Piel, Rudolf A. Jörres, Stefan Karrasch, Wolfgang Gesierich, Jörn Bullwinkel, Klaus F. Rabe, Markus Hayden, Franziska Kaestner, Dominik Harzheim, Biljana Joves, Axel Tobias Kempa, Alessandro Ghiani, Claus Neurohr, Michael Kreuter, Felix J. F. Herth, Franziska C. Trudzinski

PA3240 **Risk factors for pandemic-related workplace absenteeism among health care workers and the impact of vaccination**
Stella Piel (Bonn, Germany), Maria Ada Presotto, Rudolf A. Jörres, Stefan Karrasch, Wolfgang Gesierich, Jörn Bullwinkel, Klaus F. Rabe, Markus Hayden, Franziska Kaestner, Dominik Harzheim, Biljana Joves, Axel Tobias Kempa, Alessandro Ghiani, Claus Neurohr, Michael Kreuter, Felix J.F. Herth, Franziska Christina Trudzinski

PA3241 **Profile of healthcare workers who contracted COVID-19 after vaccination against SARS-CoV-2**
Ons Grissa (Tunis, Tunisia), Nihel Khouja, Emna Baraketi, Jihen Hsinet, Saloua Ismaïl, Nawres Gannoun, Aida Benzarti, Abdelmajid Ben Jemaa

PA3242	**Respiratory symptomatology of Covid-19 in healthcare workers** Ons Grissa (Tunis, Tunisia), Amani Dallagi, Saloua Ismail, Jihen Hsinet, Emna Baraketi, Nihel Khouja, Aida Benzarti, Abdelmajid Ben Jemaa
PA3243	**Investigation of cellular and humoral immune responses following COVID-19 vaccination in respiratory healthcare professionals** Viktoria Schmidt (Budapest, Hungary), Imola Man, Balazs Antus, Imre Barta, Marta Valyon, Lilla Lorinczi
PA3244	**Mental health, quality of life, and COVID-19 fear in Turkish healthcare workers practicing in pandemic hospitals** Abdulsamet Sandal (Ankara, Turkey), Dilek Karadogan, Tahsin Gokhan Telatar, Abdurrahman Kotan, Esin Bilgin Konyalıhatipoğlu, Merve Yumrukuz Senel, Damla Karadeniz Guven, Khurshud Huseynova, Burcu Yalcin, Pelin Asfuroglu, Tugba Ramasli Gursoy, Tugba Sismanlar Eyuboglu, Fatma Gulsum Karakas, Neslihan Kose, Kaan Kara, Selman Celik, Ceren Ilgar, Aycan Yuksel, Nese Merve Guner Zirih, Inci Selimoglu, Pinar Yildiz, Merve Ercelik, Ahu Cerit Cakir, Nazli Cetin Beyaz, Ilknur Kaya, Selen Karaoglanoglu, Feride Marim, Umran Ozden Sertcelik, Kubra Uyar Er, Neslihan Ozcelik, Ozlem Ataoglu, Okkes Gultekin, Aslihan Banu Er, Metin Akgun
PA3245	**Late Breaking Abstract - Environmental nanoparticle exposure triggers gammaherpesvirus reactivation via the MAPK signaling pathway in macrophages** Lianyong Han (Munich, Germany), Verena Haefner, David Kutschke, Beatrix Steer, Anna Fuchs, Martin Irmler, Johannes Beckers, Annette Feuchtinger, Margit Heier, Annette Peters, Heiko Adler, Tobias Stoeger
PA3246	**Late Breaking Abstract - Carbon footprint of maintenance and reliever therapy (MART) versus maintenance plus SABA (Mx+SABA) regimens for asthma: Results from the healthCARe-Based envirONmental cost of treatment (CARBON) programme** John Bell (Cambridge, United Kingdom), Ekaterina Maslova, Paul Miller, Alex Wilkinson, Christer Janson, Richard Beasley, Michael Crooks
PA3247	**Late Breaking Abstract - Carbon nanoparticle-triggered virus reactivation as a link between the inflammatory response to air pollutants and chronic lung disease** Verena Haefner (Neuherberg, Germany), Lianyong Han, David Kutschke, Beatrix Steer, Ali Oender Yildirim, Heiko Adler, Tobias Stoeger
PA3248	**Late Breaking Abstract - TRP and TLR receptors modulate airway responses to diesel exhaust and allergen co -exposure in sensitized participants** Chris Carlsten (Vancouver, Canada), Ryan D. Huff, Andrew Robinson, Min Hyung Ryu
PA3249	**Late Breaking Abstract - Evaluation and Prediction of COVID-19 Case Fatality Rates from 156 countries** Yikang Wang (London, United Kingdom), Cui Zhou, Asa Wheelock, Chutian Zhang, Wannian Liang, Jing Gao, Lei Xu
PA3250	**Late Breaking Abstract - Dwelling visible mould exposure increased asthma symptom score in the CONSTANCES cohort** Tajidine TSIAVIA (Villejuif, France), Emilie Fréalle, Valérie Bex, Orianne Dumas, Marcel Goldberg, Nicole Le Moual, Celine Ribet, Nicolas Roche, Marine Savouré, Raphaëlle Varraso, Marie Zins, Bénédicte Leynaert, Laurent Orsi*, Rachel Nadif*
PA3251	**Late Breaking Abstract - Association of COPD exacerbations with cardiovascular events – a population-based cohort study** Anders Løkke (Højbjerg, Denmark), Peter Lange, Rikke Ibsen, Gunilla Telg, Jesper Lykkegaard, Ole Hilberg
PA3252	**Late Breaking Abstract - ¿HAS MORTALITY FROM COPD DECREASED IN SPAIN IN THE LAST TWO DECADES?** Gema Ramirez Rodriguez (Granada, Spain), Ana Quesada Quesada, Antonio Menendez Lobo, Alejandro Romero Linares, Cristian Rodriguez Rivas, Pedro Romero Palacios, Bernardino Alcazar Navarrete
PA3253	**Late Breaking Abstract - Body mass index associated with lowest mortality in patients with chronic obstructive pulmonary disease.** Sigrid Anna Vikjord (Levanger, Norway), Arnulf Langhammer, Lowie Vanfleteren
PA3254	**Late Breaking Abstract - lung function decline in chronic kidney disease** CHI YOUNG KIM (Seoul, Republic of Korea), You Na Kim, Beong Ki Kim
PA3255	**Late Breaking Abstract - The impact on future risk of one moderate COPD exacerbation in GOLD A patients – a cohort study** Anders Løkke (Højbjerg, Denmark), Ole Hilberg, Peter Lange, Rikke Ibsen, Per Bakke, Lene Maria Ørts

TP-15 in thematic poster area — Session 385 — 08:30 - 09:30

Thematic poster: Paediatric asthma management

Disease(s) : Airway diseases Respiratory critical care

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

Chairs : Antje T. Schuster (Düsseldorf, Germany), Vladyslava Kachkovska (Sumy, Ukraine)

PA3256	**Late Breaking Abstract - Classifying asthma control using salivary and fecal microbiome in children with moderate to severe asthma: results from the SysPharmPediA study** Jelle Blankestijn (Amsterdam, Netherlands), Alejandro Lopez-Rincon, Anne H. Neerincx, Susanne J.H. Vijverberg, Simone Hashimoto, Mario Gorenjak, Olaia Sardón-Prado, Paula Corcuera, Javier Korta-Murua, Maria Pino-Yanes, Uroš Potočnik, Christine Wolff, Susanne Brandstetter, Antoaneta A. Toncheva, Parastoo Kheiroddin, Susanne Harner, Michael Kabesch, Aletta D. Kraneveld, Mahmoud I. Abdel-Aziz, Anke H. Maitland-Van Der Zee
PA3257	**Late Breaking Abstract - Longitudinal data-driven definition of clinical asthma phenotypes in the pediatric arm of the ALLIANCE cohort** Alexander J. Hose (München, Germany), Erika Von Mutius, Klaus F. Rabe, Gesine Hansen, Matthias V. Kopp, Markus J. Ege
PA3258	**Practice pattern survey for paediatric asthma in Nepal (SPAN)** Raju Prasad Pangeni (Kathmandu, Nepal), Amrit Ghimire, Aniruddha Mukhopadhyay, Vaibhav Gaur, Jaideep Gogtay
PA3259	**Management of Severe Asthma in Pediatric Patients by an Interdisciplinary Team in a Public Hospital Setting.** Alvaro Teijeiro (Córdoba, Argentina), Ruben Vieyra, Analia Arteaga, Maximiliano Ermoli, Carolina Bustos, Franco Soria, Anahi Yañez
PA3260	**Interactive tablet application for self-report of asthma symptoms and impacts in children** Florian S. Gutzwiller (Basel, Switzerland), Jessica Marvel, Oskar Göransson, Marci Clark, Carla Romano, Oyebimpe Olayinka-Amao, Diane Whalley, Rebecca Crawford, Caterina Brindicci, Kristin Garg, Kattayoun Kordy, Francois Everhard, Francesco Patalano, Zach Roesler, Ross Landles, Christel Naujoks
PA3261	**A feasibility study of a school-based asthma programme in Malaysia conducted during COVID-19 pandemic** Hilary Pinnock (Edinburgh (Edinburgh), United Kingdom), Siti Nurkamilla Ramdzan, Ee Ming Khoo, Su May Liew†, Steve Cunningham, Ee Ming Khoo
PA3262	**TRial to Assess Implementation of New research in a primary care Setting (TRAINS): a pragmatic cluster randomised controlled trial of an educational intervention to promote asthma prescription uptake in General Practitioner Practices** Rami Alyami (Sheffield, United Kingdom)
PA3263	**An international survey to establish prioritised outcomes of oral corticosteroids treatment for preschool wheeze** Bohee Lee (Edinburgh, United Kingdom), Steve Turner, Damian Roland, Steff Lewis, Steve Cunningham
PA3264	**Childhood asthma monitoring frequency and duration** Alexander Mathioudakis (Stockport, United Kingdom), Nikolaos Papadopoulos, Adnan Custovic, Antoine Deschildre, Wanda Phipatanakul, Gary Wong, Paraskevi Xepapadaki, . For The Pearl Group
PA3265	**Advanced in-vitro test setup for valved holding chambers with pediatric facemasks** Andrea Winzen (Gräfelfing, Germany), Eva-Maria Popp, Karin Steinfuehrer, Rosina Ledermueller
PA3266	**Study Of The Correlation Between rs242941 polymorphism in CRHR1 Gene WithThe Responsiveness of Inhaled Corticosteroid Therapy in Children with Asthma** Sy Duong-Quy (Dalat, Vietnam), Hanh Nguyen-Bich, Le Nguyen-Ngoc-Quynh, Huong Le-Thi-Minh, Sy Duong-Quy
PA3267	**Differentiation of severe versus mild/moderate asthma in children, using a new pilot registry** Alexander Mathioudakis (Stockport, United Kingdom), Eleni Statha, Paraskevi Xepapadaki, Alexandra Kothra, Sophia Botskariova, Maria Kritikou, Celine Goh, David Price, Nikos Papadopoulos
PA3268	**Medication use in uncontrolled pediatric asthma: results from the syspharmpedia study** Amir Hossein Alizadeh Bahmani (Amsterdam, Netherlands), Elise M.A. Slob, Anne H. Neerincx, Susanne J.H. Vijverberg, Simone Hashimoto, Mahmoud I. Abdel-Aziz, Mario Gorenjak, Catarina Almqvist, Anna Hedman, Olaia Sardón Prado, Paula Corcuerea, Javier Korta, Maria Pino-Yanes, Uroš Potočnik, Christine Wolff, Susanne Brandstetter, Susanne Harner, Michael Kabesch, Aletta D. Kraneveld, Mariëlle W. Pijnenburg, Gerard H. Koppelman, Anke H. Maitland-Van Der Zee
PA3269	**Impact of asthma on the quality of life of asthmatic children: prospective study of 126 cases** Nadia MEBROUK (Rabat, Morocco), Naima El Hafidi, Fadoua Benbrahim, Soumia Benchekroun, Chafiq Mahraoui
PA3270	**Efficacy of oral corticosteroids in treating preschool wheeze: A systematic review and meta-analysis** Bohee Lee (Edinburgh, United Kingdom), Jonathan Twynam-Perkins, Steve Turner, Steff Lewis, Steve Cunningham
PA3271	**The interest of magnesium sulfate nebulization in asthma exacerbation** Nadia MEBROUK (Rabat, Morocco), Naima El Hafidi, Fadoua Benbrahim, Chafiq Mahraoui

PA3272 **Secondary adrenal insufficiency with long-term inhaled corticosteroids therapy in asthmatic children**
Lekshmi Sambhu Hema (Trivandrum, India), Prawin Kumar, Jagdish Goyal, Varuna Vyas, Kuldeep Singh

PA3273 **Implement of long-term usage of inhaled corticosteroids on physical development of children with bronchial asthma**
Yevehniya Ortemenka (Chernivtci, Ukraine)

PA3274 **Does Omalizumab lead to sustained improvement in Asthma Control?**
Elizabeth Gregson (Harrogate, United Kingdom), Angela Tang, Sarah Brookman, James Tarr, Aziz Amin, Anil Shenoy, Sonal Kansra, Clare Murray, Atul Gupta

PA3275 **How pediatrician manage asthma in tertiary care hospitals of Multan, Pakistan- A cross sectional study.**
Ghulam Mustafa (Riyadh, Saudi Arabia)

TP-16 in thematic poster area — Session 386 — 08:30 - 09:30

Thematic poster: Respiratory care in neonatal and paediatric intensive care units

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

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

Chairs : Anna Lavizzari (Milano (MI), Italy), Emanuela Zannin (Milano (MI), Italy)

PA3276 **Bedside lung function monitoring in preterm infants by oscillatory mechanics and lung ultrasound**
Emanuela Zannin (Milano (MI), Italy), Camilla Rigotti, Cattaneo Federico, Abedulrhman Abdelfattah, Maria Luisa Ventura

PA3277 **Non-invasive low-frequency oscillatory mechanics in newborn infants**
Sotirios Fouzas (Patras, Greece), Panoraia - Maria Iliopoulou, Gabriel Dimitriou

PA3278 **Telomere length in preterm-born children with bronchopulmonary dysplasia (BPD)**
Ella Kotecha (Cardiff, United Kingdom), Lei Zhang, Ali Aboklaish, Michael Cousins, Kylie Hart, Sarah Kotecha, W John Watkins, Sailesh Kotecha

PA3279 **Azithromycin resistance in the stool of preterm infants at risk of chronic lung disease of prematurity (CLD)**
Chris Course (Cardiff, United Kingdom), David Gallacher, Ali Aboklaish, Lei Zhang, Julian Marchesi, Sailesh Kotecha

PA3280 **Lung clearance index using a novel washout device is elevated in premature infants**
Claire Nissenbaum (manchester, United Kingdom), Anna Shawcross, Catherine Fullwood, Ajit Mahaveer, Clare S Murray, Alexander Horsley

PA3281 **Oscillometry and mean airway pressure (MAP) titration in extremely preterm infants**
Beatrice Bonomi (milano, Italy), Tobias Werther, Chiara Veneroni, Erik Kueng, Raffaele Dellacà

PA3282 **Non-invasive Neurally Adjust Ventilatory Assist (NIV-NAVA) versus Nasal Intermittent Positive Pressure Ventilation (NIPPV) at equivalent Peak Inspiratory Pressure (PIP) in preterm infants: a randomized cross-over trial.**
Anna Lavizzari (Milano (MI), Italy), Chiara Veneroni, Nicole Sirianni, Beatrice Bonomi, Chakib Boudjellel, Mariarosa Colnaghi, Fabio Mosca, Raffaele L Dellacà

PA3283 **Estimation of the alveolar surface area using functional morphometry in extremely preterm infants**
Emma Williams (London, United Kingdom), Mahesh Nanjundappa, Grace Okoye, Raghu Subba-Rao, Anne Greenough, Theodore Dassios

PA3284 **National survey of closed-loop automated oxygen control systems in neonatal intensive care units.**
Ourania Kaltsogianni (London, United Kingdom), Theodore Dassios, Rayhan Belbal, Anne Greenough

PA3285 **Response to added deadspace in infants exposed to second-hand smoke in pregnancy**
Ourania Kaltsogianni (London, United Kingdom), Nadja Bednarczuk, Emma Williams, Rebecca Lee, Ravindra Bhat, Theodore Dassios, Anne Greenough

PA3286 **Lung biopsy in neonates needing extracorporeal membrane oxygenation for undiagnosed recalcitrant pulmonary hypertension: survey of current practice**
John King (London, United Kingdom), Maura O'Callaghan, Timothy Thiruchelvam, Ajay Desai, Andrew Bush, Samatha Sonnappa

PA3287 **Use it or lose it! A multidisciplinary protocol for early speaking valve use in children with tracheostomy**
Sammy Reed (London, United Kingdom), Brenda Carty, Suren Thavagnanam, Muna Dahabreh, Nara Orban, Tincy Abraham, Emma Bould, Sarah Brown, Caroline Pao, Chinedu Nwokoro, Tash Roberts

PA3288	**Effect of skin-to-skin contact (SSC) on respiratory parameters in premature infants with bronchopulmonary dysplasia (BPD)** Ana Serrano-Llop (LONDON, United Kingdom), Laura De-Rooy, Peter Cornuaud, Donovan Duffy, Anay Kulkarni, Sandeep Shetty
PA3289	**Early Mobilization Program in a Pediatric Intensive Care Unit** Esther Garcia Delgado (Madrid, Spain), Elsa Sanchez Ezquerra, Esther Tores Garcia, Sergio Moran Arribas, Patricia Herrera Monge, Alejandra Daza Diaz, Margarita Protero Diaz, Alicia Rodriguez Martin, Sofia Garcia De Las Peñas, Olga Ordoñez Saez, Victoria Ramos Casado, María Hernandez Gil, Esther Lopez Sanchez, Gema Prieto Arroyo
PA3290	**Pulmonary complications after liver transplantation in children** Gizem Özcan (Ankara, Turkey), Ceyda Tuna Kırsaclioglu, Fazilcan Zirek, Merve Nur Tekin, Hasan Ozen, Tanil Kendirli, Meltem Kologlu, Zarife Kuloglu, Nazan Cobanoglu
PA3291	**The influence of sex on the outcomes of premature infants receiving postnatal corticosteroids** Ourania Kaltsogianni (London, United Kingdom), Rebecca Lee, Emily Kostina, Christopher Harris, Theodore Dassios, Anne Greenough
PA3293	**Late Breaking Abstract - Effect of cannula size on oxygen saturation during nasal high flow therapy in newborns** Pavel Mazmanyan (Yerevan, Armenia), Ella Mirzoyan, Maximilian Pinkham, Stanislav Tatkov
PA3294	**Late Breaking Abstract - COVID-19 in patients diagnosed with persistent tachypnea of infancy** Honorata Marczak (Warszawa, Poland), Katarzyna Krenke, Joanna Lange, Stanisław Bogusławski

TP-17 in thematic poster area — Session 387 — 08:30 - 09:30

Thematic poster: Fantastic beasts: where to find them and how to treat

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

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

Chairs : Berta Saez Gimenez (Barcelona, Spain), Michael Perch (København Ø, Denmark)

PA3295	**Serological response following second and third SARS-CoV-2 vaccines in lung transplant recipients** Enikő Bárczi (Budapest, Hungary), Viktoria Varga, Alexandra Nagy, Noemi Eszes, Zsuzsanna Jáky-Kováts, Veronika Müller, Aniko Bohacs
PA3296	**Covid-19 in lung allograft recipients - better outcomes after vaccination?** Mário Alexandre Oliveira Pinto (Amadora, Portugal), João Rodrigues, Ana Sofia Santos, Luísa Semedo
PA3297	**Sotrovimab: a new therapeutic option in lung transplant** Rosa Gutiérrez-Larraya Sánchez-Andrade (Madrid, Spain), Silvia Aguado Ibáñez, Marta Erro Iribarren, Guillermo Padín Pico, Adriana Carolina Amaral Corgo, Brais Baamonde Veiga, Marta Lopez Pando, Sonia Salinas Castillo, Myriam Aguilar Pérez, Rosalía Laporta Hernández, Piedad Ussetti Gil, Beatríz Jara Chinarro
PA3298	**Can SARSCov2 infection drive in an acute rejection in lung transplant recipients?** Thais Beauperthuy Levy (Valencia, Spain), Maria Nieves Balaguer Cartagena, Desamparados Pastor, Juan Pablo Reig Mezquida, Laura Feced, Gabriel Anguera De Francisco, Alberto García-Ortega, Isabel Amara, Amparo Solé Jover
PA3299	**NK and T cells responses to CMV in patients awaiting for lung transplantation** Laura Bergantini (siena, Italy), Dalila Cavallaro, Miriana D'Alessandro, Sara Gangi, Luca Luzzi, Antonella Fossi, Piero Paladini, Elena Bargagli, David Bennett
PA3300	**Alteration of Immune-checkpoint after specific stimulation with CMV antigens in pre-LTx patients** Laura Bergantini (siena, Italy), David Bennett, Dalila Cavallaro, Ambra Otranto, Miriana D'Alesssandro, Sara Gangi, Luca Luzzi, Piero Paladini, Antonella Fossi, Elena Bargagli
PA3301	**Impact of Candida spp. contamination of preservation solutions in lung transplantation: a national experience over a 10-year period** Clara Noret (Nantes, France), Cédric Bretonnière, Florent Morio, Tristan Degot, Valérie Bru, Clément Picard, Emilie Cardot, Benjamin Coiffard, Stéphane Ranque, Loic Falque, Murielle Cornet, Pierre Gazengel, Anne Gigandon, Agathe Senechal, Jean Menotti, Vincent Bunel, Christine Bonnal, Aurélie Leborgne, Sophie Cassaing, Xavier Demant, Frederic Gabriel, Eric Dannaoui, F-Xavier Blanc, Adrien Tissot
PA3302	**Fungal colonisation in lung transplant recipients: A retrospective study from India** Owais Tisekar (Bangalore, India), Md Moiz Lalani, Vijil Rahulan, Srinivasa K Ravipati, Unmil Shah, Prabhat Dutta, Sandeep Attawar

PA3304 **Clinical outcome following lung transplantation in patients with CF colonized with Burkholderia cepacia complex: results from Mater Hospital lung transplant center Dublin.**
Amel Alameeri (Dublin 4, Ireland), Michelle Murray

PA3305 **Tuberculosis while on Lung transplant wait list & on ECMO as bridge to transplant- An ethical and clinical challenge**
Apar Jindal (Chennai (Tamil Nadu), India), Shubham Sharma, Sricharan Goda, Rakesh Mamilla, Kamran Ali, Sri Ravikanth Vanguri, Jnanesh Thacker

PA3306 **Late Breaking Abstract - dd-cfDNA and DSA in the occurrence of acute rejection in lung transplant recipients**
Silvia Casas (Stockholm, Sweden), Pascal PEDINI, Benjamin Coiffard, Jacques Chiaroni, Coralie Frassati, Martine Reynaud-Gaubert, Christophe Picard

PA3307 **Late Breaking Abstract - Characterization of chronic lung allograft dysfunction phenotypes using oscillometry**
Anne Fu (Toronto, Canada), Anastasiia Vasileva, Nour Hanafi, Natalia Belousova, Joyce Wu, Sarada Sriya Rajyam, Zoltan Hantos, Chung-Wai Chow

PA3308 **Late Breaking Abstract - Safety of oral Nirmatrelvir plus Ritonavir in Lung transplant recipients**
Osnat Straichman (Petach Tikva, Israel), Lev Fridkin, Ilana Bakal, Dorit Shitenberg, Yael Shostak, Moshe Heching, Shai Amor, Dror Rosengarten, Yaron Barac, Yuri Peysakhovich, Ala Atamna, Barak Pertzov, Mordechai Kramer

PA3309 **Late Breaking Abstract - Lung transplant and COVID-19: A single centre experience in Ireland**
Helen O Brien (Ratoath, Ireland), Suzanne Carter, Breda Lynch, Margaret Hannan, Sara Winward, Patricia Ging, Jana Kleinerova, Peter Riddell, Michelle Murray

TP-18 in thematic poster area — Session 388 — 08:30 - 09:30

Thematic poster: Novelties in respiratory muscle testing, training and airway clearance

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

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

Chairs : Rainer Gloeckl (Schoenau am Koenigssee, Germany), Andre Nyberg (Umeå, Sweden)

PA3310 **AGE OF CLIMATERIC SYMPTOMS IS ASSOCIATED TO LOWER MAXIMAL INSPIRATORY PRESSURE**
Ingrid Guerra Azevedo, Karina Hunter, Viviana Perez, Mayra Quintana, Kimberly Gavilán, Catherine Llancaleo, Maria Do Socorro Luna Cruz, Saionara Da Câmara, Alvaro Maciel

PA3311 **Determinants of respiratory muscle strength in adult bronchiectasis**
Aylin Tanriverdi (Izmir, Turkey), Melike Mese, Buse Ozcan Kahraman, Can Sevinc, Sema Savci

PA3312 **Eccentric diaphragmatic contractions during mechanical ventilation in critically ill patients**
Antenor Rodrigues (Toronto, Canada), Michael C Sklar, L. Felipe Damiani, Irene Telias, Thomas Piraino, Laurent Brochard

PA3313 **Reference values for maximal dynamic inspiratory pressure in a healthy population**
Vitor Souza (São Paulo, Brazil), José Neder, Luiz Nery, Priscila Sperandio

PA3314 **Can you learn to cough after having a stroke?**
Natalia Dominguez Sanz (Burgos, Spain)

PA3315 **The comparison of the effects of inspiratory muscle training and diaphragmatic neuromuscular electrical stimulation on inspiratory muscle strength in mechanically ventilated patients.**
Ali Yalman (Denizli, Turkey), Orcin Telli Atalay, Hulya Sungurtekin, Cansu Ozgen, Harun Taskin

PA3316 **The effects of inspiratory muscle training on respiratory muscle strength and diaphragm motion in patients with mechanical ventilator**
Harun Taskin (Denizli, Turkey), Orçin Telli Atalay, Furkan Ufuk, Hülya Sungurtekin, Ali Yalman

PA3317 **Effects of counterpressure breathing with steam inhalation on lung function in stable asthma**
Ilpo Kuronen (Tampere, Finland), Jukka Heinijoki, Anssi Sovijärvi

PA3318 **Timing of inspiratory muscle activity in patients with unilateral diaphragm dysfunction**
Antenor Rodrigues (Toronto, Canada), Luc Janssens, Sauwaluk Dacha, Zafeiris Louvaris, Tin Gojevic, Wim Janssens, Laurent Brochard, Rik Gosselink, W. Darlene Reid, Daniel Langer

PA3319 **The accuracy of the Cuff Leak Test in neurocritical patients**
RENATA CORREIA (Rio de Janeiro, Brazil), Iana Paes d' Assumpção Vital, Alexandre Rosa Da Silva, Clara Harazim Gaspari, Camila Afonso Badaró Marques

PA3320	**The experiences and perceptions of mechanical insufflation-exsufflation in people with amyotrophic lateral sclerosis** Shauna Sheridan (London, United Kingdom), Joerg Steier, Phillip Marino , Shelley Srivastava , Eui-Sik Suh, Nicholas Hart, Patrick Murphy , Harriet Shannon, Leyla Osman, Georgios Kaltsakas, Michelle Ramsay
PA3321	**Community Non-Invasive Ventilation practitioner service utilisation for Motor Neurone Disease patients following the Covid-19 pandemic** Emily Johnstone (Bristol (Avon), United Kingdom), Gemma Cox, Dinesh Shrikrishna
PA3322	**A bench study to investigate the safety and performance of Simeox® for secretion clearance** Neeraj Shah (New Malden (Surrey), United Kingdom), Emeline Fresnel, Adrien Kerfourn, Laurent Morin, Patrick Murphy, Maxime Patout
PA3323	**Personalising airway clearance in PCD, exploring expert physiotherapist decision making.** Lynne Schofield (Leeds, United Kingdom), Sally Singh, Jim Wild, Daniel Hind
PA3324	**The use of nasopharyngeal and oropharyngeal suctioning in physiotherapy practice in the United Kingdom** Agnieszka Lewko (Coventry, United Kingdom), Stefan Tino Kulnik, Riyaz Koheeallee, Jack Whiteside
PA3325	**Effects of the intermittent intrapulmonary deflation technique on airway clearance in patients with cystic fibrosis** William Poncin (Bruxelles, Belgium), Juliana Macedo, Gregory Reychler, Giuseppe Liistro
PA3326	**Effects of a physiotherapy intervention including frequent changes of the body position and stimulation of physical activity for infants with acute respiratory infections in hospital − a randomised controlled trial** Sonja Andersson Marforio (Hjärup, Sweden), Eva Ekvall Hansson, Annika Lundkvist Josenby, Christine Hansen
PA3327	**Late Breaking Abstract - Exercise Oscillatory Breathing in Heart Failure: clinical and prognostic implications** Renata Mendes (Sao Carlos (SP), Brazil), Cássia Goulart, Piergiuseppe Agostoni, Elisabetta Salvioni, Rebeca Nunes Silva, Leonard A. Kaminsky, Jonathan Myers, Ross Arena, Renata Gonçalves Mendes, Audrey Borghi-Silva

TP-19 in thematic poster area — Session 389 — 08:30 - 09:30

Thematic poster: After COVID

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

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

Chairs : Arietta Spinou (London, United Kingdom), Marta Alina Kisiel (Uppsala, Sweden)

PA3328	**Pulmonary function outcomes one year after moderate to critical COVID-19 pneumonia** Simone van der Sar (Teteringen, Netherlands), Antine Flikweert, Ingrid De Backer
PA3329	**Persistent symptoms after Covid 19- 6 months follow-up after discharge** Andreea Mihai (Staicu) (craiova, Romania), Cristina Calarasu, Floarea Mimi Nitu, Costin Teodor Streba, Ramona Cioboata
PA3330	**Follow up outcome in COVID-19 patients with persistent symptoms from central India** Abhishek Anil Faye (Bhandara (Maharashtra), India), Rajesh Swarnakar, Shruti Gudhane, Charu Singh
PA3331	**Pre-COVID-19 lung function in a general adult population between COVID-19 and non-COVID-19 cases** Hannu Kankaanranta (Seinäjoki, Finland), Daniil Lisik, Bright I Nwaru
PA3332	**Post covid-19 manifestations in the omicron wave** Aboubekr Imzil (Agadir, Morocco), Youness Essaid, Houda Moubachir, Hind Serhane
PA3333	**Identifiying patients who require respiratory follow up after hospital admission with COVID-19** Jennifer Martinovic (LONDON, United Kingdom), Katherine Myall, Deepan Sivakumar, Johan Meurling, Diana Roque, David Jackson, Andrew Hearn, Ahmed Seedat, Andrew Robbins, Panagis Drakatos, Alex West
PA3334	**Reasons for post-covid hospitalization- one year experience from Serbia** Ana Milenković (Novi Sad, Republic of Serbia), Siniša Maksimović, Miroslav Ilić, Jovan Javorac, Dragica Kovačević, Miloš Cvetković, Nevena Savić
PA3335	**Fatigue in Long Covid-19 is associated to short hospitalization time and normal lung function** Søren Sperling (Aarhus N, Denmark), Andreas Fløe, Steffen Leth, Tina Gissel, Ayfer Topcu, Lars Kristensen, Charlotte Hyldgaard, Lene Dahl Sønderskov, Søren Jensen-Fangel, Johannes Martin Schmid, Hans Jürgen Hoffmann, Elisabeth Bendstrup
PA3336	**Self-reported cognitive complaints in post-Covid-19 patients and its association to cognitive performance** Zjala Ebadi (Groesbeek, Netherlands), Jeannette B. Peters, Bram Van Den Borst, Roy Kessels, Jan H. Vercoulen

PA3337 **Evaluation of respiratory muscle function using ultrasound in post Covid-19 patients with unexplained dyspnea**
Anouk Stoffels (Nijmegen (GE), Netherlands), Esther L. van Voorthuizen, Jeannette B. Peters, Hanneke A.C. Van Helvoort, Anouk A.F. Stoffels, Nicol C. Voermans, Hieronymus W.H. Van Hees, Jonne Doorduin, Bram Van Den Borst

PA3338 **Evolution of pulmonary function, CT changes and respiratory symptoms 6-8 months after hospital admission with COVID-19 infection**
James Kent Bramer (London, United Kingdom), Yee-Ean Ong, Adrian Draper, Saeed Akbar, Raminder Aul

PA3339 **One-year kinetics of the humoral response following SARS-CoV-2 vaccination Among Maintenance Hemodialysis Patients**
Ori Wand (Kfar Sava, Israel), Naomi Nacasch, Sydney Benchetrit , Amir Bar-Shai, Keren Cohen-Hagai

PA3340 **Alfa-1 antitrypsin after one year COVID-19 infection**
Julian Andres Ceballos Gutierrez (vera, Spain), Beatriz M Jimenez Rodriguez, Eva Maria Triviño Ibañez, José Gutiérrez Fernández, Ana Dolores Romero Ortiz, Concepción Morales García

PA3341 **Relation of pulmonary diffusing capacity decline to HRCT and VQ SPECT/CT findings at early follow-up after COVID-19. A prospective cohort study (The SECURe study)**
Thomas Kromann Lund (Copenhagen NV, Denmark), Terese Katzenstein, Jan Christensen, Anna Kalhauge, Frederikke Rönsholt, Daria Podlekavera, Elisabeth Arndal, Ronan Berg, Thora Kjaer, Anne-Mette Lebech, Jann Mortensen

PA3342 **Oxygen home therapy after discharge of hospitalized patients with COVID-19**
Donia Belkhir (Tunis, Tunisia), Hana Blibech, Houda Snene, Aymen Jebali, Syrine Daoud, Line Kaabi, Soumaya Debbiche, Nadia Mehiri, Saoussen Miladi, Ahmed Laatar, Nozha Ben Salah, Bechir Louzir

PA3343 **Post discharge persistent dyspnea after covid-19 pneumonia**
Mohamed aymen Jebali (tunis, Tunisia), Hana Blibech, Houda Snene, Sirine Daoud, Donia Belkhir, Line Kaabi, Soumaya Debbiche, Nadia Mehiri, Nozha Bensalah, Bechir Louzir

PA3344 **Predictive factors of persistent dyspnea after COVID-19 pneumonia**
Hela Cherif (Tunis, Tunisia), Nouha Guediri, Slim Kalboussi, Mariem Triki, Ferdaous Yangui, Med Ridha Charfi

PA3345 **Trajectories of respiratory recovery after severe SARS-CoV-2 infection (RE2COVERI): a pragmatic, longitudinal cohort study.**
Frédéric Schlemmer (Créteil Cedex, France), Simon Valentin, Laurent Boyer, Valentine Bonnefoy, Clairelyne Dupin, Anne Bergeron, François Chabot, Maeva Zysman, Elodie Blanchard, Mehdi Roumila, Charlotte Colin, Violaine Giraud, Etienne Giroux-Leprieur, Thomas Gilles, Yurdagul Uzunhan, Pierre-Yves Brillet, Isabelle Honoré, Nicolas Roche, Morgane Faure, Maxime Patout, Capucine Morelot-Panzini, Sven Gunther, Olivier Sanchez, Anne-Marie Ruppert, Jacques Cadranel, Claire Andrejak, Camille Jung, Emmanuelle Bugnet, Florence Canoui-Poitrine, Bernard Maitre

PA3346 **Circulating calprotectin correlates with DLCO in patients four months after COVID-19**
Carlos Esteban Machahua Huamani (Bern, Switzerland), Nebal Abu Hussein, Michael P. Horn, Thomas Geiser, Manuela Funke-Chambour

PA3347 **Bronchoalveolar lavage fluid characteristics in patients with persistent symptoms following COVID-19 infection**
Maximilian Gysan (Wien, Austria), Antje Lehmann, Dominik Bernitzky, Milacek Christopher, Andreas Zech, Helmut Prosch, Marco Idzko, Daniela Gompelmann

TP-2 in thematic poster area — Session 390 — 08:30 - 09:30

Thematic poster: Accessibility and personalised approach to pulmonary rehabilitation

Disease(s) : Airway diseases Interstitial lung diseases

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

Chairs : Anouk W. Vaes (Horn, Netherlands), Anja Frei (Zürich, Switzerland)

PA3348 **Late Breaking Abstract - Health economic implications of the use of erdosteine in patients with chronic obstructive lung disease.**
Alberto Papi (Cona, Ferrara, Italy), Daniela Paola Roggeri, Alessandro Roggeri

PA3349 **Impact of the COVID-19 pandemic on COPD exacerbations during inpatient pulmonary rehabilitation**
Kiki Waeijen-Smit (Horn, Netherlands), Martijn A. Spruit, Rein Posthuma, Fenne De Jong, Daisy J. A. Janssen, Nicole P. H. Van Loon, Bita Hajian, Sandra L. Evertse-Snijders, Sami O. Simons, Sarah Houben-Wilke, Frits M. E. Franssen

PA3350 **"You can't feel what we feel": Multifaceted dyspnea invisibility in advanced chronic obstructive pulmonary disease: A qualitative study**
Laure Serresse (Paris, France), Antoine Guerder, Jonathan Dedonder, Nathalie Nion, Sophie Lavault, Capucine Morelot-Panzini, Jesus Gonzalez, Laelia Benoit, Thomas Similowski

PA3351	**Home-based pulmonary rehabilitation for adult with difficult-to-control asthma exposed to violence.** Sarah Gephine (Pérenchies, France), Emilie Margoline, Stéphanie Fry, Cécile Chenivesse, Jean-Marie Grosbois
PA3352	**Predictors of poor pulmonary rehabilitation program (PRP) attendance in COPD patients** Huiying Xu (Singapore, Singapore), Calvin You Jia Chen, Shi Tien Heng, Min Sen Yew
PA3353	**Respiratory Sensation Assessment in COPD and healthy ageing** Isabella Epiu (Kampala, Uganda)
PA3354	**Is Virtual Pulmonary Rehabilitation (PR) a feasible and effective alternative to Face to Face?** Laura Moth (London, United Kingdom), Vijay Padmanaban, Crisp Phillip, Lound Adam, Maguire Michelle, Moloney Clare, De Luca Brendan, Kennedy Zoe, Klinge Helena, Elkin Sarah
PA3355	**Predicting those that require rehabilitation following hospitalisation of COVID19.** Enya Daynes (Leicester, United Kingdom), Urvee Karsanji, Nikki Gardiner, Sally J Singh
PA3356	**Pain characteristics in long COVID syndrome patients one year after infection** Javier Martín Núñez (Granada, Spain), Andrés Calvache Mateo, Alba Navas Otero, Irene Torres Sánchez, Ángela Benítez Feliponi, Irene Cabrera Martos, Marie Carmen Valenza
PA3357	**Investigating adherence to pulmonary rehabilitation and long-term sequelae in patients with Long COVID.** Megan Clark (Liverpool, United Kingdom), Hafsa Shams-Khan, Gurinder Tack, Laura Watkins, Nneka Nwosu
PA3358	**Activity levels and quality of life in long COVID patients** Javier Martín Núñez (Granada, Spain), Andrés Calvache Mateo, Alberto Rodríguez López, Irene Calles Plata, Araceli Ortiz Rubio, Irene Torres Sánchez, Marie Carmen Valenza
PA3359	**Multidimensional assessment of pulmonary rehabilitation programs in COPD patients** Ana Casal (vigo, Spain), Malena Toubes, Luis Sanz, Carlota Rodríguez, Carlos Rábade, Vanessa Riveiro, Tamara Lourido, Romina Abelleira, Lucía Ferreiro, Adriana Lama, Nuria Rodríguez, Luis Valdés
PA3360	**"When I am breathless now, I don't have the fear that's linked to it." A qualitative case series analysis on the potential of EMDR to break the dyspnea-anxiety cycle in patients with COPD** Kris J.M. Mooren (Haarlem, Netherlands), Kirsten Smit, Yvonne Engels, Daisy Janssen, Judith Godschalx
PA3361	**Bone health in patients with chronic respiratory disease, are we doing enough?** Joseph McHugh (Limerick, Ireland), Caroline Tan, Niamh Logan, Catriona Reddin, Jude Ryan
PA3362	**Pulmonary rehabilitation interventions in COVID-19 patients** Leila Douik El Gharbi (Ariana, Tunisia), Imen Sahnoun, Tasnim Znegui, Ines Moussa, Siwar Rejeb, Salma Mkaddem, Asma Allouch, Rafik Guerfallah, Chiraz Ksouri, Saloua Jameleddine
PA3363	**Needs and perceptions of patients and healthcare providers about Pulmonary Rehabilitaiton in India** Shruti Sahasrabudhe (Pune (Maharashtra), India), Dipali Dhamdhere, Suryakant Borade, Meenakshi Bhakare, Mahavir Modi, Mark W Orme, Ilaria Pina, Rashmi Rohan, Zahira Ahmed, Andy Barton, Michael C Steiner, Sundeep Salvi, Sally J Singh
PA3364	**Development of a COmmunication instrument about SexualitY in COPD: COSY** Kaba Dalla Lana (Wetzikon, Switzerland), Claudia Steurer-Stey, Stefanie Gonin-Spahni, Michèle Borgmann, Ursina Brun Del Re, Sebastian Haas, Eliane Sarasin, Andrea Burri, Alexandra Strassmann, Anja Frei, Milo Puhan
PA3365	**Mapping UK rehabilitation provision for adults after hospital admission with COVID-19** Sarah Ward (Leicester, United Kingdom), Charlotte Overton, Archie Walters, Andrew Ibbetson, Sally Singh, Rachael Evans, Andrew Briggs, Linzy Houchen-Wolloff
PA3366	**Home-based pulmonary rehabilitation for patients with chronic respiratory diseases in Malaysia: A feasibility study** Yong-Kek Pang (Kuala Lumpur (Wilayah Persekutuan), Malaysia), soo chin chan, Julia Patrick Engkasan, Jaspreet Kaur Sekhon, Jayakayatri Jeevajothi Nathan, Norita Hussein, Nik Sherina Hanafi, Anwar Suhaimi, Yong Kek Pang, Saari Yatim, Monsur Habib, Hilary Pinnock, Ee Ming Khoo
PA3367	**Post-COVID pulmonary rehabilitation at primary hospital in Nepal: Preliminary experience from LMIC** Aishana Joshi (Kathmandu, Nepal), Pankaj Pant

TP-20 in thematic poster area — Session 391 — 08:30 - 09:30

Thematic poster: COVID infections prognosis: risk factors and treatment

Disease(s) : Airway diseases Interstitial lung diseases

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

Chairs : Josje Altenburg (Amsterdam (NH), Netherlands), Rosanel Amaro Rodriguez (Premia de Dalt (Barcelona), Spain)

PA3368	**Tociluzimab administation and monitoring in Covid-19** Avinash Aujayeb (Newcastle, United Kingdom), Nathaniel Keidan
PA3369	**Risk factors and mortality rate in hospitalized patients with COVID-19: Data from a respiratory medicine department in a reference Hospital for COVID-19** Andreas Photiades (Athens, Greece), Lykourgos Kolilekas, Anastasia Levounets, Konstantinos Loverdos, Lamprini Vlassi, Polixeni Ntontsi, Theoni Agapitou, Chrysoula Kontogianni, Romina Chatzipetrou, Stella Giannakaki, Zafiris Sardelis, Theoplasti Grigoratou, Erasmia Ekonomidou, Konstantinos Samitas, Eleftherios Zervas, Mina Gaga
PA3370	**Mortality prediction using a modified R2CHA2DS2-VASc score among hospitalized COVID-19 patients** Ori Wand (Kfar Sava, Israel), David Levy, Guy Topaz, Sydney Benchetrit, Keren Cohen-Hagai
PA3371	**Multiple-flows exhaled nitric oxide for the detection and severity assessment of post-COVID19 lung sequelae** Paolo Cameli (Siena (SI), Italy), Elena Bargagli, Laura Bergantini, Miriana D'Alessandro, Bruna Maria Giugno, Francesco Gentili, Piersante Sestini
PA3372	**Post Coronavirus Disease 2019 (COVID-19) pulmonary fibrosis: a 12 months follow-up study** Matteo Daverio (Padova, Italy), Elisabetta Cocconcelli, Nicol Bernardinello, Simone Petrarulo, Matteo Bovo, Cristina Dartora, Elena De Zorzi, Silvia Tonin, Annamaria Cattelan, Chiara Giraudo, Marina Saetta, Paolo Spagnolo, Elisabetta Balestro
PA3373	**COVID-19 Pneumonia Virtual Follow-up Service in Greater Glasgow and Clyde: Effectiveness and Outcomes.** Erin McGarry (Glasgow, United Kingdom), Kathryn Scott, Katie Levin, Fadilla Refin, Angela Wright, George Chalmers, David Anderson, Brian Choo-Kang, Hannah Bayes
PA3374	**Lingering COVID-19 symptoms in non-hospitalized (NH) patients: Results from a Tunisian prospective cohort** Amany Touil (Tunis, Tunisia), Ella Nemsi, Sarra Maazaoui, Tasnim Znegui, Mariem Chaabane, Sabrine Maddeh, Sonia Habibech, Hajer Racil, Nawel Chaouch
PA3375	**Critical patients with COVID-19: are there any clinical peculiarities?** Kateryna Gashynova (Dnipro, Ukraine), Vladyslava Rudakova, Yelyzaveta Skubchenko, Vladyslav Mykhailov
PA3376	**CRP, ferritin, IL-6 and D-dimer: how significant they are in prediction of disease severity in COVID-19 - A retrospective study** Borislav Božanić (Niš, Republic of Serbia), Marija Topalović, Tatjana Pejčić, Aleksandra Ignjatović, Desa Nastasijević Borovac, Vuk Pejčić, Ana Srbulović Božanić, Miodrag Vrbić, Marko Bjelaković, Marija Marinković, Milan Radović, Milan Rančić, Ivana Stanković, Lidija Ristić
PA3377	**Non-interventional, retrospective, multi-center, follow-up study evaluating the effect of the angiotensin II type 2 receptor agonist C21 on lung pathology in subjects previously hospitalised with COVID-19** Cecilia Ganslandt (Stockholm, Sweden), Rohit Batta, Göran Tornling, Thomas Bengtsson, Anand Devaraj, Reema Kashiva, Atul Rajkondawar, Kartikeya Parmar, Nirav Bhalani, Ali Bohra, Anne-Katrine Cohrt
PA3378	**CLINICAL PHENOTYPES OF COVID-19 PNEUMONIA:different phases of viral process or really different states?** Yuliia Huba (Dnipropetrovsk, Ukraine), Kseniia Bielosludtseva, Lyudmyla Konopkina, Tetyana Pertseva
PA3379	**Developing a Long-COVID follow-up protocol in a Portuguese tertiary hospital** Mariana Gomes (Porto, Portugal), Gabriela Canelas, Cláudio Nunes Silva, António Sarmento, Margarida Tavares
PA3380	**Interleukin-6 in SARS-CoV2 risk stratification** Fernando Pereira da Silva (Penafiel, Portugal), Filomena Luís, Filipa Jesus, Élin Almeida, Sara Braga, Joana Ribeiro, Rebeca Natal, João Costa, Mariana Tavares, Luís Ferreira
PA3381	**Pulmonary function evaluation after hospital discharge of patients with severe COVID-19** Fernando Carlos Guillén Ortega (Tuxtla Gutierrez Chiapas, Mexico), Carlos Palomeque, Jorge Pola
PA3382	**Automated cough detection in COVID-19 and non-COVID-19 pneumonia using machine learning-based technology** Frank Rassouli (Speicher, Switzerland), Maximilian Boesch, Florent Baty, Filipe Barata, David Cleres, Peter Tinschert, Iris Shih, Elgar Fleisch, Martin H. Brutsche
PA3383	**The charateristics of patients with pulmonary post covid fibrosis** Imen Kharrat (kairouan, Tunisia), Amani Kacem, Hajer Hannechi, Rahma Benjazia, Hend Zorgati, Salam Mefteh, Dhouha Benbraiek, Jihen Ayachi, Anis Maatalla, Latifa Merzougui

PA3384 **Association between serum IgG levels and time to first antibiotic prescription in COPD patients**
Anna Vanoverschelde (Ghent, Belgium), Samer R. Khan, Virgil A.S.H. Dalm, Layal Chaker, Guy Brusselle, Bruno H. Stricker, Lies Lahousse

PA3385 **Clinical, radiological, and respiratory functional assessment three months after SARS-CoV-2 hypoxemic pneumonia**
Soumaya Debiche (Le Kram, Tunisia), Houda Snène, Blibech Hana, Kaabi Line, Sirine Daoud, Souhir Ouali, Jalloul Daghfous, Nadia Mehiri, Nozha Ben Salah, Bechir Louzir

PA3386 **Long COVID risk factors in a Portuguese cohort**
Márcia Araújo (Porto (Porto), Portugal), Sara Dias, Joana Lourenço, Ana Luísa Fernandes, Bruno Cabrita, Joana Amado, Ana Paula Vaz, Inês Neves, Paula Simão, Bárbara Seabra

PA3387 **Microbiological profile of post covid patients admitted in tertiary care center with pulmonary infections.**
Deepak Muthreja (Nagpur (Maharashtra), India)

TP-21 in thematic poster area — Session 392 — 08:30 - 09:30

Thematic poster: Bronchiectasis: 2

Disease(s) : Airway diseases

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

Chairs : Michal Shteinberg (Haifa, Israel), Zina Alfahl (Galway, Ireland)

PA3388 **Etiology of Bronchiectasis in Adults in Ukraine**
Kateryna Gashynova (Dnipro, Ukraine), Kseniia Suska, Valeriia Dmytrychenko

PA3389 **Mortality related risk factors in patients with non-cystic fibrosis bronchiectasis**
Oxana Munteanu (Chișinău (Chișinău), Republic of Moldova), Dumitru Chesov, Doina Rusu, Leonid Onea, Victor Botnaru

PA3390 **Particularities of post-tuberculosis bronchiectasis**
Sarra Ben Sassi (ariana, Tunisia), Houda Rouis, Chirine Moussa, Marwa Bougacha, Amel Khattab, Ibtihel Khouaja, Leila Bayahi, Ines Zendah, Sonia Maalej

PA3391 **Determinants of Quality of Life using the bronchiectasis impact measure (BIM)**
Megan Crichton (Dundee (Angus), United Kingdom), Amelia Shoemark, James Chalmers

PA3392 **Risk factors for Pseudomonas aeruginosa colonization bronchiectasis and clinical implications**
Leila Douik El Gharbi (Ariana, Tunisia), Rihab Jebali, Ines Moussa, Imen Sahnoun, Siwar Rejeb, Marwa Bougacha

PA3393 **Initiating NIV in bronchiectasis – Is it a sign of poor life expectancy?**
Ashish Chudasama (Pinner, United Kingdom), Felicity Dickens, Tanjila Khan, Rachel Dexter-Spooncer, Anand Shah, Janet Stowell, Michael Loebinger, Ari Manuel, Sriram Iyer, Michael Polkey, Ricardo José

PA3394 **Effect of COVID-19 on non-cystic fibrosis bronchiectasis exacerbation rates: a retrospective claims study**
Ioannis Psallidas (London, United Kingdom), Annika Åstrand, Steven J. Kiddle, Rohith Siva Ganesh Mudedla, Sanchita Porwal, Kaushik Chafekar, Carlos Seminario, James D. Chalmers

PA3395 **Association between the viscoelastic characteristics and sputum colour in patients with bronchiectasis**
Leticia Bueno Freire (Barcelona, Spain), Leticia Bueno-Freire , Nona Rovira, Victoria Alcaraz-Serrano, Héctor Sanz-Fraile, Nil Vàzquez-Burgos, Rosanel Amaro-Rodríguez, Patricia Oscanoa, Ruben López-Aladid, Andrea Palomeque, Ramon Farré, Jorge Otero, Laia Fernández-Barat *, Antoni Torres*

PA3397 **Bacteriological profile of bronchiectasis superinfections**
Hajar Bamha (casablanca, Morocco), Hajar Arfaoui, Hasna Jabri, Wiam El Khattabi, Moulay Hicham Afif

PA3398 **Do adults with Primary Ciliary Dyskinesia (PCD) have a positive experience of home spirometry?**
Stevie Peake (London, United Kingdom), Andrew Jones, Ricardo Jose, Elaine Shattock, Michael R Loebinger

PA3399 **Clinical outcomes of bronchiectasis rheumatoid overlap syndrome in Taiwan**
Hung Yu Huang (Taipei, Taiwan), Meng Heng Hsieh, Jhen Ling Huang, Fu-Tsai Chung , Chun-Hua Wang, Horng-Chyuan Lin

PA3400 **Assessment of a self-administered home intravenous antimicrobial therapy service for patients with chronic suppurative lung disease**
Georgia Lamb (London, United Kingdom), Sarah Stoll, Ricardo Jose, Michael Loebinger, Anand Shah, Janet Stowell

PA3401 **Improving Physiotherapy Care of Bronchiectasis Inpatients**
Jennifer Kilduff (London, United Kingdom), Afrasiab Ahmad, Lizzie Grillo, Janet Stowell

PA3402 **Regional features of Pseudomonas aeruginosaPA) antibiotic (AB) resistance (R) in patients (pts) with bronchiectasis (Bx)**
Kateryna Gashynova (Dnipro, Ukraine), Kseniia Suska, Valeriia Dmytrychenko

PA3403 **Late Breaking Abstract - Microbiome characterization in patients with bronchiectasis and its association with severity and bronchial inflammation. Bronchi-Omics Project.**
Filipe Gonçalves Dos Santos Carvalho (Barcelona, Spain), Toni Zapata Comas, Laura Rodríguez Pons, Sara Quero Blanca, Esther Barreiro Portela, Liyun Quin, Annie Navarro Rolon, Javier Pomares Amigó, Concepción Montón Soler, Montserrat Vendrell Relat, Gerard Muñoz Castro, Eva Polverino, Antonia Llunell Casanoves, Guillermo Suarez Cuartin, Carmen Calero Acuña, Jorge Abad Capa, Antoni Rosell Gratacós, Alicia Marin Tapia

PA3404 **Late Breaking Abstract - Optimizing the diagnostic approach for Primary Ciliary Dyskinesia with normal ultrastructure**
Johanna Raidt (Münster, Germany), Henrike Krenz, Johannes Tebbe, Jörg Große-Onnebrink, Heike Olbrich, Niki Tomas Loges, Luisa Biebach, Christian Schmalstieg, Christina Keßler, Julia Wallmeier, Bernd Dworniczak, Petra Pennekamp, Martin Dugas, Claudius Werner, Heymut Omran

TP-22 in thematic poster area — Session 393 — 08:30 - 09:30

Thematic poster: Bridging lung cancer screening with early diagnostics

Disease(s) : Thoracic oncology Airway diseases

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

Chairs : Andrew Creamer (Bristol (Avon), United Kingdom), Armin Frille (Leipzig, Germany)

PA3405 **Lung Cancer Screening Program via Primary Care Clinics**
Greg Holt (Miami, United States), Dave Cuvi, Robert Flowers, Lisa Hue, Elizabeth Balbin

PA3406 **Eligibility to lung cancer screening among staffs of a university hospital: a large cross-sectional survey.**
Emmanuel Grolleau (Lyon, France), Julie de bermont, Flavien Devin, David Pérol, Véronique Lacoste, Loic Delastre, Fanny Fleurisson, Gilles Devouassoux, Jean-Francois Mornex, François Coton, Marie Darrason, Martin Tammemagi, Sébastien Couraud

PA3407 **Evaluating the effectivity of deploying a deep learning-based algorithm to aid clinicians and radiologists in diagnosing pulmonary nodules on chest radiographs**
Pranav Ajmera (Pune, India), Amit Kharat, Viraj Kulkarni, Sahil Kathuria, Mukul Saini, Sonali Patil, Preeti Raj, Suraj Ghuwalewala, Manaswini Edara, Reetika Kapoor, Shreeya Goyal, Karthik M., Tejvir Singh, Suhas M., Snehal Rathi, Jitesh Seth, Richa Pant

PA3408 **Characteristics of resolving pulmonary nodules at three months surveillance computerized tomography thorax.**
Shahbaz Nazir (Cottingham, United Kingdom), Faizan Haris, Gavin Anderson, Kanwal Tariq

PA3409 **Implementation of the International Lung Screen Trial (ILST) in Catalonia: A Cost Analysis study**
Antoni Rosell Gratacos (Badalona (Barcelona), Spain), Sonia Baeza, Francesc López-Seguí, Rocío Mouriño, Maria Saigí, Marta Munné, Jordi Bechini, Adela Gonzalez, Ester Cervera, Marina Compte, Anna Nuñez, Samuel García-Reina, Jordi Ara

PA3410 **Association of COPD and/or emphysema in the lung cancer screening program in Fundación Jiménez Díaz Hospital**
Maria De Los Angeles Zambrano Chacon (MADRID, Spain), Carolina María Gotera Rivera, Germán Peces-Barba Romero, Javier Alfayate Sánchez, María Fernanda Troncoso Acevedo, Marcel José Rodríguez Guzmán, Abdulkader El Hachem Debek, Elena Cabezas Pastor, Erwin Javier Pinillos Robles, Diana Sánchez Mellado, Francisco José Laso Del Hierro, María Jesús Rodríguez Nieto, José Joaquim Salvatore Amorim Sortino

PA3411 **Lung Cancer Screening Programme and Pandemic Influences on the Pattern of Referrals to a Thoracic Oncology Service**
Marcus Anthony Pittman (Basildon (Essex), United Kingdom), Sabrina Habib

PA3412 **Design and monitoring of the Czech population pilot programme for lung cancer early detection**
Karel Hejduk (Ořechov u Brna, Czech Republic), Martina Koziar Vašáková, Ivana Čierná Peterová, Hynek Mírka, Bohumil Seifert, Jana Skřičková, Vladimír Koblížek, Marcela Koudelková, Ondřej Ngo, Ladislav Dušek, Ondrej Májek

PA3413 **Diagnostic and Prognostic utility of eNOSE for Lung Cancer in a TB-endemic setting: A Pilot Study**
Rohit Vadala (New Delhii, India), Bijay Pattnaik, Naveen Bhatraju, Divyanjali Rai, Jaya Tak, Seetu Kashyap, Umashankar Verma, Geetika Yadav, R.S. Dhaliwal, Randeep Guleria, Anurag Agrawal, Anant Mohan

PA3414 **Nordic Lung Cancer Registries**
Anja Gouliaev (Viby J, Denmark), Torben Riis Rasmussen, Niels Lyhne Christensen

TP-23 in thematic poster area — Session 394 — 08:30 - 09:30

Thematic poster: New tools for the diagnosis of interstitial lung diseases

Disease(s) : Interstitial lung diseases

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

Chairs : Yet Hong Khor (Melbourne (VIC), Australia), Stéphane Jouneau (Rennes Cedex, France)

PA3415	**6-minute walk test in fibrotic interstitial lung disease (ILD)** Yet Hong Khor (Melbourne (VIC), Australia), Kerri A Johannson, Veronica Marcoux, Jolene H Fisher, Deborah Assayag, Nasreen Khalil, Julie Morisset, Martin Kolb, Christopher J Ryerson
PA3416	**A modified blood cell GAP (cGAP) to prognosticate outcomes in IPF** Michael Kreuter (Heidelberg, Germany), Joyce S Lee, Argyrios Tzouvelekis, Justin M Oldham, Philip L Molyneaux, Derek Weycker, Mark Atwood, Klaus-Uwe Kirchgässler, Toby M Maher
PA3417	**Evaluation of home monitoring for patients with interstitial lung disease during the COVID-19 pandemic** Gizal Nakshbandi (Barendrecht, Netherlands), Karen Moor, Adriane D.M. Vorselaars, Marlies S. Wijsenbeek
PA3418	**Digital device usage for home-monitoring in interstitial lung disease [ILD]:mixed-method survey** Rebecca Shuttleworth (Exeter, United Kingdom), Malik Althobiani, Anna Duckworth, John Conway, Johnathan Dainton, Sarah Lines, Jessica Mandizha, Ana Jorge Da Ponte, Chris Scotton, Michael Gibbons, Anne-Marie Russell
PA3419	**Remote Early Identification of Disease Progression in Connective Tissue Disease related Interstitial Lung Disease (CTD-ILD) using Digital Patient Empowered Monitoring** Wan Lin Ng (Dublin, Ireland), Rebecca O'Farrell, Anja Schweikert, Donough Howard, Laura Durcan, Killian Hurley
PA3420	**Interstitial Lung Diseases Virtual Clinics: a novel medical education method during pandemic times** Brenda Elena Varela (Ciudad Autónoma Buenos Aires, Argentina), Gabriela Claudia Tabaj, Lucas Sheridan
PA3421	**The Brainomix automated e-ILD CT algorithm outperforms forced vital capacity in predicting outcomes for patients with idiopathic pulmonary fibrosis** Peter George (London, United Kingdom), Christian Rennison-Jones, Stephen Gerry, Gauri Gupta, Olivier Joly, Eric Greveson, George Harston, Anand Devaraj
PA3422	**Reticulation is associated with the risk of disease progression in interstitial lung diseases** Minna Mononen (Kuopio, Finland), Eeva Saari, Hannele Hasala, Hannu-Pekka Kettunen, Sanna Suoranta, Hanna Nurmi, Jukka Randell, Jari Laurikka, Toomas Uibu, Miia Kärkkäinen, Tuomas Selander, Heikki Koskela, Riitta Kaarteenaho, Minna Purokivi
PA3423	**Characterization of Idiopathic Pulmonary Fibrosis (IPF) and Combined Pulmonary Fibrosis and Emphysema (CPFE) using Respiratory Oscillometry** Joyce Wu (Toronto, Canada), Jessica Jia-Ni Xu, Cynthia Nohra, Anastasiia Vasileva, William Matthew Binnie, Shane Shapera, Jolene Fisher, Clodagh Ryan, Micheal Mcinnis, Zoltan Hantos, Chung-Wai Chow
PA3424	**Preliminary data of the risk stratification score (RISE) prospective, multi-centre, 3-year, validation trial in idiopathic pulmonary fibrosis.** Gian Marco Manzetti (Marino, Italy), Karishma Hosein, Matthew J Cecchini, Keith Kwan, Mohamed Abdelrazek, Maurizio Zompatori, Paola Rogliani, Marco Mura
PA3425	**Can FDG-PET/CT imaging be used to prognosticate in Interstitial Lung Disease? A prospective study of the relationship between FDG-PET/CT measurements and quality of life.** Iftikhar Nadeem (BEDFORD, United Kingdom), Louise Jordon, Balaji Ganeshan, Luke Hoy, Noor Mahdi, Joanna Porter, Ashley Groves, Thida Win
PA3426	**Interstitial lung abnormality evaluated by automated quantification system: prevalence and progression rate** Ju hyun Oh, Grace Hyun J. Kim, Jin Woo Song
PA3427	**Pleuroparenchymal Fibroelastosis impact in Idiopathic Pulmonary Fibrosis outcomes** Nuno Faria (Porto, Portugal), Sara Dias, Miguel Silva, Diogo Carvalho, André Carvalho, Patrícia Caetano Mota, Natália Melo, Hélder Novais Bastos, André Terras Alexandre, Conceição Souto Moura, Susana Guimarães, Oksana Sokhatska, Rui Cunha, José Miguel Pereira, António Morais
PA3428	**Coexistence of pleuroparenchymal fibroelastosis and hypersensitivity pneumonitis – analysis of prognostic impact** Sara Catarina Dias (Braga, Portugal), Nuno Faria, Miguel Silva, Diogo Carvalho, André Carvalho, Patrícia Caetano Mota, Natália Melo, Hélder Novais-Bastos, André Terras Alexandre, Conceição Souto Moura, Susana Guimarães, Oksana Sokhatska, Rui Cunha, José Miguel Pereira, António Morais

PA3429	**Microbiology profile of BAL in interstitial lung disease patients** Erik Palmer (Eger, Hungary), Alexandra Nagy , Tamas Nagy , Nora Toth, Lorinc Polivka, Krisztina Vincze, Noemi Eszes, Aniko Bohacs, Veronika Müller
PA3430	**Cardiopulmonary Exercise Test Could Provide Prognostic Value of 1-year Mortality in Patients with Newly Diagnosed Idiopathic Pulmonary Fibrosis: A Real-World Experience** Pin-Kuei Fu (Taichung, Taiwan), Yuan-Yang Cheng
PA3431	**Fibroblast activation protein and disease severity, progression and survival in IPF** Thomas Skovhus Prior (Egå, Denmark), Nils Hoyer, Jesper Rømhild Davidsen, Saher Burhan Shaker, Bent Winding Deleuran, Elisabeth Bendstrup, Tue Wenzel Kragstrup
PA3432	**Late Breaking Abstract - Transcriptomic differences in lung apices and bases in idiopathic pulmonary fibrosis (IPF)** Nick Wilson (Parkville, Australia), Mae Wong, Cristina Gamell, Monther Alhamdoosh, Laura Mcmillan, Yong Kiat Wee, Martin Staempfli, Glen Westall, Jade Jaffar
PA3433	**Late Breaking Abstract - Blood neutrophil levels in IPF patients are significantly associated with quantitative radiological progression** Andrew Achaiah (Oxford, United Kingdom), Emily Fraser, Peter Saunders, Rachel Hoyles, Rachel Benamore, Ling-Pei Ho
PA3434	**Late Breaking Abstract - Data-driven multivariate cohort selection and automated CT scan lung volume measurement identifies disease progression in Idiopathic Pulmonary Fibrosis (IPF)** Harry Manners, Tom Mclellan, Kiril Kirov, Mike Roberts, Fahdi Kanavati, Gordon Mckenzie, Darren Gallagher, James Hainsworth, Davinder Dosanjh, Phil Molyneaux, Alessandro Ruggiero, Muhunthan Thillai

TP-24 in thematic poster area — Session 395 — 08:30 - 09:30

Thematic poster: Sarcoidosis: challenges in the assessment and management of disease complications

Disease(s) : Interstitial lung diseases

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

Chairs : Marcel Veltkamp (De Meern, Netherlands), Adriane D.M. Vorselaars (Nieuwegein, Netherlands)

PA3435	**Corticosteroid-induced remission, and mycophenolate maintenance therapy in GLILD: long-term, longitudinal change in lung function in a single centre cohort** John R Hurst (London, United Kingdom), Heba M Bintalib, David M Lowe , Gaia Mancuso , Georgia Gkrepi , Suranjith L Seneviratne , Siobhan O Burns
PA3436	**Modifiable lifestyle factors for sarcoidosis: a nested case-control study** Marina Dehara (Stockholm, Sweden), Michael C. Sacks, Johan Grunewald, Anders Blomberg, Elizabeth V. Arkema
PA3437	**Cardiac involvement in sarcoidosis patients: which patients should be screened?** Ecem Naz Ertürk (Mersin, Turkey), Bahar Ulubaş, Kaan Esen, Ahmet Çelik, Şenay Balcı, Lülüfer Tamer
PA3438	**Diagnosing Small Fiber Neuropathy in Sarcoidosis remains challenging** Lisette Raasing (Nieuwegein, Netherlands), Marcel Veltkamp, Oscar J M Vogels, Jan C Grutters
PA3439	**Long-term outcomes of combination therapy with methotrexate and methylprednisolone in patients with pulmonary sarcoidosis** Ievgeniia Merenkova (Kyiv, Ukraine), Volodymyr Gavrysyuk, Yaroslav Dziublyk, Galyna Gumeniuk, Nataliia Pendalchuk
PA3440	**Sarcoid-like reaction with mediastinal lymphadenopathy in patients after breast cancer surgery** Ryosuke Imai (Tokyo, Japan), Yasue Tsuchida, Torahiko Jinta
PA3441	**Bone mineral density in Danish patients with sarcoidosis** Janne Møller (Skanderborg, Denmark), Lars Rejnmark, Elisabeth Bendstrup
PA3442	**Vasoactive intestinal peptide for granulomatous diseases – a case series.** Bjoern Frye (Freiburg, Germany), Charlotte Gutzler, Gernot Zissel, Kerstin Höhne, Joachim Müller-Quernehim
PA3443	**Doppler resistive index is informative for assessment lymph nodes on EBUS for predictive diagnosis of sarcoidosis** Rostyslav Bubnov (Kyiv, Ukraine), Anatolii Serhiienko
PA3444	**The association between respiratory muscles and physical functioning in patients with ILD: Preliminary results** Martin Dvořáček (Bouzov, Czech Republic), Tamara Zlámalová, Sofie Breuls, Heleen Demeyer, Thierry Troosters, Monika Zurkova, Katerina Neumannova

PA3445 **Polymorphisms in immune related genes are associated with Sarcoidosis in Korean Population**
Kateřina Sikorová (Olomouc, Czech Republic), Hee-Young Yoon, Adam Strnad, Lenka Kocourková, Su-Jin Moon, Jin Woo Song, Martin Petrek

PA3446 **Sarcoidosis, from bioinformatics to bench work**
Thomas El Jammal (Strasbourg, France), Fabien Chevalier, Pascal Sève, Yves Pachéco, Alain Calender

PA3447 **Covid-19 infection in patients with sarcoidosis: clinical course and outcome – single center experience**
Martina Batarilo Hadar (Zagreb, Croatia), Mateja Janković Makek, Fedža Džubur, Dina Mihelčić Korte, Dina Rnjak, Gordana Pavliša, Andrea Vukić Dugac, Miroslav Samaržija, Ana Hećimović

PA3448 **ANXA11 rs1049550 associates with Löfgren's syndrome and chronic sarcoidosis patients**
Bekir Karakaya (Nieuwegein, Netherlands), J.J. Van Der Vis, M. Veltkamp, D. Biesma, J.C. Grutters, C.H.M. Van Moorsel

PA3449 **Features of the course of COVID-19 in patients with sarcoidosis**
Olena Semendyayeva (Mariupol, Ukraine), Nadiya Monogarova, Kseniya Borodiy, Denis Stupachenko, Dmitriy Shevchenko

TP-25 in thematic poster area — Session 396 — 08:30 - 09:30

Thematic poster: Non-PAH pulmonary hypertension

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

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

Chairs : Stéphanie Saxer (Zürich, Switzerland), Gabor Kovacs (Graz, Austria)

PA3450 **Study of a novel hypoxia system to evaluate endothelial cell dysfunction in chronic thromboembolic pulmonary hypertension (CTEPH)**
Ylenia Roger (Barcelona, Spain), Isaac Almendros, Esther Marhuenda, Adelaida Bosacoma, Anna Sardiné, Àngela Vea, Ana Ramírez, Victor I. Peinado, Isabel Blanco, Manuel Castellà, Joan A. Barberà, Olga Tura

PA3451 **MicroRNA expression in Chronic Thromboembolic Pulmonary Hypertension**
Isabelle Opitz (Zurich, Switzerland), Theodorus Papasotiropoulos, Itzel S. Martínez López, Fabian Schläpfer, Silvia Ulrich, Michaela B Kirschner

PA3452 **Pulmonary Hypertension (PH) due to Pulmonary Embolism (PE) secondary to COVID19 – A District General Hospital (DGH) experience from the UK**
Noor Mahdi (London, United Kingdom), Iftikhar Nadeem, Masood Ur Rasool, Stephanie Radoja, Faisal Rashad, Anoop Babu

PA3453 **Balloon pulmonary angioplasty for chronic thromboembolic pulmonary hypertension improves sleep-disordered breathing**
Klaus Hackner (Krems, Austria), Christian Gerges, Sophia Bauer, Meinhard Kneussl, Peter Errhalt, Shahrokh Javaheri, Irene Marthe Lang

PA3454 **Right atrial pressure to pulmonary artery wedge pressure ratio in chronic thromboembolic pulmonary hypertension**
Athiththan Yogeswaran (Giessen, Germany), Khodr Tello, Samuel J. Kaufmann, Natascha Sommer, Zvonimir Rako, Hossein A. Ghofrani, Werner Seeger, Manuel J Richter, Henning Gall

PA3455 **Carbon dioxide and alveolar dead space as prognostic markers for pulmonary endarterectomy patients**
Isabelle Opitz (Zurich, Switzerland), Katarzyna Furrer, Jan Welsch, Dominique Bettex, Thomas Horisberger, Ilhan Inci, Reto Schuepbach, Michaela B. Kirschner, Silvia Ulrich, Alessandra Matter

PA3456 **Pulmonary thromboendarterectomy after COVID-19 infection: USA single center experience**
Angela Bautista (La Jolla, United States), Michael Madani, Victor Pretorius, Jenny Yang, Timothy Fernandes, Demosthenes Papamatheakis, David Poch, Kim Kerr, Nick Hyong Kim

PA3457 **Medical bridging therapy before pulmonary endarterectomy?**
Joanna Pepke-Zaba (Cambridge, United Kingdom), David P. Jenkins, Elie Fadel, Gérald Simonneau, Nick H. Kim, Michael M. Madani, Hiromi Matsubara, Marion Delcroix, Irene M. Lang, Eckhard Mayer

PA3458 **Evaluation of chronic thromboembolic pulmonary hypertension: a pilot-study**
Barbara Ruaro (Trieste, Italy), Paola Confalonieri, Gaetano Caforio, Chiara Torregiani, Pietro Geri, Riccardo Pozzan, Silvia Pichierri, Marco Confalonieri, Francesco Salton

PA3459 **Remodeling of small airways and their associated vasculature is a hallmark of Idiopathic Pulmonary Fibrosis.**
Andres Moran-MacDonald (Vancouver, Canada), Keith Wu, Kohei Ikezoe, Stacey Ledoux, Joel Cooper, Jim Hogg, Dragos Vasilescu, Tillie Hackett

PA3460 **Acute vasoreactivity in WSPH Group-3 pulmonary hypertension and relation to inhaled treprostinil response**
Eileen Harder (Boston, United States), David Systrom, Aaron Waxman

PA3461 **Clinical phenotypes and outcomes of severe pulmonary hypertension associated with chronic obstructive pulmonary disease**
Alexandre Diaz (Saint Etienne, France), David Montani, Samy Chelabi, Xavier Jais, Laurent Savale, Marios Froudarakis, Souad Bezzeghoud, Athénais Boucly, Mitja Jevnikar, Olivier Sitbon, Laurent Bertoletti, Marc Humbert

PA3462 **Recognition of early pulmonary structural changes with real-time high fidelity expiratory CO2 analysis**
Teresa Sassmann (Graz, Austria), Michael Pienn, Gabor Kovacs, Philipp Douschan, Vasile Foris, Nikolaus John, Katarina Zeder, Andreas Zirlik, Horst Olschewski

PA3463 **Efficacy of Digoxin in isolated Right ventricular Dysfunction due to Chronic Pulmonary Diseases**
Sudarsan Pothal (Puri, India), Narendra Tengli, Nayan Patel, Aurobindo Behera

PA3464 **Hemodynamic mechanisms in patients with pulmonary hypertension and chronic obstructive pulmonary disease: a retrospective monocentric cohort study**
Pierre Thoré (Nancy, France), Jean Staentzel, Simon Valentin, Anne Guillaumot, Christine Selton-Suty, Emmanuel Gomez, François Chabot, Ari Chaouat

PA3465 **Pulmonary Vascular Calcification As A Pathomechanism In Pulmonary Hypertension Due To Left Heart Disease**
Shao-Fei Liu (Berlin, Germany), Mariya M. Kucherenko, Pengchao Sang, Qiuhua Li, Juquan Yao, Netra Nambiar Veetil, Tara Gransar, Ioana Alesutan, Jakob Voelk, Christoph Knosalla, Wolfgang M. Kuebler

PA3466 **Right ventricle – pulmonary artery coupling is a risk factor for mortality in patients with pulmonary hypertension associated with heart failure and preserved ejection fraction**
Saleh Nazzal (Nahef, Israel), Shemy Carasso, Claudia Simsolo, Marwan Amara, Yochai Adir

PA3467 **The effect of parenchymal lung disease on patient characteristics and outcome in SSc-PH: Insights from the ASPIRE registry**
Robin Condliffe (Sheffield (South Yorkshire), United Kingdom), Ashraful Haque, Krit Divwedi, Robert Lewis, Athanasios Charalampopoulos, Charlie Elliot, Abdul Hameed, Neil Hamilton, Sheila Ramjug, Alex Rothman, Andy Swift, Roger Thompson, David Kiely

PA3468 **Pulmonary hypertension and ECG synchronized CT scan for pulmonary artery pulsatility calculation in pre-TAVI patients and prognostic significance**
Yochai Adir (Haifa, Israel), Johad Khoury, Ibrahim Naoum, Yuval Shachaf, Magdi Qdah, Ronin Yaffi

PA3469 **Right ventricular myocardial dysfunction in patients (pts) after severe coronavirus disease (COVID-19)**
Oleksandr Fesenko (Slobozhanske, Ukraine), Lada Siabro, Kseniia Bielosludtseva

TP-26 in thematic poster area — Session 397 — 08:30 - 09:30

Thematic poster: Multimodality respiratory imaging research: what is novel in 2022

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

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

Chairs : Kseniia Bielosludtseva (Dniepropetrovsk, Ukraine), Helmut Prosch (Wien, Austria)

PA3470 **Value of functional lung MRI in long term patient care after lung transplantation.**
Jens Vogel-Claussen (Hannover, Germany), Till Kaireit, Andreas Voskrebenzev, Filip Klimes, Lea Behrendt, Marcel Gutberlet, Christopher Korz, Milan Speth, Tobias Welte, Frank Wacker, Jens Gottlieb

PA3471 **First-in-human evaluation of 18F-BMS-986327 as a novel PET tracer to assess lysophosphatidic acid receptor 1 (LPA1) target engagement in the lung**
Ralph Smith (Princeton, United States), David Donnelly, Jean-Dominique Gallezot, Yihuan Lu, Brian Murphy, Peter Cheng, Joonyoung Kim, Edgar Charles, Shuyan Du, Daniel Holden, Soheila Najafzadeh, Hong Gao, Michael Kapinos, Jim Ropchan, Nabeel Nabulsi, Henry Huang, Aryeh Fischer, Richard Carson

PA3472 **PET/MR to study lung morphology and inflammation in children and adolescents with Primary Ciliary Dyskinesia**
Valentina Agnese Ferraro (Rosa' (VI), Italy), Chiara Giraudo, Pietro Zucchetta, Stefania Zanconato, Diego Cecchin, Silvia Carraro

PA3473	**Feasibility of Hyperpolarized 129Xe MRI in Primary Ciliary Dyskinesia** Wallace Wee (Toronto (ON), Canada), Brandon Zanette, Samal Munidasa, Sharon Braganza, Daniel Li, Felix Ratjen, Giles Santyr, Sharon Dell
PA3474	**Hyperpolarised 129Xe MR imaging of lung ventilation in neonates with bronchopulmonary dysplasia: initial experience** Neil James Stewart (Sheffield (South Yorkshire), United Kingdom), Nara S Higano, Shanmukha S Mukthapuram, Matthew M Willmering, Anita Arnsperger, Wolfgang Loew, Rolf F Schulte, Jim M Wild, Jason C Woods
PA3475	**Feasibility of Specific Ventilation Imaging on a 3T MRI scanner** Claire O'Sullivan (Melbourne, Australia), G. Kim Prisk, Kris Nilsen, Richard Mcintyre, Beau Pontre, David Dubowitz, Bruce Thompson
PA3476	**Correlation between radiological subtypes and histopathology in restrictive allograft syndrome after lung transplantation** Adriana Dubbeldam (Nieuwrode, Belgium), Robin Vos, Arno Vanstapel, Walter De Wever, Stijn E. Verleden, Emanuele Muscogiuri, Johan Coolen, Birgit Weynand, Johny A. Verschakelen
PA3477	**Multimodal 4D imaging and deep learning unveil acinar migration of tissue-resident, nanoparticle-laden macrophages in the lung** Lin Yang (Oberschleißheim, Germany), Qiongliang Liu, Pramod Kumar, Arunima Sengupta, Ali Farnoud, Ruolin Shen, Darya Trofimova, David Kutschke, Marie Piraud, Fabian Isensee, Gerald Burgstaller, Markus Rehberg, Tobias Stoeger, Otmar Schmid
PA3478	**Higher harmonic generation microscopy for instant on-site pathologic feedback of lung biopsies** Laura Van Huizen (Amsterdam, Netherlands), Johannes Daniels, Teodora Radonic, Jan Von Der Thüsen, Danielle Cohen, Marloes Groot, Jouke Annema
PA3479	**Reflux micro-aspiration associated with oesophageal dysmotility but not delayed liquid gastric emptying** Gregory Falk (Lindfield, Australia), Oleksandr Khoma, Maite Jeanne Mendu, Amita Nandini Sen, Hans Van Der Wall
PA3480	**Radiological aspects of thoracic involvement in hematological malignancies** Zakaria Laklaai (casablanca, Morocco), Khadija Channoune, Nahid Zaghba, Hanane Benjelloune, Najiba Yassine
PA3481	**Assessment of lung disorders in patients with rheumatoid arthritis (RA)** Yuliia Huba (Dnipropetrovsk, Ukraine), Larisa Botvinikova, Lyudmyla Konopkina, Oxana Plekhanova
PA3482	**Bronchial arterial embolization for management of hemoptysis: are there factors influencing the successful treatment?** Diogo André Barroso Ferreira (Vila Nova De Famalicão, Portugal), Marta Castro, Ana Rita Gigante, Ana Raquel Marçôa, Diogo Rocha, Eloísa Silva, Carla Ribeiro, Teresa Shiang, Manuela Vanzeller
PA3483	**Predictors of short term mortality in acute pulmonary embolism** Ali Abdelaziz (Minia, Egypt), Yosra M .Ali, Mohamed Abdelaziz, Ahmed H Mohamed, Hany T Asklany, Noha M M Abdullah , Rasha A Abdelfattah
PA3484	**Assessing clinicians' detection rate of Pulmonary Embolism (PE) with use of CT Pulmonary Angiogram (CTPA) imaging in an Acute Hospital Trust** Roisin O'Neill (Birmingham, United Kingdom), Jessamy Reece, Bethany Jones, Muhammad Bilal Niazi, See Ling Tan, Abhi Lal
PA3485	**Mounier-Kuhn syndrome: about 4 cases** Manelle Rjimati (Fès, Morocco), Zineb Biaz, Mounia Serraj, Mohammed Elbiaze, Mohamed Chakib Benjelloun, Bouchra Amara
PA3486	**Meta-analysis of mean transit time and pulmonary blood flow in the lung** Marta Tibiletti (Manchester, United Kingdom), Lucy Edwards, Jo Naish, Geoff J M Parker, John C Waterton

TP-3 in thematic poster area — Session 398 — 08:30 - 09:30

Thematic poster: Remote monitoring and self-management of respiratory patients

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

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

Chairs : Esther I. Metting (Groningen, Netherlands), Paula Maria Gonçalves Pinto (Lisboa, Portugal)

PA3487	**Feasibility of an asthma app to monitor inhaler adherence in primary care: a 4-month prospective multicentre study** Rita Amaral (Porto, Portugal), Cristina Isabel Oliveira Jácome, Sara Rocha, Francisca Cardia, Rui Lobo, Tania Ferreira, Cristina Guimarães, Ana Margarida Cruz, Daniela Morais, Rosália Páscoa, Inês Vieira, Sofia Silva, Carlos Santos, Luís Monteiro, Rosário Monteiro, Natalina Rodrigues, Margarida Cepa, Maria João Faria, Ana Monteiro Penas, Ângela Neves, Inês Rosendo, Carlos Seiça Cardoso, Rui Oliveira, Daniela Sousa Coelho, José Varanda Marques, Bruno Reis, Sara Fernandes, Patricia Meireles, Filipa Pimenta, Luis Salgueiro, Margarida Abreu Aguiar, Ana Rita Mourão, Ana Margarida Pereira, Rute Almeida, Magna Alves-Correia, Jaime Correia De Sousa, João Almeida Fonseca
PA3488	**Experiences of home-monitoring in patients with Interstitial Lung Disease (ILD): An exploratory, qualitative study** Jessica Mandizha (Exeter, United Kingdom), Michael Gibbons, Sarah Lines, Graham Brown, Ana Jorge Da Ponte, Anna Duckworth, Rebecca Shuttleworth, Matthew Steward, Chris Scotton, Maureen Cosby, Alexander Berry, Anne-Marie Russell
PA3489	**Improved outcomes with use of the LenusCOPD digital service in the DYNAMIC-SCOT study** Anna Taylor (Glasgow, United Kingdom), Morgan Dow, Andrew Cushing, David Lowe, Paul Mcginness, Chris Carlin
PA3490	**Daily heart rate characteristics, allergy symptom severity and mood in adults with allergic rhinitis** Joren Buekers (Barcelona, Spain), Michiel Stas, Raf Aerts, Nicolas Bruffaerts, Sebastien Dujardin, An Van Nieuwenhuyse, Jos Van Orshoven, Guillaume Chevance, Ben Somers, Jean-Marie Aerts, Judith Garcia-Aymerich
PA3491	**The interest of telemonitoring on treatment abandonment in patients with home noninvasive ventilation: the O'telo observation study.** Raphaël Le Mao (Brest, France), Joelle Texereau, Frederique Kremer, Mathieu Rose, Christophe Gut Gobert
PA3492	**Effectiveness of a reliever-based Digital System on asthma control** Flavia Hoyte (Denver, United States), Giselle Mosnaim, Linda Rogers, Guilherme Safioti, Randall Brown, Thomas Li, Michael Depietro, Michael Reich, Tanisha Hill, Michael Wechsler
PA3493	**Data from a reliever-based Digital System supports patient-clinician interactions in asthma** Flavia Hoyte (Denver, United States), Giselle Mosnaim, Linda Rogers, Guilherme Safioti, Randall Brown, Thomas Li, Michael Depietro, Michael Reich, Tanisha Hill, Michael Wechsler
PA3494	**Is daily home spirometry feasible in remote monitoring of interstitial lung disease?** Colin Edwards (Dublin, Ireland), Sarah Barth, Gauri Saini, Yussef Haider, Nicholas Williams, William Storrar, Iain Stewart, Gisli Jenkins, Melissa Wickremasinghe
PA3495	**Using digital technology for home monitoring in children and adolescents with cystic fibrosis** Daniela Savi (Rome, Italy), Valeria Raia, Antonella Tosco, Angela Sepe, Raffaele Cerchione, Giulia Borgia, Camilla Romano, Antonio Di Pasqua, Paolo Buonpensiero
PA3496	**Health status progression measured using weekly COPD Assessment Test (CAT) scores over 1 year and its association with COPD exacerbations** Paul Jones (London, United Kingdom), Toru Soutome, Taizo Matsuki, Masahiro Shinoda, Osamu Hataji, Motohiko Miura, Masaharu Kinoshita, Akira Mizoo, Kazunori Tobino, Takanobu Nishi, Takeo Ishii, Yoko Shibata
PA3497	**Views on features of an 'app' to support asthma self-management among Malaysian adults with limited health literacy: a feasibility study** Ee Ming Khoo (Kuala Lumpur, Malaysia), Ai Theng Cheong, Shariff Ghazali Sazlina, Ping Yein Lee, Hani Salim, Noor Harzana Harrun, Bee Kiau Ho, Salbiah Mohamad Isa, Norita Hussein, Nik Sherina Hanafi, Hilary Pinnock
PA3498	**Accuracy of a wearable device for assessing sedentary behavior in Chronic Obstructive Pulmonary Disease** Wade Michaelchuk (Toronto, Canada), Roger Goldstein, Dina Brooks
PA3499	**Home monitoring for patients on biologic asthma therapies – are patients up for it?** Hitasha Rupani (Southampton, United Kingdom), James Rose, Nichola Cookson, Alexandra Nanzer, Gemma Hayes, Dominic Shaw, Yik Lam Pang, Grainne D'Ancona
PA3500	**Improving symptom perception in asthmatic children: a pilot study using feedback on home-monitoring measurements** Ingrid de Bekker (Enschede, Netherlands), Mattiènne Van Der Kamp, Job Van Der Palen, Anke Lenferink, Boony Thio
PA3501	**Results from a test of change project using the MyCOPD app with pulmonary rehabilitation patients** Nicola J. Roberts (Edinburgh, United Kingdom), Susan Mcnarry, Elizabeth Payne, Gourab Choudhury
PA3502	**Wearable lung monitoring device with integrated non-invasive chest imaging and sound recording: a clinical validation study** Inez Frerichs (Kiel, Germany), Josias Wacker, Rita Paradiso, Vassilis Kilintzis, Bruno M. Rocha, Fabian Braun, Michaël Rapin, Laura Caldani, Nikolaos Beredimas, Romanos Trechlis, Claas Strodthoff, Rui P. Paiva, Nikolaos Maglaveras, Norbert Weiler

PA3503 **Measuring adherence to inhaled control medication in patients with asthma: comparison among an asthma app, patient self-report and physician assessment**
Afonso Cachim (,), Ana Margarida Pereira, Rute Almeida, Rita Amaral, Magna Alves-Correia, Pedro Vieira-Marques, João Almeida Fonseca, Cristina Isabel Oliveira Jácome

PA3504 **Mobile application to prepare the ALS patient and clinical specialist for the first consultation on home mechanical ventilation**
Sander Steijns (Margraten, Netherlands), Marijke Rutten

PA3505 **Late Breaking Abstract - Validation of a novel wearable monitoring patch for continuous respiratory monitoring**
Morales John (Heverlee, Netherlands), Roberto Garcia Van Der Westen, Gabriela Yordanova, Willemijn Groenendaal, Carlos Agell

TP-4 in thematic poster area — Session 399 — 08:30 - 09:30

Thematic poster: Assessment of respiratory physiology

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

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

Chairs : Camille Rolland-Debord (clermont-ferrand, France), André Luis Pereira De Albuquerque (São Paulo (SP), Brazil)

PA3506 **Investigation of the relationship between breathing motor adaptation and agency: a physiological & VR-based study**
Sophie Betka (Genève, Switzerland), Antoine De Comite , Florent Jeanpetit, Sunho Lee, Claire Meuwly, Oliver Kanappe, Florian Lance, Sixto Alcoba, Olaf Blanke

PA3507 **Fluctuations of respiratory frequency in infants according to the state of activity in a 24-hour time frame**
Marita Antoniadi (Athens, Greece), Konstantinos Douros, Michael Anthracopoulos, Ourania Magoni, Konstantinos Priftis

PA3508 **Risk factors for respiratory depression in Opioid Use Disorder**
Caroline Jolley (London, United Kingdom), Basak Tas, Nicola J Kalk, Manuel Lozano- García, Gerrard F Rafferty, Peter S P Cho, Michael Kelleher, John Moxham, John Strang

PA3509 **Impact of continuous pulse oximetry recording on 6-minute walking distance in patients with chronic respiratory diseases**
Anna Carolina Azevedo (Porto Alegre, Brazil), Anna Carolina Campos De Azevedo, Litiele Evelin Wagner, Gustavo Hauenstein Rosa, Amanda Becker Da Silva, Ravena Maya Cardoso Da Silva, Kassio Padilha Goulart, Franciele Plachi, Igor Gorski Benedetto, Marcelo Basso Gazzana, José Alberto Neder, Danilo C Berton

PA3510 **Evaluation of the clinical impact of the revised Bronchodilator responsiveness of the ATS/ERS 2021 on asthmatic children**
FATMA ELLEUCH (Sfax, Tunisia), Rim Kammoun, Sana Sellami, Sana Ben Jemaa, Farah Gargouri, Ines Kammoun, Kaouthar Masmoudi

PA3511 **Bronchodilator response for oscillometry in severe eosinophilic asthma**
Rory Chan (Glasgow, United Kingdom), Chris Rui Wen Kuo, Brian Lipworth

PA3512 **Interactions between spirometry and oscillometry in patients with moderate to severe asthma**
Rory Chan (Glasgow, United Kingdom), Brian Lipworth

PA3513 **Comparison of lung function measured by spirometry, plethysmography and impulse oscillometry in hospitalized adults**
Eyal Kleinhendler (Tel Aviv-Yafo, Israel), Rosman Maya, Elisabeth Fireman, Irena Fomin, Inbal Friedman Regev, Evgeny Gershman, Noa Ofir, Tal Perluk, Boaz Tiran, Avraham Unterman, Amir Bar-Shai

PA3514 **Reliability and clinical relevance of impulse oscillometry in smokers with and without airflow obstruction**
Matthew D. James (Kingston (ON), Canada), Sandra G. Vincent, Devin B. Phillips, Michael K. Stickland, Jordan A. Guenette, J. Alberto Neder, Denis E. O'Donnell

PA3515 **Effects of implementing GLI-2012 reference equations on pulmonary function test (PFT) interpretations**
Haruna Kitazawa (Toronto, Canada), Annie Jiang, Joyce K.Y. Wu, Cynthia Nohra, Honami Ota, Clodagh Ryan, Chung-Wai Chow

PA3516 **Volumetric capnography to assess changes in respiratory mechanics during methacholine challenge in rats**
Petra Somogyi (Hódmezővásárhely, Hungary), Ibolya Tóth, Szilvia Kecskés, József Tolnai, Ferenc Peták, Gergely H. Fodor

PA3517	**Retrospective accuracy evaluation of a long-term, large number spirometry dataset of a health check-up clinic of Japan.** Tetsuo Kimura (Saku, Japan), Satoru Yanagisawa, Satoshi Wasamoto, Nariaki Ohura, Nobutoshi Morozumi
PA3518	**What is the clinical relevance of reference values in the 6MWT?** Juan Fco. Nieves Salceda (Oviedo, Spain), Marta Iscar Urrutia , Ramón Fernández Álvarez, Gema Rubinos Cuadrado, María José Vázquez López, Laura Abad Chamorro, Patricia Álvarez Álvarez, Eduardo Sánchez Vázquez, Ángela Lanza Martínez, Laura Martínez Vega, Alejandro Fernández Fernández, Covadonga De La Escosura Muñoz, María Marta García Clemente
PA3519	**The adding value of continuous monitoring of pulse oximetry during the 6-minute walk test for prognosis estimation in interstitial lung disease** Franciele Plachi (Porto Alegre, Brazil), Fernanda Machado Balzan, Anna Carolina Campos De Azevedo, Kimberli Dantas Käfer, Litiele Evelin Wagner, Marcelo Basso Gazzana, José Alberto Neder, Danilo Cortozi Berton
PA3520	**Standardisation of specific airway resistance measurements in COPD.** James Dean (Holmes Chapel, United Kingdom), Leanne Archer, Natalie Jackson, Dave Singh
PA3521	**Assessment of the relation between the severity of the deformity and spirometric values of children with pectus deformity.** Dilara Doghan (Ankara, Turkey), Gizem Ozcan, Fazılcan Zirek, Merve Nur Tekin, Secahattin Bayav, Nazan Cobanoglu
PA3522	**Respiratory effects of commonly used anesthesia regimes in rats** Gergely H. Fodor (Szeged, Hungary), Álmos Schranc, Bence Ballók, Ibolya Tóth, József Tolnai, Ferenc Peták
PA3523	**Fractional exhaled nitric oxide in the assessment of exercise-induced bronchoconstriction: a multicentre retrospective analysis of UK-based athletes** Oliver Price (Leeds, United Kingdom), John Dickinson, William Gowers, Savannah Sturridge, Neil Williams, Pascale Kippelen, Andrew Simpson, Anna Jackson, James Hull
PA3524	**The role of n-of-1 single-blinded crossover ambulatory oxygen test (AOT) in fibrotic interstitial lung disease (fILD)** Hazel Wilkie (Glasgow, United Kingdom), Jill Macleod, Alex Przybylski, Nik Hirani
PA3525	**Comparison of different reference values for lung function, and implications of inconsistent use nationwide** Henrik Mangseth (Oslo, Norway), Liv Ingunn Bjoner Sikkeland, Ole Henrik Myrdal, Mariann Ulvestad, Johny Kongerud, Michael Thomas Durheim, May Brit Lund

TP-5 in thematic poster area — Session 400 — 08:30 - 09:30

Thematic poster: COVID-19: from bench to bedside

Disease(s) : Airway diseases, Respiratory critical care

Method(s) : General respiratory patient care, Respiratory intensive care, Cell and molecular biology, Surgery

Chairs : Christoph Fisser (Regensburg, Germany), João Carlos Winck (Vila Nova de Gaia, Portugal)

PA3526	**Serum markers of endothelial dysfunction and invasive mechanical ventilation in COVID-19** Laura Cornejo-Cornejo (México City, Mexico), Arturo Orea-Tejeda, Dulce Gonzalez-Islas, Juan Marquez-Cordero, Alejandra Rios-Pereda, Jorge Aguilar-Meza, Mariana Salvatierra-Escobar, Iris Lopez-Vazquez, Carlos Sanchez-Moreno, Luis Hernandez-Urquieta, Alejandra Loaeza-Roman, Juan Carlos Garcia-Hernandez, Yasmin Debray-Garcia, Maria Patricia Sierra-Vargas, Gamaliel Aztatzi-Aguilar
PA3527	**PSP kinetics in the prediction of VAP diagnosis** Adrian Ceccato (Ituzaingo (Prov. De Buenos Aires), Argentina), Marta Camprubi, Lieuwe Bos, Pedro Povoa, Ignacio Martin-Loeches, Aina Areny, Elena Campaña, Luis Morales, Paula Ramirez, Mariano Esperatti, Antoni Torres, Antonio Artigas
PA3528	**C3a and C5b-9 levels differentially predict COVID-19 severity and mortality.** Maria Detsika (Athens, Greece), Elpida Diamanti, Kleio Ampelakiotou, Edison Jahaj, Stamatios Tsipilis, Nikolaos Athanasiou, Alexandros Zacharis, Ioanna Dimopoulou, Stylianos Orfanos, Alexandra Tsirogianni, Anastasia Kotanidou
PA3529	**Calcium-sensing receptor signalling and neutrophil dysfunction: implications in critical illness** Polina Yarova (Newcastle upon Tyne, United Kingdom), Jonathan Scott, Vsevolod Telezhkin, Emma Turnbull, Benjamin J. Patchett, Christopher Merrill, Marie-Helene Ruchaud-Sparagano, Kate Musgrave, Daniela Riccardi, Anthony J. Rostron, Thomas P. Hellyer, John A. Simpson
PA3530	**A pilot trial for ozanimod therapy in hospitalized COVID-19 patients** David Marsolais (Quebec, Canada), Nathalie Châteauvert, Pascale Blais-Lecours, Philippe Rola, Tuyen Nguyen, François Lellouche

PA3531	**Towards a better diagnostic and treatment of ventilator-associated respiratory infections.** Andrea Palomeque Flores (BARCELONA, Spain), Rubén López, Alba Soler, Leticia Bueno, Nona Rovira, Enric Barbeta, Ana Motos, Miriam Villanueva, Nil Vázques, Roberto Cabrera, Antonio Torres*, Laia Fernández-Barat*
PA3532	**Importance of alveolo-arterial oxygen gradient in monitoring moderate/severe forms of COVID-19** Cristina Maria Tusa (cluj-napoca, Romania), Andreea Daniela Prodisteanu, Diana Laura Moldovan, Loreana Cardos-Rosca
PA3533	**Outcome of patients admitted in Covid ICU during first wave and second wave in Mumbai Tertiary Hospital** ROHIT SUHAS BHINGARDEVE (SANGLI, India), Sudarshan Ramdas Mante, Naman Shamsunder Ajwani, Swapnil Manaji Thorve, Siddharth Ravindranath Waghmare, Jairaj Parameswaran Nair
PA3534	**The Utility of Estimating the Shunt Fraction of Critical Patients with COVID-19 in determining the outcome of High Flow Nasal Cannula at Lung Center of the Philippines, a pilot study.** Marvic Raymond Gabitan (Quezon City, Philippines), Shiela Ganangan
PA3535	**Clinical Profile and Outcomes of COVID19 confirmed cases with Acute Respiratory Distress Syndrome Undergoing Protocol directed assisted Prone Positioning at Lung Center of the Philippines (LCP) from May 1, 2020 to April 30, 2021** Krizelle Acibal (San Jose del Monte Bulacan, Philippines), Noel Gomez, Portia Tanyag
PA3536	**Predictive indexes in prolonged weaning of mechanical ventilation due to tracheostomy in patients with COVID-19 pneumonia** Carlos Maria Franceschini (Ciudad Autónoma Buenos Aires, Argentina), Jorge Rodriguez, Mariano Wysocki, Mercedes Kleinert, Carlos Cozzani, Margarita Torres Boden, Julio Giorgini, Orlando Saque, Amada Sanchez Andia, Andrea Olmos, Mariana Finadesio, Elizabeth Santilli, Daniel Nahmias, Barbara Frias, Maria Lucrecia Olave, Ludmila Ciaponi, Merjay Henriquez Salazar
PA3537	**Ventilator associated pneumonia surveillance in critically ill patients with COVID-19 in a tertiary care hospital** Damla Karadeniz Güven (Ankara, Turkey), Gülçin Telli Dizman, Gökhan Metan, Gamze Durhan, Arzu Topeli, Ahmet Uğur Demir
PA3538	**Impact of combined non-invasive support strategies use during acute respiratory failure due to COVID-19.** Sergi Pascual Guardia (Barcelona, Spain), Judith Marin Corral, Francisco Parrilla, Marcos I Restrepo, Alejandro Rodriguez, Juan Carlos Ballesteros, Susana Sancho, Lorenzo Socias, Emili Diaz, Antonio Albaya-Moreno, Joan Ramon Masclans
PA3539	**The successful use of Pezzer Catheter in Covid-19 patients** Kalliopi Athanassiadi (Athens, Greece), Symeon Mitrou, Eleni Ischaki, Maria Kazantzi, Ilias Galanis, Evangelia Liverakou, Aikaterini Sarri, Stylianos Kokkoris, Zafeiria Mastora
PA3540	**Delay of intensive care admission of severe COVID-19 patients : what impact on mortality ?** Fatma Essafi (Zaghouan, Tunisia), Imen Talik, Khaoula Ben Ismail, Malek Kharrat, Najla Ben Slimene, Aida Bayoudh, Ilhem Fessi, Moez Kaddour, Takoua Merhabene
PA3541	**Relationship between blood gases and inflammatory markers with clinical outcomes in critically ill patients with COVID-19** Nickson Morais (Mossoró, Brazil), Lara Candice Costa De Morais Leonez, Valéria Duarte De Almeida, Micássio Fernandes De Andrade, Ellany Gurgel Cosme Do Nascimento, José Veríssimo Fernandes, Christiane Medeiros Bezerra, Thales Allyrio Araújo De Medeiros Fernandes
PA3542	**Utilization of corticosteroids among patients died with COVID 19: A single center experience from a resource poor setting** Dapanaduwage Amila Vindana Rathnapala (Minuwangoda, Sri Lanka), Buddhini Imbulpitiya, Prabuddha Attanayake, Prasanna Liyanage, Anoma Siribaddna
PA3543	**Clinical and laboratory characteristics of patients who succumbed to COVID-19: a single center experience from a resource poor setting** Dapanaduwage Amila Vindana Rathnapala (Minuwangoda, Sri Lanka), Buddhini Imbulpitiya, Prabuddha Attanayake, Prasanna Liyanage, Anoma Siribaddana
PA3544	**Comparing the effect of strict versus routine awake prone positioning among patients hospitalized withCOVID-19** Hamza Asif (Peshawar, Pakistan), Saadia Ashraf, Amber Ashraf
PA3545	**Clinıcal effects and mortality of farilty in geriatric COVID-19 patients** Zeynep Sofia Şahin Eröksüz (İstanbul, Turkey), Şehnaz Olgun Yildizeli

TP-6 in thematic poster area — Session 401 — 08:30 - 09:30

Thematic poster: Asthma and cystic fibrosis: from cellular mechanisms to new targets

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

Method(s) : Cell and molecular biology | Epidemiology

Chairs : Stefan Marciniak (Cambridge (Cambridgeshire), United Kingdom), Maha Zohra Ladjemi (Paris, France)

PA3546	**Inhaled corticosteroids induce DNA methylation changes in nasal cells of asthma patients** Alen Faiz (Ultimo (NSW), Australia), Rashad Mahbub, Karosham D. Reddy, Ilse Boudewijn, Gerard H. Koppelman, Maarten Van Den Berge
PA3547	**ER22/23EK and TTH111I polymorphisms in the glucocorticoid receptor gene among asthma patients with regard to the age of onset** Vladyslava Kachkovska (Sumy, Ukraine), Anna Kovchun, Lyudmyla Prystupa
PA3548	**Association of DNA methylation with fractional exhaled nitric oxide levels in pediatric asthma** Javier Perez-Garcia (San Cristóbal de La Laguna, Spain), Mario Martín-Almeida, Esther Herrera-Luis, Carlos De La Rosa-Báez, Mario Gorenjak, Anne H. Neerincx, Olaia Sardon-Prado, Antoaneta Toncheva, Susanne Harner, Christine Wolff, Susanne Brandstetter, Elisa Valletta, Mahmoud I. Abdel-Aziz, Simone Hashimoto, Vojko Berce, Paula Corcuera Elosegui, Javier Korta Murua, Heike Buntrock-Döpke, Paul Brinkman, Susanne J. H. Vijverberg, Joris C. Verster, Nikki Kerssemakers, Catarina Almqvist, Aletta D. Kraneveld, Uroš Potočnik, Michael Kabesch, Anke H. Maitland-Van Der Zee, Maria Pino-Yanes
PA3549	**Inflammatory cellular changes in the large airway of asthma COPD overlap (ACO) patients** Surajit Dey (Launceston, Australia), Wenying Lu, 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
PA3550	**IL-33 signal impairment attenuates experimental pulmonary hypertension and fibroblast proliferation in mice** Kathryn Wilson (Glasgow, United Kingdom), Saad Wali, Milton Kodom, David Welsh
PA3551	**Genome-wide association analysis identifies variants in the chromosome 21 associated with asthma exacerbations in Brazilian adults** Maria Santana (Salvador, Brazil), Helena Teixeira, Hatilla Silva, Mahmoud Abdel-Aziz, Susanne Vijverberg, Simone Hashimoto, Anke Maitland-Van Der Zee, Camila Figueiredo, Álvaro Cruz, Ryan Costa
PA3552	**The upper airway microbiome composition is associated with inhaled corticosteroid response in asthma** Javier Perez-Garcia (San Cristóbal de La Laguna, Spain), Mario González Carracedo, Antonio Espuela-Ortiz, José M Hernández-Pérez, Ruperto González-Pérez, Olaia Sardon, Elena Martín-González, Elena Mederos-Luis, Paula Corcuera, Inmaculada Sánchez-Machín, Paloma Poza-Guedes, Ariel Callero, Javier Korta-Murua, José Antonio Pérez Pérez, Jesús Villar, Maria Pino-Yanes, Fabian Lorenzo-Diaz
PA3553	**KYNU gene variants and lifestyle factors associated with Asthma in Singapore Chinese.** Praneeth Malipeddi (Singapore, Singapore), Fook Tim Chew
PA3554	**Epigenome-wide association study of paediatric asthma in African Americans** Esther Herrera Luis (La Laguna, Spain), Carlos de la Rosa Báez, Javier Perez-Garcia, Mario Martin-Almeida, Kenneth B. Beckman, Michael A. Lenoir, Luisa N. Borell, Esteban G. Burchard, María Pino-Yanes
PA3555	**LSC - 2022 - Local airway expression of lnc-SERPINA12-1 in children with Cystic Fibrosis** Zuzanna Stachowiak (Poznan, Poland), Beata Narożna, Wojciech Langwiński, Irena Wojsyk-Banaszak, Katarzyna Jończyk-Potoczna, Anna Bręborowicz, Aleksandra Szczepankiewicz
PA3556	**Transcriptome comparison between air-liquid interface differentiated nasal and bronchial epithelial cells of infants with cystic fibrosis** Lisa Rodenburg (Utrecht, Netherlands), Sabine Michel, Karin De Winter-De Groot, Cornelis Van Der Ent, Jeffrey Beekman, Gimano Amatngalim
PA3557	**Allergic airway inflammation affects signaling pathways in adipose tissue via mRNA-miRNA interactions in the rat** Aleksandra Szczepankiewicz (Poznań, Poland), Dawid Szczepankiewicz, Wojciech Langwiński, Joanna Nowakowska, Paweł Kołodziejski, Ewa Pruszyńska-Oszmałek, Maciej Sassek, Natalia Leciejewska, Kamil Ziarniak
PA3558	**Association of asthma genetic variants with asthma-associated traits reveals molecular networks of eosinophilic asthma** Zaid Elhusseini (Groningen, Netherlands), Judith Vonk, Maarten Van Den Berge, Reinoud Gosens, Gerard Koppelman
PA3559	**Genome-wide cis-expression-Quantitative Trait Loci (eQTL) in association with asthma.** Zachary Chua (Singapore, Singapore), Yang Yie Sio, Fook Tim Chew
PA3560	**Sputum metagenomics of U-BIOPRED asthma cohort: link to severity and granulocytic inflammation** ALI VERSI (London, United Kingdom), Ivan Fransiskus Xaverius, Mahmoud Abdel-Aziz, Stewart Bates, John Riley, Take Ogawa, Sven-Erik Dahlen, Ratko Djukanovic, Peter Sterk, Anke-Hilse Maitland-Van Der Zee, Sanjay H Chotirmal, Peter Howarth, Ian M Adcock, Kian Fan Chung

PA3561 **Altered airway epithelial cell landscape in U-BIOPRED severe asthma**
Ian M. Adcock (London, United Kingdom), Ying Shi, Nazanin Zounemat Kermani, Alen Faiz, Kian Fan Chung, Philip M. Hansbro, Xin Yao, Maarten Van Den Berge, Martijn Nawijn

PA3562 **Nasal airway epithelium differentiates between asthma and healthy subjects and identifies clinically relevant asthma endotypes**
Tatiana Karp (Groningen, Netherlands), A. Faiz, H.A.M. Kerstjens, I.M. Boudewijn, M. Kraft, J.M. Vonk, M.C. Nawijn, H.I. Heijink, L.M. Fabbri, K.F. Rabe, G. Nicolini, A. Papi, C. Brightling, D. Singh, T. Van Der Molen, S. Siddiqui, V. Guryev, M. Van Den Berge

PA3563 **Expression of eosinophil-associated gene signatures in U-BIOPRED severe asthma**
Janice Koranteng (London, United Kingdom), Nazanin Zounemat-Kermani, Yusef Badi, Ian M. Adcock, Charalambos Michaeloudes, Kian Fan Chung, Pankaj Bhavsar

PA3564 **GSVA analysis of steroid insensitive signatures in severe asthma.**
Piers Dixey (London, United Kingdom), Nazanin Zounemat-Kermani, Katie Raby, Ian Adock, Pankaj Bhavsar, Kian Chung

PA3565 **Translating host–respiratory virus genetic susceptibility signals to candidate casual genes and pathways to provide therapeutic opportunities**
Christina Shrees (Nottingham, United Kingdom), Kamini Rakkar, Michael Portelli, Nicholas Hannan, Alexander Tarr, Ian Sayers

TP-7 in thematic poster area — Session 402 — 08:30 - 09:30

Thematic poster: Emerging therapeutic targets, biomarkers and mechanisms of chronic lung disease

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

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

Chairs : Arlene Glasgow (Dublin 9, Ireland), Killian Hurley (Co. Meath, Ireland)

PA3566 **Elucidation of a novel mechanism of Benralizumab on human immune cells using humanized hIL-3/hGM-CSF/hIL-5 Tg NOG mice**
Satoshi Nunomura (Saga, Japan), Ryoji Ito, Yasuhiro Nanri, Kenji Izuhara

PA3567 **A transcriptomic, metabolic and phenotypic study of the anti-fibrotic effects of PGE2 in IPF lung fibroblasts and macrophages**
Melker Göransson (Mölndal, Sweden), Kristin Wiqvist, Madeleine Ingelsten, Zala Jevnikar, Orsolya Bilkei-Gorzo, Tomas Ottosson, Thomais Markou, Julia Lindgren, Toby M Maher, Philip L Molyneaux

PA3568 **Development of PRS-400, an inhaled Jagged-1 Anticalin protein for the treatment of muco-obstructive lung diseases**
Matthias Hagner (Hallbergmoos, Germany), Claudia Wurzenberger, Janet Peper-Gabriel, Diana Jaquin, Nicolas Quilitz, Christina Hechinger, Thomas Jaquin, Kristina Heinig, Eva-Maria Hansbauer, Stefan Grüner, Josef Prassler, Rachida Siham Bel Aiba, Jan-Peter Mayer, Richa Bharti, Joe Alexander Wrennall, Robert Tarran, Anuradha Ray, Sally Wenzel, Christine Rothe, Shane A. Olwill, Gabriele Matschiner, Athanasios Fysikopoulos

PA3569 **No effect of lidocaine on ciliary beating frequency and pattern of human nasal epithelial cells in vitro**
Sibel T Savas (Bern, Switzerland), Stefan A Tschanz, Philipp Latzin, Carmen Casaulta, Loretta Müller

PA3570 **Fluorescent PLGA nanocarriers for pulmonary administration**
Aina Areny Balagueró (Sabadell, Spain), Wid Mekseriwattana, Marta Camprubí-Rimblas, Andrea Stephany, Ariana Roldán, Antonio Artigas, Daniel Closa, Anna Roig

PA3571 **Involvement of miRNAs as a response to extracorporeal photopheresis in the control of bronchiolitis obliterans syndrome**
Sara Bozzini (Pavia, Italy), Claudia Del Fante, Monica Morosini, Cecilia Bagnera, Hatice Oya Berezhinskiy, Sophia Auner, Laura Pandolfi, Matteo Della Zoppa, Cesare Perotti, Konrad Hoetzenecker, Peter Jaksch, Alberto Benazzo, Federica Meloni

PA3572 **ADAM-33 and MMP-8 in bronchial asthma.**
Dimo Dimov (Stara Zagora, Bulgaria), Tanya Tacheva, Donika Ivanova, Kahan Celik, Anelia Bivolarska, Tatyana Vlaykova

PA3573 **Airway eosinophilic inflammation indicates small airway dysfunction (SAD) in patients with mild stable or at risk for COPD – results from CAPTO-COPD**
Mustafa Abdo (Grosshansdorf, Germany), Frauke Pedersen, Frederik Trinkmann, Felix J.F. Herth, Klaus F. Rabe, Anne Kirsten, Henrik Watz

PA3574 **MUC5AC and MUC5B expression in goblet cells of large airway epithelium in never-smokers, smokers, and COPD patients**
Terezia Pincikova (Solna, Sweden), Heta Merikallio, Ioanna Kotortsi, Reza Karimi, Chuan-Xing Li, Elisa Lappi-Blanco, Sara Lindén, Médea Padra, Åsa Wheelock, Riitta Kaarteenaho, Magnus Sköld

PA3575 **Increased luminal narrowing but reduced wall thickness in the small airways of severe COPD patients**
Andrew Higham (Manchester (Greater Manchester), United Kingdom), Josiah Dungwa, Dave Singh

PA3576 **COPD-associated changes in lung extracellular matrix**
Mugdha M. Joglekar (Groningen, Netherlands), Maunick L. Koloko Ngassie, Niek J. Bekker, Marjan A. Reinders-Luinge, Theo Borghuis, Judith M. Vonk, Simon D. Pouwels, Barbro N. Melgert, Wim Timens, Corry-Anke Brandsma, Janette K. Burgess

PA3577 **Olfactory Receptors Reduce Inflammation of Lung Epithelial Cells**
Daniel Weidinger (Bochum, Germany), Julian Jacobsen, Kaschin Jamal Jameel, Desiree Alisch, Hendrik Uebner, Juliane Kronsbein, Marcus Peters, Sebastian Reuter, Hanns Hatt, Jürgen Knobloch

PA3578 **Basal airway epithelial cells from PCD have distinct proliferative and inflammatory responses**
Žofia Varényiová (Prague, Czech Republic), Laura Rojas, Jacquelyn Spano, Václav Čapek, Tyson Holmes, Carlos Milla

PA3579 **Cell death and proliferation-related transcripts in lung allograft airway epithelial cells**
Olivia Mekhael (Toronto, Canada), Allen Duong, Benjamin Renaud-Picard, Tina Daigneault, Ankita Burman, Sajad Moshkelgosha, Stephen Juvet, Tereza Martinu

PA3580 **LSC - 2022 - Circular RNA expression in cystic fibrosis bronchial epithelium**
Chiara De Santi (Dublin, Ireland), Killian Hurley, Agnieszka Swiatecka-Urban, Catherine Greene

PA3581 **Dynamic microscopic imaging and molecular characterisation of alveolar macrophage drug effects of a labelled inflammasome inhibitor in the human lung**
Tom Quinn (Edinburgh (Edinburgh), United Kingdom), Antonella Pellicoro, Charles Lochenie, Emma Duffy, Richard O'Connor, Anuruddika Fernando, Hazel Stewart, Erin Gaughan, Keith Finlayson, Ashley Mansell, Christopher Murphy, Adriano Rossi, Kevin Dhaliwal

PA3582 **Prevalence and predictors of airway hyperresponsiveness in asthma, COPD, and overlap-findings from a large real-life population**
Marie Lykke Felby (Copenhagen, Denmark), Ditte Klein , Laurits Frøssing , Morten Hvidtfeldt, Uffe Bodtger , Kerstin Romberg , Leif Bjermer , Ellen Tufvesson , Celeste Porsbjerg

PA3583 **Effect of Bronchial Thermoplasty on Alarmin (S100A7/A8/A9) Expression in Severe Asthma.**
Pierre-Alexandre Gagnon (Québec, Canada), Said Assou, Mabrouka Salem, Sabrina Biardel, John De Vos, Noel Lampron, Simon Martel, Louis-Philippe Boulet, Michel Laviolette, Catherine Laprise, Jamila Chakir

PA3584 **LSC - 2022 - COPD Monocyte-derived macrophages display hallmarks of senescence**
Shyreen Hassibi (London, United Kingdom), Jonathan Baker, Peter Barnes, Louise Donnelly

PA3585 **Role of urokinase-type plasminogen activator receptor (uPAR) in senescent lung cells**
Catherine Wrench (Cambrdige, United Kingdom), James Dodgson, Catherine Overed-Sayer, Louise Donnelly, Peter Barnes

TP-8 in thematic poster area — Session 403 — 08:30 - 09:30

Thematic poster: Sleep-disordered breathing treatment: from lifestyle to CPAP and beyond

Disease(s) : Sleep and breathing disorders

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

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

PA3586 **Effectiveness of an integrated hospital-primary care lifestyle change program in the treatment of obstructive sleep apnea syndrome and obesity**
Neus Salord Oleo (Barcelona, Spain), Carolina Alves , Eliseo Prado, Sandra Pérez, Maria Calvo, Roser Torta, M Carmen González, Lídia Rubio, Ana Comabella, Raquel Suárez, Mónica Montserrat, Núria Vilarrasa, Carmen Monasterio

PA3587 **Adherence to Positive Airways Pressure therapy in patients with sleep apnea and comorbid psychiatric diseases.**
Anastasios Kallianos (Athens, Greece), Pantelis T. Nikolaidis, Dionysios Stamatelakis, Christina Klamenakou, Nicholas-Tiberio Economou, Paschalis Steiropoulos, Georgia Trakada

PA3588	**Association of positive airway pressure adherence with clinical outcomes in patients with type 2 diabetes and obstructive sleep apnea** Michail Fanaridis (Heraklion, Greece), Izolde Bouloukaki, George Stathakis, Christina Ermidou, Konstantina Lyroni, Eleni Mavroudi, Violeta Moniaki, Ioanna Tsiligianni, Sophia Schiza
PA3589	**Outcomes of CPAP therapy in Down syndrome – the population-based DISCOVERY study** Andreas Palm (Uppsala, Sweden), Malin Svensson, Magnus Ekström, Josefin Sundh, Mirjam Ljunggren, Ludger Grote
PA3590	**The effect of 2 years of CPAP therapy on métabolic comorbidities in OSAS** Manel Loukil Ben Ali (Nabeul, Tunisia), Hemissi Khaoula, Narjes Abid, Mechaal Ben Ali, Hedia Ghrairi
PA3591	**Short-term continuous positive air pressure treatment: effects on quality of life and sleep in patients with obstructive sleep apnea** Laima Kondrataviciene (Kaunas, Lithuania), Skaidrius Miliauskas
PA3592	**Long term outcomes in CPAP-treated sleep apnea patients: Impact of blood pressure responses after CPAP initiation and treatment adherence** Jean-Louis Pépin (Grenoble, France), Ami-Marie Bocoum, Sébastien Bailly, Marie Joyeux-Faure, Sébastien Baillieul, François Arbib, Clara-Lou Kang, Thi Hong Van Ngo, Pierre Boutouyrie, Renaud Tamisier
PA3593	**Nasal polyposis is a risk factor for non-adherence to CPAP – the DISCOVERY study** Caroline Bengtsson (Uppsala, Sweden), Ludger Grote, Mirjam Ljunggren, Magnus Ekström, Andreas Palm
PA3594	**A prospective study of factors that predict compliance with Continuous Positive Airway Pressure (CPAP) in patients with Obstructive Sleep Apnoea (OSA)** Qandeel Khan (Nottingham, United Kingdom), Abdisamad Ali, Amy Hough, Manoj Marathe, Imran Hamigi, Andrew Bain, Ajit Thomas
PA3595	**Predicting adherence to continuous positive airway pressure in patients with obstructive sleep apnea syndrome through machine learning** Marco António Pacheco Pereira (Paio Pires, Portugal), Ricardo Ribeiro
PA3596	**Persistent inspiratory flow limitation during positive airway pressure therapy** Neil Skjodt (Lethbridge (AB), Canada), Ronald S. Platt
PA3597	**Telemedicine home CPAP titration and follow-up in the COVID-19 scenario** Jaume Bordas Martinez (barcelona, Spain), Eva Fontanilles Arbones, Neus Salord, Eliseo Prado Gala, María D. Calvo Sánchez, Salud Santos, Carmen Monasterio
PA3598	**Efficacy of VAUTO ventilation in OSA patients resistant to CPAP** Pasquale Tondo (Foggia, Italy), Rossella Trentin, Caterina Pronzato, Simona Arcovio, Francesco Fanfulla
PA3599	**Auto-BiPAP switch in OSA patients: can it be done successfully?** Pasquale Tondo (Foggia, Italy), Caterina Pronzato, Irene Risi, Nadia D'Artavilla Lupo, Francesco Fanfulla
PA3600	**Reboxetine improves pharyngeal collapsibility and respiratory control in obstructive sleep apnoea.** Thomas Altree (Adelaide, Australia), Atqiya Aishah, Kelly Loffler, Ronald Grunstein, Danny Eckert
PA3601	**Effect of 5 mg of Oxybutynin and 6 mg of Reboxetine on obstructive sleep apnea severity** Mathieu Berger (Saint Etienne, France), Romane Dussez, Nicola Marchi, Geoffroy Solelhac, Brian Bradley, Gianpaolo Lecciso, José Haba-Rubio, Francesca Siclari, Raphael Heinzer
PA3602	**Effectiveness of acetazolamide in patients with moderate obstructive sleep apnea and obesity** Iana Andreieva (Zaporizhia, Ukraine)
PA3603	**Effect of sulthiame on cardiopulmonary coupling assessed sleep quality in OSA patients – a RCT** Ding Zou (Gothenburg, Sweden), Karl Theliander, Jan Hedner, Christian Strassberger, Kaj Stenlöf, Ludger Grote
PA3604	**Robotic beds for the treatment of positional obstructive sleep apnoea – a randomised cross-over pilot trial** Martina Meszaros (Zurich, Switzerland), Alexander Breuss, Elisabeth Wilhelm, Robert Riener, Malcolm Kohler, Esther I Schwarz
PA3605	**Late Breaking Abstract - Sulthiame induced carbonic anhydrase inhibition is associated with improvement of nocturnal oxygenation in OSA patients** Ali M. Komai, Saliha Musovic, Ludger Grote, Kaj Stenlöf, Erik Hoff, Ding Zou, Jan Hedner

TP-9 in thematic poster area — Session 404 — 08:30 - 09:30

Thematic poster: COPD clinical studies and exacerbations

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

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

Chairs : Alexander Mathioudakis (Stockport, United Kingdom), Chair to be confirmed

PA3606	**Digital spacer informed inhaler adherence education: the OUTERSPACE proof-of-concept study in COPD** Boudewijn Dierick (Groningen, Netherlands), Sandra Been Buck, Titia Klemmeier, Paul Hagedoorn, Susanne Van De Hei, Huib Kerstjens, Janwillem Kocks, Tanja Zijp, Daan Touw, Job Van Boven
PA3607	**Mortality outcomes associated with oral corticosteroid use in patients with COPD** Gary Tse (Singapore, Singapore), David Price, Mona Bafadhel, Alberto Papi, Victoria Carter, Con Ariti, Jiandong Zhou, Derek Skinner, Xiao Xu, Hana Müllerová, Benjamin Emmanuel
PA3608	**Ventilation and tissue oxygenation patterns induced by LABA and LAMA in COPD patients** Silvia Perez Bogerd (Bruxelles, Belgium), Alain Van Muylem, Emilie Maufroy, Yasmina El.Khloufi, Selim Zengin, Vitalie Faoro, Andrei Malinovschi, Alain Michils
PA3609	**Maintenance and reliever therapy with budesonide/formoterol versus fixed dose fluticasone/salmeterol in patients with COPD** Susan Muiser (Groningen, Netherlands), Kai Imkamp, Dianne Seigers, Nynke Halbersma, Judith Vonk, Bart Luijk, Gert-Jan Braunstahl, Jan Willem Van Den Berg, Bart-Jan Kroesen, Janwillem Kocks, Irene Heijink, Helen Reddel, Huib Kerstjens, Maarten Van Den Berge
PA3610	**Effect of benralizumab on recurrent COPD exacerbations** Dave Singh (Manchester, United Kingdom), Gerard J Criner, Alvar Agusti, Mona Bafadhel, Johan Söderström, Gabriela Luporini Saraiva, Yue Song, Idlir Licaj, Maria Jison, Ubaldo J Martin, Ioannis Psallidas
PA3611	**Lack of Association between Inhaled Corticosteroid Use and the Risk of Future Exacerbation in Patients with GOLD Group A Chronic Obstructive Pulmonary Disease** Seong Yong Lim (Seoul, Republic of Korea), Hye Yun Park, Sun Hye Shin, Deog Kyeom Kim, Sang-Heon Kim, Tae Rim Shin, Ki-Suck Jung, Kwang Ha Yoo, Ki-Eun Hwang, Yong Suk Jo
PA3612	**Inhaled corticosteroids and the risk of new-onset arterial hypertension in patients with chronic obstructive pulmonary disease** Howraman Meteran (VALBY, Denmark), Pradeesh Sivapalan, Josefin Eklöf, Mohamad Isam Saeed, Alexander Jordan, Jens-Ulrik Jensen
PA3613	**Sufficient inspiratory effort for a Dry Powder Inhaler - do we have to measure it, or can we observe it? Post hoc analysis of the PIFotal study** Lars Dijk (Groningen, Netherlands), Marika Leving, Sinthia Bosnic-Anticevich, Joyce Van Cooten, Jaime Correia De Sousa, Biljana Cvetkovski, Richard Dekhuijzen, Marina Garcia Pardo, Asparuh Gardev, Radosław Gawlik, Iris Van Der Ham, Ymke Jansen, Federico Lavorini, Tiago Maricoto, Jiska Meijer, Boyd Metz, David Price, Miguel Roman Rodriguez, Kirsten Schuttel, Nilouq Stoker, Ioanna Tsiligianni, Omar Usmani, Janwillem Kocks
PA3614	**Risk for exacerbation, hospitalization and mortality in Global Initiative for Chronic Obstructive Lung Disease group B patients with and without exacerbations: a cohort study** Lowie E.G.W. Vanfleteren (Gothenburg, Sweden), Linnea Holmstrand, Anne Lindberg, Caddie Zhou, Fredrik Nyberg, Caroline Stridsman
PA3615	**Recombinant AAT-Fc fusion protein INBRX-101 achieves normal serum AAT levels in patients with alpha-1 antitrypsin deficiency (AATD)** Andrew Veale (Auckland, New Zealand), Humam Farah, Ravi Mahadeva, Michelle Baker, Brooks Kuhn, Alexandra Cole, Catherina Chang, Cynthia Brown, Michael Campos, James Kalabus, Terri Boyea, Carson Veldstra, Vasily Andrianov, Sharvari Bhagwat, Brendan P Eckelman, Jorge Loscano, Mark Brantly
PA3616	**Efficacy and safety of ICS/LABA/LAMA FDCs in COPD: a network meta-analysis** Luigino Calzetta (Roma (RM), Italy), Paola Rogliani, Mario Cazzola, Stefano Verri, Francesca Camardelli
PA3617	**Blood, nasal and airway immune responses to SARS-COV-2 vaccination in COPD patients and healthy subjects** Thomas Southworth (Manchester, United Kingdom), Natalie Jackson, Dave Singh
PA3618	**TriOptimize IX: Real-world improvement in COPD symptoms and lung function by extrafine single-inhaler triple therapy (efSITT)** Frederik Trinkmann (Heidelberg, Germany), Sanaz Bahari Javan, Carl-Peter Criée, Valentina Bogoevska, Christian Gessner
PA3619	**Adherence to umeclidinium/vilanterol versus inhaled corticosteroids/long-acting β2-agonist in patients with chronic obstructive pulmonary disease in England** Alexandrosz Czira (Brentford, United Kingdom), Gema Requena, Victoria Banks, Robert Wood, Theo Tritton, Catherine Castillo, Jie Yeap, Rosie Wild, Chris Compton, Maria Duarte, Kieran Rothnie, Afisi Ismaila

PA3620	**SHORT-TERM OXYGEN THERAPY OUTCOMES IN COPD** Thibaud Soumagne (Paris, France), François Maltais, François Corbeil, Bruno Paradis, Marc Balzan, Paula Simao, Araceli Abad Fernandez, Richard Lecours, Sarah Bernard, Yves Lacasse
PA3621	**COPD clinical course in patient with Gln27Glu polymorphism of ADRB2 gene** Kostiantyn Dmytriiev (Vinnitsya, Ukraine), Yuriy Mostovoy, Nataliia Slepchenko, Yuliia Smereka, Dmytro Dmytriiev
PA3622	**How does Arg16Gly polymorphism affect pulmonary function and treatment response in COPD patients?** Kostiantyn Dmytriiev (Vinnitsya, Ukraine), Nataliia Slepchenko, Yuriy Mostovoy, Yuliia Smereka, Dmytro Dmytriiev
PA3623	**EVELUT: dyspnoea and symptom burden in COPD patients switching from LABA/ICS to LAMA/LABA or LAMA/LABA/ICS** Roland Buhl (Mainz, Germany), Michael Dreher, Muriel Mattiucci-Guehlke, Sebastian Eckhardt, Christian Taube, Claus Vogelmeier
PA3624	**Relationship between severity of airflow obstruction and GOLD classification in COPD patients** Nataša Karamarković Lazarušić (Zagreb, Croatia), Bojana Butorac Petanjek, Latinka Basara, Melita Jerić, Gordana Pavliša
PA3625	**Late Breaking Abstract - Evaluating multiple eosinophil measurements when stepping up to ICS/LAMA/LABA triple therapy in patients with COPD: a post-hoc analysis of ETHOS** Dave Singh (Manchester, United Kingdom), Mona Bafadhel, John R Hurst, Patrick Darken, Mehul Patel

Studio - online | Session 405 | 08:45 - 09:15

News from the Studio: Day 3 highlights not to miss

Chairs : Pierantonio Laveneziana (Paris, France), Emer Kelly (Dublin 4, Ireland)

08:45	**Discussion and Q&A** All Speakers	**3626**

Studio - online | Session 406 | 09:30 - 11:00

Language session: Chinese Programme 2022

A joint ERS/CTS session

Aims : To present and discuss the new advances in respiratory medicine presented by experienced speakers from the European Respiratory Society leadership and Chinese leaders in respiratory medicine; to present an overview of hot respiratory disease topics in Europe and China.
This session will be delivered in English and will not be translated in Chinese.

Method(s) : Epidemiology Public health Respiratory intensive care

Tag(s) : COVID

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

Chairs : Jieming Qu (Shanghai, China), Tobias Welte (Hannover, Germany), Georgia Hardavella (Athens, Greece)

09:30	**Early interventions of lung cancer** Nanshan Zhong (Guangzhou (Guangdong), China)	**3627**
09:45	**Status and future perspective of biomarkers in early detection of lung cancer** Torsten Gerriet Blum (Berlin, Germany)	**3628**
10:00	**Clinical progress in critical care of pulmonary medicine in China** Li-xin Xie (Beijing, China)	**3629**
10:15	**New insights in the pathophysiology of ARDS** Lieuwe D.J. Bos (Amsterdam, Netherlands)	**3630**
10:30	**Discussion and Q&A** All Speakers	**3631**

8A - live streamed | Session 407 | 09:30 - 11:00

State of the art session: Sleep and breathing disorders

Myth or reality: is obstructive sleep apnoea really critical for cardiovascular complications? Current evidence about pathophysiology, clinical implications and future perspectives

Aims : to summarise the current knowledge of the impact of obstructive sleep apnoea (OSA) on cardiovascular complications; to explain the link between the hypoxic burden, associated intracellular mechanisms and cardiovascular comorbidities; to describe critical endpoints of OSA including cardiovascular morbidity, mortality and patient-related outcome measures; to summarise current evidence of the effects of positive airway pressure (PAP) treatment on cardiovascular endpoints; to critically discuss the limitations and strengths of current trials; to define future research needs.

Disease(s) : Sleep and breathing disorders

Method(s) : General respiratory patient care Physiology

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Medical Student, Medical Technical Assistant, Nurse, Scientist (basic, translational)

Chairs : Sophia E. Schiza (Heraklion, Greece), Winfried J. Randerath (Solingen, Germany)

09:30	**The hypoxic burden and intracellular mechanisms** Silke Ryan (Dublin, Ireland)	**3632**
09:45	**What endpoints really matter? The clinical relevance of morbidity, mortality and patient-related outcome measures** G. Parati (Milano (MI), Italy)	**3633**
10:00	**Appraisal and critical review of the effects of PAP treatment on cardiovascular endpoints** Anita Simonds (London, United Kingdom)	**3634**
10:15	**The future of sleep science: what are the correct targets, outcome parameters, innovative studies and methodologies?** Raphael Heinzer (Lausanne, Switzerland)	**3635**
10:30	**Discussion and Q&A** All Speakers	**3636**

8B - live streamed Session 408 09:30 - 11:00

Journal session: Respiratory strategies for COVID-19, diagnostic strategies for venous thromboembolism and screening for COPD

Highlights from JAMA

Aims : to provide an update on noninvasive respiratory strategies for acute hypoxemia in COVID-19; to provide an update on screening for COPD; to provide an update on diagnostic strategies for venous thromboembolism.

Disease(s) : Airway diseases Respiratory critical care

Method(s) : Epidemiology General respiratory patient care Respiratory intensive care

Tag(s) : Clinical

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

Chairs : Olivier Sitbon (Le Kremlin-Bicêtre, France), Kristin Walter (Chicago, United States)

09:30	**Noninvasive diagnostic strategies for acute hypoxemia in COVID-19** Gavin D Perkins (Birmingham (West Midlands), United Kingdom)	**3637**
09:45	**Screening for COPD** John R Hurst (London, United Kingdom)	**3638**
10:00	**Diagnostic strategies for venous thromboembolism** Yonathan Freund (Paris, France)	**3639**
10:15	**Discussion and Q&A** All Speakers	**3640**

8C - live streamed Session 409 09:30 - 11:00

Clinical cases: Lungs on fire: Paediatric respiratory diseases

Aims : To facilitate the presentation of 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

Tag(s) : Clinical

Target audience : Paediatrician, General practitioner, Physician in Pulmonary Training, Clinical researcher, Nurse, Thoracic oncologist, Radiologist, Respiratory physiotherapist, Respiratory therapist

Chairs : Marielle W.H. Pijnenburg (Rotterdam, Netherlands), Alexander Möller (Zürich, Switzerland), Cristina Ardura-Garcia (Bern, Switzerland)

Discussants : Monika Gappa (Düsseldorf, Germany), Andrew Bush (London, United Kingdom)

09:30	**Case 1 incl. panel discussion and Q&A - Author: K. Hillson (United Kingdom)** Monika Gappa (Düsseldorf, Germany)	**3641**
09:52	**Case 2 incl. panel discussion and Q&A - Author: A. Sepahzad (United Kingdom)** Andrew Bush (London, United Kingdom)	**3642**
10:14	**Case 3 incl. panel discussion and Q&A - Author: S. Louey (Australia)** Monika Gappa (Düsseldorf, Germany)	**3643**
10:36	**Case 4 incl. panel discussion and Q&A - Author: M. Folch Benito (Spain)** Andrew Bush (London, United Kingdom)	**3644**

8G - live streamed Session 410 09:30 - 11:00

Hot topics: Thoracic surgery and COVID-19 pandemic: an unexpected intimate relationship

Aims : to report the incidence and outcome of the complications of COVID-19 that require thoracic surgery.

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

Method(s) : Pulmonary rehabilitation Surgery Transplantation

Tag(s) : COVID

Target audience : Adult pulmonologist/Clinician, Medical Student, Nurse, Respiratory critical care physician, Radiologist, Thoracic oncologist, Thoracic surgeon, Respiratory therapist

Chairs : Carlos Robalo Cordeiro (Coimbra, Portugal), Federica Meloni (Pavia (PV), Italy)

09:30	**Defining appropriate surgical management of thoracic complications** Isabelle Opitz (Zurich, Switzerland)	**3645**
09:45	**Tracheal complications after prolonged intubation: risk factors, surgical indications and outcome** Marco Lucchi (Pisa (PI), Italy)	**3646**
10:00	**Lung transplant in COVID 19 patients: post acute versus long term sequelae.** Peter Jaksch (wien, Austria)	**3647**
10:15	**The positive downside: unveiling of unknown chest malignancies.** Stefano Elia (Roma (RM), Italy)	**3648**
10:30	**Discussion and Q&A** All Speakers	**3649**

8H - live streamed Session 411 09:30 - 11:00

Primary care session: Asthma diagnosis: new and old approaches to increase primary care capability

Aims : to discuss the latest approaches for the difficult task of diagnosing asthma in clinical practice.

Disease(s) : Airway diseases

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

Tag(s) : Clinical

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

Chairs : Thierry Troosters (Leuven, Belgium), Hilary Pinnock (Edinburgh (Edinburgh), United Kingdom), Monica Kraft (New York, United States)

09:30	**The clues for asthma diagnosis in primary care** Janwillem W. H. Kocks (Groningen, Netherlands)	**3650**
09:45	**New and old tests for asthma diagnosis in primary care: from peak-flow to FeNO** David Lo (Leicester, United Kingdom)	**3651**

10:00	**Oscillometry: a renewed and suitable tool for asthma diagnosis in primary care?** Salman Siddiqui (Leicester, United Kingdom)	**3652**
10:15	**From diagnosis to self-management: supporting the patient's journey** Cláudia Vicente (Coimbra, Portugal)	**3653**
10:30	**Discussion and Q&A** All Speakers	**3654**

8N Session 412 09:45 - 11:00

Oral presentation: Cellular involvement in lung diseases

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

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

Chairs : Agnes Boots (Maastricht, Netherlands), Sara Rolandsson Enes (Lund, Sweden)

OA3655	**Extracellular vesicles propagate cellular senescence by transferring miR34a in airway epithelial cells** Justine Devulder (London, United Kingdom), Jonathan R. Baker, Lina Odqvist, Louise E. Donnelly, Peter J. Barnes
OA3656	**SFRP1-linked to extracellular vesicles promotes pulmonary fibrosis** Olivier Burgy (Dijon, France), Christoph H. Mayr, Beatriz Ballester Llobell, Arunima Sengupta , Sabrina Loriod, Ali Önder Yildirim , Mareike Lehmann , Herbert B. Schiller, Gerald Burgstaller, Melanie Königshoff
OA3657	**Potential prothrombotic role of extracellular vesicles during exacerbation of chronic obstructive pulmonary disease** Erica Bazzan (Padova (PD), Italy), Tommaso Neri, Dario Nieri, Federica Ceriegi, Camilla Morani, Alessandro Celi
OA3658	**MSC extracellular vesicles ameliorate ARDS via activation of mitochondrial biogenesis** Catherine McClintock (Bangor, United Kingdom), Johnatas Silva, Declan Doherty, Cecilia O'Kane, Daniel Mc Auley, Anna Krasnodembskaya
OA3659	**Characterization of Mesenchymal Cell from BAL of post COVID-19 patient whit fibrosis** Matteo Della Zoppa (Pavia, Italy), Maria Antonietta Avanzini, Sara Bozzini, Stefania Croce, Cecilia Bagnera, Chiara Valsecchi, Laura Pandolfi, Elisa Lenta, Sara Lettieri, Valentina Vertui, Laura Saracino, Federica Meloni
OA3660	**Mitochondrial dysfunction features in lung resident mesenchymal stem cells from patients with Idiopathic Pulmonary Fibrosis** Aina Martín Medina (Palma, Spain), Joan Truyols-Vives, Linda Elowson, Andreas Jahn, Carlos Rio, Amanda Iglesias, Ana Montes, Julio Velasco, Maria Molina-Molina, Gunilla Westergren-Thorsson, Josep Mercader-Barceló, Ernest Sala-Llinas
OA3661	**LSC - 2022 - Biomarker identification to assess effects of bone-marrow derived mesenchymal stromal cell-therapy i n emphysema through immune profiling** Padmini P. S. J. Khedoe (Den Haag, Netherlands), Li Jia, Na Li, Pieter S. Hiemstra, Frits Koning, Jan Stolk
OA3662	**Mesenchymal Stem Cells derived Biospheres (BS) as potential therapeutic agent in lung disease like Idiopathic Pulmonary Fibrosis (IPF)** Andreas Jahn (Palma De Mallorca, Spain), Carlos Rio, Aina Martin-Medina, Amanda Iglesias, Javier Pierola, Orokia Clara Traore Diaby, Ernest Sala Llinas
OA3663	**Combined Cell Therapy and Anticoagulants as a treatment for an in vivo model of Acute Lung Injury** Marta Camprubí-Rimblas (Molins de Rei, Spain), Aina Areny-Balagueró, Elena Campaña-Duel, Luis Morales-Quinteros, Adrian Ceccato, Lluís Blanch, Antonio Artigas
OA3664	**Late Breaking Abstract - Human induced pluripotent stem cell-derived alveolar type 2 cells mature at air-liquid interface and respond to airborne stimuli** Kristine Abo (Cambridge, United States), Andrew Wilson
OA3665	**Discussion** All Speakers

8F Session 413 09:45 - 11:00

Mini symposium: State-of-the-art in the home mechanical ventilation

Aims : to state main components orienting new developments in the field of home mechanical ventilation (including hypoxia, hypercapnia, secondary symptoms such as weak cough and stagnation of airway secretion leading to diminished health related quality of life (HRQL) and increased risk of pneumonia).

Disease(s) : Sleep and breathing disorders

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

Tag(s) : Clinical

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

Chairs : Jellien Makonga-Braaksma (Woudenberg, Netherlands), Peter J. Wijkstra (Groningen, Netherlands)

09:45	**Chronic respiratory failure in neuromuscular disorders: diagnosis and treatment** Barbara Garabelli (Romentino (NO), Italy)	**3666**
10:00	**Airway clearance and cough augmentation strategies** Tiina Andersen (Bergen, Norway)	**3667**
10:15	**Homecare, follow-up and outcomes of the treatment** Jean-Paul Janssens (Genève, Switzerland)	**3668**
10:30	**Discussion and Q&A** All Speakers	**3669**

8L Session 414 09:45 - 11:00

Oral presentation: Recent advances in biological treatments for asthma

Disease(s) : Airway diseases

Method(s) : General respiratory patient care Physiology Epidemiology

Chairs : Manali Mukherjee (Hamilton (ON), Canada), Apostolos Bossios (Stockholm, Sweden)

OA3670	**Efficacy of tezepelumab in patients with severe, uncontrolled asthma and low blood eosinophil counts not receiving maintenance oral corticosteroids** Andrew Menzies-Gow (London, United Kingdom), Bill Cook, Gene Colice, Åsa Hellqvist, Jean Pierre Llanos-Ackert, Christopher S. Ambrose
OA3671	**Prevalence and impact of hypereosinophilia in severe asthma treated by dupilumab: an observational analysis** Stephanie Everaerts (Leuven, Belgium), Bart Hilvering, Els Weersink
OA3672	**Dupilumab improved lung function and reduces exacerbations in patients with 1, 2, or 3 prior exacerbations: TRAVERSE** Jorge Fernando Maspero (Ciudad Autónoma Buenos Aires, Argentina), Jonathan Corren, Mario Castro, Jorge F Maspero, Marc Humbert, David M G Halpin, Arman Altincatal, Nami Pandit-Abid, Xavier Soler, Shahid Siddiqui, Juby A Jacob-Nara, Yamo Deniz, Paul J Rowe
OA3673	**Benralizumab attenuates blood and airway eosinophilia in severe asthmatics with inadequate response to anti-IL-5 neutralizing antibodies** Manali Mukherjee (Hamilton (ON), Canada), Anurag Bhalla, Carmen Venegas-Garrido, Chynna Huang, Katherine Radford, Melanie Kjarsgaard, Sylvia Lauks, Kiho Son, Nicola Lavigne, Roma Sehmi, Paul O'Byrne, Parameswaran Nair
OA3674	**Past smoking does not influence response to biologic therapy in patients with severe asthma** Mohammed Rahman (Portsmouth, United Kingdom), Paddy Dennison, Adnan Azim, Anna Freeman, Hans Michael Haitchi, Ramesh Kurukulaaratchy, Hitasha Rupani
OA3675	**Relation between reduction in fractional exhaled nitric oxide and efficacy in asthma patients treated with dupilumab** Ian Douglas Pavord (Oxford (Oxfordshire), United Kingdom), Yamo Deniz, Thomas Casale, Jonathan Corren, Mark Fitzgerald, Nadia Daizadeh, Alexandre Jagerschmidt, Myles Dillon, Rebecca Gall, Nami Pandit-Abid, Shahid Siddiqui, Juby A. Jacob-Nara, Paul J. Rowe, William W. Busse
OA3676	**On-treatment clinical remission with tezepelumab among patients with severe, uncontrolled asthma in the phase 3 NAVIGATOR study** Mario Castro (Kansas City, United States), Christopher S Ambrose, Gene Colice, Stephanie L Roseti, Kamil Kmita, Bill Cook, Neil Martin, Jean-Pierre Llanos-Ackert, Andrew Menzies-Gow
OA3677	**Clinical response and remission in patients with severe asthma treated with biologic treatment: Findings from the nationwide Danish Severe Asthma Registry** Celeste Michala Porsbjerg (Copenhagen, Denmark), Susanne Hansen, Anna Von Buelow, Marianne Baastrup Soendergaard, Linda Makowska Rasmussen, Claus Rikard Johnsen, Truls Sylvan Ingebrigtsen, Kjell Erik Julius Haakansson, Karin Dahl Assing, Sofie Lock Johansson, Johannes Schmid, Anne-Sofie Bjerrum, Ole Hilberg, Charlotte Ulrik

OA3678	**Effect of tezepelumab on a composite of severe asthma exacerbations and acute worsening events, CompEx, in the phase 3 NAVIGATOR study** Guy Brusselle (Ghent, Belgium), Neil Martin, Sandhia Ponnarambil, Gillian Hunter, Åsa Hellqvist, Malin Fagerås, Carla A Da Silva
OA3679	**Late Breaking Abstract - Mepolizumab effectiveness in severe asthma supported by federated analysis of European SHARP data** Johannes A Kroes (Leeuwarden, Netherlands), Rafael Alfonso-Cristancho, Aruna T Bansal, Emmanuelle Berret, Kristina Bieksiene, Arnaud Bourdin, Luisa Brussino, Diogo Canhoto, Cristina Cardini, Gulfem Celik, Zsuzsanna Csoma, Barbro Dahlén, Ebru Damadoğlu, Katrien Eger, Lisa Gauquelin, Bilun Gemicioglu, Ozlem Goksel, Sophie Graff, Enrico Heffler, Hendrik B Hofstee, Peter Howarth, Rupert Jakes, Fabienne Jaun, Virginija Kalinauskaite-Zukauske, Peter Kopač, Namhee Kwon, Claudia C Loureiro, Víctor Lozoya García, Matthew Masoli, Maria Paula Rezelj, Luis Pérez De Llano, Sanja Popović-Grle, David Ramos-Barbon, Anna Sà Sousa, Konstantinos Samitas, Florence Schleich, Concetta Sirena, Sabina Skrgat, Eleftherios Zervas, George Zichnalis, Elisabeth H Bel, Jacob K Sont, Simone Hashimoto, Anneke Ten Brinke
OA3680	**Discussion** All Speakers

8M Session 415 09:45 - 11:00

Mini symposium: Diagnosis and management of pneumonitis in lung cancer systemic therapy
Immune-related and targeted therapy toxicities

Aims : to provide an overview of the incidence and specific patterns of lung toxicity associated with immune-checkpoint inhibitors, molecular targeted agents and radiation used for lung cancer therapy; to cover a general discussion of the clinical presentation, pathogenesis, diagnosis, differential diagnosis and treatment of pulmonary toxicity associated with the use of antineoplastic agents; to provide a review of potential biomarkers that could guide our clinical reasoning in immune-related toxicities.

Disease(s) : Thoracic oncology

Method(s) : General respiratory patient care

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, General practitioner, Pathologist, Physician in Pulmonary Training, Radiologist, Thoracic oncologist

Chairs : Joanna Chorostowska-Wynimko (Warsaw, Poland), Maria Joana Pereira Catarata (Porto, Portugal)

09:45	**Immune-checkpoint inhibitors: diagnosis and management of pneumonitis in lung cancer patients** Jacques Cadranel (Paris Cedex 20, France)	**3681**
10:00	**Pulmonary toxicity associated with antineoplastic therapy: Molecular targeted agents** Maria Gabriela Oliveira Fernandes (Matosinhos, Portugal)	**3682**
10:15	**Pneumonitis and radiotherapy: diagnosis and management** Katherina Bernadette Sreter (Zagreb, Croatia)	**3683**
10:30	**Discussion and Q&A** All Speakers	**3684**

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

8D Session 418 10:40 - 13:00

Skills workshop: SW8 Thoracic ultrasound

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 : Najib M. Rahman (Oxford, United Kingdom)

10:40	**The normal thoracic cavity** Rachelle Asciak (SIGGIEWI, Malta), Beenish Iqbal (London, United Kingdom)	**3691**
11:10	**Pleural effusion and/or pleural thickening** Giovanni Volpicelli (Torino (TO), Italy), Morten Bendixen (Skejby, Denmark)	**3692**

11:40	**Case studies** Poppy Denniston (London, United Kingdom), Eleanor Barton (Bristol, United Kingdom)	**3693**
12:10	**Lymph node biopsy using models** Pia Iben Pietersen (Odense NØ, Denmark), Rachel Mercer (Winchester, United Kingdom)	**3694**

Studio - online Session 424 11:15 - 11:45

Guidelines session: ERS clinical practice guidelines for the diagnosis of asthma in adults

Disease(s) : Airway diseases

Method(s) : General respiratory patient care

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, General practitioner, Medical Student, Physician in Pulmonary Training, Clinical researcher

Chairs : Andrew Bush (London, United Kingdom)

11:15	**Discussion and Q&A** Omar S. Usmani (London, United Kingdom), Renaud Louis (Liège, Belgium)	**3695**

8A - live streamed Session 425 11:15 - 12:45

Symposium: The many faces of central sleep apnoea and hypoventilation syndromes

Aims : to discuss the phenotypes of central sleep apnoea and the impact of biomarkers on outcomes, new pathophysiological insights and consecutive therapeutic options for obesity hypoventilation, the strengths and limitations of positive airway pressure during the lifetime and the relevance of concomitant pulmonary disease with not only obstructive, but also central, sleep apnoea.

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

Method(s) : General respiratory patient care Public health 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, Physician in Pulmonary Training, Scientist (basic, translational)

Chairs : Sophia E. Schiza (Heraklion, Greece), Winfried J. Randerath (Solingen, Germany)

11:15	**Phenotyping and prognostic markers of central sleep apnoea: is treatment of central sleep apnoea necessary?** Winfried J. Randerath (Solingen, Germany)	**3696**
11:30	**Opioid-induced central sleep apnoea: exceptional or epidemic ?** Shahrokh Javaheri (Cincinnati, United States)	**3697**
11:45	**New perspectives in obesity hypoventilation: from pathophysiology to treatment** Jean-Louis Pépin (Grenoble, France)	**3698**
12:00	**Continuous positive airway pressure and non-invasive ventilation in hypoventilation syndromes from childhood to adulthood** Marieke L. Duiverman (Groningen, Netherlands)	**3699**
12:15	**Discussion and Q&A** All Speakers	**3700**

8B - live streamed Session 426 11:15 - 12:45

Clinical cases: Clinical challenges beyond guidelines

Aims : to describe the controversial aspects of the current guidelines for the management of adults with COVID-19 in the intensive care unit, clinical standards for tuberculosis infection, optimal follow-up after acute pulmonary embolism and imaging of pulmonary embolism in pregnancy; 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) : Respiratory critical care Respiratory infections Pulmonary vascular diseases

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

Tag(s) : Clinical

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

Chairs : Olivier Sitbon (Le Kremlin-Bicêtre, France), Kristin Walter (Chicago, United States)

11:15	**Management of adults with COVID-19 in the intensive care unit** Christian Karagiannidis (Cologne, Germany)	**3701**
11:30	**Discussion and Q&A** All Speakers	**3702**
11:37	**Clinical standards for tuberculosis infection** Marc Lipman (London, United Kingdom)	**3703**
11:52	**Discussion and Q&A** All Speakers	**3704**
11:59	**Optimal follow-up after acute pulmonary embolism** Olivier Sanchez (Paris, France)	**3705**
12:14	**Discussion and Q&A** All Speakers	**3706**
12:21	**Guidelines for imaging of pulmonary embolism in pregnancy** David Jiménez Castro (Madrid, Spain)	**3707**
12:36	**Discussion and Q&A** All Speakers	**3708**

8C - live streamed Session 427 11:15 - 12:45

State of the art session: Paediatric respiratory diseases

Aims : to provide clinicians with practical take-home messages regarding the key management and health policy issues related to the respiratory health of children and young people; to provide an update on four important topics in paediatric respiratory medicine.

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

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

Tag(s) : Clinical

Target audience : Clinical researcher, General practitioner, Medical Student, Nurse, Respiratory critical care physician, Paediatrician, Patient, Physician in Pulmonary Training

Chairs : Marielle W.H. Pijnenburg (Rotterdam, Netherlands), Alexander Möller (Zürich, Switzerland), Cristina Ardura-Garcia (Bern, Switzerland)

11:15	**Patient's testimony** Kuluma Faila (, France)	**3709**
11:20	**Diagnosis and management of respiratory infections in children and young adults with neurological impairment** Marijke Proesmans (Leuven, Belgium)	**3710**
11:35	**Paediatric long-term noninvasive ventilation** Brigitte Fauroux (Paris, France)	**3711**
11:50	**Paediatric interventional bronchoscopy** Dirk Schramm (Düsseldorf, Germany)	**3712**
12:05	**Respiratory function monitoring in neonatal and paediatric intensive care units** David Tingay (Melbourne (VIC), Australia)	**3713**
12:20	**Discussion and Q&A** All Speakers	**3714**

8G - live streamed Session 428 11:15 - 12:45

Symposium: Management of complicated sarcoidosis

Management decisions and dealing with complications

Aims : to discuss new insights into the management of complicated sarcoidosis; to discuss the diagnosis and treatment of fibrotic sarcoidosis, one of the most challenging and unmet needs, in depth; to explore the latest insights into the management of complications and co-morbid conditions such as pulmonary hypertension and infections (mainly fungal); to discuss other important extrapulmonary organ involvements such as those of the heart and brain, which frequently confront pulmonologists.

Disease(s) : Interstitial lung diseases | Pulmonary vascular diseases | Respiratory infections

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

Tag(s) : Clinical

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

Chairs : Carlos Robalo Cordeiro (Coimbra, Portugal), Federica Meloni (Pavia (PV), Italy)

11:15	**Patient' s testimony** Barbara Bandirali (, Italy)	**3715**
11:20	**Management of fibrotic sarcoidosis** Vivienne Kahlmann (Rotterdam, Netherlands)	**3716**
11:35	**Management of pulmonary hypertension in sarcoidosis** Laura Price (London, United Kingdom)	**3717**
11:50	**Infections as drivers of sarcoidosis** Marcel Veltkamp (De Meern, Netherlands)	**3718**
12:05	**Complex extrapulmonary sarcoidosis: the heart, brain and more** Paolo Spagnolo (Padova (PD), Italy)	**3719**
12:20	**Discussion and Q&A** All Speakers	**3720**

8H - live streamed | Session 429 | 11:15 - 12:45

Primary care session: Forgotten issues in chronic obstructive pulmonary disease: a primary care perspective

Aims : to increase the knowledge and motivation of healthcare professionals in relation to issues and interventions besides pharmacological treatment from a primary care perspective.; to discuss best approaches of assessment and treatment of mental disorders that are common in patients with COPD; to raise awareness on a need of rehabilitation programmes that currently are are very scarce and inaccessible for many COPD patients, especially in low resource settings where telerehabilitation approaches may be unreliable, and remote options need to be realistic; to discuss the effect of COPD on sexual satisfaction that is often underappreciated in clinical practice, and improved information and communication regarding sexual health is needed; to start a discussion on early integrated palliative care for COPD patients that should be developed in primary care.

Disease(s) : Airway diseases

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

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, General practitioner, Medical Student, Nurse, Patient, Respiratory physiotherapist

Chairs : Thierry Troosters (Leuven, Belgium), Hilary Pinnock (Edinburgh (Edinburgh), United Kingdom)

11:15	**COPD and mental health** Ioanna Tsiligianni (Heraklion (Crete), Greece)	**3721**
11:30	**Home-based pulmonary rehabilitation in a digital world: an alternative for low-to-middle income countries?** G M Monsur Habib (Khulna, Bangladesh)	**3722**
11:45	**COPD and sexual health** Andreia Rodrigues Silva (Vila do Conde, Portugal)	**3723**
12:00	**A palliative approach to COPD** Miriam Johnson (Hull (North Humberside), United Kingdom)	**3724**
12:15	**Discussion and Q&A** All Speakers	**3725**

8N | Session 430 | 11:15 - 12:30

Oral presentation: Development of the International Curriculum for Respiratory Nurses: perspectives and needs

Disease(s) : Airway diseases

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

Chairs : Georgia Narsavage (PUNTA GORDA, United States), Carme Hernandez Carcereny (Barcelona, Spain)

OA3726	**Development of an international curriculum for respiratory nurses (ICRN): A global needs survey** Georgia Narsavage (PUNTA GORDA, United States), Andreja Šajnić, Carol Kelly, Sheree Smith, Nicola Roberts, Karen Heslop-Marshall , Malin Axelsson, Miguel Padilha, Carme Hernández, Bridget Murray, Betty Poot
OA3727	**Steps in the development of an international curriculum for respiratory nurses (ICRN): A Delphi Process plan to standardise levels of respiratory nursing education** Andreja Sajnic (Zagreb, Croatia), Georgia Narsavage, Carol Kelly, Karen Heslop-Marshall, José Miguel Padilha, Bridget Murray, Malin Axelsson, Carme Hernández, Betty Poot, Nicola Roberts, Helle Marie Christensen, Marco Clari, Sheree Smith
OA3728	**The International Coalition of Respiratory Nurses (IRCN): development of a curriculum towards advanced nursing education and improvements in care.** Karen Heslop-Marshall (Newcastle upon Tyne (Tyne and Wear), United Kingdom), Joanne King, Iain Wheatley, Maria Parsonage, Sarah Kearney, Alison Hughes
OA3729	**INTERNATIONAL CURRICULUM FOR NURSES WORKING WITH RESPIRATORY PATIENTS - WHY DO WE NEED IT? A PORTUGUESE PERSPECTIVE** José Miguel Dos Santos Castro Padilha (Porto, Portugal), Rui Pedro Silva, Fernando Macedo, Luís Gaspar, Belmiro Rocha
OA3730	**Developing an International Curriculum for respiratory nurses and the need for a curriculum in Turkey** Merve Kıymaç Sarı (Şişli, Turkey), Rahşan Çevik Akyıl, Gamze Oğuz, Zehra Durna
OA3731	**An International Curriculum for Respiratory Nurses (ICRN): Supporting standardized respiratory nursing education in Croatia** Andreja Sajnic (Zagreb, Croatia), Georgia Narsavage, Sandra Karabatic, Tanja Zovko, Irena Godic, Aleksandra Trupkovic, Tihana Odobasic Palkovic, Maja Majeric, Azra Hodzic, Ivana Lalic Cickovic, Romana Palić, Nikolina Dodlek, Jasminka Milicevic, Mario Gazic, Ana Ljubas, Marko Jakopović
OA3732	**Nurses specialized through higher education in asthma, allergy and COPD. Experiences from a Swedish perspective - A winning concept for the clinic** Caroline Stridsman (Luleå, Sweden), Ann-Britt Zakrisson, Therese Sterner
OA3733	**An exploration of the experiences of respiratory clinical nurse specialists (CNS) and advance nurse practitioners (ANP) in Irish healthcare settings** Bridget Murray (DUBLIN, Ireland)
OA3734	**How confident are nursing students about their respiratory knowledge and assessment skills?** Nicola J. Roberts (Edinburgh, United Kingdom), Maria Renwick, Lindsay Welch, Kate Lippiett, Carol Kelly
OA3735	**Discussion** All Speakers

8F Session 431 11:15 - 12:30

Oral presentation: Lung function and risk factors associated with obstructive lung diseases

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

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

Chairs : Om Prakash Kurmi (Coventry, United Kingdom), Joan B Soriano (Madrid, Spain)

OA3736	**Lung function trajectories based on annual measurements for 10 years in adults with airway obstruction** Helena Backman (Lulea, Sweden), Anders Blomberg, Anders Lundquist, Viktor Strandkvist, Sami Sawalha, Ulf Nilsson, Caroline Stridsman, Linnea Hedman, Eva Rönmark, Anne Lindberg
OA3737	**Multi-ancestry genetic risk score for lung function from meta-analysis of genome-wide association studies in 580,869 individuals from five ancestry groups** Nick Shrine (Leicester, United Kingdom), Abril Izquierdo, Jing Chen, Anna L Guyatt, Richard Packer, Chiara Batini, Alfred Pozarickij, Robin G Walters, Stephanie London, Andrew P Morris, Louise V Wain, Ian P Hall, Martin D Tobin
OA3738	**Prevalence and risk factors for small airways obstruction: Results from the Burden of Obstructive Lung Disease (BOLD) study.** Ben Knox-Brown (NEWMARKET, United Kingdom), Jaymini Patel, Peter Burney, Andre Amaral
OA3739	**Race-adjusted lung function increases inequities in diagnosis and prognosis and should be abandoned** Magnus Ekström (Lund, Sweden), David Mannino
OA3740	**Plasma IgE and risk of exacerbation and mortality in COPD in the general population** Yunus Çolak (Herlev, Denmark), Truls S. Ingebrigtsen, Børge G. Nordestgaard, Jacob L. Marott, Peter Lange, Jørgen Vestbo, Shoaib Afzal

OA3741	**Frequency and severity of respiratory infections prior to COPD diagnosis and risk of subsequent post-diagnosis COPD exacerbations and mortality: a UK routine health care data study** Hannah Whittaker (London, United Kingdom), Clementine Nordon, Annalisa Rubino, Tamsin Morris, Yang Xu, Enrico De Nigris, Hana Müllerová, Jennifer Quint
OA3742	**COVID-19 real-world data (RWD) insights regarding exacerbations and serum Eosinophil levels in Asthma and Chronic Obstructive Pulmonary Disease (COPD).** Michael Cushion (Biggleswade, United Kingdom)
OA3743	**Lung development genes, adult lung function and cardiovascular comorbidities** Mohammad Talaei Pashiri (London, United Kingdom), Laura Portas, Nay Aung, Matthew Hind, Charlotte Dean, Cosetta Minelli, Seif O. Shaheen
OA3744	**Factors associated with specific causes of death in a primary care COPD population in England** Hannah Whittaker (London, United Kingdom), Kieran Rothnie, Jennifer Quint
OA3745	**Late Breaking Abstract - Beyond direct costs: Individual and societal burden of asthma in young adults** Kjell Erik Julius Håkansson (København N, Denmark), Anders Løkke, Rikke Ibsen, Ole Hilberg, Vibeke Backer, Charlote Suppli Ulrik
OA3746	**Discussion** All Speakers

8L Session 432 11:15 - 12:30

Oral presentation: Bronchiectasis

Disease(s) : Airway diseases Respiratory critical care

Method(s) : Epidemiology Public health Cell and molecular biology General respiratory patient care Physiology Respiratory intensive care Imaging

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

OA3747	**The antimicrobial resistome in bronchiectasis: an international multicentre study** Micheál Mac Aogáin (Dublin, Ireland), Fransiskus Xaverius Ivan, Tavleen Jaggi, Holly R. Keir, Alison J. Dicker, Albert Lim Yick Hou, Mau Ern Poh, Mariko Siyue Koh, Ong Thun How, Augustine Tee, Teck Boon Low, John Arputhan Abisheganaden, Francesco Blasi, Stefano Aliberti, James D. Chalmers, Sanjay H. Chotirmall
OA3748	**The role of the NLRP3 inflammasome in mucociliary clearance in bronchiectasis: The EMBARC-BRIDGE study** Lídia Perea Soriano (Barcelona, Spain), Mathieu Bottier, Erin Cant, Hollian Richardson, Alison J Dicker, Morven Shuttleworth, Holly R Keir, Yan Hui Giam, Simon Finch, Jeffrey T J Huang, Michal Shteinberg, Pieter C Goeminne, Eva Polverino, Josje Altenburg, Francesco Blasi, Tobias Welte, Stefano Aliberti, Oriol Sibila, James D Chalmers, Amelia Shoemark
OA3749	**Characteristics of frequent exacerbators in the US Bronchiectasis and NTM Research Registry (BRR)** Nicole Lapinel (New Orleans, United States), Radmila Choate, Timothy Aksamit, Joseph Feliciano, Kevin Winthrop, Andreas Schmid, Jasmanda Wu, Mariam Hassan, Sebastian Fucile, Mark Metersky
OA3750	**Neisseria species as pathobionts in bronchiectasis.** Micheál Mac Aogáin (Dublin, Ireland), Liang Li, Tengfei Xu, Tavleen Jaggi, Louisa L Y Chan, Jing Qu, Lan Wei, Shumin Liao , Hong Sheng Cheng, Holly R Keir, Alison J Dicker, Kai Sen Tan, Wang De Yun, Mariko Siyue Koh, Ong Thun How, Albert Lim Yick Hou, John Arputhan Abisheganaden, Teck Boon Low, Tidi Maharani Hassan, Xiang Long, Peter A.B. Wark, Brian G. Oliver, Daniela I Drautz-Moses, Stephan C. Schuster, Nguan Soon Tan, Mingliang Fang, James D Chalmers, Sanjay H. Chotirmall
OA3751	**Genome sequencing reveals underdiagnosis of primary ciliary dyskinesia in bronchiectasis** Amelia Shoemark (Dundee (Angus), United Kingdom), Helen Griffin, Gabrielle Wheway, Claire Hogg, Jane S Lucas, Carme Camps, Jenny Taylor, Mary Carroll, Micheal R Loebinger, James D Chalmers, Deborah Morris-Rosendahl, Hannah M Mitchison, Anthony De Soyza
OA3752	**Implementing tablet-based ototoxicity screening in adult respiratory patients** Jamie Cheong (London, United Kingdom), Shereen Boreland, Barbara Belkarty, Andrew Jones, Imogen Felton, Emem-Fong Ukor, Janet Stowell, Ricardo Jose, Susan Madge, Julie Wilkins, Emily Frost, Presanna Premachandra, Michael Loebinger, Francis Drobniewski, Nicholas Simmonds, Anand Shah
OA3753	**Dysregulation of the microbial 'gut-lung' axis in bronchiectasis** Jayanth Kumar Narayana (Singapore, Singapore), Stefano Aliberti, Micheál Mac Aogáin , Tavleen Kaur Jaggi , Nur A'Tikah Binte Mohamed Ali, Ivan Fransiskus Xaverius , Francesco Amati, Andrea Gramegna, Krasimira Tsaneva-Atanasova, Francesco Blasi, Sanjay H. Chotirmall

OA3754	**Longitudinal analysis of bronchiectasis exacerbations (BEx) in patients from the US Bronchiectasis and NTM Research Registry (BRR)** Timothy Aksamit (Rochester, United States), Nicole Lapinel, Radmila Choate, Joseph Feliciano, Kevin Winthrop, Andreas Schmid, Jasmanda Wu, Mariam Hassan, Sebastian Fucile, Mark Metersky
OA3755	**The ROSE criteria for coexistent COPD-bronchiectasis: association with future exacerbations and death** Wojciech Dolliver (BROOKLINE, United States), Wei Wang, Jose Orejas, Diego Maselli, Andrew Yen, Kendra Young, Gregory Kinney, Michael Cho, Raul San José Estépar, , Alejandro Diaz
OA3756	**Late Breaking Abstract - Bronchiectasis in AATD: initial report of EARCO** Robert Andrew Stockley (Birmingham (West Midlands), United Kingdom), Anita Pye, Alice Turner
OA3757	**Discussion** All Speakers

8M Session 433 11:15 - 12:30

Oral presentation: Innovation in thoracic surgery

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

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

Chairs : Marcello Migliore (Catania (CT), Italy), Marco Nardini (Uxbridge, United Kingdom)

OA3758	**The risk of postoperative pulmonary complications in lung resection candidates with normal values of FEV1 and DLCO – a subgroup analysis from a prospective multicenter study.** Kristian Brat (Brno, Czech Republic), Ivan Cundrle Jr, Michal Svoboda, Monika Bratova, Ladislav Mitas, Zdenek Merta, Andrej Mazur, Pavel Homolka, Zdenek Chovanec, Lyle J. Olson
OA3759	**Prognostic significance of N1 nodal metastasis patterns in surgically treated patients with pT1-2 non-small cell lung cancer** Güntuğ Batıhan (Izmir, Turkey), Kenan Can Ceylan, Ahmet Üçvet, Seyda Örs Kaya, Serkan Yazgan
OA3760	**Analysis of Flow and Pressure with an in-vitro model of a lung while a drainage system delivers a varying suction pressure** Frans H.C. De Jongh (Enschede, Netherlands), Rejiar Asad, Pacal Steenvoorde, Ron Speekenbrink, Kees Venner, Michiel Wagenaar
OA3761	**Extended Pleurectomy/Decortication in Malignant Pleural Mesothelioma: preceding or following chemotherapy? Perioperative data and short-term outcomes of a single Institution** Giulia Maria Stella (Pavia (PV), Italy), Francesco Falanga, Chandra Bortolotto, Olga Oneta, Francesco Agustoni, Patrizia Morbini, Laura Saracino, Stefano Tomaselli, Pietro Rinaldi, Cristiano Primiceri
OA3762	**Electromagnetic navigation bronchoscopy localization of small lung nodules previous to thoracoscopic resection** Alessio Vincenzo Mariolo (Paris, France), Guillaume Boddaert, Emmanuel Brian, Madalina Grigoroiu, Dominique Gossot, Agathe Seguin-Givelet
OA3763	**Comparison of survival after extrapleural pneumonectomy versus pleurectomy/decortication for malignant pleural mesothelioma in the era of macroscopic complete resection: A meta-analysis** Kalliopi Athanassiadi (Athens, Greece), Anna Karamolegkou, Evangelos Tatsios, Prokopis-Andreas Zotos, Kyriakos Spiliopoulos, Thanos Athanasiou, Dimitrios Magouliotis
OA3764	**Influence of the Surgeons' Seniority in the Quality of Life of Patients with Prolonged Air Leaks (PAL) after Lobectomy for Lung Cancer** Luca Bertolaccini (Milan, Italy), Oriana Ciani, Elena Prisciandaro, Marco Lucchi, Francesco Zaraca, Roberto Crisci, Rosanna Tarricone, Lorenzo Spaggiari
OA3765	**Local experience of surgical management of tracheal stenosis** Joana Borges (Coimbra, Portugal), Luis Graça, Sara Cunha, António Jorge Ferreira, João José Bernardo
OA3766	**Evaluation of prognostic factors for patients who underwent pneumonectomy for non-small cell lung cancer** Güntuğ Batıhan (Izmir, Turkey), Kenan Can Ceylan, Seyda Ors Kaya
OA3767	**Discussion** All Speakers

Studio - online Session 434 12:45 - 14:00

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), Hilary Pinnock (Edinburgh (Edinburgh), United Kingdom)

12:45	**Introduction** Omar S. Usmani (London, United Kingdom), Frans H.C. De Jongh (Enschede, Netherlands)	**3768**
12:50	**Spirometry procedure** Frans H.C. De Jongh (Enschede, Netherlands), Rachel Ong-Salvador (Amsterdam, Netherlands)	**3769**
13:00	**Oscillometry procedure** Frans H.C. De Jongh (Enschede, Netherlands), Hilary Pinnock (Edinburgh (Edinburgh), United Kingdom)	**3770**
13:20	**Case discussion (Spirometry paediatric, adult, oscillometry, and teaching/coaching perspectives)** Laura Graciela Gochicoa Rangel (Ciudad de México, Mexico), Chung-Wai Chow (Toronto (ON), Canada), Hilary Pinnock (Edinburgh (Edinburgh), United Kingdom), Jellien Makonga-Braaksma (Woudenberg, Netherlands)	**3771**

8N Session 440 12:45 - 14:00

Oral presentation: Lung or long COVID: emerging insights into COVID-19 mechanisms

Disease(s) : Airway diseases Interstitial lung diseases

Method(s) : Cell and molecular biology Imaging Public health General respiratory patient care Respiratory intensive care

Chairs : Gwenda Vasse (Groningen, Netherlands), Chair to be confirmed

OA3772	**Blood monocyte subsets to characterize and differentiate active SARS-CoV-2 infection from convalescent patients** Elżbieta Rutkowska (Warsaw, Poland), Iwona Kwiecień, Agata Raniszewska, Piotr Rzepecki , Krzysztof Kłos, Andrzej Chciałowski
OA3773	**LSC - 2022 - Alveolar macrophages from people with severe eosinophilic asthma show differential antiviral response s to human rhinovirus 16 and SARS-CoV-2.** Andrew Hearn (London, United Kingdom), Paniz Khooshemehri, Varsha Kanabar-Raivadera, Kate Poulton, Rocio Martinez Nunez, David Jackson
OA3774	**Increased CD14+ monocytes and OPN+ positive airway macrophages in the BAL are associated with Post-COVID-19 induced altered respiratory function.** Eliza Tsitoura (Heraklion (Crete), Greece), Eirini Lambiri, Semeli Mastrodemou, Dimitra Maria Zevla, Eleni Bibaki, Nikolta Bizymi, Nikos Tzanakis, Katerina Antoniou
OA3775	**The role of reactive nitrogen species as biomarkers of disease severity in COVID-19** Nur Konyalilar (İstanbul, Turkey), Özgecan Kayalar, Deniz Mortazavi, Hadi Rajabi, Seval Korkunç, Sinem Erkan, Tuşe Aksoy, Mehmet Gökhan Gönenli, Fatma Tokgöz Akyıl, Sedat Altın, Hasan Bayram
OA3776	**Covid-19 and NETs** Salvador Bello Dronda (Zaragoza, Spain), Pablo Ruiz De Gopegui, Lucia López Vergara, Laura Torralba Garcia, Cristina De Diego Ramos, Claudia Abadía Molina, Raquel Lahoz Alonso, Ana Lasierra Monclus, Alberto Cebollada Solanas, Javier Godino, Beatriz Jimeno Beltran
OA3777	**To estimate oxidative stress and DNA damage in post-COVID patients.** Nandini Dikshit (Lucknow, India), Surya Kant, Ajay Kumar Verma, Kausar Mahmood Ansari, Jyoti Bajpai, Chamanpreet Kaur, Ishrat Jahan
OA3778	**COVID-19 neutrophils show elevated migration and NETosis, which is reduced by PI3K inhibition** Shaun Thein (Birmingham (West Midlands), United Kingdom), Kylie Belchamber, Jon Hazeldine, Frances Grudzinska, Michael Hughes, Alice Jasper, Kay Por Yip, Louise Crowley, Sebastian Lugg, Elizabeth Sapey, Dhruv Parekh, David Thickett, Aaron Scott
OA3779	**Insights into the lung microenvironment after severe COVID-19** Valentina Vaira (Milan, Italy), Alessandra Maria Storaci, Mattia Pitasi, Francesco Gentile, Francesco Blasi, Letizia Corinna Morlacchi, Antonio Pesenti, Giacomo Grasselli, Paola Tagliabue, Mario S. Clerici, Francesco Malvestiti, Luca Valenti, Stefano Aliberti, Roberta Gualtierotti, Stefano Ferrero , Mario Nosotti, Alessandra Bandera, Andrea Gori, Flora Peyvandi, Silvano Bosari, Alessandro Palleschi

OA3780	**Molecular signatures of SARS-CoV2 in vitro infection of bronchial epithelium from CF, COPD and healthy subjects** Loic Guillot (Paris, France), Justine Oliva, Manon Ruffin, Claire Calmel, Harriet Corvol, Olivier Terrier
OA3781	**Late Breaking Abstract - mRNA vaccine boosts the SARS-CoV-2 specific mucosal antibody in recipients of inactivated and mRNA vaccines** Shaojun Liu (HONG KONG, China), Kathy Yy Chan, Yuanyuan Wei, Renee Wy Chan
OA3782	**Discussion** All Speakers

8F Session 441 12:45 - 14:00

Oral presentation: Sarcoidosis: from disease pathogenesis to prediction of disease behaviour

Disease(s) : Interstitial lung diseases

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

Chairs : Karen Moor (Rotterdam, Netherlands)

OA3783	**Imbalance between Th17 and Tregs in the EBUS/TBNA lymph nodes in patients with pulmonary sarcoidosis.** Agata Raniszewska (Warszawa, Poland), Elzbieta Rutkowska, Iwona Kwiecien, Joanna Bednarek, Rafal Sokolowski, Karina Jahnz-Rozyk, Piotr Rzepecki
OA3784	**Bronchoscopy in sarcoidosis – EBUS-TBNA, transbronchial biopsy or cryobiopsy?** Charlott Terschluse (Freiburg, Germany), Martin Feineis, Wolfram Meschede, Thomas Köhler, Daniel Soriano, Sebastian Fähndrich, Joachim Müller-Quernehim, Daiana Stolz, Bjoern Frye
OA3785	**Risk factor of pulmonary embolism in sarcoidosis patients: a pilot study** Barbara Ruaro (Trieste, Italy), Paola Confalonieri, Chiara Torregiani, Silvia Pichierri, Marco Confalonieri, Francesco Salton
OA3786	**Changes in forced vital capacity over time in pulmonary fibrosing sarcoidosis: application of group-basedtrajectory modelling** Florence Jeny (bobigny, France), Marina Cumin, Philippe Khafagy, Pierre-Yves Brillet, Diane Bouvry, Thomas Gille, Nanthara Sritharan, Marouane Boubaya, Dominique Valeyre, Hilario Nunes
OA3787	**Strain echocardiography for the prognostic estimation of patients with sarcoidosis** Paolo Cameli (Siena (SI), Italy), Maria Concetta Pastore, Giulia Elena Mandoli, Mariangela Vigna, Giuseppe De Carli, Laura Bergantini, Miriana D'Alessandro, Nicolò Ghionzoli, Elena Bargagli, Matteo Cameli
OA3788	**Effect of hydroxychloroquine in cutaneous sarcoidosis or musculoskeletal-related pain** Britney Vermeer (Nieuwegein, Netherlands), Marcel Veltkamp, Adriane D.M. Vorselaars
OA3789	**Online mindfulness-based cognitive therapy reduces anxiety and depression in patients with sarcoidosis** Vivienne Kahlmann (Rotterdam, Netherlands), Catharina C Moor, Sanne J Van Helmondt, Rémy L Mostard, Marije L Van Der Lee, Jan C Grutters, Marlies S Wijsenbeek, Marcel Veltkamp
OA3790	**Chronic hypersensitivity pneumonitis - how to predict the treatment success?** Katarzyna B. Lewandowska (Warszawa, Poland), Inga Baranska, Malgorzata Sobiecka, Piotr Radwan-Rohrenschef, Malgorzata Dybowska, Monika Franczuk, Adriana Rozy, Agnieszka Skoczylas, Iwona Bestry, Jan Kus, Witold Tomkowski, Monika Szturmowicz
OA3791	**Home environmental fungal exposure in patients with Hypersensitivity Pneumonitis – pilot analysis** David Jorge Araújo Barros Coelho (Braga, Portugal), Joao Cavaleiro Rufo, Rita F Santos, Natalia Melo, Patricia Caetano Mota, Andre Terras Alexandre, Helder Novais Bastos, Antonio Morais
OA3792	**Discussion** All Speakers

8L Session 442 12:45 - 14:00

Oral presentation: What's new in COVID

Disease(s) : Airway diseases Interstitial lung diseases

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

Chairs : Eva Van Braeckel (Ghent, Belgium), Iñigo Ojanguren Arranz (Barcelona, Spain)

OA3793	**Airway remodeling in COVID-19 lungs** Vincent Geudens (Leuven, Belgium), Jan Van Slambrouck, Gitte Aerts, Lynn Willems, Tinne Goos, Janne Kaes, Iwein Gyselinck, Celine Aelbrecht, Astrid Vermaut, Hanne Beeckmans, Marie Vermant, Charlotte De Fays, Annelore Sacreas, Lucia Aversa, Kenneth Verstraete, Michaela Orlitová, Arno Vanstapel, John E. Mcdonough, Charles Pilette, Wim Janssens, Wim A. Wuyts, Geert M. Verleden, Dirk E. Van Raemdonck, Robin Vos, Ghislaine Gayan-Ramirez, Laurens J. Ceulemans, Bart M. Vanaudenaerde
OA3794	**Airway microbiota profiles associated with total lung capacity after severe COVID-19** Sabine Stadler (Lausanne, Switzerland), Eric Bernasconi, Niki Ubags, Louis Mercier, Berra Erkosar , Manuela Funke-Chambour, Christophe Von Garnier
OA3795	**Vitamin D to prevent COVID-19 or other acute respiratory infections: phase 3 randomised controlled trial (CORONAVIT)** Adrian R Martineau (London, United Kingdom), David A Jolliffe, Hayley Holt, Mohammad Talaei, Aziz Sheikh, Christopher J Griffiths, Seif O Shaheen, Clare Relton
OA3796	**Faster clinical recovery with ensovibep compared to placebo in patients with mild-to-moderate COVID-19: interim results from the EMPATHY Phase 2 trial** Andreas Tietz (Basel, Switzerland), Richa Chandra, Luis Abrishamian, Marc Bonten, Pierre Fustier, Kinfemichael Gedif, Susana Goncalves, Awawu Igbinadolor, Jeff Kingsley, Charles Knutson, Nagalingeswaran Kumarasamy, Philippe Legenne, Martha Mekebeb-Reuter, Krishnan Ramanathan, Evgeniya Reshetnyak, Jennifer Rosa, Marianne Soergel, Damodaran Solai Elango, Vaia Stavropoulou, Nina Stojcheva, Michael Stumpp
OA3797	**Major candidate variables to guide personalized treatment with corticosteroids in critically ill patients with COVID-19: CIBERESUCICOVID study** Ana Motos Galera (Barcelona, Spain), Catia Cillóniz, Adrian Ceccato, Laia Fernández-Barat, Antoni Torres
OA3798	**Longitudinal profiling of the peripheral blood transcriptome identifies risk of Major Cardiac Events after Hospitalization for COVID-19** Chloe Hughes (Dundee, United Kingdom), Merete, B Long, Holly, R Keir, Yan Hui Giam, Thomas Pembridge, Lilia Delgado, Hani Abo Leyah, Rebecca Hull, Amy Gilmour, Diane Cassidy, Hollian Richardson, Amelia Shoemark, Faisel Khan, James, D Chalmers
OA3799	**THE IMPACT OF BIOLOGICAL AGEING ON CLINICAL SEVERITY IN HOSPITALIZED COVID-19 PATIENTS.** Elien De Waele (Sint-Niklaas, Belgium), Dries Martens , Stijn Vos, Esmée Bijnens, Geert Mistiaen, Geert Dewyspelaere, Tim Nawrot, Pieter Goeminne
OA3800	**Characteristics and risk factors for persistent breathlessness after hospitalisation for COVID-19** Luke Daines (Edinburgh (Edinburgh), United Kingdom), Bang Zheng, Omer Elneima, John R Hurst, Jeremy Brown, Elizabeth Sapey, James D Chalmers, Jennifer K Quint, Paul Pfeffer, Salman Siddiqui, Samantha Walker, Krisnah Poinasamy, Louise V Wain, Christopher E Brightling, Rachael A Evans, Liam G Heaney, Anthony De Soyza, Aziz Sheikh
OA3801	**The role of surfactant lipid composition in the aftermath of covid-19 infection among patients treated in intensive care** Alexander Holm (Gothenburg, Sweden), Sanna Kjellberg, Bengt Nellgård, Keti Dalla, Per Larsson, Anna-Carin Olin
OA3802	**Late Breaking Abstract - Real-world effectiveness of sotrovimab for the early treatment of COVID-19 in the US** Carolina Reyes (San Francisco, United States), Mindy Cheng, Daniel Gibbons, Helen Birch, Vishal Patel, Christopher Bell, Myriam Drysdale, Sacha Satram
OA3803	**Discussion** All Speakers

13:00-14:00
INDUSTRY LUNCHTIME SYMPOSIUM SEE PAGE 1

TP-1 in thematic poster area — Session 450 — 13:00 - 14:00

Thematic poster: COVID-19 and Post COVID-19: evolving knowledge

Disease(s) : Airway diseases Interstitial lung diseases

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

Chairs : Thomas Bahmer (Kiel, Germany), Sachin Ananth (London, United Kingdom)

PA3833	**Impact of cardiovascular disease on in-hospital mortality in patients with COVID-19** Ventsislava Pencheva Genova (Sofia, Bulgaria), Ralica Pancheva, Blagovest Stoimenov, Emil Manov, Vasil Kolev, Radoslava Tsrancheva, Krasimira Koshtikova, Dimitar Stoianov, Svilen Donev
PA3834	**Post COVID-19 recovery personalised care** Rachael Moses (North Shields, United Kingdom), Jenny Ceolta-Smith, Aimee Robson, Kate Jackson, Mohanpal Singh Chandan
PA3835	**Eight clusters of long-covid symptoms** Michal Kopecký (Býšť, Czech Republic), Vladimir Koblizek, Mikulas Skala, Vratislav Sedlak, Jiri Mares, Hynek Cigler
PA3836	**Professional burnout in a COVID-19 pandemic** Kseniia Bielosludtseva (Dniepropetrovsk, Ukraine), Karyna Fuhol, Larysa Botvinikova, Olena Myronenko, Oksana Pliekhanova
PA3837	**Impact of endothelial function on the prognosis of COVID-19 patients** Laura Cornejo-Cornejo (México City, Mexico), Carlos Sanchez-Moreno, Arturo Orea-Tejeda, Dulce Gonzalez-Islas, Iris Lopez-Vazquez, Mariana Salvatierra-Escobar, Jorge Aguilar-Meza, Juan Marquez-Cordero, Alejandra Rios-Pereda, Luis Hernandez-Urquieta, Robinson Robles-Hernandez, Susana Galicia-Amor, Esperanza Trejo-Mellado, Juan Carlos Garcia-Hernandez, Norma Camacho-Mendoza
PA3838	**Heart involvement in patients shortly after COVID-19 infection – easy detectable risk factors.** Magdalena Martusewicz-Boros (Warszawa, Poland), Piotr Boros, Marcin Paciorek, Dorota Piotrowska-Kownacka
PA3839	**Major cardiovascular events in patients with severe chronic obstructive pulmonary disease with and without asthma: a nationwide cohort study** Josefin Eklöf (København N, Denmark), Barbara Bonnesen, Pradeesh Sivapalan, Anna Kjær Kristensen, Ema Rastoder, Rikke Sørensen, Tor Biering Sørensen, Jens-Ulrik Jensen
PA3840	**Depressive outcomes of coronavirus pneumonia at a glance of gender factor** Kiarina Chichirelo-Konstantynovych (Vinnitsya, Ukraine), Olena Koval, Maksym Marunkevych, Tetyana Konstantynovych, Larysa Moroz
PA3841	**The long-COVID in the Czech Republic - interim analysis of population based survey** Vladimir Koblizek (Hradec Králové, Czech Republic), Jiří Jarkovsky, Iva Cierna Peterova, Pavla Petr Dostalova, Margit Horackova, Milada Sipkova, Jiri Posker, Zuzana Antusova, Marianna Stefankova, Irena Opletalova, Michal Kopecky, Mikulas Skala, Klara Benesova, Ondrej Sanca, Hana Zelinkova, Libor Nevoranek, Larisa Solichova
PA3842	**Anxiety and depression in COVID-19 survivors** Soumaya Bouchareb (Ksar Hellal, Tunisia), Bouthayna Ben Rejeb, Ameni Ben Salem, Aya Zaara, Soumaya Boujnah, Imen Touil, Jihen Ayeb, Leila Boussoffara, Jalel Knani, Nadia Boudawara
PA3843	**In bed hybrid tracheostomy procedure in COVID-19 patients. Technique and results.** Jose Alfredo Santibáñez-Salgado (Coyoacán. Ciudad de México, Mexico), Mauricio González-Navarro, Julio De Jesús Herrera-Zamora, César Antonio López-Flores, Tania Pérez-Marmolejo, Elí Guido-Guerra, Francina Valezka Bolaños-Morales, Patricio Javier Santillán-Doherty
PA3844	**Short-term impact of COVID-19 on health-related physical fitness in hospitalized and home-treated patients** Aniello Arianna (Naples, Italy), Luca Scalfi, Ludovica Capitelli, Anna Buonocore, Rosalba Donizzetti, Lorena Gallotti, Paola Rebecca Iovine, Annalisa Mazzocca, Alessandro Sanduzzi, Marialuisa Bocchino
PA3845	**Mortality and access to intensive care in the Czech Republic during COVID-19 pandemic - evidence of care limitation or natural course of the disease?** Vladimir Koblizek (Hradec Králové, Czech Republic), Renata Chloupkova, Ondrej Ngo, Ondrej Majek, Jiri Jarkovsky, Karel Hejduk, Karolina Benesova, Ondrej Sanca
PA3846	**Stress and workload impact of the COVID-19 pandemic on pulmonology residents** Aylin Özsancak Uğurlu (İstanbul, Turkey), Maide Gozde Inam, Nazlı Cetin, Orkun Eray Terzi, Nazli Huma Teke, Mehmet Parlak, Atalay Ozkul
PA3847	**Post COVID Lung function after mild to moderate disease: Good prognosis, but high prevalence of hyperventilation (HV)** Abhinav Singla (Essen, Germany), Christian Taube, Thomas Wessendorf
PA3848	**Clinical course of Covid-19 cases vaccinated or unvaccinated** AYCAN YUKSEL (Ankara, Turkey), Esen Sayin Gülensoy, Ceren Ilgar, Nalan Ogan, Evrim Eylem Akpınar
PA3849	**Symptoms as achievable indicators of death risk in patients with COPD - final analysis of a prospective multicenter study in Czechia** Jaromir Zatloukal (Olomouc, Czech Republic), Vladimir Koblizek, Michal Svoboda, Eva Volakova, Libor Nevoranek, Michal Kopecky, Marek Plutinsky, Kristian Brat

PA3850 **Impact of COVID19 on work return after 6 months of hospitalization**
Eloara Ferreira (São Paulo, Brazil), Helena Azevedo, Nataly Santos, Mariana Lafetá, Vitor Souza, Thais Menezes, Fabiana Penido, Maria Saldanha, Andre Albuquerque, Suzana Tanni, Priscila Sperandio

PA3851 **Comparison between suspected and confirmed COVID-19 respiratory patients: a pilot study**
Stefania Principe (Palermo (PA), Italy), Amelia Grosso, Alida Benfante, Federica Albicini, Salvatore Battaglia, Erica Gini, Marta Amata, Ilaria Piccionello, Angelo Guido Corsico, Nicola Scichilone

PA3852 **Has become the management of severe SARS-CoV-2 infection a challenge for respiratory physicians?**
Damiana Maria Vulturar (Cluj-Napoca, Romania), Anca-Diana Maierean, Doina-Adina Todea

TP-10 in thematic poster area — Session 451 — 13:00 - 14:00

Thematic poster: Clinical treatment of asthma

Disease(s) : Airway diseases Respiratory critical care

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

Chairs : Zuzana Diamant (Lund, Sweden), Pradeesh Sivapalan (Gentofte, Denmark)

PA3853 **Effect of once daily (o.d.) mometasone/indacaterol/glycopyrronium (MF/IND/GLY) vs o.d. MF/IND and twice daily (b.i.d.) fluticasone/salmeterol (FLU/SAL) with respect to age, age at asthma-onset and BMI at baseline: Subgroup analysis from IRIDIUM study**
Huib A.M. Kerstjens (Groningen, Netherlands), David Lawrence, Karen Mezzi, Dominic Brittain, Xavier Jaumont, Kenneth R. Chapman

PA3854 **A window of opportunity to prevent exacerbations in intermittent and mild persistent asthma**
Miguel Lanz (Coral Gables, United States), Michael Pollack, Ileen Gilbert, Hitesh Gandhi, Joseph Tkacz, Njira Lugogo

PA3855 **Predictors of treatment response to high-dose ICS/LABA or medium-dose ICS/LABA+LAMA in asthma patients - TAILOR study**
Katia Mc Verhamme (Rotterdam, Netherlands), Maria De Ridder, Peter Rijnbeek, Mees Mosseveld, Lars Pedersen, Ettore Marconi, Francesco Lapi, Cheryl Tan, Antonella Delmestri, Dani Prieto-Alhambra, Dani Prieto-Alhambra, Elena Nudo, Guy Brusselle

PA3856 **SABA-free asthma management challenged by refer id asthma questionnaire.**
Luis Nannini (Rosario (Pcia. Santa Fe), Argentina), Nadia Brandan, Octavio Fernandez, Gabriela Chirino, Nadia Zuccarino, Francisco Rovira

PA3857 **Short and longer-term effects of tailored pulmonary rehabilitation for difficult-to-control asthma associated with elevated body mass index**
Helen Clare Ricketts (Glasgow (Glasgow), United Kingdom), Femke Steffensen, Duncan S Buchan, Rekha Chaudhuri, Douglas C Cowan

PA3858 **Efficacy of once-daily medium- or high-dose mometasone/indacaterol/glycopyrronium (MF/IND/GLY) versus twice -daily high-dose fluticasone/salmeterol (FLU/SAL) to control nocturnal symptoms in patients (pts) with inadequately controlled asthma**
Kenneth R. Chapman (Toronto (ON), Canada), Richard Van-Zyl Smit, Karen Mezzi, Dominic Brittain, Huib Am Kerstjens

PA3859 **Efficacy of once-daily (o.d.) indacaterol/glycopyrronium/mometasone (IND/GLY/MF) vs free combination of twice-daily salmeterol/fluticasone (SAL/FLU) & o.d. tiotropium with respect to age, age at asthma-onset & BMI at baseline: ARGON subgroup analysis**
Richard Van Zyl-Smit (Cape Town, South Africa), David Lawrence, Karen Mezzi, Dominic Brittain, Xavier Jaumont, Christian Gessner

PA3861 **Asthma patient adherence to biologic and non-biologic treatments**
Michelle Tan (London, United Kingdom), Kelly Kueh

PA3862 **Medication adherence and asthma control with once-daily indacaterol/glycopyrronium/mometasone (IND/GLY/MF) Breezhaler digital companion: interim analysis from Europe**
Holger Woehrle (Ulm, Germany), Paul Mastoridis, David A Stempel, Leanne Kaye, Vy Vuong, Karen Mezzi

PA3863 **Medication adherence and asthma control with once-daily indacaterol/glycopyrronium/mometasone (IND/GLY/MF) Breezhaler digital companion: interim analysis from Japan and Germany**
Holger Woehrle (Ulm, Germany), Paul Mastoridis, David A Stempel, Leanne Kaye, Vy Vuong, Karen Mezzi

PA3864	**Efficacy of indacaterol/glycopyrronium/mometasone (IND/GLY/MF) vs free combination of salmeterol/fluticasone (SAL/FLU) & tiotropium (TIO) in patients with uncontrolled asthma on prior LABA/ICS high-dose (GINA step 5): Results from ARGON study** Christian Gessner (Leipzig, Germany), David Lawrence, Karen Mezzi, Dominic Brittain, Richard Van-Zyl Smit
PA3865	**TriOptimize X: Improved adherence by extrafine single-inhaler triple therapy in real-world** Carl-Peter Criee (Bovenden, Germany), Frederik Trinkmann, Stephanie Güldenring, Nathalie Loeper, Valentina Bogoevska, Christian Gessner
PA3866	**Airway hyperresponsiveness in uncontrolled severe eosinophilic asthma with anti-IL5rα** Rory Chan (Glasgow, United Kingdom), Chris Ruiwen Kuo, Sunny Jabbal, Cally Smith, Brian Lipworth
PA3867	**Bronchodilator responsiveness testing with inhaled budesonide/formoterol in asthma.** Luis Nannini (Rosario (Pcia. Santa Fe), Argentina), Nadia Neumayer, Nadia Brandan, Octavio Fernandez
PA3868	**Oral corticosteroid-related morbidity and mortality in asthma - a Danish nationwide cohort study** Inge Raadal Skov (Odense, Denmark), Hanne Madsen, Daniel Pilsgaard Henriksen, Jacob Harbo Andersen, Anton Pottegård, Jesper Rømhild Davidsen
PA3869	**Determinants of type of step-up treatment following medium-dose ICS/LABA in asthma patients - TAILOR study** Katia Mc Verhamme (Rotterdam, Netherlands), Maria De Ridder, Peter Rijnbeek, Mees Mosseveld, Lars Pedersen, Francesco Lapi, Ettore Marconi, Cheryl Tan, Antonella Delmestri, Dani Prieto-Alhambra, Dani Prieto-Alhambra, Enena Nudo, Guy Brusselle
PA3871	**Early lung function and asthma control test score after different biological therapy in severe asthmatics patients in real-life** María Eugenia Navarrete Rouco (Barcelona (Barcelona), Spain), Cinta Cumpli, Esmeralda Hernández, Juana Martínez-Llorens, Nuria Carballo, José González-García, Pilar Ausin
PA3872	**Once-daily Inhaled therapy and peak flowmetry: How effective in improving adherence and control of Asthma** Pramod Dadhich (Mumbai, India)

TP-11 in thematic poster area — Session 452 — 13:00 - 14:00

Thematic poster: COPD: from biomarkers to phenotypes and severity

Disease(s) : Airway diseases Respiratory critical care

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

Chairs : Morten Dahl (Køge, Denmark), Jose Luis López-Campos Bodineau (Sevilla, Spain)

PA3873	**Bone Morphogenic Proteins and their antagonists in the lower airways of stable COPD patients** Antonino Di Stefano (Veruno (NO), Italy), Isabella Gnemmi, Francesca Dossena, Umberto Rosani, Paola Brun, Andrea Leonardi, Bruno Balbi, Francesco Nucera, Vitina Carriero, Francesca Bertolini, Silvestro Ennio D'Anna, Mauro Maniscalco, Ian M. Adcock, Gaetano Caramori, Fabio Lm Ricciardolo
PA3874	**What is walking? a systematic review and meta-ethnography** Laura Delgado Ortiz (Barcelona, Spain), Ashley Polhemus , Alison Keogh, Norman Sutton, Werner Remmele , Clint Hansen, Felix Kluge, Basil Sharrack, Clemens Becker , Thierry Troosters, Walter Maetzler, Lynn Rochester, Anja Frei, Milo Puhan , Judith Garcia-Aymerich
PA3875	**Effects of breathing-based meditation on dyspnea in COPD, a single-case study** Ting-fen Lin (Fresno, United States), Samantha Shune
PA3876	**Survival of COPD patients according to the new phenotypes defined in Spanish COPD Guidelines 2021** IRENE MILAGROS DOMINGUEZ ZABALETA (Madrid, Spain), Zichen Ji, Julio Hernández Vázquez, Ismael Ali García, Carmen Matesanz Ruiz, Walther Iván Girón Matute, David Martos Ruiz, Paula García Valentín, Marta Esteban Yagüe, Javier De Miguel Díez
PA3878	**Thrombophilia as a factor in increasing inflammation in COPD** Elnorahon Abduganieva (Tashkent, Uzbekistan)
PA3879	**The BLF Early COPD Consortium: Respiratory Oscillometry Detects Abnormalities before Lung Function Testing** Andrew Ritchie (London, United Kingdom), Gavin Donaldson, Omar Usmani, Andras Bikov, Luana Alves-Moreira, Jorgen Vestbo, Peter Calverley, Jadwiga Wedzicha

PA3880	**Advanced lung function targeting small airway dysfunction (SAD) improves differentiation of mild COPD and smokers at risk from healthy controls – CAPTO-COPD** Frederik Trinkmann (Heidelberg, Germany), Mustafa Abdo, Anne Kirsten, Klaus F. Rabe, Felix J.F. Herth, Henrik Watz
PA3881	**Health-related quality of life (HRQL) is associated with small airway dysfunction (SAD) in mild COPD and smokers at risk – cross-sectional baseline data from CAPTO-COPD** Frederik Trinkmann (Heidelberg, Germany), Anne Kirsten, Mustafa Abdo, Klaus F. Rabe, Felix J.F. Herth, Henrik Watz
PA3882	**TRONARTO post hoc analysis: factors affecting peak inspiratory flow (PIF) variability** Donald A. Mahler (Hanover, United States), Henrik Watz, Rachel Emerson-Stadler, John Ritz, Asif Shaikh, Michael Bradley Drummond
PA3883	**Sarcopenia is associated with cardiovascular risk in patients with COPD, independent of adiposity** Youngmok Park (Seoul, Republic of Korea), Ji Ye Jung, Ah Young Leem, Young Sam Kim, Kung Soo Chung, Moo Suk Park, Seung Up Kim, Young Ae Kang
PA3884	**Correlations between volumetric capnography and automated quantitative computed tomography analysis in patients with severe COPD** Monica Corso Pereira (Campinas (SP), Brazil), Odair Diniz, Silvia Da Silva, Marcel Santos, Ilma Paschoal, Marcos Moreira
PA3885	**Principal component analysis of flow-volume curves in COPDGene to link spirometry with phenotypes of COPD** Kenneth Verstraete (Leuven, Belgium), Nilakash Das, Iwein Gyselinck, Marko Topalovic, Thierry Troosters, Maarten De Vos, Wim Janssens
PA3886	**PROM and PREM preferences in COPD-patients** Iwein Gyselinck (Leuven, Belgium), Kristina Vermeersch, Hendrik Pott, Sanjay Ramakrishnan, Andreas Halner, Phil Collis, Courtney Coleman, Henrik Watz, Fabienne Dobbels, Frits Franssen, Timm Greulich, Pierre-Régis Burgel, Mona Bafadhel, Wim Janssens
PA3887	**Rapid FEV1/FVC decline is a risk factor for chronic obstructive pulmonry disease and mortality in general population** Kwang Yong Choi (Seoul, Republic of Korea), Hyo-Jin Lee, Jung-Kyu Lee, Tae Yeon Park, Eun Young Heo, Deog Kyeom Kim, Hyun Woo Lee
PA3888	**Probabilistic modeling of COPD imaging characteristics for disease severity prediction** Silvia Dias Almeida (Heidelberg, Germany), Tobias Norajitra, Carsten Lueth, Tassilo Wald, Taisiya Kopytova, Marco Nolden, Paul F. Jaeger, Claus Peter Heussel, Juergen Biederer, Hans-Ulrich Kauczor, Oliver Weinheimer, Klaus Maier-Hein
PA3889	**Analysis of brain functional connectivity in COPD patients with functional brain MRI** Yoomi Yeo (Guri-si, Republic of Korea), Ji Tak Rhu, Hanjoon Jo, Sung-Ho Jang, Joonho Choi, Dong Woo Park, Tae-Hyung Kim
PA3890	**FEV1 decline is accelerated in only a minority of patients with COPD: a factorial analysis of longitudinal data** Pierre-Régis Burgel (Paris, France), Thierry Perez, Gaetan Deslée, Maeva Zysman, Olivier Le Rouzic, Pascal Chanez, Gilles Jébrak, Isabelle Court-Fortune, Graziella Brinchault, Pascale Nesme-Meyer, Anne Guillaumot, Bruno Ribeiro-Baptista, El Hassane Ouaalaya, Jean-Louis Paillasseur, Nicolas Roche
PA3891	**129Xe-MRI and lung function to phenotype ventilation heterogeneity in asthma and/or COPD** Laurie Smith (Sheffield (South Yorkshire), United Kingdom), Helen Marshall, Demi-Jade Jakymelen, Alberto Biancardi, Guilhem Collier, Ho-Fung Chan, Paul Hughes, Martin Brook, Joshua Astley, Ryan Munro, Smitha Rajaram, Andy Swift, David Capener, Jody Bray, James Ball, Oliver Rodgers, Ian Smith, Bilal Tahir, Madhwesha Rao, Graham Norquay, Nick Weatherley, Leanne Armstrong, Latife Hardaker, Titti Fihn-Wikander, Rod Hughes, Jim Wild
PA3892	**Prediction of V'O2max in advanced COPD patients using the Oxygen Uptake Efficiency Slope** Marco Maenen (Heerlen, Netherlands), L. Van Den Broek, L. Somers, A. Hanneman, J.G. Van Den Aardweg, R. Baba, M.D. De Kruif

TP-12 in thematic poster area — Session 453 — 13:00 - 14:00

Thematic poster: Elucidating the pathogenesis of COPD, cough and viral infection

Disease(s) : Airway diseases

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

Chairs : Antonio Spanevello (Milano, Italy), Melissa McDonnell (Oranmore (Co Galway), Ireland)

PA3893	**Differential responses of COPD macrophages to respiratory bacterial pathogens** Simon Lea (Manchester (Greater Manchester), United Kingdom), Augusta Beech, James Baker, Rosemary Gaskell, Dharmendra Pindolia, Aisha Baba Dikwa, Rajesh Shah, Dave Singh

PA3894	**Mast cell gene expression in eosinophilic COPD patients** Andrew Higham (Manchester (Greater Manchester), United Kingdom), Josiah Dungwa, Tuyet-Hang Pham, Christopher Mccrae, Dave Singh
PA3895	**ADAM17 and CD62L in BAL fluid as a measure of leukocyte transmigration in COPD, asthma, and healthy individuals** Carin Larsson (Rydsgård, Sweden), Nicole Van Der Burg, Jaro Ankerst, Leif Bjermer, Ellen Tufvesson
PA3896	**Three clinical phenotypes of COPD with each a characteristic immunological profile** Cathelijne van Zelst (Rotterdam, Netherlands), Johannes In 'T Veen, Marjolein De Bruijn, Menno Van Nimwegen, Esmee Van Der Ploeg, Lisette Krabbendam, Denise Van Uden, Ralph Stadhouders, Rudi Hendriks, Gert-Jan Braunstahl
PA3897	**Soluble epoxide hydrolase inhibition alleviates inflammation in cigarette smoke-induced experimental COPD irrespective of dietary fat content** Saima Firdous Rehman (Annandale Sydney, Australia), Kurtis F Budden, Alessandro Quaranta, David Fuchs, Shakti D Shukla, Alexandra Brown, Charlotte Alemao, Lohis Balachandra, Henry Gomez, Vinod Kumar, Sobia Idrees, Jay Horvat, Lisa G Wood, Craig Wheelock, Philip M Hansbro
PA3898	**Tyndallized bacteria induce macrophage polarization toward M1 polarization: an effect useful to balance allergic immune responses** Elisabetta Pace (Palermo (PA), Italy), Serena Di Vincenzo, Simona Taverna, Maria Ferraro, Marco Buscetta, Chiara Cipollina, Stefania La Grutta
PA3899	**LSC - 2022 - Innate immunity plays an important role during NTHI and RV sequential infection.** Yuqing Long (Oxford, United Kingdom), Sophie Morgan, Paul Klenerman, Timothy Hinks
PA3900	**Capsaicin evoked cough responses and the effect of sex hormones** Ruth Cusack (Waterford, Ireland), X Ju, B.M Salter, K Howie, C Stevens, S Beaudin, J Wattie, J.A. Smith, P.M. O'Byrne, Imran Satia, R Sehmi, Gail Gauvreau
PA3901	**Late Breaking Abstract - Maternal high-fat diet increases airway sensory innervation and reflex bronchoconstriction in adult offspring** Zhenying Nie (Portland, United States), Gina Calco, Yem Alharithi, Elysse Phillips, David Jacoby, Allison Fryer, Alina Maloyan
PA3902	**Late Breaking Abstract - Enhanced early T cell activation and protection from hyper-inflammation in smoke exposed Cox4i2-/- infected mice with influenza** Thilo Berger (Marburg, Germany), Claudia Fernanda Garcia Castro, Vidya Lakshmi, Sara Völkel, Natascha Sommer, Chrysanthi Skevaki
PA3903	**Late Breaking Abstract - FeNO in a healthy population: normal ranges and contributing factors** Christina Bal (Wien, Austria), Caspar Schiffers, Patricia Puchhammer, Owat Sunanta, Marie-Kathrin Breyer, Wolfgang Pohl, Sylvia Hartl, Marco Idzko, Robab Breyer-Kohansal
PA3904	**Late Breaking Abstract - Assessment of sputum inflammatory, neural, and remodelling mediators in eosinophilic and non-eosinophilic asthma** Hajar Ali (wellington, New Zealand), Jeroen Douwes, Jeroen Burmanje, Prachee Gokhale, Julian Crane, Philip Pattemore, Yu-Chieh Tzeng, Thorsten Stanley, Jacqui Keenan, Collin Brooks
PA3905	**Late Breaking Abstract - White blood cells and asthma: a two-sample Mendelian Randomization Study** Vanesa Bellou (Ioannina, Greece), Athena Gogali, Konstantinos Kostikas, Evangelos Evangelou
PA3906	**Late Breaking Abstract - Oral microbiome associated with asthma and COPD in a multicenter study** Christine Drengenes (Bergen, Norway), Michael Abramson, Oskar Jõgi, Caroline Lodge, Francisco Gomez Real, Randi Bertelsen

TP-13 in thematic poster area — Session 454 — 13:00 - 14:00

Thematic poster: Obstructive lung diseases: trends, diagnosis and management

Disease(s) : Airway diseases

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

Chairs : Branislava Milenković (Beograd, Republic of Serbia), AYCAN YUKSEL (Ankara, Turkey)

PA3907	**Co-morbidities in COPD patients with Arg16Gly polymorphism of ADRB2 gene** Kostiantyn Dmytriiev (Vinnitsya, Ukraine), Yuriy Mostovoy, Nataliia Slepchenko, Yuliia Smereka, Dmytro Dmytriiev, Kateryna Dmytriieva

PA3908	**Respiratory health inequalities exponentially impact the most deprived tertile** Alice Lee (Liverpool, United Kingdom), Carlos Echevarria, Daniel Hawcutt, Ian Sinha
PA3909	**Long-term oxygen therapy in Catalonia over 18 years** Julia Tarrega Camarasa (Granollers, Spain), Alejandra Marín Arguedas
PA3910	**Disease burden and healthcare contact behaviour across care sectors in asthma** Kjell Erik Julius Håkansson (København N, Denmark), Vibeke Backer, Charlotte Suppli Ulrik
PA3911	**Healthcare resource consumption and care pathway of patients who died from asthma in France** Laurent Guilleminault (Toulouse Cedex, France), Michael Mounié, Agnès Sommet, Claire Camus, Alain Didier, Laurent Reber, Nadège Costa, Cécile Conte
PA3912	**Pharmacovigilance in Brazil: safety of budesonide-formoterol** Rafael Miranda (Santo Andre (SP), Brazil), Antonio Vattimo, Jana Fonseca, Marina Ramos, Ariane Oliveira, Karen Barbosa, Stevin Zung
PA3913	**Amongst chronic conditions, respiratory diseases are most inextricably linked to socioeconomic deprivation** Alice Lee (Liverpool, United Kingdom), Carlos Echevarria, Daniel Hawcutt, Ian Sinha
PA3914	**Characteristics of patients developing depression after hospitalization for COPD** Johanne Hermann Karlsen (Randers C, Denmark), Christian Torp-Pedersen, Kristian Hay Kragholm, Ulla Møller Weinreich, Peter Jacobsen
PA3915	**Parental COPD as a risk factor for developing COPD and disease severity in offspring – a systematic scoping review** Melina Sikjær (Egå, Denmark), Allan Sørensen, Ole Hilberg, Anders Løkke
PA3916	**Co-morbidities in COPD patients with Gln27Glu polymorphism of ADRB2 gene** Kostiantyn Dmytriiev (Vinnitsya, Ukraine), Yuriy Mostovoy, Nataliia Slepchenko, Yuliia Smereka, Dmytro Dmytriiev
PA3917	**Observational cohort study of pulmonary exacerbations in alpha-1 antitrypsin deficiency** Paul Ellis (Solihull, United Kingdom), Michael Newnham, John Ripollone, Mark Forshag, Alice Turner
PA3918	**Development and validation of a clinical model to identify candidates for allergic rhinitis pre-exposure prophylaxis: a multi-center study** Wenting Luo (Guangzhou (Guangdong), China), Baoqing Sun
PA3919	**HAS MORTALITY FROM COPD DECREASED IN SPAIN IN THE LAST TWO DECADES?** Gema Ramirez Rodriguez (Granada, Spain), Ana Quesada-Quesada, Antonio Menéndez-Lobo, Alejandro Romero-Linares, Bernardino Alcázar-Navarrete
PA3920	**Retrospective study characterising clinical manifestations and treatment patterns of hypereosinophilic syndrome in Europe** Lee Baylis (Apex, United States), Jeremiah Hwee, Rupert W Jakes, Lynn Huynh, Namhee Kwon, Rafael Alfonso-Cristancho, Gema Requena, Shawn Du, Anamika Khanal, Mei Sheng Duh
PA3921	**Prognosis of patients with COPD not eligible for major clinical trials** Shoaib Afzal (Herlev, Denmark), Yunus Çolak, Børge G. Nordestgaard, Peter Lange, Jørgen Vestbo
PA3922	**Where and when: The diagnostic setting and age at diagnosis for Danish COPD-patients - a nationwide registry study** Peter Ascanius Jacobsen (Aalborg, Denmark), Kristian Kragholm, Christian Torp-Pedersen , Ulla Møller Weinreich
PA3923	**Chronic airflow limitation and respiratory symptoms in relation to smoking in a general middle-aged population** Magnus Sköld (Stockholm, Sweden), Anders Blomberg, Per Liv, Carl Johan Östgren, Jan Engvall, Andrei Malinovschi, Gunnar Engström, Kjell Torén
PA3924	**Title: Development of a Community Screening tool for COPD in India: The OSCAR study** Deesha Ghorpade (Pune (Maharashtra), India), Jyoti Londhe, Sapna Madas, Anchala Raghupathy, Nisha Kale, Arvinder Narula, Reshma Patil, Prakash P R Doke, Sundeep Salvi
PA3925	**The role of birth order and sibship size in the pathogenesis of asthma is independent of living standards** Daniil Lisik (Gothenburg, Sweden), Athina Ioannidou, Gregorio Paolo Milani, Sungkutu Nyassi, Saliha Selin Özuygur Ermis, Giulia Carla Immacolata Spolidoro, Hannu Kankaanranta, Emma Goksör, Göran Wennergren, Bright Ibeabughichi Nwaru

TP-14 in thematic poster area — Session 455 — 13:00 - 14:00

Thematic poster: Epidemiology: products and diseases

Disease(s) : Airway diseases Respiratory critical care

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

Chairs : Stamatoula Tsikrika (Athens, Greece), Linnea Hedman (Luleå, Sweden)

PA3926	**Smoking cessation program for patients with diabetes-success factors** Aliki Korkontzelou (Athens, Greece), Stamatina Driva, Sotiria Schoretsaniti, Zafeiria Barbaressou, Vasiliki Vasileiou, Vasiliki Saltagianni, Alexander Osarogue, Sotirios Gyftopoulos, Martha Andritsou, Sofia Pappa, Serena Tonstad, Christina Gratziou, Nikolaos Tentolouris , Paraskevi Katsaounou
PA3927	**Impact of smoking and arterial hypertension on plasma surfactant protein-A levels in patients during acute exacerbation COPD** Olha Shtepa (Dnipro, Ukraine)
PA3928	**Biomarkers used to evaluate smoking in COPD patients** Letitia Trofor (Iasi (Iasi), Romania), Antigona Carmen Trofor, Ioana Buculei, Mona Dobrin, Roberta Ionela Cernat, Oana Melinte, Cristina Vicol, Emanuel Stavarache
PA3929	**Evaluation of environmental tobacco smoke exposure of pediatric patients with chronic lung diseases** Setenay Akyuzluer Gunes (Ankara, Turkey), Gızem Ozcan, Fazılcan Zirek, Merve Nur Tekin, Filiz Bakar Ateş, Nazan Cobanoglu
PA3930	**Students' smoking prevalence in Barcelona region in 2021: study of its evolution compared to 2016 and 2019.** Cristina Muñoz-Pindado (Vic (Barcelona), Spain), Genoveva Vilardell-Rifà, Carlos Muñoz-Pindado
PA3931	**SARS CoV-2 infection in a cohort of patients from a smoking cessation program in Bogotá** Juan Pablo Rodriguez Gallego (Bogotá, Colombia), Daniela Cifuentes Hurtado, Mauricio Gonzalez Garcia
PA3932	**High parental education a risk factor for teenage e-cigarette use in Ireland** Joan Hanafin (Dublin, Ireland), Salome Sunday, Luke J. Clancy
PA3933	**The decline in teenage smoking has reversed in Ireland - how can we intervene?** Salome Sunday (Blackpool, Ireland), Joan Hanafin, Luke Clancy
PA3934	**Educational interventions to improve inpatient smoking cessation support** Adam Lyons (London, United Kingdom), Rebecca Walshe, Christina Timehin, Kay Roy
PA3935	**Comparative study of oxidative stress status in smokers versus non-smokers with tuberculosis** Letitia Trofor (Iasi (Iasi), Romania), Antigona Carmen Trofor, Ioana Buculei, Cristina Vicol, Mona Dobrin, Roberta Ionela Cernat, Oana Melinte, Daniela Robu Popa
PA3936	**Clinical features of drug addict patients hospitalized for pulmonary diseases** Khouloud Chaabi (Tunis, Tunisia), Emna Ben Jemia, Yossr Aloulou, Nourchene Khalfallah, Yossr Ben Attig, Jihen Ben Amar, Mohamed Sadok Boudaya, Haifa Zaibi, Hichem Aouina
PA3937	**Predictors of severity in patients with exacerbation of the chronic obstructive pulmonary disease** Hamida Kwas (Gabes, Tunisia), Sabrine Majdoub, Wafa Fekih
PA3938	**Correlation between blood carboxyhemoglobin levels and smoking** Cristina Sánchez Fernández (Oropesa, Spain), Walther Ivan Girón Matute, Ji Zichen, Gabriella Manzanares Cavin, Irene Milagros Domínguez Zabaleta, Cristhian Alonso Correa Gutiérrez, Virginia Parra León, Javier De Miguel Díez, Luis Puente Maestu
PA3939	**Attitudes and behavior of healthcare workers towards smoking: Hospital-based study in Tunisia** amina abdelkbir (ben arous, Tunisia), Yosr Ayedi, Chahida Harizi, Afef Skhiri, Nawel Dhaouadi, Radhouane Fakhfakh
PA3940	**Smoking among nursing staff in the regional hospital of AGADIR** Oussama HALLOUMI (AGADIR, Morocco), Houda Moubachir, Hind Serhane
PA3941	**Vaping and Hookah use among medical trainees** Luiza Helena Degani-Costa (São Paulo, Brazil), Fernando P Bruno, Fernanda Gushken, Claudia Szlejf, João Roberto Resende Fernandes, Yasmin F Tehrani, Daniel Kaufman, Ana B P Tokeshi, Kandipudi K L Prasad, Pentapati S S Kumar, Limalemla Jamir, Matthew G K Benesch, Morag G Ryan, Hardeep S Lotay, Jonathan P Fuld, Thiago M Fidalgo
PA3942	**Geography, gender and smoking in Europe** Luke J. Clancy (Dublin 8, Ireland), Joan Hanafin, Salome Sunday
PA3943	**Parental smoking reduction bundle in children's medical-care utilisation, respiratory tract infection and spirometry results** Siyu Dai (Hong Kong, Hong Kong), Fanjing Meng

PA3944 **Late Breaking Abstract - Sex-related differences and FEV1 decline among COPD patients: the French Palomb cohort.**
Nolwenn Jestin-Guyon (Bordeaux, France), El Hassane Ouaalaya, Alain Bernady, Emilie Berteaud, Julien Casteigt, Laurent Falque, Frédéric Le Guillou, Jean Moinard, Mathieu Molimard, Laurent Nguyen, Cécilia Nocent, Annaig Ozier, Mohammed Staali, Chantal Raherison-Semjen

PA3945 **Late Breaking Abstract - Establishment of an Alpha-1 research registry within the patient advocacy organization**
Jeanine D'Armiento (New York, United States), Monica Goldklang, Alison Chin, J Michael Wells, Randel Plant, Laura Fonseca, Charlie Strange

TP-15 in thematic poster area — Session 456 — 13:00 - 14:00

Thematic poster: Influence of infections, risk factors and biomarkers in paediatric asthma

Disease(s) : Airway diseases

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

Chairs : Susanne J. H. Vijverberg (Utrecht, Netherlands), Sejal Saglani (London, United Kingdom)

PA3946 **Exposure to bushfire smoke is associated with clinical significant decrease in lung function in asthmatic children during the 2019/2020 Australian bushfire**
Carla Rebeca Da Silva Sena (Newcastle, Australia), Olivia Lines, Mariyam Shaya Latheef, Guvani Gaveshika Amarasinghe, Wei Han Quah, Tesfalidet Beyene, Joseph Van Buskirk, Ivan Hanigan, Geoff Morgan, Christopher Oldmeadow, Lauren Platt, Kasey Pearce, Vanessa Murphy, Peter G Gibson, Wilfried Karmaus, Adam Collison, Koert Dewaal, Joerg Mattes

PA3947 **Have you heard about Air Pollution?**
Abigail Whitehouse (London, United Kingdom), Rachel Parker, Victoria Hadaway

PA3948 **Impact of COVID-19 related alterations in circulating respiratory viruses on children and adult patients with recurrent wheeze and asthma**
Nicole Maison (München, Germany), Ana Peck, Alexander Hose, Jimmy Omony, Bianca Schaub, Ruth Grychtol, Anna-Maria Dittrich, Catharina Nitsche, Svenja Foth, Markus Weckmann, Mustafa Abdo, Thomas Bahmer, Klaus F. Rabe, Harald Renz, Gesine Hansen, Matthias V. Kopp, Erika Von Mutius

PA3949 **Differences in COVID-19-triggered pediatric asthma exacerbations across variant waves**
Kristina Gaietto (Pittsburgh, United States), Oliver Snyder, Nicholas Bergum, Leigh Anne Dicicco, Sherry Rauenswinter, Jennifer Iagnemma, David Wolfson, Traci Kazmerski, Erick Forno

PA3950 **Living with the risk of being infected: Asthma patients' experiences during the Covid-19 pandemic.**
fatiha bounoua (AGADIR, Morocco), Abdelkrim Khannous, Houda Moubachir, Hind Serhane

PA3951 **Late Breaking Abstract - Parental socioeconomic status, access to specialist care, and childhood asthma severity, control, and exacerbations**
Kjell Erik Julius Håkansson (København N, Denmark), Silvia Cabrera Guerrero, Vibeke Backer, Charlotte Suppli Ulrik, Deepa Rastogi

PA3952 **Follow-up of severe asthmatic children during COVID-19 pandemic: A comparative analysis**
Gabriela Peláez (Buenos Aires, Argentina), Verónica Giubergia, Juan Manuel Figueroa, Claudio Castaños

PA3953 **The prevalence, severity and risk factors of asthma in school-going adolescents in KwaZulu Natal, South Africa.**
Reratilwe Mphahlele (Durban (Kwazulu Natal), South Africa), Refiloe Masekela

PA3954 **Impact of moisture / mould exposure on asthma control in children: the CHAMPIASTHMA study**
Stéphanie Lejeune (Lille, France), Margaux Sauvere, Flore Chagnon, Camille Cisterne, Clémence Mordacq, Caroline Thumerelle, Héloïse Ducoin, Manuella Scalbert, Armelle Le Mée, Mohamed Amani, Sawsan El Mourad, Sophie Encherry, Guillaume Pouessel, Juliette Roussel, Maxime Dartus, Emilie Fréalle, Elodie Drumez, Antoine Deschildre

PA3955 **Allergen sensitization patterns in the French COBRAPed cohort**
Stéphanie Lejeune (Lille, France), Naïm Bouazza, Pascale Roland Nicaise, Valérie Jolaine, Léa Roditis, Christophe Marguet, Véronique Houdoin, Patrick Berger, Michael Fayon, Jean-Christophe Dubus, Isabelle Pin, Philippe Reix, Mathieu Pellan, Jacques Brouard, Raphael Chiron, Lisa Giovannini-Chami, Jacques De Blic, Antoine Deschildre, Guillaume Lezmi

PA3956 **Is the measurement of particles in exhaled air feasible and useful in children with suspected asthma?**
Laura Healy (Manchester, United Kingdom), Fahad Al-Huda, Emma Barrett, Lisa Willmore, Rhys Tudge, Gina Kerry, Clare S Murray, Angela Simpson, Stephen Fowler

PA3957 **Factors associated with severe asthma in children**
Jenny Libeth Jurado Hernández (Bogotá, Colombia), Iván Francisco Álvarez Orozco, Mario Barreto, Gabriel Oscar Sinfontes Rodríguez, Natalia Becerra Uribe, Luis Fernando Giraldo Cadavid

PA3958	**Adult Follow-up of Children with Severe Asthma** Manon Lasseur (Montreuil, France), Camille Taillé, Véronique Houdouin, Stéphanie Wanin, Flore Amat
PA3959	**Role of sex and puberty on respiratory outcomes** Marina Attanasi (Chieti (CH), Italy), Annemiek Mian, Evelien R. Van Meel, Sophie M. Blaauwendraad, Vincent W.V. Jaddoe, Liesbeth Duijts
PA3960	**The impact of the Mediterranean diet on rhinitis prevalence** Francisco-Javier Gonzalez Barcala (Santiago de Compostela, Spain), Antonio Acevedo-Prado, María-Teresa Seoane-Pillado , Angel López-Silvarrey , Sonia Pértega , Francisco-Javier Salgado, Juan José Nieto-Fontarigo , Miguel-Angel San-José-González, Juan Sánchez-Lastres, Manuel Sampedro, Teresa Pérez-Castro , Luciano Garnelo , Luis Bamonde
PA3962	**Better COVID-19 outcomes in children with good asthma control** Jasna Rodman Berlot (Ljubljana, Slovenia), Malena Aldeco, Dušanka Lepej, Marina Praprotnik, Saša Šetina Šmid, Aleksandra Zver, Uroš Krivec
PA3963	**Environmental exposures and recurrent wheeze in early childhood: a time-to-event study** Nithiseelan Rajen Naidoo (Durban, South Africa), Kareshma Asharam, Prakash Jeena, Aweke Mitku
PA3964	**Housing and health – impact of mould on children with asthma** Abigail Whitehouse (London, United Kingdom), Victoria Hadaway, Rachel Parker
PA3965	**Respiratory (RA) & Non-IgE(NIgE) allergies both increase Respiratory Effort(RE) during sleep, implicating a common pathophysiology mechanism in Obstructive Sleep Apnoea(OSA)asthma associated. Asthma treatment (AT) decrease Apnoea Hypopnea Index(AHI).** Kalomoira Kefala (Paris, France), François Lavaud, Philippe Guerin

TP-16 in thematic poster area — Session 457 — 13:00 - 14:00

Thematic poster: Viral respiratory infections and primary ciliary dyskinesia

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

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

Chairs : Myrofora Goutaki (Bern, Switzerland), Laura Petrarca (Roma (RM), Italy)

PA3966	**Bronchiolitis 2021-2022: the other viruses revenge** Meriem Mjid (Tunis, Tunisia), Fatma Khalsi, Imen Briki, Emna Ben Arab, Ines Trabelsi, Imen Belhadj, Khedija Boussetta
PA3967	**Variation in the pattern of childhood respiratory viral infections during the COVID-19 pandemic** Dana Pe'er Moscovich (Jerusalem, Israel), Diana Averbuch, Dana Wolf, Oded Breuer
PA3968	**Effects of the Covid-19 Pandemic on the nature of bronchiolitis in infants** Emma Smith (Kent, United Kingdom), Thomas Blyth, Miriam Fine-Goulden
PA3969	**Bronchiolitis vs. COVID-19: epidemiologic correlations from a single Pediatric Unit experience.** Claudio Cavalli (Cremona, Italy), Anna Vaccari, Alessandra C.F. Ferrari, Lorenza Bonetti, Elena Carboni, Filippo Puricelli, Gloria Fumagalli, Mariano S.S. Cosentino, Martina Soliani, Andrea E. Scaramuzza
PA3970	**Hospitalizations for acute bronchiolitis in infants after relaxation of COVID-19 mitigation strategies in Brazil.** Leonardo Pinto (Porto Alegre (RS), Brazil), Frederico Friedrich, Magali Lumertz, Lucas Montiel Petry, Marina Pieta, Marcos Brum, Marcelo Scotta, Marcus Jones, Renato Stein
PA3971	**Effectiveness of school or day-care center closure on rhinovirus infection during COVID-19 Pandemic** Jee Youn Oh (Seoul, Republic of Korea), Young Seok Lee, Juwhan Choi, Jae Kyeom Sim, Kyung Hoon Min, Gyu Young Hur, Sung Yong Lee, Jae Jeong Shim
PA3972	**Evolution of the frequency cases of infection COVID-19 among children in relation to the evolution of the pandemic** Tatiana Dumitras (Chisinau, Republic of Moldova), Rodica Selevestru, Diana Rotaru-Cojocari, Ana Goloborodico, Veaceslav Bozadji, Ion Negru, Ina Palii, Sergiu Gladun, Svetlana Sciuca
PA3973	**Hospitalizations Associated with COVID-19 Among Children in Republic of North Macedonia from September 2021 to January 2022** Filip Doksimovski (Skopje, North Macedonia), Sandra Petlichkovska, Elena Ginovska, Hristijan Nestorov, Katerina Boshkovska, Tanja Jakovska

PA3975 **Low incidence and severity of SARS-CoV-2 infections in people with PCD**
Eva Sophie Lunde Pedersen (Bern, Switzerland), Leonie D Schreck, Myrofora Goutaki, Sara Bellu, Fiona Copeland, Jane S Lucas, Claudia E Kuehni

PA3977 **Research priorities for Primary Ciliary Dyskinesia- experts' perspective**
Myrofora Goutaki (Bern, Switzerland), Yin Ting Lam, Bruna Rubbo, Laura Behan, Jane S. Lucas

PA3979 **Research priorities in Primary Ciliary Dyskinesia - patients' perspective**
Yin Ting Lam (Bern, Switzerland), Laura Behan, Katie Dexter, Lucy Dixon, Claudia E Kuehni, Eva S-L Pedersen, Jane Lucas, Myrofora Goutaki

PA3980 **Sinonasal features in patients with Primary Ciliary Dyskinesia - an EPIC-PCD study**
Yin Ting Lam (Bern, Switzerland), Jean-François Papon, Mihaela Alexandru, Andreas Anagiotos, Miguel Armengot, Mieke Boon, Andrea Burgess, Nathalie Caversaccio, Suzanne Crowley, Sinan Ahmed. D. Dheyauldeen, Nagehan Emiralioglu, Ela Erdem, Onder Gunaydın, Eric G. Haarman, Amanda Harris, Hasnaa Ismail Koch, Bulent Karadag, Céline Kempeneers, Sookyung Kim, Philipp Latzin, Natalie Lorent, Ugur Ozcelik, Charlotte Pioch, Anne-Lise Ml Poirrier, Ana Reula, Jobst Roehmel, Christine Van Gogh, Panayiotis Yiallouros, Myrofora Goutaki

PA3982 **Body composition in Primary Ciliary Dyskinesia, does it matter?**
René Gaupmann (Wien, Austria), Klara Schmidthaler, Sabine Renner, Zsolt Szépfalusi, Eleonora Dehlink

PA3983 **PICADAR - is there a need for a separate paediatric score?**
Kirsten Wallace (West Calder, United Kingdom), Zoe Johnstone, Stefan Achim Unger, Kirstin Unger

PA3984 **Anxiety and depression in children with primary ciliary dyskinesia – Experience from a tertiary respiratory centre in the northwest United Kingdom**
David Wood (Manchester, United Kingdom), Anirban Maitra

PA3985 **Depression, anxiety and sleep quality ofcaregivers of children with spinal muscular atrophy**
Cansu Yilmaz Yegit (Istanbul, Turkey), Pinar Ergenekon, Zeynep Gumus, Muruvvet Yanaz, Aynur Gulieva, Mine Kalyoncu, Merve Selcuk, Seyda Karabulut, Gulten Ozturk, Ela Erdem Eralp, Olcay Unver, Bulent Karadag, Yasemin Gokdemir

PA3986 **Late Breaking Abstract - Increase of high flow nasal cannulas use after the pandemic in bronchiolitis: a more severe disease or a changed physician's attitude?**
Sergio Ghirardo (Trieste, Italy), Giorgio Cozzi, Giovanna Tonin, Francesco Maria Risso, Laura Dotta, Alessandro Zago, Daniela Lupia, Paola Cogo, Nicola Ullmann, Antonella Coretti, Raffaele Badolato, Alessandro Amaddeo, Egidio Barbi, Renato Cutrera

PA3987 **Late Breaking Abstract - Prevalence of chronic respiratory disease in Australian Aboriginal children**
Pamela Laird (Perth, Australia), Rachel Foong, Shekira Brahim, Elizabeth Mc Kinnon, Matthew Cooper, Roz Walker, Elizabeth Smith, Anne Chang, André Schultz

TP-17 in thematic poster area — Session 458 — 13:00 - 14:00

Thematic poster: Respiratory physiology assessment: choosing the right test for the patient

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

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

Chairs : Ana Lutas (São Domingos de Rana, Portugal), Karl Sylvester (Cambridge (Cambridgeshire), United Kingdom)

PA3988 **Borg ratings of dyspnea and leg fatigue during exercise testing**
Maaike Dunnink (Staphorst, Netherlands), Irene Steenbruggen

PA3989 **Validity and symptom burden of impulse oscillometry (iOS) in idiopathic pulmonary fibrosis (IPF)**
Suhani Patel (London, United Kingdom), Karl Sylvester, Zhe Wu, Claire Nolan, Toby Maher, Philip Molyneaux, William Man

PA3990 **Diagnostic work-up of asthma: more than spirometry**
Caspar Schiffers (Vienna, Austria), Emiel Wouters, Alina Ofenheimer, Tobias Mraz, Patricia Puchhammer, Marie-Kathrin Breyer, Renaud Louis, Wolfgang Pohl, Otto Chris Burghuber, Sylvia Hartl, Robab Breyer-Kohansal

PA3991 **Accuracy of three different peak flow devices, a pilot study**
Martijn Cuijpers (Roermond, Netherlands), Richard Bonné, Herman Jan Pennings

PA3992	**Personal respiratory profiles assessed at rest ventilometry distinguished asthmatic from COPD patients** Patrick Hanusse (Pessac, France), Pierantonio Laveneziana, Fabien Beaufils, Julie Joie, Christian Straus, Pierre-Olivier Girodet, Thomas Similowski, Patrick Berger
PA3993	**Personal respiratory profiles assessed at rest ventilometry predict phenotypes of asthmatic patients** Patrick Hanusse (Pessac, France), Fabien Beaufils, Julie Joie, Pierantonio Laveneziana, Christian Straus, Thomas Similowski, Pierre-Olivier Girodet, Christophe Pison, Patrick Berger
PA3994	**Pulmonary function tests in COVID-19 pandemic: The thoughts and concerns of the patients** Bilun Gemicioglu (Istanbul, Turkey), Ilgim Vardaloglu, Kamile Tombul, Nihal Ensen, Gunay Can, Sermin Borekci
PA3995	**Understanding the pathophysiology of COVID-19: Are we investigating survivors appropriately?** Ian Cliff (Stoke-on-Trent, United Kingdom), Imran Hussain, Naveed Mustfa, Charlotte Johnson, Helen Stone
PA3996	**Correlation between multiple breath washout and spirometry in young cystic fibrosis children with pancreatic sufficiency** Federico Alghisi (Roma (RM), Italy), Matteo De Marchis, Sergio Bella, Fabiana Ciciriello, Alessandra Federici, Alessandro Giovanni Fiocchi
PA3997	**Can remote monitoring of lung disease lead to more efficient patient care?** Vicky Moore (Birmingham (West Midlands), United Kingdom), Sherwood Burge, Christopher Huntley, Alastair Robertson, Gareth Walters
PA3998	**Agreement of three continuous oximetry devices in COPD patients, users of supplementary oxygen and noninvasive ventilation.** Roberto Vera Uribe (Santiago, Chile), Nicolás Sepúlveda Cáceres, Francisca Figueroa, Javiera Rosales Fuentes, Paula Urrutia, Constanza Hernandez, Francisca Zarricueta, Álvaro Olivares, María Elena Torres, Rodrigo Torres-Castro
PA3999	**Cardiopulmonary Exercise Testing (CPET) Service Utilisation: Backlog to the Future** Max Thomas (Birmingham, United Kingdom)
PA4000	**Respiratory profiles assessed by rest ventilometry predict response to bronchodilator of COPD patients** Patrick Hanusse (Pessac, France), Pierantonio Laveneziana, Fabien Beaufils, Julie Joie, Christian Strauss, Pierre-Olivier Girodet, Patrick Berger, Thomas Similowski
PA4001	**Body plethysmography interpretation using ECSC versus GLI2019 reference equations** Tânia Duarte (Caparica, Portugal), Catarina Rijo, Mafalda Loureiro, Susana Sousa, Paula Duarte
PA4002	**Effects of Covid-19 pneumonia on submaximal exercise tolerance** Salma Mokaddem Mohsen (Tunis, Tunisia), Asma Chaker, Nadia Ben Lazreg, Khouloud Kechaou, Molk Maalej, Saloua Ben Khamsa Jameleddine
PA4003	**Comparing ultrasonic and breath-actuated jet nebulisers for sputum induction** Paula Cristina Andrade Almeida (Aracaju (SE), Brazil), Katherine Smith, Glenn Hearson, Matthew J. Martin, Tim W. Harrison
PA4004	**Evaluation of the Global Lung Initiative 2012 reference values for spirometry in Chinaa national cross-sectional study** Feilong Wang (Shanghai, China), Kun Wang, Cole Bowerman, Hogne Ulla, Jiaxing Sun, Marko Topalovic, Sanja Stanojevic, Qiang Li
PA4005	**Post-Covid Interstitial Lung Disease (PC-ILD): the role of pulmonary function testing and lung imaging in the long-term follow-up of patients with COVID-19 pneumonia** Letizia D'Antoni (Roma, Italy), Arianna Sanna, Daniela Pellegrino, Emanuele Messina, Leonardo Maria Siena, Valentina Baccolini, Pia Baiocchi, Paolo Villari, Carlo Catalano, Valeria Panebianco, Paolo Palange
PA4006	**Late Breaking Abstract - Smallest detectable change (SDD) of absolute long volumes by bodyplethysmography** Herman Groepenhoff (Lijnden, Netherlands), Margriet Kaldenbach, Andreas Waldmann

TP-18 in thematic poster area — Session 459 — 13:00 - 14:00

Thematic poster: Nursing interventions in various respiratory areas

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

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

Chairs : Rui Pedro Marques da Silva (Sobreira – Paredes, Portugal), Sabina Miranda Valladares (La Laguna, Spain)

PA4007	**Audit of council-level clean air policies for schools in England** Chloe John (Liverpool, United Kingdom), Beth Lawrence, Ian Sinha , Alice Lee
PA4008	**Managing patients with respiratory diseases: burnout among HCP** Tomi Kovačević (Sremska Kamenica, Republic of Serbia), Bojan Zaric, Ivan Mikov, Darijo Bokan
PA4009	**Cognitive impairment in long COVID syndrome patients one year after infection** Javier Martín Núñez (Granada, Spain), Alba Navas Otero, Paula López López, Irene Torres Sánchez, Ángela Benítez Feliponi, Irene Cabrera Martos, Marie Carmen Valenza
PA4010	**A literature review of allergen management in Children with Type 2-high Asthma** Madeleine Gray-ffrench (Leicester, United Kingdom), Ian Sinha, Elissa Abrams, Ricardo Fernandes, Lynsey Brown
PA4011	**HOW MUCH DO WE SLEEP AND HOW MUCH DO WE KNOW ABOUT SLEEP?** Maria Isabel Portela Ferreño (Pontevedra, Spain), Angel Piñeiro Lopez, Alejandro Pastor Campo, Arthur Yesayan, Tania Rivera Baltanas, Robert Alarcón Cedeño
PA4012	**The effect of the respiratory rehabilitation depends on the level of anxiety and depression.** Sabina Miranda Valladares (La Laguna, Spain), Marta Perez Redondo, Marta Entrambasaguas Martin, Belen Gonzalez Sanchez, Maria Jesus Prunera Pardell, Adolfo Domenech Del Rio
PA4013	**Exacerbation risk factors in bronchiectasis colonized by Pseudomonas aeruginosa** Leticia Bueno Freire (Barcelona, Spain), Victoria Alcaraz Serrano, Nil Vázquez Burgos, Andrea Palomeque Flores, Patricia Oscanoa Huamán, Roberto Cabrera Ortega, Rubén López Aladid, Rosanel Amaro, Adrián Ceccato, Laia Fernández Barat*, Antoni Torres*
PA4014	**Abdominal Haematomas following subcutaneous heparin injections in COVID19 patients; Food for thought in daily practice.** Elli Keramida (Athens, Greece), Georgia Hardavella, Elena Bellou, Irma Bracka, Antonis Xipolitos, Maria Salomidou, Thodoris Daskalos, Ioannis Karampinis, Nikolaos Anastasiou, Despoina Zorpidou, Panagiotis Demertzis
PA4015	**Performance of The Modified Viral and Bacterial Filter during Aerosol Inhalation Therapy** Ting Yu (Changchun, China), Hongjing Lin, Zeyu Qin, Fanying Yu
PA4016	**Effectiveness of the "AsmaSemCrise" programme in asthma control** Liliana Silva (Matosinhos, Portugal), Luciana Rodrigues
PA4017	**Nurses with workplace violence in pneumology settings during Covid-19** Francesca NAPOLITANO (Genova, Italy), Annamaria Bagnasco, Gianluca Catania, Nicola Pagnucci, Rosaria Alvaro, Giancarlo Cicolini, Alberto Dal Molin, Loreto Lancia, Maura Lusignani, Daniela Mecugni, Paolo Carlo Motta, Roger Watson, Mark Hayter, Milko Zanini, Loredana Sasso
PA4018	**Effectiveness of Fan therapy in breathlessness management in Fibrotic Interstitial lung disease.** Helen Morris (Manchester (Greater Manchester), United Kingdom), Katie Zakis, Jenna Swale, Conal Hayton
PA4019	**Prognostic value of the distance walked in the 6-minute walk test and the desaturation-distance ratio (DDR) in patients who will receive hematopoietic stem-based transplantation (HSCT).** Rodrigo Torres Castro (Barcelona, Spain), Yolanda Torralba García, Xavier Alsina Restoy, Jordi Vilaró, Isabel Blanco
PA4020	**Patient perspective on antifibrotic monitoring - impact on management at a single UK prescribing centre** Carmine Ruggiero (Oxford, United Kingdom), Shakila Hussain, Karen Parsons, Sarah Poole, Raashid Luqmani, Vishal Nathwani, Sabrina Zulfikar, Emily Fraser, Peter Saunders, Ling-Pei Ho, Rachel Hoyles
PA4021	**Development of a core competency-based curriculum in respiratory nursing – A nationwide Delphi study** SIlvia Loua Henriksen (Lyngby, Denmark), Marie Albrectsen Paine, Charlotte Sandau Bech, Lea Baunegaard Hvidberg
PA4022	**Respiratory nursing post-COVID consultation** Miriam Dominguez Blasco (Sevilla, Spain), Carlos Carrera Cueva, María Rosario Ruiz Serrano De La Espada, Pedro Francisco García Tamayo, María Dolores Nuñez Ollero, María Dolores Ucero León
PA4023	**Nebulised medications in secondary care: Rising to the challenge** MAX BETTANY (Liverpool, United Kingdom)

TP-19 in thematic poster area — Session 460 — 13:00 - 14:00

Thematic poster: Pneumonia

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

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

Chairs : Pedro Jorge Marcos Rodriguez (A Coruña, Spain), Chair to be confirmed

PA4024	**High serum HIF-1α levels are associated with intensive respiratory support in community acquired pneumonia** Noelia Carrion Collado (Valencia, Spain), Ana Comes Raga, Francisco Sanz Herrero, Goitzane Marcaida Benito, Estrella Fernández-Fabrellas
PA4025	**A population-based study to estimate the incidence rate of hospitalized community-acquired pneumonia in adults in Greece** Adamadia Liapikou (Athens, Greece), Vasiliki Kossyvaki, John Skiadas, Damianos Menegas, Cristina Méndez, Elizabeth Begier, Bradford D. Gessner, Claudia Schwarz, Haralampos Milionis, Vasilios Tsimihodimos, Athanasios Konstantinidis, Gerasimos Baxevanos, Theodora Argiriadou, Chrysavgi Terrovitou, Michael Toumbis, Study Egnatia Group
PA4026	**Activity and isoferment spectrum of serum lactate dehydrogenase in patients with community-acquired pneumonia associated with non-alcoholic fatty liver disease** Roman Razumnyi (Dnipro, Ukraine)
PA4027	**Impact of isolation for the suspicion of COVID-19 on bacterial pneumonia patients** Akiko Tamura (Tokyo, Japan), Manabu Murakami, Hiroshi Okamoto, Torahiko Jinta
PA4028	**Adiponectin in patients with community-acquired pneumonia: a prospective cohort study** Arnold Dungu (København, Denmark), Camilla Koch Ryrsø, Maria Hein Hegelund, Adin Sejdic, Andreas Vestergaard Jensen, Peter Lommer Kristensen, Rikke Krogh-Madsen, Daniel Faurholt-Jepsen, Birgitte Lindegaard
PA4029	**Analysis of complications of community-acquired pneumonia (CAP) in Anti-Terrorist Operation / Joint Forces Operation (ATO / JFO) participants** Nataliia Popenko (Kyiv, Ukraine)
PA4030	**Antioxidative stress markers in obese patients with community-acquired pneumonia** Tatiana Dumitras (Chisinau, Republic of Moldova), Diana Fetco-Mereuta, Sergiu Matcovschi, Livi Grib, Lilia Andronache, Virginia Cascaval, Valeriana Pantea, Valentin Gudumac
PA4031	**Delta Neutrophil Index, C-Reactive Protein and IL-8 as Markers of Sepsis** Pavlina Peneva (Varna, Bulgaria), Silviya Nikolova, Yana Bocheva
PA4032	**Changes in the pathogen spectrum of hospitalized adults with community-acquired pneumonia in Fujian Province: a multicenter, prospective study from 2012 to 2018** Hongru Li (Fuzhou (Fujian), China), Fan Wu, Jian Wu, Nengluan Xu, Ming Lin, Wenxiang Yue, Yusheng Chen
PA4033	**Phenotypic characteristics of Streptococcus pneumoniae in patients admited to intensive care unit due to bacteremic pneumococcal pneumonia** Francisco Sanz Herrero (Quart de Poblet (Valencia), Spain), Luis Alberto Ruiz Iturriaga, Marta García Clemente, Pedro Pablo España Yandiola, Leyre Serrano Fernández, Noelia Carrión Collado, Julia Herrero Huertas, Rafael Zalacaín Jorge, Estrella Fernández-Fabrellas
PA4034	**Host transcriptomic signature for infection in patients with suspicion of LRTI undergoing bronchoscopy** Andreas Hoheisel (Leipzig, Germany), Desiree Schumann, Kathleen Jahn, Nina Khanna, Matthias Herrmann, Andrei Darie, Silvio Ragozzino, Sabine Kuster, Werner Strobel, Hans Hirsch, Michael Tamm, Daiana Stolz
PA4035	**Model-Based Dosing Optimization of Teicoplanin in Critically Ill Patients** SUNG WOOK KANG (Seoul, Republic of Korea), Hyeong Geun Jo, Eun Kyoung Chung, Sandy Jeong Rhie, Cheon Woong Choi
PA4036	**Serum copeptin and Serum albumin as markers of severity for community acquired pneumonia** Vaibhav Padashetti (Kalaburgi, India), Mahesh Pa, Jayraj Bs
PA4037	**Late Breaking Abstract - Real-world effectiveness of remdesivir for hospitalized patients with COVID-19: systematic review and meta-analysis** James Jarrett (Uxbridge, United Kingdom), Lianne Barnieh, Robert L. Gottlieb, Jakob J. Malin, Roger Paredes, Rachel Beckerman, Rikisha Gupta, Sushanth Jeyakumar, Nathaniel J. Smith, Armando Texeiro-Pinto
PA4038	**Validation of IDSA/ATS guidelines for ICU admission in very elderly patients with community-acquired pneumonia** Miquel Ferrer Monreal (Barcelona, Spain), Catia Cilloniz Campos, Juan Manuel Pericas, Leyre Serrano, Raul Mendez, Rosario Menendez, Luis Alberto Ruiz, Antoni Torres

PA4039	**ESTIMATING THE RISK OF BACTEREMIA IN HOSPITALIZED PATIENTS WITH PNEUMOCOCCAL PNEUMONIA** Leyre Serrano Fernandez (Bilbao (Bizkaia), Spain), Luis Alberto Ruiz Iturriaga, Silvia Perez Fernandez, Pedro Pablo España Yandiola, Catia Cilloniz, Beatriz Gonzalez Quero, Alejandro Rezola Carasusan, Ane Uranga , Antoni Torres Martí, Rafael Zalacain Jorge
PA4040	**Covid -19 pneumonia in women: what are the particularities?** Manel Loukil Ben Ali (Nabeul, Tunisia), Nemsi Ella, Abid Narjes, Gader Nada, Kalboussi Slim, Ben Ali Mechaal, Chaabane Imen, Bouzaidi Khaled, Ghrairi Hedia
PA4041	**Neutrophil gelatinase-associated lipocalin for predicting clinical stability in patients with community-acquired pneumonia** Xue Mingshan (Guangzhou, China), Runpei Lin, Teng Zhang, Yifeng Zeng, Wenhan Cao, Sixiao Wu, Mingtao Liu, Ning Li, Peiyan Zheng, Haisheng Hu, Chen Huang, Baoqing Sun
PA4042	**Forced oscillation technique used for monitoring of covid-19 pneumonia** Immanuels Taivans (Riga, Latvia), Laura Grima, Normunds Jurka, Gunta Strazda, Valentina Gordjusina
PA4043	**Interstitial changes after severe SARS-CoV-2 Infection** Ana Belén Llanos Gonzalez (La Orotava, Spain), Verónica Saray Hernández García, Héctor Manuel González Expósito, Juan Alfonso Bonilla Arjona, Paula Pérez De Armas, Nelson Mesa Leóon, Marta Elena Gómez Gil, Jorge Estonell Erill, Olga María García Hernández, María Mercedes Cruz Díaz, Orlando Acosta Fernández

TP-2 in thematic poster area — Session 461 — 13:00 - 14:00

Thematic poster: Biomarkers and lung function in COPD exacerbation

Disease(s) : Airway diseases

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

Chairs : Bernardino Alcazar Navarrete (Cájar, Spain), Andrea Bianco (Napoli, Italy)

PA4044	**How COPD patients with Gln27Glu polymorphism utilize exacerbation-related drugs?** Kostiantyn Dmytriiev (Vinnitsya, Ukraine), Yuriy Mostovoy, Nataliia Slepchenko, Yuliia Smereka, Dmytro Dmytriiev
PA4045	**Role of ADRB2 gene haplotypes in the clinical course of COPD** Kostiantyn Dmytriiev (Vinnitsya, Ukraine), Nataliia Slepchenko, Yuriy Mostovoy, Yuliia Smereka, Dmytro Dmytriiev
PA4046	**Serum amyloid A (SAA) as a predictor of chronic obstructive pulmonary disease (COPD) exacerbations.** Daria Koval (Dnipropetrovsk, Ukraine)
PA4047	**Resistin identifies individuals with reduced lung function in a healthy aging cohort.** Ivette Buendia Roldán (México D.F, Mexico), Andy Ruiz, Andrea Espinosa-Arellano, Iliana Herrera, Leslie Chavez-Galan, Moises Selman
PA4048	**Activity of platelet von Willebrand factor in stable patients with COPD in terms of cardiovascular risk.** Olena Kovalenko (Dnipro, Ukraine), Victoriia Rodionova, Olha Boiko
PA4049	**Connection between markers of local and systemic inflammation in stable COPD** Daria Koval (Dnipropetrovsk, Ukraine), Bohdana Basina, Nataliia Kravchenko, Tetiana Kirieieva, Yuliya Bershadenko
PA4050	**The prevalence of prolonged QTc and associated risks of starting macrolide treatment** Benjamin Allison (Salford, United Kingdom), Andras Bikov
PA4051	**Predictive value of caspase-8 in hypertension development in COPD patients** Volodymyr Tverezovskyi (Kharkiv, Ukraine), Valeriy Kapustnyk
PA4052	**The correlation between blood eosinophilia and clinical characteristics in chronic obstructive pulmonary disease patients** Ibtihel Khouaja (Tunis, Tunisia), amal chennoufi, Chirine Moussa, Houda Rouis, Takwa Bejaoui, Marwa Bougacha, Syrine Neji, Sarra Zioueche, Amel Khattab, Leila Bayahi, Ines Zendah, Sonia Maalej
PA4053	**Preserved Ratio Impaired Spirometry (PRISM) and increased arterial stiffness (AS)** Otto Chris Burghuber (Wien, Austria), Marie Kathrin Breyer, Robab Breyer-Kohansal, Patricia Puchhammer, Alina Ofenheimer, Christoph Kaufmann, Thomas Weber, Sylvia Hartl

PA4054 **Role of the lower limit of normal in COPD diagnosis.**
Elisa Martinez Besteiro (Madrid, Spain), Ana Sofía Martín Hernández, Marta Solís García, Laura García Castellanos, Mateo Hevia Menéndez, Jose María Eiros Bachiller, Celeste Marcos, Rosa Mar Gómez-Punter, Elena Ávalos Pérez-Urria, Gorane Iturricastillo Gutiérrez, Julio Ancochea Bermúdez

PA4055 **Impulse oscillometry as a rule-out method for emphysema**
Allan Klitgaard (Vejle, Denmark), Anders Løkke, Ole Hilberg

PA4056 **Association between thoracic muscle mass assessed by high-resolution computed tomography and static lung volume in patients with COPD - a pilot study**
Mia Solholt Godthaab Brath (Vadum, Denmark), Esben Bolvig Mark, Jens Brøndum Frøkjær, Pernille Veiss-Pedersen, Lasse Riis Østergaard, Henrik Højgaard Rasmussen, Ulla Møller Weinreich

PA4057 **What are the best spirometric predictors of COPD progression?**
Daria Koval (Dnipropetrovsk, Ukraine), Bohdana Basina, Tetiana Pertseva, Nataliia Kravchenko

PA4058 **Effect of an early multidisciplinary respiratory (MDT) in-reach review of Airways Disease exacerbations (ADE) in an acute general hospital on discharges and length of stay (LOS)**
Paul Ellis (Solihull, United Kingdom), Alain Al Helou, Gajan Chellappah, Kayleigh Jones, Adel Mansur, Rahul Mukherjee

PA4059 **The language COPD patients use to describe exacerbations: a qualitative study**
Michael Crooks (East Riding of Yorkshire, United Kingdom), Richard Russell, Helena Cummings, Kay Roy, Omar Usmani, Sarah Macfadyan, Judith Cohen, Tamsin Morris, Hana Mullerova, Yang Xu, Ann Hutchinson

PA4060 **Predicting 3-month respiratory readmission in a Scottish COPD cohort**
Chris Carlin (Glasgow (Glasgow), United Kingdom), Shane Burns, Anna Taylor, Grace Cox, Paul Mcginness, David Lowe

PA4061 **Restrictive and obstructive lung patterns and postoperative pulmonary complications after cardiac surgeries: A prospective cohort study**
Hasan Allah Sadeghi (Tehran, Islamic Republic of Iran), Mahsa Mirdamadi, Mahmood Sheikh Fathollahi, Sadeghi Sarina

PA4062 **Proadrenomedullin and copeptin are more sensitive and specific biomarkers for the prediction of mortality in stable COPD than fibrinogen: An analysis of the COSYCONET study**
Sebastian Fähndrich (Freiburg, Germany), Sebastian Teuteberg, Christian Herr, Henrik Watz, Benjamin Waschki, Franziska C. Trudzinski, Albert Omlor, Peter Alter, Frederik Seiler, Frank Biertz, Tobias Welte, Hans-Ulrich Kauczor, Rudolf A Jörres, Claus F. Vogelmeier, Robert Bals, Daiana Stolz

PA4063 **Comparison of predictive properties between tools of patient-reported outcomes: exacerbation and admission due to exacerbation in subjects with chronic obstructive pulmonary disease.**
Koichi Nishimura (Kyoto, Japan), Mio Mori, Ryo Sanda, Masaaki Kusunose

TP-20 in thematic poster area — Session 462 — 13:00 - 14:00

Thematic poster: COVID basic science

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

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

Chairs : Holly R. Keir (Dundee (Angus), United Kingdom), Natalia El-Merhie (Giessen, Germany)

PA4064 **Experimental SARS-CoV-2 human challenge in young adults**
Alex Mann (London, United Kingdom), Ben Killingley, Mariya Kalinova, Arun Anandakumar, Alison Boyers, Brandon Londt, Nicolas Noulin, Christopher Chiu, Andrew Catchpole

PA4065 **Dynamics and Heterogeneity of the Lung Immunopathology in Severe COVID-19**
Jonas Erjefalt (Lund, Sweden), Natália De Souza Xavier Costa, Jimmie Jönsson, Olga Cozzolino, Katia Dantas, Carl-Magnus Clausson, Premkumar Siddhuraj, Caroline Lindö, Suzete Ferreira Spina Lombardi, Alfredo Mendroni Júnior, Leila Antonangelo, Caroline Silvério Faria, Amaro Nunes Duarte Neto, Renata De Almeida Monteiro, João Rebello Pinho, Michele Soares Gomes-Gouvêa, Roberta Verciano Pereira, Jhonatas Sirino Monteiro, João Setubal, Ellen Pierre De Oliveira, Jair Theodoro Filho, Caroline Sanden, Jamie Orengo, Matthew Sleeman, Luiz Ferraz Da Silva, Paulo Nascimento Saldiva, Marisa Dolhnikoff, Thaís Mauad

PA4066 **Impact of the NRF2 activator, stabilised synthetic sulforaphane, on systemic inflammation in COVID19: results from the STAR-COVID19 trial**
Merete Bridget Long (Dundee, United Kingdom), Yan Hui Giam, Hani Abo-Leyah, Rebecca C Hull, Holly R Keir, Thomas Pembridge, Daniela Alferes De Lima, Benjamin J M New, Sarah Inglis, Thenmalar Vadiveloo, Graeme Maclennan, Amy Gilmour, Chloe Hughes, Lilia Delgado, Albena T Dinkova-Kostova, James D Chalmers

PA4067	**Covid-19 and Cytokine Storm** Lucia Lopez Vergara (Zaragoza, Spain), Laura Torralba, Cristina De Diego, Ana Lasierra, Raquel Lahoz, Claudia Abadía, Pablo Ruiz De Copegui, Javier Godino, Alberto Cebollada, Beatriz Jimeno, Salvador Bello
PA4068	**Lymphocytic exhaustion in Covid-19 patients** Cristina De Diego Ramos (Zaragoza, Spain), Laura Torralba, Lucía López, Pablo Ruiz De Gopegui, Raquel Lahoz, Claudia Abadía, Ana Lasierra, Alberto Cebollada, Javier Godino, Beatriz Jimeno, Salvador Bello
PA4069	**A study on the morbid histopathological changes in COVID-19 patients with or without comorbidities using minimally invasive tissue sampling** Animesh Ray (Kolkata (West Bengal), India), Ayush Goel, Deepali Jain, Prasenjit Das, Sudheer Arava, Geetika Singh, S Arulselvi, Naveet Wig
PA4070	**The features of thrombogenesis in COVID-19-associated pneumonia compared to bacterial pneumonia: the key role of fibrinolysis** Kseniia Bielosludtseva (Dniepropetrovsk, Ukraine), Mariia Krykhtina, Katerina Dyahovets
PA4071	**Cells and cytokines analysis in bronchoalveolar lavage (BAL) fluid during or after non-severe COVID-19 pneumonia.** Camille Rolland-Debord (clermont-ferrand, France), Laurence Pieroni, Farah Bejar, Audrey Milon, Antoine Parrot, Anne Fajac, Jacques Cadranel
PA4072	**Histopathologic changes in lung tissue after Covid-19 pneumonia** Jasna Tekavec-Trkanjec (Zagreb, Croatia), Arijana Pačić, Čedna Tomasović-Lončarić, Darjan Ranilović, Divo Ljubičić
PA4073	**Impact of COVID 19 on bacterial respiratory isolates (2018-2021) from a UK tertiary cardio-thoracic ICU** Vidya Krishna (Chennai, India), Sundeep Kaul, Pradeep Panicker, Jaymin Morjaria, Anne Hall
PA4074	**T-cell responses to SARS-CoV-2 in patients during acute disease, convalescence and after vaccination** Guillem Safont-Gonzalez (Llinars del Vallès, Spain), Irene Latorre, Raquel Villar-Hernández, Zoran Stojanovic, Alicia Marín, Cristina Perez-Cano, Alicia Lacoma, Bárbara Molina-Moya, Alan Jhunior Solis, Fernando Armestar, Joan Matllo, Sergio Díaz-Fernández, Arnau Cendón, Liliya Sokalchuk, Guillermo Tolosa, Irma Casas, Antoni Rosell, Jose Dominguez
PA4075	**Cell surface GRP78 functions as an alternative virus entry receptor on monocytes during SARS-CoV-2 infection** Bing Han, Yibing Lü, Dominique Moser, Tobias Woehrle, Xiaoqi Zhou, Alexander Choukér, Ping Lei
PA4076	**Human pulmonary artery endothelial cells upregulate ACE2 expression in response to iron-regulatory elements: potential implications for SARS-CoV-2 infection** Quezia K Toe (Essex, United Kingdom), Theo Issitt, Abdul Mahomed, Charles Sturges, Stephen J Wort, Gregory Quinlan
PA4077	**Could biological disease modifying anti rheumatic drugs (bDMARDs) and small molecules have a key role in preventing COVID-19 infection?** Fiammetta Danzo, Marina Saad, Sarah O'Donnell, Debora Spitaleri, Linda Pelosi, Anna Casartelli, Dejan Radovanovic, Pier Carlo Sarzi-Puttini, Pierachille Santus
PA4078	**Circulating cfDNA is an excellent marker of severity in Covid-19** Lucia Lopez Vergara (Zaragoza, Spain), Cristina De Diego, Laura Torralba, Ana Lasierra, Claudia Abadía, Raquel Lahoz , Pablo Ruiz De Copegui, Javier Godino, Alberto Cebollada, Beatriz Jimeno, Salvador Bello
PA4079	**T1-inflammatory endotype in patients with severe COVID-19** Takehiro Hasegawa (Hamburg, Germany), Yoshiaki Miyamoto, Niina Iwanaga, Maho Yoshida, Yamashita Kazuto, Yamashita Saya, Tamada Eiya, Kohjin Suzuki, Kenta Noda, Yoko Tabe
PA4080	**Viral kinetic modeling and simulation of the impact of non-pharmaceutical COVID-19 interventions in different countries: model-informed respiratory disease trial design** Igor Faddeenkov (Lyon, France), Simon Arsène, Claire Couty, Natacha Go, Solène Granjeon-Noriot, Daniel Šmit, Riad Kahoul, Ben Illigens, Jean-Pierre Boissel, Aude Chevalier, Lorenz Lehr, Christian Pasquali, Alexander Kulesza
PA4082	**Late Breaking Abstract - SARS-CoV-2 load in exhaled end-tidal breath fine aerosol condensates among acutely symptomatic COVID-19 cases** Sterghios Moschos (Newcastle Upon Tyne, United Kingdom), Edison Jajah, Pedro Almeida, Nikolaos Athanasiou, Taxiarchis Nikolouzakis, John Henderson, Saqib Ali, Theodora Mantso, Diamantis Kofteridis, Alexandros Zafiropoulos, Chrysa Rokka, Daniel Queiroz, Aristides Tsatsakis, Paraskevi Katsaounou, Anastasia Kotanidou, Pagona Lagiou, Renato Aguiar, Mœuro Teixeira, Gkikas Magiorkinis
PA4083	**Late Breaking Abstract - SARS-CoV-2 RNA in exhaled air of hospitalized COVID-19 patients** Corné van den Kieboom (Utrecht, Netherlands), Lisa Kurver, Kjerstin Lanke, Dimitri Diavatopoulos, Gijs Overheul, Mihai Netea, Jaap Ten Oever, Reinout Van Crevel, Karin Mulders-Manders, Frank Van De Veerdonk, Heiman Wertheim, Jeroen Schouten, Janette Rahamat-Langendoen, Ronald Van Rij, Teun Bousema, Arjan Van Laarhoven, Marien De Jonge

TP-21 in thematic poster area Session 463 13:00 - 14:00

Thematic poster: Advances in the diagnosis of tuberculosis, multidrug-resistant tuberculosis and NTM

Disease(s) : Pulmonary vascular diseases Airway diseases

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

Chairs : Selin Ercan (Izmir, Turkey), Irina Kontsevaya (Borstel, Germany)

PA4084	**Disseminated tuberculosis is associated with more false negative interferon gamma release assay results compared to localized tuberculosis** Shagun Shah (warrington, United Kingdom), Michael Eisenhut
PA4085	**Mutational profile of gyrA and gyrB genes associated with fluoroquinolones (FQs) resistance among drug resistant tuberculosis patients: an observational study** Vikram Bajiya (Jodhpur, India), Chaina Ram Choudhary, Gopal Purohit, Ashok Kuwal, Ankita Mohanty
PA4086	**Variability of resistance of Mycobacterium tuberculosis based on whole genome sequencing in patients with MDR and XDR-TB in the Kharkiv region,Ukraine** Dmytro Butov (Kharkiv, Ukraine), Tetina Butova, Mykhailo Kuzhko, Oleksii Solodiankin, Nataliia Rudova, Anton Tkachenko, Michael Harris, Andrei Gabrielian, Darrell Hurt, Alex Rosenthal
PA4087	**The alternation of gut microbiome composition can predict latent tuberculosis infection status in poorly-controlled diabetic patients: A prospective case-controll study** Jann-Yuan Wang (Taipei, Taiwan), Hung-Ling Huang, Inn-Wen Chong, Jinn- Moon Yang, Po-Liang Lu
PA4088	**Next generation sequencing reveals miR-431-3p and miR-1303 as immune-regulatory microRNA for active pulmonary tuberculosis through targeting MDR1/MMP16/RIPOR2 and ATG5 signaling** Yung-Che Chen (Kaohsiung, Taiwan), Chao-Chien Wu, Meng-Chih Lin, Chang-Chun Hsiao, Chiu Ping Lee
PA4089	**Role of complete-thoracentesis in TB-pleural-effusions, precluding residual-pleural-thickening, a case-control-study(300 cases)?** Abdul Rasheed Qureshi (Lahore, Pakistan), Muhammad Irfan
PA4090	**Utility of the provocation coupled with the drug reintroduction test in the diagnosis of a hypersensitivity reaction to fixed-dose combination (FDC) of anti-TB drugs** Aissa Sana (Sousse, Tunisia), Omrane Asma, Ben Jazia Rahma, Benzarti Wafa, Knaz Asma, Kacem Amani, Gargouri Imen, Abdelghani Ahmed, Hayouni Abdelaziz
PA4091	**Comparison of Indigenous tuberculin skin test (TST) antigen solution developed in India with Tubersol in diagnosing latent tuberculosis** Devasahayam Jesudas Christopher (Vellore (Tamil Nadu), India), Natesan Priya, Thangakunam Balamugesh, Barney Isaac, Prasanna Samuel
PA4092	**Study of CD27, CD38, HLA-DR and Ki-67 immune profiles for the characterization of activetuberculosis, latent infection and cured disease.** Sergio Díaz Fernández (Barcelona, Spain), Raquel Villar-Hernández, Zoran Stojanovic, Marco Antonio Fernández-Sanmartín, Maria Luiza De Souza-Galvão, Guillermo Tolosa, Adrián Sánchez-Montalva, Jorge Abad, María Ángeles Jiménez-Fuentes, Guillem Safont, Iris Romero, Josefina Sabrià, Cristina Prat, Jose Domínguez, Irene Latorre
PA4093	**Diagnostic accuracy of molecular assays for drug susceptibility testing of M.tuberculosis using a raw sputum and isolates strains.** Valeriu Crudu (Chisinau, Republic of Moldova), Sofia Alexandru, Nelly Ciobanu, Alexandru Codreanu, Ecaterina Noroc, Dumitru Chesov, Ted Cohen
PA4094	**Comparison of QuantiFERON-TB Gold Plus vs tuberculin skin test in a healthy population in Mexico** Adrian Rendon (Monterrey, Mexico), Adrian G. Rosas Taraco, Jorge Martín Llaca Díaz, Berenice Soto Monciváis, Adriana Gonzalez Gutierrez, María José Sánchez Otero, Aurora Eloísa Mercado Sánchez
PA4095	**Utility of GeneXpert MTB/Rif for detection of drug resistance in tuberculous pleural effusion(TPE) in high endemic areas** Radhika Banka (Mumbai (Maharashtra), India), Swapna Naik, Jai Mullerpattan, Lancelot Pinto, Zarir Udwadia, Camilla Rodrigues
PA4096	**Comparing drug susceptibility testing for drug resistant TB using TB PCR and WGS** Mirae Park (London, United Kingdom), Giovanni Satta, Onn Min Kon

PA4097	**The role of autophagy associated gene expressions in the progression from latent TB infection to active pulmonary TB disease** Ying-Tang Fang (Kaohsiung City,, Taiwan), Yung-Che Chen
PA4098	**A retrospective audit assessing the efficacy of the GeneXpert test in diagnosing TB in a paediatric population** Robert White (LEICESTER, United Kingdom), Srini Bandi
PA4099	**Multiparameter immunoprofiling differentiates progressive from nonprogressive nontuberculous mycobacteria lung disease (NTM-LD)** Paige Marty (Rochester, United States), Balaji Pathakumari, Virginia Van Keulen, Maleeha Shah, Tobias Peikert, Patricio Escalante
PA4100	**Identification of lung macrophage secreted biomarkers for the development of rapid, accurate and affordable point-of-care tuberculosis diagnosis test suitable in low income settings.** Paulin Essone (Lambarene, Gabon), Bayode Adegbite, Ayodele Alabi, Bertrand Lell, Ayola Adegnika , Peter Kremsner, Martin Grobusch, Selidji Agnandji

TP-22 in thematic poster area — Session 464 — 13:00 - 14:00

Thematic poster: Molecular footprints in lung cancer

Disease(s) : Thoracic oncology Airway diseases

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

Chairs : Ilias Angelidis (Chalandri, Greece), Fernando Gamarra (Straubing, Germany)

PA4101	**Changes in Structure and Stiffness of the Lung Extracellular Matrix in Lung Cancer** Maria Narciso (barcelona, Spain), Natalia Díaz-Valdivia, Constança Junior, Jorge Otero, Jordi Alcaraz, Daniel Navajas, Ramon Farre, Isaac Almendros, Núria Gavara
PA4102	**Endobronquial ultrasound transbronchial needle aspiration (EBUS-TBNA) performance for the determination of Programmed Death Ligand-1 (PDL-1) expression in non-small cell lung cancer (NSCLC)** Maria Zuil Moreno (Lleida, Spain), Dinora Polanco, Esther Gracia-Lavedan, Lucía Pinilla, Sonia Gatius, Ferran Barbé
PA4103	**Extracellular vesicles (EVs) as diagnostic tools in the phenotypic determination of lung tumors** Maureen Cambier (Liège, Belgium), Florian Muller, Monique Henket , Claire Remacle , Julien Guiot , Ingrid Struman
PA4104	**Non small cell lung cancer patients with EGFR mutation : therapeutic sequences in a real life setting** Giulia Berardi (Grenoble, France), Nicolas Girard, Florence De Fraipont, Chantal Decroisette, Sylvie Gazzerie, Denis Moro Sibilot, Anne Claire Toffart
PA4105	**Detection of lung cancer using a single blood biomarker and tobacco history in a high risk cohort** Morten Borg (Aalborg SV, Denmark), Line Nederby, Sara Wen, Torben Hansen, Anders Jakobsen, Rikke Andersen, Ulla Møller Weinreich, Ole Hilberg
PA4106	**Involvement of TLRs and WNT pathway in lung cancer in COPD patients** Amanda Iglesias Coma (Palma, Spain), Noemi Ceron, Esther Martínez, Aina Martin, Antonia Obrador, Jaume Sauleda
PA4107	**Terminal effector Tregs in metastatic lymph nodes of lung cancer patients** Joanna Domagała-Kulawik (Warszawa, Poland), Iwona Kwiecien, Elzbieta Rutkowska, Agata Raniszewska, Joanna Bednarek, Rafal Sokolowski, Piotr Rzepecki
PA4108	**Current Practice in Molecular Genetic Testing in NSCLC Patients in Czechia. Data from the TULUNG Registry 2011-2021.** Monika Bratová (Brno 35, Czech Republic), Kristian Brat, Jana Skrickova, Karolina Hurdalkova, Milos Pesek, Martin Svaton, Libor Havel, Leona Koubkova, Michal Hrnciarik, Ondrej Fischer, Jana Krejci
PA4109	**ADAMTS1 as a potential tumor suppressor in lung adenocarcinoma** Chao-Yuan Chang (Kaohsiung, Taiwan), Hsiao-Chen Lee, Kuan Li Wu, Ya-Ling Hsu
PA4110	**Blood biomarkers as predictors of treatment response in advanced NSCLC patients treated with immune checkpoint inhibitor therapy** Karolien Vekens (Jette, Belgium), Charlotte Dethier, Lore Decoster
PA4111	**Cancer associated fibroblasts subtypes are associated with histological features, immune environment and prognosis in resected non small cell lung cancer** nicolas poté (paris, France), Edouard Guenzi, Kinan El Husseini, Alice Guyard, Arnaud Mailleux, Pierre Mordant, Anne Couvelard, Bruno Crestani, Aurélie Cazes, Gérard Zalcman

PA4112	**Analysing the molecular landscape of squamous cell carcinoma through simultaneous targeted DNA and RNA-based next-generation sequencing** Joanna Moes-Sosnowska (Warsaw, Poland), Monika Skupinska, Urszula Lechowicz, Paulina Skronska, Ewa Szczepulska-Wojcik, Aneta Stepniewska, Adrianna Rozy, Renata Langfort, Piotr Rudzinski, Tadeusz Orlowski, Delfina Popiel, Maciej Wieczorek, Joanna Chorostowska-Wynimko
PA4113	**Effects of the tumor microenvironment and molecular forms of alpha1-antitrypsin on NSCLC viability** Anna Gründing (Hannover, Germany), Tobias Welte, Sabina Janciauskiene
PA4114	**The Role of Interleukin 6 and Cyclooxygenase 2 In Progressivity and Metastatic Process in Andavce Non Small Cell Lung Cancer** Arif Santoso (Makassar, Indonesia), Rasiha Rasiha, Sitti Munawwarah, Ahmad Mustang

TP-23 in thematic poster area — Session 465 — 13:00 - 14:00

Thematic poster: From basic to translational research in idiopathic interstitial pneumonias

Disease(s) : Interstitial lung diseases, Airway diseases

Method(s) : Cell and molecular biology, Physiology, Imaging, Endoscopy and interventional pulmonology

Chairs : Nikhil Hirani (Edinburgh (Edinburgh), United Kingdom), Manuela Funke-Chambour (Bern, Switzerland)

PA4115	**Silencing MMP7 expression with a lung-targeted RNAi molecule limits fibrosis and preserves pulmonary function in bleomycin-injured rats** Tingting Yuan (VERONA, United States), Anthony Nicholas, Natalia Lakomski, Maria Afrazi, Holly Hamilton, Julia Hegge, James Hamilton, Tao Pei, Erik Bush
PA4116	**Fibroblast-like culture from bronchoalveolar lavage of patient with idiopathic pulmonary fibrosis** Laura Bergantini (siena, Italy), Sara Gangi, Elena Bargagli, Miriana D'Alessandro, Dalila Cavallaro, Paolo Cameli
PA4117	**Biomarker analysis of bronchoalveolar lavage (BAL), bronchoabsorption (BA) and serum in Idiopathic Pulmonary Fibrosis (IPF) and healthy volunteers (HV)** Nikhil Hirani (Edinburgh (Edinburgh), United Kingdom), Feng Li, Adam Marshall, Cecilia Boz, Sarah Mcnamara, Lisa Nicol, Williamson Bradford
PA4118	**Dysfunctional club cells differentiation in idiopathic pulmonary fibrosis** Bénédicte SAISSAC (Montpellier, France), Arnaud Bourdin , Fort Petit Aurélie
PA4119	**Mannose 6-phosphate/insulin-like growth factor 2 receptor in fibrosing phenotypes of diffuse parenchymal lung diseases** Eva Tedlova (Bratislava, Slovakia), Vladimir Leksa, Magda Suchankova, Eszter Zsemlye, Jan Urban, Martina Ganovska, Elena Tibenska, Kinga Szaboova, Frantisek Sandor, Marta Hajkova, Kristina Kluckova, Maria Bucova
PA4120	**Discovery of intra-parenchymal adipose tissue as a component of tissue remodeling in pulmonary fibrosis** Kinan El Husseini (Paris, France), Nicolas Poté, Madeleine Jaillet, Pierre Mordant, Hervé Mal, Justine Frija-Masson, Raphael Borie, Aurélie Cazes, Bruno Crestani, Arnaud Mailleux
PA4121	**Prolyl-3-hydroxylase 4 (P3H4), a novel player in collagen synthesis and secretion in lung fibroblasts** Ceylan Onursal (München, Germany), Larissa Knüppel, Caressa D. Lietman, Juliane Merl-Pham, Rudolf Hatz, Jürgen Behr, Kristian Unger, Julia Hess, Stefanie M. Hauck, Brendan Lee, Claudia Staab-Weijnitz
PA4122	**Role of IL17 A/F in experimental lung fibrosis** Marie Moog (Hannover, Germany), Franziska Aschenbrenner, Danny Jonigk, Immo Prinz, Tobias Welte, Martin Kolb, Ulrich A. Maus
PA4123	**Role of CXCL13 in animal model of lung fibrosis and human ILDs.** Aya Watanabe (Kyoto, Japan), Hasegawa Koichi, Ashino Shigeru, Santosh Kumal Gothwal, Tomohiro Handa, Hiroshi Date, Toyohiro Hirai, Michael Haas, Fionnuala Mcaleese Eser, Ken Fujimura, Justus Veerkamp, Hana Cernecka, Markus Koch , Ulrich Nielsch, Atsuyasu Sato
PA4124	**Idiopathic pulmonary fibrosis is associated with increased levels of FACIT collagen biomarkers** Jannie M. B. Sand (Herlev, Denmark), Annika Hummersgaard Hansen, Emilie A. Madsen, Jeppe Thorlacius-Ussing, Thomas S. Prior, Morten A. Karsdal, Diana J. Leeming, Elisabeth Bendstrup
PA4125	**Inhibitory role of retinoic acid-related orphan receptor alpha RORa in human lung fibroblast activation.** Eliza Tsitoura (Heraklion (Crete), Greece), Dimitra Maria Zevla, Bruno Crestani, Katerina Antoniou

PA4126 **Increased expression of β-1,4-Galactosyltransferase-I in Idiopathic Pulmonary Fibrosis, a basis for further therapeutic applications**
Alberto Ricci (Roma (RM), Italy), Claudia De Vitis, Dario Pizzirusso, Giulio Guerrieri, Silvia Castelli, Antonella Carraturo, Alba Moretta, Claudia Salvucci, Maria Chianese, Tiria Sordi, Rita Mancini, Michela D'Ascanio

PA4127 **PERIPHERAL BLOOD IMMUNOLOGICAL PROFILE OF IDIOPATHIC PULMONARY FIBROSIS**
Nuria Mendoza Barco (Premià de Dalt (CT), Spain), Sandra Casas-Recasens, Fernanda Hernandez, Tamara Cruz, Núria Albacar, Gemma López-Saiz, Xavier Alzina, Alvar Agustí, Jacobo Sellarés, Rosa Faner

PA4128 **Proteomic profiling for the development of new serum based diagnostic and prognostic biomarkers in Progressive Pulmonary Fibrosis.**
Ermanno Puxeddu (Roma (RM), Italy), Giuseppe Cillis, Luigino Calzetta, Francesco Cavalli, Gianluigi Sergiacomi, Immacolata Rossi, Paola Rogliani

PA4129 **Expression of PD-1/PD-L1 axis and CD4/CD8 ratio in mediastinal lymph nodes of human and experimental lung fibrosis**
Theodoros Karampitsakos (Patras, Greece), Apostolos Galaris, Serafeim Chrysikos, Ourania Papaioannou, Ioannis Vamvakaris, Aris Anagnostopoulos, Grigoris Stratakos, Matthaios Katsaras, Fotios Sampsonas, Katerina Dimakou, Effrosyni Manali, Spyridon Papiris, Demosthenes Bouros, Petros Bakakos, Vassilis Aidinis, Argyris Tzouvelekis

PA4130 **Bleomycine-induced Pulmonary fibrosis alters the functioning of the respiratory neural network**
nicolas voituron (Bobigny, France), Céline-Hivda Yegen, Dominique Marchant, Emilie Boncoeur

PA4131 **Profibrotic effects analysis of bleomycin administration in Swiss CD-1 nude mice**
Kristiyan Stiliyanov Atanasov (Palma de Mallorca, Spain), Joan Truyols Vives, Gabriel Escarrer, Cristina Gómez, Teresa De Francisco, Aina Martín Medina, Carlos Río, Ernest Sala-Llinàs, Josep Mercader-Barceló

PA4132 **Effects of a palmitate and fructose rich diet on lung fibrosis and inflammation markers in a murine model**
Kristiyan Stiliyanov Atanasov (Palma de Mallorca, Spain), Cristina Gómez, Joan Truyols Vives, Aina Martín-Medina, Gabriel Escarrer, Ernest Sala-Llinàs, Josep Mercader-Barceló

PA4133 **Uncovering collagen VII in lungs of patients with idiopathic pulmonary fibrosis**
Arturo Ibáñez Fonseca (Lund, Sweden), Barbora Michaliková, Liang Xiong, Hans Brunnström, Arturo Ibáñez-Fonseca, Sofia Lundin, Göran Dellgren, Anna Löfdahl, Linda Elowsson Rendin, Gunilla Westergren-Thorsson

TP-24 in thematic poster area — Session 466 — 13:00 - 14:00

Thematic poster: Basic science in pulmonary hypertension

Disease(s) : Pulmonary vascular diseases Airway diseases

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

Chairs : Christina Eichstaedt (Heidelberg, Germany), Grazyna Kwapiszewska-Marsh (Graz, Austria)

PA4134 **Research priorities for future pulmonary hypertension research: a James Lind Alliance priority setting partnership**
Jason Weatherald (Edmonton, Canada), Hina Iqbal, Lisa Mielniczuk, Abdul Rehman Syed, Jennifer Howard, Nicole Dempsey, Tamara Rader, John Swiston, Steeve Provencher

PA4135 **Deep learning of regulatory regions discovers enhancer variants implicated in PAH**
Tobias Tilly (Cambridge, United Kingdom), Kathryn Auckland, Reshma Nibhani, Jennifer Martin, N Nihr Bioresource - Rare Diseases, N National Cohort Study Of Idiopathic And Heritable Pah, Nicholas W. Morrell, Pietro Lio', Stefan Gräf

PA4136 **End-stage COPD patients with severe pulmonary hypertension have less airspace enlargement in histologic samples of explanted lungs**
Katarina Zeder (Graz, Austria), Leigh M. Marsh, Alexander Avian, Luka Brcic, Anna Birnhuber, Philipp Douschan, Vasile Foris, Teresa Sassmann, Panja Böhm, Konrad Hoetzenecker, Grazyna Kwapiszewska, Horst Olschewski, Gabor Kovacs

PA4137 **Optical imaging outperforms micro-CT towards revealing 3D microvasculature in whole lung tissue**
Birger Tielemans (Leuven, Belgium), Fopke Marain, Felix De Bie, Montserrat Coll-Llado, Sebastian Munck, Jan Deprest , Jim Swoger, Greetje Vande Velde

PA4138 **Correlation between right ventricular dysfunction and plasma protein profile in pulmonary hypertension**
Stephen Wort (London, United Kingdom), Andrew Constantine, Christopher J Rhodes, Piera Ricci, Wei Li, Laura C Price, Colm Mccabe, John Wharton, Martin R Wilkins, Luke S Howard, Konstantinos Dimopoulos

PA4139 **Impulse oscillometry in the assessment of patients with idiopathic arterial hypertension: a pilot study.**
Monica Corso Pereira (Campinas (SP), Brazil), Helena Villas Bôas, Ilma Paschoal

PA4140	**NTP42 alleviates experimental pulmonary arterial hypertension and promotes beneficial right ventricular adaptation, preserving right heart function** Eamon Mulvaney (Dublin 4, Ireland), Fabiana Renzo, Rui Adão, Glória Conceição, Emilie Dupre, Charles Laurent, Pedro Mendes-Ferreira, Carmen Brás-Silva, B. Therese Kinsella
PA4141	**IL-11 increases levels and activates circulating fibrocytes in different pulmonary hypertension animal models.** Ines Roger (Valencia, Spain), Javier Milara, Paula Montero, Nada Belhadj, Julio Cortijo
PA4142	**IL-1β may contribute to NGF-induced alterations in pulmonary hypertension** Clement BOUCHET (Pessac, France), Guillaume Cardouat, Precilia Fernandes, Paul Robillard, Roger Marthan, Christelle Guibert, Veronique Michel
PA4143	**Quantitative immunohistochemistry of PDGFRα, PDGFRβ, c-KIT and CSF1R in human PAH lung samples** Ravikumar Sitapara (San Diego, United States), Aneta Gandjeva, Rubin Tuder, Lawrence Zisman
PA4144	**Extended Pulmonary Retention and Tissue Distribution of Inhaled Liposomal Iloprost (L608)** Pei Kan (Taipei, Taiwan), Ko-Jie Chen
PA4145	**The microbiota affects the development of the lung vascular tree in rats** FIRMIN AKOUMIA (Paris, France), Maria-Rosa Ghigna, Julie Cadiou, Amandine Lashermes, Julie Riviere, Stephanie Gouriou, Rosyne Lagrafeuille, Geneviève Hery-Arnaud, Marc Humbert, Nicolas Lapaque, Sylvia Cohen-Kaminsky
PA4146	**HS135: Novel Activin & GDF Ligand Trap for the Treatment of Pulmonary Hypertension (PH)** Gauthier Schang (Montreal, Canada), Mathilde Poujol De Molliens, Jean-Francois Denis, Cristina Chauvet, Emilie Brûlé, Vann Ganesh, Julia Schoelermann, Gilles Tremblay, Ilia Tikhomirov, Maureen O'Connor-Mccourt
PA4147	**Basement membrane regulates neointimal hyperplasia in pulmonary hypertension due to left heart disease (PH-LHD)** Netra Nambiar Veetil (Berlin, Germany), Mariya Kucherenko, Tara Gransar, Robert Szulcek, Christoph Knosalla, Wolfgang M. Kuebler
PA4148	**COX2 expression is downregulated in a shear stress magnitude-dependent manner in BMPR2-silenced HPAECs: implications for prostacyclin deficiency in PAH** Abdul Mahomed (London, United Kingdom), Abdul Mahomed, Anne Burke-Gaffney, Maziah Ghazaly, Jarka Naser, Quezia Toe, Gregory Quinlan, Stephen John Wort
PA4149	**The ephrin-b2/EphB4 guidance system in pulmonary artery smooth muscle cells plays a central role in adult vascular remodeling** Sonja Rittchen (Graz, Austria), Slaven Crnkovic, Katharina Jandl, Diana Zabini, Ayse Ceren Mutgan, Panja Boehm, Konrad Hoetzenecker, Wolfgang Toller, Christine Veith, Akos Heinemann, Ralph T. Schermuly, Andrea Olschewski, Leigh M Marsh, Grazyna Kwapiszewska
PA4150	**Pulmonary arterial changes in patients with end-stage COPD and pulmonary hypertension: computed tomography and histopathological study of the lungs.** Guillaume Martin (Strasbourg, France), Matthieu Canuet, Aissam Labani, Antoine Wackenthaler, Irina Enache, Marie-Pierrette Chenard, Peter Dorfmüller, David Montani, Romain Kessler, Marianne Riou
PA4152	**Towards a GCN2 deficient model of pulmonary veno-occlusive disease** Max Schwiening (CAMBRIDGE, United Kingdom), Stephen Moore, Alexi Crosby, Mark Southwood, Chris Huang, Nicholas W Morrell, Stefan J Marciniak, Elaine Soon
PA4153	**Il-33 role in the pulmonary hypertension development in diabetic patients with coronary artery disease** Boris Shelest (Kharkiv, Ukraine), Yuliia Kovalova, Anatoliy Voitovych

TP-25 in thematic poster area — Session 467 — 13:00 - 14:00

Thematic poster: Practice changing pleural interventions and beyond in 2022

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

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

Chairs : Mohammed Munavvar (Preston (Lancashire), United Kingdom), Rachel Mercer (Winchester, United Kingdom)

PA4154	**Antiseptic pleural irrigation for adult pleural infection** Maged Hassan (Alexandria, Egypt), Basma El-Shaarawy, Asmaa Elshazly, Mohamed Gadallah, Ahmed Sadaka

PA4155	**A Randomized Trial Comparing the duration of the procedure using Rigid mini-Thoracoscopy and Semirigid Thoracoscopy in Undiagnosed or Malignant Pleural Effusion** Pariyakorn Padmindra (Bangkok, Thailand), Vorawut Thanthitaweewat, Thitiwat Sriprasart
PA4156	**Semi-rigid vs rigid pleuroscopy for the diagnosis for pleural effusion: a multi-centric study** Maria João Silva (Torres Novas, Portugal), Diana Amorim, Fernando Silva, Rebeca Natal, Michele Santis, Paulo Matos, Lourdes Barradas, Luis Ferreira, Luis Rodrigues, Salvato Feijó
PA4157	**Erector spinae plane (ESP) blocks and day case thoracoscopy** Avinash Aujayeb (Newcastle, United Kingdom), Jamie Mcpherson, Edward Halvey
PA4158	**Pleural pustule - A novel thoracoscopic appearance of pleural tuberculosis.** Venkata Nagarjuna Maturu (Hyderabad (Andhra Pradesh), India), Pratibh Prasad, Mahendra Biradar
PA4159	**Usefulness of pleural manometry during evacuating thoracentesis** Claudia Rodriguez Busto (Madrid, Spain), Olga Rajas Naranjo, Ana Nuñez Ares, Javier Lazaro Sierra, Paola Arrieta Narvaez, Javier Flandes Aldeyturriaga, Beatriz Morales Chacon, Andrea Albuja Hidalgo, Gianna Vargas Centanaro, Eduardo Solis Garcia, Elena Forcen Vicente De Vera, Maria Jose Bernabe Barrios
PA4160	**The impact of 2% lidocaine in pleural effusion pH and LDH - Real world experience** Gabriela Sofia Cancela da Fonseca Ferreira Santos (Lisboa, Portugal), André B. Matos, João Portela, Ricardo Gomes, Marina Bonnet, Jorge Soares
PA4161	**Tunneled pleural catheters - our experience with the first fifty patients** Nicole Fernandes (vila nova de gaia, Portugal), Luis Lázaro Ferreira, Daniel Coutinho, Carla Ribeiro, Ana Oliveira
PA4162	**Improving pleural procedure documentation in a district general hospital** Frederick Jarvis (Halstead, United Kingdom), Catherine Doig, Zaw Aung, Dora Amran
PA4163	**Pigtail catheters for pleural effusions: efficacy and safety** Ana Rita Queiroz Rodrigues (Baiao, Portugal), Margarida Cruz, Ana Isabel Loureiro, Joelma Silva, Rafael Noya
PA4164	**An update on the management of first episode primary spontaneous pneumothorax in an Australian hospital network.** Christopher Chew (Melbourne, Australia), James Bartlett
PA4165	**Retrospective analysis of chest drain size and complications in spontaneous secondary pneumothorax in a District General Hospital, UK.** Thomas Moore (Buckinghamshire, United Kingdom), Martha Purcell, Ketan Patel, Katrine Steele
PA4166	**Has COVID-19 affected complication rate of IPC placements?** Dana Li (London, United Kingdom), Sarah Johnstone, Padmavathi Parthasarathy, Rajini Sudhir, Muhammad Tufail, Rakesh Panchal
PA4167	**Does intravenous sedation improve patient comfort during the insertion of tunnelled indwelling pleural catheters a pilot prospective comparison study.** Andrew Harries (Cardiff, United Kingdom), Gillian Warwick, Artemio Gonzales, Claire Tagg, Kathryn Turner, Michael Pynn, Alina Ionescu
PA4168	**Compliance of Pleural Procedures with BTS Pleural Guidelines within a large District General Hospital** Nafisa Hussain (Watford, United Kingdom), Alessio Navarra, Rahul Mogal
PA4169	**THORACOSCOPIC PRACTICES IN INDIA- A SURVEY BY INDIAN CHEST SOCIETY** Aditya Kumar Chawla (New Delhi (Delhi), India), Rakesh Chawla
PA4170	**Mechanical ventilation for COVID19 – new patient cluster in risk for postintubation tracheal stenosis** Goran Glodić (Zagreb, Croatia), Sonja Badovinac, Marta Koršić, Filip Popović, Denis Baričević, Dražena Srdić, Ana Bačelić Gabelica, Feđa Džubur, Mateja Janković Makek, Bernard Budimir, Miroslav Samaržija
PA4171	**A retrospective cohort study to investigate the diagnostic yield of bronchoscopy with bronchoalveolar lavage in highly immunocompromised adult patients** Rayid Abdulqawi (Manchester, United Kingdom), Deemah AlAbdulhadi, Ahmad Aljishi, Ghadeer Alabbadi, Mohammad Hashim Khalafallah, Zainab Almusa
PA4172	**Late Breaking Abstract - Metered Cryospray improves patient-reported outcome measures at 6-months post -treatment, in patients with COPD with chronic bronchitis, in a randomised, sham-controlled trial** Christopher M Orton (London, United Kingdom), James Tonkin, Ley Chan, Francesca Conway, Anand Tana, Bavithra Vijayakumar, Jorine E Hartman, Cielito Caneja, Laura Avanzi, Karin Klooster, John Thornton, Jan Lukas Robertus, Dirk-Jan Slebos, Pankaj K Bhavsar, Pallav L Shah

PA4173	**Late Breaking Abstract - Transbronchial biopsy by radial probe endobronchial ultrasound followed by cryobiopsy using a novel 1.1-mm diameter cryoprobe** Jung Seop Eom (Busan, Republic of Korea), Soo Han Kim, Hyun Sung Chung

TP-26 in thematic poster area — Session 468 — 13:00 - 14:00

Thematic poster: Late-breaking abstracts in airway disease

Disease(s) : Airway diseases Respiratory critical care

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

Chairs : Christopher E. Brightling (Leicester (Leicestershire), United Kingdom), Vibeke Backer (Copenhagen, Denmark)

PA4174	**Late Breaking Abstract - Safety of ascending single and multiple doses of inhaled SIS, an isotonic aqueous solution of sodium hypochlorite, in healthy subjects** Christopher Burton (Kgs Lyngby, Denmark), Torben Balchen, Lise Wilki-Kurtzhals, Niclas Sjögren, Thomas Bjarnsholt, Elin Jørgensen, David Peick Sonne
PA4175	**Late Breaking Abstract - ETD001: A long-acting inhaled ENaC blocker, is well tolerated in humans** Paul Russell (Chalfont St Peter, United Kingdom), Kathy Woodward, Joanne Charlwood, Rachael White, Denisa Wilkes, Henry Danahay, David Morris
PA4176	**Late Breaking Abstract - Metformin: A potential drug candidate to restore poor corticosteroid sensitivity in obese asthmatic patients** Masako To (Saitama, Japan), Natsue Honda, Kosuke Haruki, Yasuo To
PA4177	**Late Breaking Abstract - Waning of biologic effect at end of dosing interval perceived by patients with severe asthma** Johannes A Kroes (Leeuwarden, Netherlands), Lotte H G Van Hal, Liset Van Dijk, Sander W Zielhuis, Eric N Van Roon, Anneke Ten Brinke
PA4178	**Late Breaking Abstract - Impact of erdosteine on exacerbations in moderate COPD** Peter M. A. Calverley (Liverpool (Merseyside), United Kingdom), Alberto Papi, Clive Page, Paolo Rogliani, Roberto Dal Negro, Mario Cazzola, Arrigo Cicero, Wisia Wedzicha
PA4179	**Late Breaking Abstract - Understanding how azithromycin reduces asthma exacerbations and the underlying mechanisms of macrolides** Lisa Jurak (Woolloongabba, Australia), Ian Yang, Michelle Hill, Jodie Simpson, John Upham
PA4180	**Late Breaking Abstract - Achievement rate and predictive factors of the deep remission to biologics in severe asthma.** Keiji Oishi (Ube, Japan), Kazuki Hamada, Yoriyuki Murata, Yoshikazu Yamaji, Maki Asami, Nobutaka Edakuni, Tsunahiko Hirano, Kazuto Matsunaga
PA4181	**Late Breaking Abstract - Identification and characterisation of selective antagonists for TMEM16A(acd) isoform for the treatment of obstructive respiratory diseases.** pierre philippe saintot (verona, Italy), Corrado Carignani, Jonathan Phillips, Caterina Virginio
PA4182	**Late Breaking Abstract - A phase 3b, randomized controlled trial of gefapixant in recent-onset chronic cough** Lorcan McGarvey (Belfast, Ireland), Mandel Sher, Yuri Grigorievich Shvarts, Susan Lu, Wen-Chi Wu, Ping Xu, Jonathan Schelfhout, Carmen La Rosa, Allison Martin Nguyen, Paul Reyfman, Amna Sadaf Afzal
PA4183	**Late Breaking Abstract - Effects of anti-tryptase antibody in upper and lower airway of asthmatics** Lindsay Henderson (South San Francisco, United States), Kit Wong, Victor Poon, Gizette Sperinde, Rebecca Bauer, Kenta Yoshida, Chen Chen, Qi Liu, Yiling Chen, Keyi Long, Prajna Banerjee, Steven Laing, Nick Jones, Horace Rhee, Brian Leaker, Dave Singh, Peter Bradding
PA4184	**Late Breaking Abstract - The antiasthmatic activity of Rho-kinase inhibitor hydroxyfasudil in the settings of experimentally induced allergic airway inflammation** Sona Franova (Martin, Slovakia), Miroslava Molitorisova, Lenka Kalmanova, Jarmila Palencarova, Martina Sutovska
PA4185	**Late Breaking Abstract - Implications of treatable traits and treatment choices on exacerbation risk in moderate -severe asthma** Ayşe Arzu Yorgancıoğlu (Konak, Turkey), Ian Pavord, Guy Brusselle, Paolo Pitrez, Sean Oosterholt, Abhijith Pg, Oscar Della Pasqua
PA4186	**Late Breaking Abstract - International, prospective study of mepolizumab in severe asthma: REALITI-A at 2yrs** Rupert Jakes (London, United Kingdom), Cristiano Caruso, Giorgio W. Canonica, Manish Patel, Andrew Smith, Mark C. Liu, Rafael Alfonso-Cristancho, Robert G. Price, Lydia Demetriou, Antonio Valero, Charles Pilette, Peter Howarth

PA4187 **Late Breaking Abstract - Asthma exacerbation rate reduction with benralizumab in an integrated analysis of the real-world XALOC-1 study**
David J Jackson (London, United Kingdom), Girolamo Pelaia, Alicia Padilla-Galo, Michael Watt, Sheena Kayaniyil, Silvia Boarino, Jesus Sanchez Tena, Vivian H. Shih, Trung N. Tran, Douglas Arbetter, David Cohen, Rohit Katial, Justin Kwiatek, Anat Shavit, Benjamin Emmanuel, Parameswaran Nair

PA4188 **Late Breaking Abstract - KCa3.1 inhibition possesses complex anti-asthmatic effect in a guinea pig model of chronic asthma.**
Martina Šutovská (Martin, Slovakia), Jozef Mažerik, Soňa Fraňová

PA4189 **Late Breaking Abstract - Early response and remission with benralizumab in patients with severe asthma and chronic rhinosinusitis with nasal polyposis (CRSwNP) in the prospective real-world ImPROve Asthma study**
Stephanie Korn (Mainz, Germany), Henrik Watz, Benjamin Emmanuel, Tanja Plate, Matthias Saathoff, Anat Shavit, Thorsten Grund, Marek Lommatzsch

PA4190 **Late Breaking Abstract - Gender differences in gene polymorphisms are linked to up-reguated leukotriene pathway in asthma**
Davida Mirra (Francolise, Italy), Renata Esposito, Giuseppe Spaziano, Erika Cione, Luca Gallelli, Fiorentina Roviezzo, Francesca Polverino, Bruno D'Agostino

PA4191 **Late Breaking Abstract - Cognitive impairment is common in patients with severe astma that are commenced on a biological treatment**
Charlotte Bernhoff (Copenhagen, Denmark), Andreas Elleby Jespersen, Nanna Dyhre-Petersen, Ditte K Klein, Kamilla W Miskowiak, Celeste M Porsbjerg

PA4192 **Late Breaking Abstract - The PARP14 inhibitor RBN-3143 suppresses lung inflammation in preclinical models**
Mario Niepel (Newton, United States), Melissa Vasbinder, Jennifer Molina, Bin Gui, Kaiko Kunii, Danielle Blackwell, Elizabeth Mateer, Jan-Rung Mo, Colin Coutts, Nicholas Perl, Kristy Kuplast-Barr, William Church, Christina Majer, Laurie B. Schenkel, Kerren Swinger, Ryan Abo, Ellen Bamberg, Yue Ren, Luke Utley, Tim Wigle, Christopher Reik, Alvin Lu, Anne Cheung, Elena Minissale, Kristen Mceachern, Victoria Richon, Sudha Parasuraman, Kevin Kuntz, Heike Keilhack

TP-3 in thematic poster area — Session 469 — 13:00 - 14:00

Thematic poster: Chronic management of respiratory diseases

Disease(s) : Airway diseases Interstitial lung diseases

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

Chairs : Beatriz Abascal Bolado (Santander, Spain), Natasha Smallwood (Melbourne (VIC), Australia)

PA4193 **The minimum important difference for the PREM-9 following a course of Pulmonary Rehabilitation (PR)**
Emma Chaplin (Leicester (Leicestershire), United Kingdom), David Coope, Jakub Zatloukal, Sarah Ward, Sally J Singh, Linzy Houchen-Wolloff

PA4194 **Physical activity promotion interventions in chronic airways disease: preliminary findings from a scoping review and meta-analysis**
Caroline Reilly (Leeds, United Kingdom), Joe Sails, Rebecca Birch, Ian Clifton, Daniel Peckham, Jim Mckenna , Antonios Stavropoulos-Kalinoglou, Oliver Price

PA4195 **Using technology to engage patients with interstitial lung diseases in a home exercise program: a pilot study**
Diana C Sanchez-Ramirez (Winnipeg, Canada)

PA4196 **The lived experiences of people with idiopathic pulmonary fibrosis (IPF) to inform Home Based Pulmonary Rehabilitation (HBPR) in Delhi, India: A Qualitative Study**
Humaira Hanif (Noida, India), Obaidullah Ahmed, Rubia Ishrat, Ilaria Pina, Mark W Orme, Zahira Ahmed, Mohd Shibli, Andy Barton, Deepak Talwar, Sally Singh

PA4197 **Does personality predict physical activity and sedentary behaviors after pulmonary rehabilitation in patients with chronic respiratory diseases ?**
Pauline Caille (LODEVE, France), Yannick Stephan, François Alexandre, Virginie Molinier, Nelly Héraud

PA4198 **Perceptions of patients about Pulmonary Rehabilitation (PR) in Bangladesh**
G M Monsur Habib (Khulna, Bangladesh), Roberto Rabinovich, Nazim Uzzaman, Kamrun Nahar, Sumaiya Akter, Hilary Pinnock

PA4199 **Feasibility study of home-based pulmonary rehabilitation (PR) in Bangladesh**
G M Monsur Habib (Khulna, Bangladesh), Roberto Rabinovich, Nazim Uzzaman, Kamrun Nahar, Sumaiya Akter, Hilary Pinnock

PA4200 **Effect of virtual pulmonary rehabilitation among patients with Chronic Obstructive Pulmonary Disease**
Aldrin John Almario (Quezon City, Philippines), Glynna Ong-Cabrera

PA4201 **Comparison of the effectiveness of different telerehabilitation methods on exercise capacity, dyspnea and quality of life in COPD patients**
Nursima Bulut (Istanbul, Turkey), Esra Pehlivan, Erdoğan Çetinkaya, Barış Demirkol, Melih Akay Arslan, Kürşad Nuri Baydili, Halit Çınarka

PA4202 **Late Breaking Abstract - A long road to recovery? Reduced quality of life, impaired functional status and the lived experience of Long COVID patients, a cohort analysis.**
Mark Faghy (Nottingham (Nottinghamshire), United Kingdom), Rebecca Owen, James Yates, Callum Thomas, Francessco Ferraro, Ruth Ashton

PA4203 **Sing-a-Lung: Does Singing for Lung Health provide physiological changes in COPD?**
Uffe Bodtger (Naestved, Denmark), Mette Kaasgaard, Daniel Bech Rasmussen, Anders Løkke, Peter Vuust, Ole Hilberg

PA4204 **Home oxygen therapy before, during, and after the COVID-19 pandemic: our reality**
Ramon Antonio Toribio Abreu (Santo Domingo, Dominican Republic), Sheila Espinal

PA4205 **Differentiating acute heart failure from exacerbations of COPD: An AI-supported literature review**
Sanne H B van Dijk (Enschede, Netherlands), Marjolein G J Brusse-Keizer, Charlotte C Bucsán, Carine J M Doggen, Job Van Der Palen, Anke Lenferink

PA4206 **A systematic review of shared decision-making interventions for people living with chronic respiratory diseases**
Amy Barradell (Leicester (Leicestershire), United Kingdom), Charlotte Gerlis, Linzy Houchen-Wolloff, Hilary Bekker, Noelle Robertson, Sally Singh

PA4207 **Impact of pulmonary rehabilitation on the social support of people with COPD**
Alda Sofia Pires De Dias Marques (Aveiro, Portugal), Sara Almeida, Patrícia Rebelo, Guilherme Rodrigues, Eduardo Samuel, Carolina Monteiro, Ana Grave, Cíntia Dias, Cristiana Santos, Adriana Simões, Cláudia Rodrigues, Sílvia Marques, Ana Carolina Conde Oliveira, Ana Sofia Rijo, Maria João Moura, Maria Aurora Mendes

PA4208 **Effectiveness of home-based pulmonary rehabilitation: systematic review and meta-analysis**
Md Nazim Uzzaman (Edinburgh, United Kingdom), Dhiraj Agarwal, Soo Chin Chan, Julia Patrick Engkasan, G M Monsur Habib, Nik Sherina Hanafi, Tracy Jackson, Paul Jebaraj, Ee Ming Khoo, Fatim Tahirah Mirza, Hilary Pinnock, Ranita Hisham Shunmugam, Roberto A. Rabinovich

PA4209 **Accelerometer adherence and physical activity levels for adults living with post-TB lung disease in Uganda**
Winceslaus Katagira (Kampala, Uganda), Pauline Ndagire, Pina Ilaria, Richard Kasiita, Sally J. Singh, Bruce J. Kirenga, Mark W. Orme

PA4210 **The influence of adherence to COPD exacerbation action plans on health outcomes**
Jade Schrijver (Enschede, Netherlands), Tanja Effing, Joanke Van Helden, Marjolein Brusse-Keizer, Job Van Der Palen, Paul Van Der Valk, Anke Lenferink

PA4211 **Impact of fatigue on physical performance during a pulmonary rehabilitation program in COPD patients**
Francois Alexandre (Lodeve, France), Virginie Molinier, Amandine Calvat, Adriana Castanyer, Laurene Charbonnel, Thomas Henry, Louis Hognon, Morgane Jollive, Aurelien Marcenac, Antonin Vernet, Nelly Heraud

PA4212 **Pulmonary rehabilitation and changes in aerobic capacity, peak respiratory pressures and quality of life in Colombian patients with bronchiectasis**
Lina Marcela Orozco Mejia (Cali, Colombia), Julián Andrés Rivera Motta

TP-4 in thematic poster area — Session 470 — 13:00 - 14:00

Thematic poster: Exercise capacity in respiratory diseases

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

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

Chairs : J. Alberto Neder (Kingston (ON), Canada), Samuel Verges (Grenoble, France)

PA4213 **Determinants of DLCO and contribution to exercise capacity and symptoms**
Eldar Priel (Dundas, Canada), Kieran J Killian, Imran Satia

PA4214 **VO2 prediction based on physiologic and mechanical exercise measurements**
Marco António Pacheco Pereira (Paio Pires, Portugal), Ricardo Almeida, Herminia Dias

PA4215	**Cardiovascular response to exercise in preterm-born children with and without low lung function** Chris Course (Cardiff, United Kingdom), Sarah Kotecha, Michael Cousins, Kylie Hart, John Watkins, Sailesh Kotecha
PA4216	**The effect of aerobic training on pulse wave velocity in adults with and without long-term conditions: a systematic review** Majda Bakali (Leicester, United Kingdom), Thomas J C Ward, Amy V Jones, Grace M Hawthorne, Pip Divall, Matthew P M Graham-Brown, Gerry P Mccann, Thomas Yates, Michael C Steiner, Rachael A Evans
PA4217	**Effects of a rehabilitation programme on blood inflammatory markers** Salma Mokaddem Mohsen (Tunis, Tunisia), Khadija Ayed, Zeineb El Guebsy, Asma Ayed, Ibtissem Dekhil, Imededdine Ben Dhia, Touhami Khelifi
PA4218	**Why patients with lung fibrosis showing only mild restriction at rest may develop limiting dyspnoea on exertion?** J. Alberto Neder (Kingston (ON), Canada), Reginald M Smyth, Devin B Phillips, Matthew D James, Sandra G Vincent, Kathryn M Milne, Mathieu Marillier, Juan Pablo De-Torres, Onofre Moran-Mendoza, Denis E. O'Donnell
PA4219	**Longitudinal prediction of maximum oxygen uptake in adults: analysis from the FRIEND registry** Victor Dourado (Santos (SP), Brazil), James Peterman, Ross Arena, Jonathan Myers, Leonard Kaminsky
PA4220	**Validity of alternative exercise tests in pulmonary hypertension.** Harrison Stubbs (Glasgow, United Kingdom), Alexander Maclellan, Michael Mcgettrick, Stephanie Lua, Fiona Thompson, Bhautesh Jani, Melanie Brewis, Colin Church, Martin Johnson
PA4221	**Disease-specific muscle oxygen transport and utilization during exercise in chronic obstructive pulmonary disease vs. chronic heart failure** Ulrik Winning Iepsen (Copenhagen, Denmark), Jacob Peter Hartmann, Rasmus Holmboe Dahl, Stine Nymand, Gregers Munch, Camilla Koch Ryrsøe, Bente Klarlund Pedersen, Pia Thaning, Stefan Mortensen, Ronan Martin Griffin Berg
PA4222	**Effects of acute bronchodilators on ventilatory constraint and dyspnoea during exercise in patients with pulmonary arterial hypertension (PAH)** Danilo C Berton (Porto Alegre (RS), Brazil), Elisa Schroeder, Lucia Rosso Diello, Suelen Di Domenico Melati, Marcelo B Gazzana, Eloara V M Ferreira
PA4223	**The utility of maximal oxygen uptake in assessment of cardiovascular risk in female patients with rheumatoid arthritis without associated lung disease** Gehan H. Abo E-Magd (Tanta, Egypt), Samah Elmedany
PA4224	**Submaximal breathing reserve during incremental cycle ergometry: reference values and clinical validation** J. Alberto Neder (Kingston (ON), Canada), Danilo C. Berton, Franciele Plachi, Devin Phillips, Reginald Smyth, Matthew James, Sophie Crinion, Juan Pablo De-Torres, Denis E. O'Donnell
PA4225	**The Impact of Cardiopulmonary Exercise Testing on Diagnosis of Unexplained Dyspnea** Craig Cook (bountiful, United States), Matt Hegewald
PA4226	**The association of pulmonary function and physical fitness in a population study** Maria Lopmeri (Helsinki, Finland), Tuula Vasankari, Tiina Mattila, Kari Tokola, Tommi Vasankari
PA4228	**Sit-to-stand as a potential alternative to 6MWT for portable oxygen titration in COPD** Nuno Faria (Porto, Portugal), Bruno S. Silva, Paula Pinto, Vânia Almeida, Maria José Fernandes, Maria Sucena, Joana Gomes
PA4229	**Do "static" lung volumes add to inspiratory capacity to predict exertional dyspnea and poor exercise tolerance in COPD?** J. Alberto Neder (Kingston (ON), Canada), Danilo C. Berton, Francieli Plachi, Devin Phillips, Reginald Smyth, Matthew James, Sophie Crinion, Juan Pablo De-Torres, Denis E. O'Donnell
PA4230	**Postural relief of dyspnea is associated with reduced neuromechanical dissociation in patients with advanced COPD** Amany Elbehairy (Alexandria, Egypt), Azmy Faisal, Hannah Mcisaac, Matthew D. James, Devin B. Phillips, Nicolle J. Domnik, Denis E. O'Donnell
PA4231	**The link between elevated inspiratory neural drive, inspiratory constraints, and dyspnea across the continuum of COPD severity** Matthew D. James (Kingston (ON), Canada), Devin B. Phillips, Sandra G. Vincent, Sara J. Abdallah, Adamo A. Donovan, J. Alberto Neder, Benjamin M. Smith, Dennis Jensen, Denis E. O'Donnell

TP-5 in thematic poster area — Session 471 — 13:00 - 14:00

Thematic poster: Noninvasive respiratory support in COVID-19: what did we learn?

Disease(s) : Respiratory critical care

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

Chairs : Claudia Crimi (Catania (CT), Italy), Miguel Filipe Martins de Matos Navarro Guia (Carnaxide, Portugal)

PA4232 **Role of BAL in COVID-19 patients: a prospective multicentre study**
Luca Ciani (Firenze, Italy), Julien Guiot, Claudia Ravaglia, Venerino Poletti, Valentina Luzzi, Leonardo Giuntoli, Leonardo Gori, Ernst Benoit, Edoardo Berillo, Alessandro Morettini, Carlo Nozzoli, Federico Lavorini, Anna Peired, Cosimo Nardi, Fabio Morecchiato, Gian Maria Rossolini, Simona Pollini, Laura Maggi, Francesco Annunziato, Marco Matucci Cerinic, Sara Tomassetti

PA4233 **Usefulness of the early combination of non-invasive respiratory therapies in patients with COVID-19**
Jose Rafael Teran Tinedo (Madrid, Spain), Pablo Mariscal Aguilar, Miguel Lorente González, Eduardo Cano Sanz, Joaquin Hernández Núñez, Maria Angeles Ortega Fraile, Daniel Laorden Escudero, Isabel De La Calle-Gil, Maria Cristina Plaza Moreno, Daniel Carballo López, Berta Gallego Rodríguez, Mariara Calderon Alcalá, Ailaf Latif Essa, Annette Zevallos Villegas, Soraya Gholamian Ovejero, Maria Churruca Arróspide, Manuel Valle Falcones, Elena Maria Saiz Lou, Carmen Rodríguez Calle, Pedro Landete Rodríguez

PA4234 **High-flow nasal cannula oxygen versus non-invasive ventilation in patients with COVID-19: a systematic review and meta-analysis**
Azizullah Beran (Toledo, United States), Omar Srour, Saif-Eddin Malhas, Mohammed Mhanna, Hazem Ayesh, Waleed Khokher, Khaled Srour, Ragheb Assaly

PA4235 **Severe SARS-CoV-2 pneumonia and pneumomediastinum and/or pneumothorax: a prospective observational study in an intermediate respiratory care unit**
Miguel Lorente González (Madrid, Spain), José Rafael Terán Tinedo, Daniel Laorden Escudero, Annette Zevallos Villegas, Miguel Suárez Ortiz, Pablo Mariscal Aguilar, Eduardo Cano Sanz, María Ángeles Ortega Fraile, Joaquín Hernández Núñez, Adalgisa Falcone, Elena María Saiz Lou, María Cristina Plaza Moreno, Clotilde Funes Moreno, Isabel De La Calle Gil, Rosalía Navarro Casado, Daniel Carballo López, Berta Gallego Rodríguez, Soraya Gholamian Ovejero, Aylaf Latif Essa, Carmen Rodríguez Calle, Tomás Jesús Villén Villegas, Pedro Landete Rodríguez

PA4236 **Lung Ultrasound versus SpO2-guided as "Best-PEEP" titration in SARS-CoV2 ARDS**
Salvatore Longobardi (Milan, Italy), Paolo Gaboardi, Fabrizio Nava, Andrea Lanza, Leonardo Rovere, Luca Ciceri, Michele Chiericozzi, Paolo Tarsia

PA4237 **Palliative care for Continuous Positive Airway Pressure (CPAP) withdrawal in patients with COVID-19**
Shi Han Lee (Colchester, United Kingdom), Asfandyar Yousuf, Sangam Bhandari, Mayurun Selvan, Harriet Roebuck, Rekha Badiger

PA4238 **CPAP-associated changes in oxygenation and clinical outcomes in severe COVID-19 pneumonia**
Stefano Pini (Milan, Italy), Marina Saad, Luca Perotto, Marina Gatti, Davide Alberto Chiumello, Stefano Aliberti, Francesco Blasi, Dejan Radovanovic, Pierachille Santus

PA4239 **Treatment of COVID-19 ARDS with a tabletop NIV device in a Respiratory Intermediate Care Unit**
Devasahayam Jesudas Christopher (Vellore (Tamil Nadu), India), Barney Isaac, Nadesan Priya, Avinash Nair, Balamugesh Thangakunam, Amith Balachandran, Tina George, Sheba Thomas, Tarun George, Ramya Iyadurai, Selwyn Kumar, Anand Zachariah, Bhagteshwar Singh, Priscilla Rupali, Kishore Pichamuthu, Richa Gupta, Jeffereson Daniel, Jebin Roger, Sujith Chandy

PA4240 **Utility of Continuous Positive Airway Pressure (CPAP) in COVID pneumonitis patients not suitable for mechanical ventilation**
Jessamy Reece (Worces, United Kingdom), Bethany Jones, Roisin O'Neill, Abhi Lal, See Ling Tan

PA4241 **Predicting the need for Continuous Positive Airway Pressure (CPAP) or High-flow nasal oxygen (HFNO) in COVID-19 and patient outcome**
Mohammed Jahanzeb Malik (Leatherhead, United Kingdom), Simon Bax, Riaz Ahmed

PA4242 **ROX index dynamics according to HFNC success in ICU patients with COVID-19-related acute respiratory failure**
Pervin Hanci (Edirne, Turkey), Ahmet Uysal, Beyza Yuksel, Volkan Inal

PA4243 **Development of a Non-Invasive Respiratory Support Pathway in COVID19 patients with severe respiratory failure in an Intermediate Respiratory Care Unit**
Antonio Menéndez (Granada, Spain), Jose Antonio Sánchez-Martínez, Susana Rojo-Tolosa, María Victoria González-Gutiérrez, Graciela Carolina Jurkojc Mohremberger, Gonzalo Jiménez-Gálvez, Concepción Morales-García

PA4244 **CLINICAL FINDINGS AND OUTCOMES FROM 1306 PATIENTS WITH COVID-19 PNEUMONIA IN AN INTERMEDIATE RESPIRATORY CARE UNIT: A PROSPECTIVE, OBSERVATIONAL STUDY**
Daniel Laorden Escudero (Madrid, Spain), Jose Rafael Terán-Tinedo, Soraya Gholamian-Ovejero , Miguel Lorente-González, Annette Zevallos-Villegas , Roberto Martínez-Alejos, Fernando Neria, Maria Ángeles Ortega-Fraile, Joaquín Hernández-Núñez , Pablo Mariscal-Aguilar, Rosalía Navarro-Casado, Isabel De La Calle-Gil, Maria Cristina Plaza-Moreno, Clotilde Funes-Moreno, Eduardo Cano-Sanz, Miguel Suárez-Ortiz, Manuel Valle-Falcones, Daniel Carballo-López, Berta Gallego-Rodríguez, Mariara Calderon-Alcalá, Aylaf Latif-Essa, María Churruca-Arróspide , Elena María Saiz-Lou, Carmen Rodríguez-Calle, Adalgisa Falcone, Miguel Ángel Salvador-Maya, Juan Martin-Torres, Marta D Espuelas Borderia, Laura Cotter-Muñoz, Ana Sanchez-Azofra, Roberto Vates-Gomez, Fernando García-Prieto, Alba Hernández-Píriz, Tomás Villén-Villegas, Pedro Landete

PA4245 **Predictors of Non-invasive Respiratory Support Failure in COVID-19 Pneumonia (RUTIROX). Preliminary Results**
Toni Marin (Badalona (Barcelona), Spain), Irene Aldás, Marina Galdeano, Leire Mendiluce, Alan Jhunior Solis, Isabel Alfaya, Adriana Martín, Marina Perpiñan, Jorge Abad, Antoni Rosell

TP-6 in thematic poster area — Session 472 — 13:00 - 14:00

Thematic poster: Translational research in COPD and lung cancer

Disease(s) : Thoracic oncology Airway diseases

Method(s) : Endoscopy and interventional pulmonology Cell and molecular biology Epidemiology Public health Imaging Pulmonary rehabilitation Transplantation

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

PA4246 **The Y-chromosome regulates hallmark features of asthma and COPD**
Karosham (Diren) Reddy (Glebe, Australia), Senani Rathnayake, Dikaia Xenaki, Alen Faiz, Brian Oliver

PA4247 **Implicating biological pathways in lung function and COPD by variant-to-gene mapping of novel signals from a multi-ancestry meta-analysis of genome-wide association studies**
Martin D Tobin (Leicester, United Kingdom), Nick Shrine, Abril Izquierdo, Jing Chen, Anna L Guyatt, Richard Packer, Chiara Batini, Alfred Pozarickij, Robin G Walters, Stephanie London, Andrew P Morris, Louise V Wain, Ian P Hall

PA4248 **Clinical and molecular characterisation of new variants associated to alpha-1-antitrypsin deficiency**
Valentina Barzon (Casanova Lonati (PV), Italy), Alice Maria Balderacchi, Giulia Bartoli, Stefania Ottaviani, Alessandra Corino, Tomás Patrick Carrol, Davide Piloni, Noel Gerard Mcelvaney, Angelo Guido Corsico, Anna Fra, Ilaria Ferrarotti

PA4249 **Smoking mice and exercise genes**
Lars Aakerøy (Trondheim, Norway), Chew W Cheng, Pavla Sustova, Sissel Gyrid Freim Wahl, Nathan R Scrimgeour, Sigurd Steinshamn, T Scott Bowen, Eivind Brønstad

PA4250 **Study of the expression of the IREB2, HHIP, and FAM13A genes in COPD and lung cancer**
Esperanza Salcedo Lobera (Málaga, Spain), Macarena Arroyo Varela, Gracia Eugenia González Angulo, Rafael Larrosa Jiménez, Rocío Bautista Moreno

PA4251 **The role of the microbiome in COPD**
Gunnar Reksten Husebø (Fana, Norway), Kristel Knudsen, Rune Nielsen, Andreu Paytuvi-Gallart, Walter Sanseverino, Tomas Mikal Eagan

PA4252 **Differentiating metabolomic signatures of airway and pulmonary vascular abnormalities in COPD**
Wassim Labaki (Ann Arbor, United States), Yizhuo Wang, Susan Murray, Jeffrey Curtis, Russell Bowler, Carrie Pistenmaa, Pietro Nardelli, Rubén San José Estépar, Raúl San José Estépar, Kathleen Stringer, George Washko, Meilan Han

PA4253 **Using liquid biopsies to validate miRNA lung cancer biomarkers.**
Esperanza Salcedo Lobera (Málaga, Spain), Macarena Arroyo Varela, Elena Espinosa García, Rafael Larrosa Jiménez, Rocío Bautista Moreno

PA4254 **MiRNAs under condition of continuous and intermittent hypoxia: possible link with oncogenesis?**
Donato Lacedonia (Molfetta (BA), Italy), GIORGIA MORIONDO, Piera Soccio, Giulia Scioscia, Pasquale Tondo, Rosa Leccisotti, Maria Cristina Colanardi, Roberto Sabato, Maria Pia Foschino Barbaro

PA4255 **Comparison of blood and lung biopsy core microbiome profiles of patients with lung carcinoma.**
Borislava Tsafarova (Sofia, Bulgaria), Yordan Hodzhev, Vladimir Tolchkov, Nikolay Yanev, Vania Youroukova, Silvia Ivanova, Vladimir Milanov, Dimitar Kostadinov, Stefan Panaiotov

PA4256 **Correlation of PD-L1 expression on endobronchial ultrasound-guided transbronchial needle aspiration(EBUS-TBNA) samples and metabolic activity on 18F-Fluorodeoxyglucose uptake on positron emission tomography/computed tomography(18F-FDG PET/CT)**
Virginia Guevara Velazquez (Salamanca, Spain), Rosa Cordovilla Pérez, Asunción Gómez Muñoz, Marta Rodríguez González, Marco López Zubizarreta, Miguel Iglesias Heras, Lorena Bellido Hernández, Jesús Pinto Blázquez

PA4257 **The involvement of neutrophil infiltration in the formation of lung pre-metastatic niche**
YUNG-CHI HUANG (Kaohsiung City, Taiwan), Ya-Ling Hsu, Hsiao-Chen Lee

PA4258 **Searching for genomic variations in lung cancer using Deep Learning.**
Esperanza Salcedo Lobera (Málaga, Spain), Macarena Arroyo Varela, Maria Pilar Pérez Soriano, Rafael Larrosa Jiménez, Rocío Bautista Moreno

PA4259 **The clinical utility of longitudinal measurement of mutated EGFR in plasma of advanced NSCLC patients during EGFR-TKI treatment**
Adam Szpechciński (Warszawa, Poland), Maciej Bryl, Emil Wojda, Grzegorz Czyzewicz, Daria Swiniuch, Marek Szwiec, Rodryg Ramlau, Pawel Sliwinski, Aleksander Barinow-Wojewodzki, Joanna Chorostowska-Wynimko

PA4260 **Chest manifestation of the scleros tuberos complex : case report and literature review**
naima ait mouddene (CASABLANCA, Morocco), Hajar Arfaoui, Hasna Jabri, Wiam Elkhattabi, Hicham Afif

PA4261 **MiR-125b-5p up-regulation in asthma and COPD overlap patients mediates oxidative stress and apoptosis via targeting IL6R/NLRC5/TRIAP1**
Yu-Ping Chang (Kaohsiung, Taiwan), Chiu-Ping Lee, Yung-Che Chen

PA4262 **The regulation of IL33 following smoking cessation**
Alen Faiz (Ultimo (NSW), Australia), Fia Sabrina Boedijono, Wim Timens, Martijn Nawijn, Philip M. Hansbro, Rashad Mahbub, Matt D. Johansen, Corry-Anke Brandsma, Irene H. Heijink, Florian Massip, Maria Stella De Biase, Roland F. Schwarz, Ian M. Adcock, Kian Fan Chung, Pieter S. Hiemstra, Helene Goulaouic, Heming Xing, Raolat Abdulai, Emanuele De Rinaldis, Danen Cunoosamy, Sivan Harel, David J. Lederer, Chad Nivens, Huib Kerstjens, Machteld Hylkema, Maarten Van Den Berge

PA4263 **Novel privacy considerations for large scale proteomics**
Russell Bowler, Andrew Hill, Elizabeth Litkowski, Ani Manichaikul, Leslie Lange, Katherine Pratte, Katerina Kechris, Matthew Decamp, Marilyn Coors, Victor Ortega, Stephen Rich, Jerome Rotter, Jeffery Curtis, Debby Ngo, Wanda O'Neal, Brian Hobbs, Michael Cho, Farnoush Banaei-Kashani

PA4264 **Late Breaking Abstract - Low-density lipoprotein-cholesterol and risk of chronic obstructive pulmonary disease: A prospective study of 107.301 participants**
Josefine Freyberg (København SV, Denmark), Shoaib Afzal, Eskild Morten Landt, Børge G. Nordestgaard, Morten Dahl

PA4265 **Late Breaking Abstract - Terminal bronchioles decrease before emphysematous destruction and adaptive immune response in human explant lungs with COPD.**
Charlotte de Fays (Loverval, Belgium), Hanne Beeckmans, Pieterjan Kerckhof, Vincent Geudens, Astrid Vermaut, Iwein Gyselinck, Tinne Goos, Marie Vermant, Janne Kaes, Celine Aelbrecht, Karen Maes, Youssry Mohamady, Lucia Aversa, Stephanie Everaerts, John E. Mcdonough, Laurens J. De Sadeleer, Sophie Gohy, Jerome Ambroise, Wim A. Wuyts, Wim Janssens, Laurens J. Ceulemans, Dirk E. Van Raemdonck, Robin Vos, Naftali Kaminski, Charles Pilette, Ghislaine Gayan-Ramirez, Bart M. Vanaudenaerde

TP-7 in thematic poster area — Session 473 — 13:00 - 14:00

Thematic poster: Respiratory inflammation and the pulmonary consequences of COVID-19

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

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

Chairs : Justine Devulder (London, United Kingdom), Katie Raby (London, United Kingdom)

PA4266 **Inflammation and membrane integrity of epithelial cells and macrophages infected by Pseudomonas aeruginosa and Streptococcus pneumoniae**
Elena Campaña Duel (Sabadell, Spain), Luis Morales-Quinteros, Adrián Ceccato, Aina Areny-Balagueró, Pamela Conde, Lluís Blanch, Laia Fernández, Marta Camprubí-Rimblas, Antonio Artigas

PA4267 **IL-4 mediated-macrophage reprograming promotes ARDS resolution in the Aging Host**
Andres Felipe Villabona-Rueda (Baltimore, United States), Xueyi Chen, Jeremy Walston, Peter Abadir, Franco D'Alessio

PA4268 **IL-33 and IL-4Rα blockade impact distinct and overlapping inflammatory mediators of airway disease**
Seblewongel Asrat (Tarrytown, United States), George Scott, Jeanne Allinne, Weikeat Lim, Dylan Birchard, Li-Hong Ben, Andrew J. Murphy, Matthew A. Sleeman, Jamie Orengo, Audrey Le Floch, Kirsten Nagashima, Subhashini Srivatsan

PA4269 **Physiomimetic culture of mesenchymal stromal cells affects macrophage activity in a paracrine manner.**
Bryan Falcones (Malmö, Sweden), Arturo Ibáñez-Fonseca, Zackarias Söderlund, Isaac Almendros, Linda Elowsson Rendin, Ramon Farré, Gunilla Westergren-Thorsson

PA4270	**The role of MBD2 regulating M1 macrophage polarization in acute lung injury** Wenjin Sun (Chengdu City, China)
PA4271	**Monocyte Derived Macrophage (MDM) responses to heme stimulation** Michelle Schorer (Bern, Switzerland), Kleanthis Fytianos, Jessica Petracca, Fabian Kaesermann
PA4272	**Late Breaking Abstract - Parenchymal lung abnormalities , clinical severity and outcomes in patients with COVID 19 pneumonia: a prospective longitudinal observational study** Ashish Kumar Prakash (Gurgaon (Haryana), India), Bornali Datta, Manish Kumar Singh, Kavitha Yaddanapudi, Kulbir Ahlawat, Jaya Tripathy, Pinky Goyal, Sandeep Mittal, Nishant Gupta, S Parvathi, Anand Jaiswal, Padam Singh, Sudhakar Pipavat, Ganesh Raghu
PA4273	**Circulating neutrophil-derived microvesicles are a hidden compartment of inflammation in severe COVID-19** Sanooj Soni (London, United Kingdom), Elizabeth Brown, Diianeira Tsiridou, Ashley Green, Carissa Chu, Jessica Luiz, Robert Grogan, Sehar Khushi, Michael R. Wilson, Anthony C. Gordon, Kieran O'Dea, Stephen J. Brett, Masao Takata
PA4274	**Investigating COVID-19 severity based on serum levels of vascular endothelial growth factor (VEGF)** Elham Barfzadeh (Kerman, Islamic Republic of Iran), Mitra Samareh Fekri, Ahmad Shafahi, Mehrdad Farokhnia, Fatemeh Karami Robati, Sajjadeh Movahedinia, Shariar Dabiri
PA4275	**Involvement of the chemerin-ChemR23 system in severe COVID-19 patients** Philomene Lavis (Brussels, Belgium), Sofia Morra, Carmen Orte Cano, Nurhan Albayrak, Véronique Corbière, Véronique Olislagers, Nicolas Dauby, Véronique Del Marmol, Arnaud Marchant, Christine Decaestecker, Françoise Mascart, Philippe Van De Borne, Isabelle Salmon, Myriam Remmelink, Marc Parmentier, Alessandra K Cardozo, Benjamin Bondue
PA4276	**Developing advanced cell culture models to study COVID-19-associated pulmonary fibrosis** Ying Wang (Leiden, Netherlands), Sijia Liu, Melissa Thaler, Annemarie Van Schadewijk, Mariska Van Huizen, Danielle Cohen, Marjolein Kikkert, Martijn J. Van Hemert, Peter Ten Dijke, Pieter S. Hiemstra, Anne M. Van Der Does
PA4277	**Time-dependent molecular motifs of pulmonary fibrogenesis in COVID-19** Jan-Christopher Kamp (Hannover, Germany), Lavinia Neubert, Maximilian Ackermann, Helge Stark, Christopher Werlein, Jan Fuge, Axel Haverich, Alexandar Tzankov, Konrad Steinestel, Johannes Friemann, Peter Boor, Klaus Junker, Marius M. Hoeper, Tobias Welte, Florian Laenger, Mark P. Kuehnel, Danny D. Jonigk
PA4278	**Serological markers of tissue remodeling are elevated in patients with COVID-19 who develop interstitial lung disease** Helene Wallem Breisnes (Herlev, Denmark), Pernille Juhl, Diana Julie Leeming, Tom Wilkinson, Aishath Fazleen, Jannie Marie Bülow Sand
PA4279	**Balance between α-1Antitrypsin and Human Neutrophil Elastase (a1AT/HNE) in Bronchoalveolar Lavage fluid (BALf) of severe COVID19 patients** Valentina Vertui (Pavia, Italy), Maura D'Amato, Simona Viglio, Sara Bozzini, Monica Morosini, Laura Pandolfi, Sara Lettieri, Matteo Della Zoppa, Tommaso Fossali, Riccardo Colombo, Anna Aliberti, Paolo Iadarola, Federica Meloni
PA4280	**Broncho-alveolar expression of metalloproteinases and tissue growth factors as predictors of clinical severity in Sars-Cov-2 pneumonia** Vittorio Chino (Pavia, Italy), Francesco Bertuccio, Laura Saracino, Anna Aliberti, Michele Pagani, Sara Bozzini, Cecilia Bagnera, Sara Lettieri, Federica Meloni
PA4281	**Prolonged stay and endothelial dysfunction in hospitalized patients with covid-19** Laura Cornejo-Cornejo (México City, Mexico), Juan Marquez-Cordero, Arturo Orea-Tejeda, Dulce Gonzalez-Islas, Jorge Aguilar-Meza, Alejandra Rios-Pereda, Iris Lopez-Vazquez, Mariana Salvatierra-Escobar, Carlos Sanchez-Moreno, Gamaliel Aztatzi-Aguilar, Maria Sierra-Vargas, Yasmin Debray-Garcia, Alejandra Loaeza-Roman, Susana Galicia-Amor, Esperanza Trejo-Mellado
PA4282	**Correlation between lung inflammatory cells, viral load and cytokines in fatal COVID-19** Natália de Souza Xavier Costa (São Paulo, Brazil), Jonas Erjefält, Jimmie Jönsson, Olga Cozzolino, Katia Dantas, Carl-Magnus Clausson, Premkumar Siddhuraj, Caroline Lindö, Suzete Ferreira Spina Lombardi, Alfredo Mendroni Júnior, Leila Antonangelo, Caroline Silvério Faria, Amaro Nunes Duarte Neto, Renata Almeida Monteiro, João Renato Rebello Pinho, Michele Soares Gomes-Gouvêa, Roberta Verciano Pereira, Jhonatas Sirino Monteiro, João Carlos Setubal, Ellen Pierre De Oliveira, Jair Theodoro Filho, Caroline Sanden, Jamie Orengo, Matthew Sleeman, Luiz Fernando Ferraz Da Silva, Paulo Nascimento Saldiva, Marisa Dolhnikoff, Thais Mauad
PA4283	**Proteomic profiling of severe lung diffusion impairment in the recovery stage of COVID-19-induced ARDS** María C García-Hidalgo (Lleida, Spain), Jessica González, Iván D Benítez, Sally Santisteve, Fátima Rodríguez-Jara, Marta Molinero, Manel Pérez-Pons, Gerard Torres, Anna Moncusí-Moix, Clara Gort-Paniello, Paola Carmona, Jesús Caballero, Carme Barberà, Ana P. Tedim, Raquel Almansa, Adrián Ceccato, Laia Fernández-Barat, Ricard Ferrer, Dario García-Casulla, Rosario Menéndez, Anna Motos, Óscar Peñuelas, Jordi Riera, Jesús F Bermejo-Martín, Antoni Torres, Ferrán Barbé, David De Gonzalo-Calvo

PA4284 **Evaluation of lung inflammation using Exhaled breath condensate in patients with post-COVID syndrome.**
Andrea Portacci (Taranto, Italy), Paola Pierucci, Sara Quaranta, Ilaria Iorillo, Cristian Locorotondo, Enrico Buonamico, Fabrizio Diaferia, Esterina Boniello, Giuseppe Di Gioia, Maria Francesca Grimaldi, Giovanna Elisiana Carpagnano

PA4285 **HLA Class I allele is associated with a lower risk to develop Post-COVID19 interstitial lung manifestations**
Gloria Pérez-Rubio, Ramcés Falfán-Valencia, Ivette Buendía-Roldán, Enrique Ambrocio-Ortiz, Hiram Aguilar-Durán, Leslie Chávez-Galán, Angel Camarena

TP-8 in thematic poster area — Session 474 — 13:00 - 14:00

Thematic poster: Clinical consequences and systemic effects of obstructive sleep apnoea

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

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

Chairs : Raphael Heinzer (Lausanne, Switzerland), Carolina Lombardi (Milano (MI), Italy)

PA4286 **determinants of sleepiness and related polysomnographic variables in sleep apnea patients:cross sectonal study**
Luci Suliman (Mansoura, Egypt), Raed Elmetwaley, Elshaima El -shimaa Sabry Mohamed

PA4287 **Hypoxic burden in patients with Obstructive Sleep Apnea and its correlation with other polygraphic parameters and subjective hypersomnia.**
Thais Beauperthuy Levy (Valencia, Spain), Grace Oscullo Yepez, Marina Inglés Azorín, Alberto García-Ortega, Jose Daniel Gómez-Olivas, Amina Bekki, Miguel Ángel Martínez-García

PA4288 **Partners cannot help improve the accuracy of the Epworth Sleepiness Scale for assessment of Excessive Daytime Sleepiness**
Bob Tielbeek (Maastricht, Netherlands), Susan Voncken, Umit Karaca, Astrid Kolfoort-Otte, Martijn De Kruif

PA4289 **Micro-sleep during MWT and risk of sleepiness at wheel or near-missing accidents**
Francesco Fanfulla (Pavia (PV), Italy), Pasquale Tondo, Irene Risi, Caterina Pronzato, Marisa Bonsignore

PA4290 **Residual excessive daytime sleepiness (EDS) in Italian patients with obstructive sleep apnea (OSA) treated with continuous positive airway pressure (CPAP): preliminary results of the OSAREDS study**
Maria Bonsignore (Palermo, Italy), Tommaso Sacco, Alberto Braghiroli, Francesco Fanfulla, Luigi Ferini-Strambi, Anna Lo Bue, Fabio Placidi, Andrea Romigi, Giuseppe Plazzi

PA4291 **Prevalence and predictors of Residual Sleepiness (RS) in Obstructive Sleep Apnea (OSA) Patients Treated with Positive Airway Pressure (PAP)**
Michail Fanaridis (Heraklion, Greece), Izolde Bouloukaki, George Stathakis, Christina Ermidou, Violeta Moniaki, Eleni Mavroudi, Sophia Schiza

PA4292 **Obstructive Sleep Apnea and Fracture Risk**
Daniela Krasimirova (Sofia, Bulgaria), Ventsislava Pencheva, Ognyan Georgiev, Daniela Petrova, Radoslav Bilyukov, Tzanko Mondeshki, Sevda Naydenska, Petko Shoshkov, Adelina Tzakova

PA4293 **Hepatic steatosis in patients with obstructive sleep apnoea syndrome**
Manel Loukil Ben Ali (Nabeul, Tunisia), Warda Jelassi, Narjes Abid, Mechaal Ben Ali, Hedia Ghrairi

PA4294 **Hepatic dysfunction in patients with obstructive sleep apnea; prevalence and how to assess**
Ali Abdelaziz (Minia, Egypt), Ahmed Kasem, Rabab Sedeek , Mahmoudm. Higazi, Ahmed Mady

PA4295 **Association with obstructive sleep apnea severity and heart rate variability**
Soriul Kim (Seoul, Republic of Korea), Hye Ryeong Nam, Chol Shin

PA4296 **Impact of sleep-disordered breathing on premature ventricular complexes after cardiac surgery**
Luise Schäffer (Regensburg, Germany), Annika Hofmann, Marcus Creutzenberg, Bernhard Flörchinger, Daniele Camboni, Christof Schmid, Lars Siegfried Maier, Stefan Wagner, Michael Arzt, Maria Tafelmeier

PA4297 **Obstructive sleep apnea and associations with lung function**
Baz Delshad (Uppsala, Sweden), Mirjam Ljunggren, Xingwu Zhou, Jenny Theorell-Haglöw, Christer Janson, Ding Zou, Jan Hedner, Ludger Grote, Anders Blomberg, Karl A. Franklin, Carin Sahlin, Andrei Malinovschi, Eva Lindberg

PA4298 **Association between gut microbiota and obesity in obstructive sleep apnea**
Masako Ueyama (Tokyo, Japan), Ryuji Ohue, Hiroyuki Kokuto, Fumio Suzuki, Shinichi Oikawa, Hiroshi Kimura, Ikuo Kimura

PA4299 **Comparison of composite lipid indices in patients with obstructive sleep apnoea**
Andras Bikov (Budapest, Hungary), Stefan Frent, Daniela Reisz, Alina Negru, Laura Gaita, Daniel Breban Schwarzkopf, Stefan Mihaicuta

PA4300 **Relationship between Neutrophil to lymphocyte ratio and platelet to lymphocyte ratio and the severity of obstructive sleep apnea syndrome**
Abir Hedhli Ep Cherni (tunis, Tunisia), arbia chaieb, Abir Hedhli, Mjid Mariem, Turki Chaima, Cheikhrouhou Sana, Merai Samira, Toujeni Sonia, Ouhachi Yassine, Dhahri Bessma

PA4301 **Apnea-hypopnea index of 5 per hour is a threshold for phosphatidylcholine-related metabolomic changes in patients with sleep complaints**
Ott Kiens (Tartu, Estonia), Egon Taalberg, Viktoria Ivanova, Ketlin Veeväli, Ragne Tamm, Triin Laurits, Aigar Ottas, Kalle Kilk, Ursel Soomets, Alan Altraja

PA4302 **Inflammation and oxidative stress markers in obstructive sleep apnea patients**
Anca Diana Maierean (,), Damiana Maria Vulturar, Doina Adina Todea

PA4303 **The association between snoring and hearing loss in patients with obstructive sleep apnoea.**
Emily Lawton (Adelaide, Australia), Mark Jurisevic, Kate Hobart, Jonathon Polasek, Andrew Fon

PA4304 **REM sleep apnoea and carotid intima thickness in men and womenA SHE-MUSTACHE Cohort Study**
Mirjam Elisa Ljunggren (Uppsala, Sweden), Tord Naessén, Jenny Theorell-Haglöw, Karl Franklin, Eva Lindberg

PA4305 **Association of REM predominant obstructive sleep apnoea severity with depression and quality of life in adults with coronary artery disease in the RICCADSA cohort**
Baran Balcan (Istanbul, Turkey), Yeliz Celik, Yuksel Peker

TP-9 in thematic poster area — Session 475 — 13:00 - 14:00

Thematic poster: Translational studies of asthma and COPD

Disease(s) : Airway diseases

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

Chairs : Ian M. Adcock (London, United Kingdom), Chair to be confirmed

PA4307 **Pharmacological characterization of the anti-inflammatory effect of mepolizumab and benralizumab in a human ex vivo model of asthma**
Josuel Ora (Roma (RM), Italy), Paola Rogliani, Francesco Facciolo, Enrico Melis, Beatrice Ludovica Ritondo, Maria Chiara Gabriele, Andrea Perduno, Luigino Calzetta

PA4308 **Asthma exacerbations and eosinophilia in the UK Biobank: a Genome-Wide Association Study**
Ahmed Edris (Ghent, Egypt), Katherine Fawcett, Ian P. Hall, Matin D. Tobin, Lies Lahousse

PA4309 **Dupilumab in patients with atopic dermatitis: what effect on asthma?**
Merouane MESSEKHER (Toulouse, France), Marie Tauber, Alain Didier, Laurent Guilleminault

PA4310 **IL1RAP is an emerging target in chronic airway inflammatory diseases**
Gopinath Kasetty (Mölndal, Sweden), Marie Jönsson, Janne Persson, Pernilla Grundevik, Josquin Nys, Suzanne Cohen, Annika Borde, Mark A Birrell

PA4311 **The effect of rosuvastatin on rat models asthma, hyperlipidemia and asthma-hyperlipidemia**
Mohammad Hossein Boskabady (Mashhad, Islamic Republic of Iran), Saeideh Saadat

PA4312 **Effect of tezepelumab on symptoms and peak expiratory flow before, during and after exacerbations in NAVIGATOR**
Mario Castro (Kansas City, United States), Neil Martin, Christopher S. Ambrose, Sandhia Ponnarambil, Ales Kotalik, Jean-Pierre Llanos-Ackert, Stephanie Korn

PA4313 **Effect of tezepelumab on exacerbation-related intravenous corticosteroid use in patients with severe, uncontrolled asthma in NAVIGATOR**
Arnaud Bourdin (Montpellier Cedex 5, France), Neil Martin, Chris Ambrose, Sandhia Ponnarambil, Gillian Hunter, Nestor Molfino, Bill Cook

PA4314 **Omalizumab-treated severe allergic asthmatics have comparable small airways function to healthy controls.**
Amir Hakim (London, United Kingdom), Harpal Kalsi, Sally Meah, Paolo Paredi, Martyn Biddiscombee, Omar Usmani

PA4315	**Efficacy of tezepelumab according to age at asthma onset in NAVIGATOR** Guy Brusselle (Ghent, Belgium), Joseph Spahn, Gillian Hunter, Neil Martin, Jean-Pierre Llanos-Ackert, Sandhia Ponnarambil
PA4316	**Small mobile stem cells multitargeted approach to alveoli in vivo regeneration** Abdulkader Rahmo (San Marcos, United States)
PA4317	**Validation of sputum cytokine immunoassays in COPD** Alex Mulvanny (Manchester (Greater Manchester), United Kingdom), Thomas Southworth, Caroline Pattwell, Dave Singh
PA4318	**The role of the molecular circadian clock in Asthma** Julia Teppan (Graz, Austria), Iris Red, Juliana Schwanzer, Akos Heinemann, Eva Sturm
PA4319	**Effects of salbutamol and ipratropium on human stem-cells derived cardiomyocytes´ function** Martin Scurek (Brno, Czech Republic), Simon Klimovic, Martin Pesl, Jan Pribyl, Daniil Kabanov, Deborah Beckerova, Marketa Bebarova, Vladimir Rotrekl, Kristian Brat
PA4320	**Targeting eosinophils in chronic eosinophilic pneumonia: new therapeutic perspectives for long-term control.** Cecilia Cisternino (San Giovanni Rotondo, Italy), Alessia Steffanina, Paola Scarano, Giulia Lo Muzio, Olimpia Calò, Arianna Sanna, Francesca De Filippis, Maria Teresa Leporini, Paolo Palange, Elda Graziani
PA4321	**Dupilumab improves exacerbations and lung function irrespective of prior asthma exacerbations: TRAVERSE** Alberto Papi (Cona, Ferrara, Italy), Mario Castro, William W Busse, David Langton, Stephanie Korn, Changming Xia, Xavier Soler, Nami Pandit-Abid, Shahid Siddiqui, Juby A Jacob-Nara, Paul J Rowe, Yamo Deniz
PA4322	**Assessment of inhaled medications using an in vitro human alveolar microphysiological system.** Emily Richardson, Hailey Sze, David Hughes, Tomasz Kostrzewski
PA4323	**Biomarker-defined clusters by level of Type 2 inflammatory involvement in severe asthma** William Henley (Exeter, United Kingdom), David Price, Sarah Burkill, Eileen Wang , Michael E. Wechsler, Eve Denton , Trung N.Tran , Neil Martin, Rohit Katial , Peter Barker , Jorge Maspero, Mark Hew, Guy Bruselle, George C Christoff, Mohsen Sadatsafavi, Carlos A. Torres-Duque, Celeste M. Porsbjerg, Charlotte Ulrik, Susanne Hansen, Alan Altraja, Arnaud Bourdin, Nikolaos G. Papadopoulos, Konstantinos Kostikas, Sundeep Salvi, Richard W Costello, Puggioni Francesca, Takashi Iwanga, Chin Kook Rhee, Mona Al-Ahmad, Desiree Larenas Linnemann, Joao A Fonseca, Borja G.Cosio, Mariko Koh Siyue, Bruce Kirenga, Chau-Chyun Sheu, Ming-Ju Tsai, Bassam Mahboub, John Busby, Liam G Heaney, Paul E Pfeffer, Pujan Patel, Flavia Hoyte, Yang Liu, Celine Goh, Juntao Lyu, Thendral Uthaman
PA4324	**Dupilumab effectiveness in patients with type 2-high severe asthma and chronic rhinosinusitis with nasal polyps** Santi Nolasco (Catania, Italy), Raffaele Campisi, Antonino Cipolla, Pietro Impellizzeri, Martina Bonsignore, Nunzio Crimi, Claudia Crimi
PA4325	**Characteristics of Responders to Biologics in Patients with Severe Asthma: Based on Precision Medicine Intervention in Severe Asthma (PRISM) Study** Ji-Hyang Lee (Seoul, Republic of Korea), Hyunkyoung Kim, Jae-Woo Jung, Min-Hye Kim, Jeong-Hee Choi, Ji-Yong Moon, So Young Park , Sae-Hoon Kim, Min-Suk Yang , Byung-Keun Kim, Jae-Woo Kwon, Hye-Kyung Park, Chan Sun Park, Taehoon Lee, Sujeong Kim, Young-Hee Nam, Han-Ki Park, Byung-Jae Lee , Hyouk-Soo Kwon, Woo-Jung Song, Sei Won Lee, You Sook Cho, Tae-Bum Kim

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

Studio - online Session 478 14:15 - 15:15

Online skills lab: Right heart catheterisation

Aims : To learn the principles of a safe right heart catheterisation. To learn how to obtain the correct pressure wave recordings and obtaining the correct references. To learn to interpret the right heart catheterisation in a correct way. To learn the principles of NO testing and performing an exercise test.

Chairs : Mona Lichtblau (Zürich, Switzerland), Gabor Kovacs (Graz, Austria), Olivier Sitbon (Le Kremlin-Bicêtre, France)

14:15	**Right heart catheterisation procedure from the Amsterdam lab: jugular approach** Mona Lichtblau (Zürich, Switzerland), Gabor Kovacs (Graz, Austria)	**4330**
15:00	**Discussion and Q&A** Mona Lichtblau (Zürich, Switzerland), Gabor Kovacs (Graz, Austria)	**4331**

8A - live streamed Session 479 14:15 - 15:45

Clinical cases: Imaging clinical cases

Challenges in imaging of emphysema and interstitial lung diseases

Aims : to provide a case-based session, with a special focus on imaging, that explains the role of imaging of emphysema in a preoperative setting and evaluation before endobronchial valve implantation or LVRS, with a special focus on available imaging software, the role of the new imaging technique photon counting CT in comparison with HRCT for ILD imaging and how to identify the most common ILD patterns on HRCT. A clinician and a radiologist will evaluate the cases, and there will be interactive involvement of the audience.

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

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

Tag(s) : Clinical

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

Chairs : Walter De Wever (Leuven, Belgium), Elżbieta Magdalena Grabczak (Warszawa, Poland), Daniela Gompelmann (Vienna, Austria)

14:15	**Patients with lung emphysema: endobronchial valves or surgery?** Stephanie Everaerts (Leuven, Belgium)	**4332**
14:30	**Patients with lung emphysema: radiological preoperative setting** Walter De Wever (Leuven, Belgium)	**4333**
14:45	**Discussion and Q&A** All Speakers	**4334**
15:00	**Patients with ILDs: prognostic markers of disease progression** Veronika Müller (Budapest, Hungary)	**4335**
15:15	**Patients with ILDs: radiological signs and artificial intelligence possibilities** Helmut Prosch (Wien, Austria)	**4336**
15:30	**Discussion and Q&A** All Speakers	**4337**

8B - live streamed Session 480 14:15 - 15:45

Symposium: Asthma: confusion in diagnosis, recognising comorbidities and understanding pathophysiological connections

Aims : to inform clinicians and researchers about the latest updates in significant asthma comorbidities and pathologies that mimic asthma and contribute to difficulties with diagnosis and treatment; to describe in particular conditions that mimic asthma, such as vocal cord dysfunction and dysfunctional breathing, and significant comorbidities, such as chronic rhinosinusitis, vasculitis and eosinophilic granulomatosis with polyangiitis (EGPA); to assess the importance of small airways in asthma.

Disease(s) : Airway diseases | Interstitial lung diseases

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

Tag(s) : Translational

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

Chairs : Katerina Antoniou (Heraklion, Greece), Apostolos Bossios (Stockholm, Sweden)

14:15	**Vocal cord dysfunction and dysfunctional breathing: the underlying secrets** Stephen James Fowler (Preston (Lancashire), United Kingdom)	**4338**
14:30	**Difficult-to-manage chronic rhinosinusitis and asthma: two strangers in the same city** Vibeke Backer (Copenhagen, Denmark)	**4339**
14:45	**Vasculitis, EGPA and eosinophilic asthma: ties of blood** Amy Klion (BETHESDA, United States)	**4340**
15:00	**Small airways in asthma: looking deep in the lungs** Monica Kraft (New York, United States)	**4341**
15:15	**Discussion and Q&A** All Speakers	**4342**

8C - live streamed Session 481 14:15 - 15:45

State of the art session: Respiratory critical care

Aims : to discuss the key characteristics of the different acute respiratory disease syndrome phenotypes and how these affect clinical management; to discuss the pathophysiology of lung injury induced by high respiratory effort and how clinical management can reduce the risk of lung injury caused by high patient effort; to discuss the principles of novel techniques for respiratory monitoring and how their clinical application can improve outcomes; to discuss the role of different techniques for noninvasive respiratory support in patients with acute hypoxemic failure.

Disease(s) : Respiratory critical care

Method(s) : General respiratory patient care Physiology Respiratory intensive care

Tag(s) : Clinical

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

Chairs : Maxime Patout (Paris, France), Maria Bonsignore (Palermo, Italy), João Carlos Winck (Vila Nova de Gaia, Portugal)

14:15	**Phenotyping in acute respiratory distress syndrome: clinical implications** Carolyn Calfee (San Francisco, United States)	**4343**
14:30	**Patient self-inflicted lung injury: clinical implications** Laurent Brochard (Toronto (ON), Canada)	**4344**
14:45	**Advanced respiratory monitoring in acute respiratory failure: clinical implications** Lise Piquilloud (Lausanne, Switzerland)	**4345**
15:00	**High-flow nasal oxygen or noninvasive ventilation for patients with acute hypoxemic failure** Stefano Nava (Bologna (BO), Italy)	**4346**
15:15	**Discussion and Q&A** All Speakers	**4347**

8G - live streamed Session 482 14:15 - 15:45

Hot topics: Occupational COVID-19: current and future impact

Aims : To present the latest evidence on the occupational risk factors for COVID-19 in support of a global recognition and compensation of COVID-19 and long COVID-19 as new occupational diseases; to present an international overview of the most adversely impacted and best studied occupational groups, in particular healthcare workers (HCWs); to discuss how occupational health services could be a privileged observatory to study and manage the COVID-19 pandemic because of their key role in implementing preventive measures, especially vaccination programmes, administrative and engineering controls, personal protective equipment and health surveillance and management of COVID-19 cases, including testing, contact tracing and return to work of long COVID-19 cases; to seek to identify research needs in relation to risk for occupational groups other than HCWs, especially among the most vulnerable social categories, such as migrants, to estimate the true occupational health burden of COVID-19, thereby providing effective and efficient governmental mitigation policies to prevent the associated public health burden and increase preparedness for future pandemics.

Disease(s) : Interstitial lung diseases Respiratory infections

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

Tag(s) : COVID

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, Journalist

Chairs : Sara De Matteis (Cagliari, Italy), Rafael E. de la Hoz (New York, United States)

14:15	**Epidemiology of occupational COVID-19** Kurt Straif (Ste. Foy-les-Lyon, France)	**4348**
14:30	**Long COVID-19: an epidemiologist, clinician and patient perspective** Eva Polverino (Barcelona, Spain)	**4349**
14:45	**Fast-tracking the development of vaccines during a pandemic: what have we learnt?** Laura Fregonese (London, United Kingdom)	**4350**
15:00	**COVID-19 and returning to work: an international online survey** Pippa Powell (Sheffield (South Yorkshire), United Kingdom)	**4351**
15:15	**Discussion and Q&A** All Speakers	**4352**

8H - live streamed Session 483 14:15 - 15:45

Hot topics: Artificial intelligence applications in thoracic oncology: an overarching ambition or overarching benefit?

Aims : to provide a clear overview of all current applications of artificial intelligence (AI) in the entire spectrum of thoracic malignancies and identify their impact on patient care.

Disease(s) : Thoracic oncology

Method(s) : Cell and molecular biology Endoscopy and interventional pulmonology Surgery

Tag(s) : Digital health

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

Chairs : Najib M. Rahman (Oxford, United Kingdom), Georgia Hardavella (Athens, Greece)

14:15	**AI in lung cancer screening: the radiologist's spotlight** Annemiek Snoeckx (Edegem (Antwerp), Belgium)	**4353**
14:30	**AI in the diagnosis of thoracic malignancies: the pathologist's spectacles** Joanna Domagała-Kulawik (Warszawa, Poland)	**4354**
14:45	**AI in pleural malignancies** Kevin Blyth (Glasgow (Glasgow), United Kingdom)	**4355**
15:00	**AI in lung cancer: potential implications for patient care** Laurent Dercle (New York, United States)	**4356**
15:15	**Discussion and Q&A** All Speakers	**4357**

8N Session 484 14:15 - 15:30

Oral presentation: Long COVID and rehabilitation

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

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

Chairs : Anne Holland (Fitzroy North (VIC), Australia), Carla Simonelli (Lumezzane (BS), Italy)

OA4358	**Predictive factors for centralized rehabilitation in hospitalized COVID-19 patients** Antoine EL KIK (Beirut, Lebanon), Hind Eid, Albert Riachy, Elio Mekhael, Karim Hoyek, Nabil Nassim, Georges Khayat, Ghassan Sleilaty, Moussa Riachy	
OA4359	**Tolerability and safety of high-intensity continuous and intermittent exercise in COVID-19** Gundi Steinhilber (Bergamo (BG), Italy), Ioannis Vogiatzis, Beatrice Salvi, Laura Bertacchini , Irene Favero , Massimo Venturelli, Mara Paneroni , Michele Vitacca	
OA4360	**Severity score-based study of predictors and clinical correlates of Post-COVID Syndrome (PCS) in Germany** Thomas Bahmer (Kiel, Germany), Christoph Borzikowsky, Wolfgang Lieb, Anna Horn, Lilian Krist, Julia Fricke, Carmen Scheibenbogen, Klaus F. Rabe, Walter Maetzler, Corina Maetzler, Martin Laudien, Derk Frank, Sabrina Ballhausen, Alin Viebke, Anne Hermes, Olga Muljukov, Karl Georg Haeusler, Nour Eddine El Mokhtari, Martin Witzenrath, Thomas Zoller, Jörg Janne Vehreschild, Sina Hopff, Gabriele Anton, Dagmar Krefting, Lennart Reinke, Grit Hein, Felipe A. Montellano, Mirjam Kohls, Caroline Morbach, Stefan Störk, Jens-Peter Reese, Thomas Keil, Peter Heuschmann, Michael Krawczak, Stefan Schreiber	
OA4361	**The Relationship Between Functional Status and Fatigue After COVID-19 Infection** Ipek Çaylı Candemir (Ankara, Turkey), Pınar Ergun, Dicle Kaymaz, Ipek Özmen, Elif Yıldırım, Asli Görek Dilektasli, Busra Yigitler, Deniz Kizilirmak, Seçil Sarı, Celalettin Korkmaz, Cantürk Taşçı, Yakup Arslan, Sema Savcı, Buse Kahraman, Aylin Tanrıverdi, Can Sevinç, Melda Sağlam, Deniz Inal Ince, Naciye Vardar Yagli, Ebru Kütükçü, Dilber Durmaz, Neslihan Durutürk, Gaye Ulubay, Lütfiye Kılıç, Benan Çağlar, Aylin Moray, Sabri Serhan Olcay	
OA4362	**Aerobic Training Reduces Chronic Airway Inflammation and Mediators of Remodelingin Asthma** Rodolfo De Paula Vieira (Sao Jose Dos Campos (SP), Brazil), Renilson Moraes-Ferreira, Maysa A. R. Brandao-Rangel, Anamei Silva-Reis, Victor H. S. Palmeira, Helida C. Aquino-Santos, Claudio R. Frison	
OA4363	**Effectiveness of a long-term home-based exercise training in COPD patients: The HOMEX-2 RCT** Anja Frei (Zürich, Switzerland), Thomas Radtke, Kaba Dalla Lana, Ramona Kunz, Tamara Cerini, Milo A. Puhan	

OA4364	**Predictors of disability in activities of daily living in people with advanced respiratory disease** Lucy Fettes (London, United Kingdom), Joanne Bayly, Emeka Chukwusa, Stephen Ashford, Irene Higginson, Matthew Maddocks
OA4365	**Single breath counting as a respiratory muscle function assessment test** Selin Ercan (Izmir, Turkey), Christopher David Turnbull, Kathryn Bowyer, Megan Haines, John R Stradling, Annabel H Nickol
OA4366	**Actionable factors fostering scalability of prehabilitation** Raquel Sebio Garcia (Barcelona, Spain), Raquel Risco, Rubén González-Colom, Mar Montané-Muntané, Isaac Cano, Emili Vela, Fernando Dana, Joan Faner, Miquel Coca, Sara Laxe, Josep Roca, Graciela Martínez-Pallí
OA4367	**Late Breaking Abstract - Muscle volume, functionality and metabolic resilience during recovery following severe COVID-19** Ayushman Gupta (Boston (Lincolnshire), United Kingdom), Rosemary Nicholas, Jordan Mcging, Aline Nixon, Joanne Mallinson, Sebastian Serres, James Bonnington, Tricia Mckeever, Tricia Mckeever, Ian Hall, Janet Lord, Janet Lord, Rachael Evans, Rachael Evans, Paul Greenhaff, Susan Francis, Charlotte Bolton
OA4368	**Discussion** All Speakers

8F Session 485 14:15 - 15:30

Mini symposium: Long-term impact of cystic fibrosis transmembrane conductance regulator modulators in cystic fibrosis patients and potential changes in the management of the disease in CF units

Long-term effects of CFTR modulators in cystic fibrosis

Aims : To review the expected changes associated with the introduction of cystic fibrosis transmembrane conductance regulator (CFTR) modulators in the management of CF patients; to particularly review how the clinical management of paediatric and adult CF patients could change in the future considering the potential benefits of these drugs on disease progression, but also in consideration of potential side effects; to discuss the perspective of early treatment in CF children and the applications of CFTR modulators in special subgroups of CF patients, such as nonresponders and those with rare mutations; to provide a session that is intentionally translational and directed at different specialists and disciplines involved in the management of CF patients.

Disease(s) : Paediatric respiratory diseases Respiratory infections

Method(s) : Cell and molecular biology Epidemiology

Tag(s) : Translational

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 : Catherine Greene (Dublin 9, Ireland), Refika Hamutcu Ersu (Ottawa, Canada)

14:15	**How CFTR modulators are expected to change the management of CF and its comorbidities** Stuart Elborn (Belfast (Belfast), United Kingdom)	**4369**
14:30	**Impact of CFTR modulators on disease progression in children with CF** Marcus Mall (Berlin, Germany)	**4370**
14:45	**Nonresponders and rare mutation classes: ex vivo models to test CFTR modulator efficacy** Irene Oglesby (Dublin 9, Ireland)	**4371**
15:00	**Discussion and Q&A** All Speakers	**4372**

8L Session 486 14:15 - 15:30

Oral presentation: Improving respiratory management in primary care

Disease(s) : Airway diseases

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

Chairs : Hilary Pinnock (Edinburgh (Edinburgh), United Kingdom), Chair to be confirmed

OA4373	**Impact of exacerbations in GOLD A patients** Anders Løkke (Højbjerg, Denmark), Peter Lange, Rikke Ibsen, Per Bakke, Lene Maria Ørts

OA4374	**Investigating the impact of a structured diagnostic pathway for chronic breathlessness on patient reported outcomes: a feasibility cluster RCT in primary care** Gillian Doe (Leicester, United Kingdom), Jill Clanchy, Simon Wathall, Shaun Barber, Chantrell Stacey, Sarah Edwards, Helen Evans, Darren Jackson, Noel Baxter, Michael Steiner, Rachael Evans
OA4375	**Delivery of supported self-management in asthma reviews: an observational study** Emma Kinley (Edinburgh, United Kingdom), Kirstie Mcclatchey, Liz Steed, Hilary Pinnock
OA4376	**Annual and post-exacerbation follow-up of COPD patients in clinical practice – a large population-based study in Sweden** Christer Janson (Uppsala, Sweden), Hanna Sandelowsky, Fredrik Wiklund, Gunilla Telg, Sofie De Fine Licht, Björn Ställberg
OA4377	**Rate of admission and readmission to the emergency department (ED) associated with physician visits among patients with asthma** Irvin Mayers (Edmonton (AB), Canada), Stephen Noorduyn, Arsh Randhawa, Mena Soliman, Manisha Talukdar, Christina Qian, Karissa Johnston, Pramoda Jayasinghe, Mohit Bhutani
OA4378	**Incidence of physical frailty in older subjects with lung function impairment and frailty transitions: a population-based study.** Lies Lahousse (Ghent, Belgium), Sara Wijnant, Elizabeth Benz, Annemarie Luik, Fernando Rivadeneira, Trudy Voortman, Guy Brusselle
OA4379	**IMPlementing IMProved Asthma self-management as RouTine (IMP2ART) in primary care: internal pilot for a cluster randomised controlled trial** Kirstie McClatchey (Edinburgh, United Kingdom), Jessica Sheringham, Atena Barat, Brigitte Delaney, Barbara Searle, Viv Marsh, Vicky Hammersley, Stephanie Taylor, Hilary Pinnock
OA4380	**Pulmonary rehabilitation using peer volunteers in a rural Indian setting: A feasibility study** BISWAJIT PAUL (Vellore, India), Paul Jebaraj, Rita Isaac, Deepa Das, John Norrie, David Weller
OA4381	**Covid Virtual Ward: Are we effectively managing patients in the community following hospitalisation from Acute COVID infection?** Sarah Sibley (Altrincham (Cheshire), United Kingdom), Emma Rickards, Dennis Wat
OA4382	**Discussion** All Speakers

8M Session 487 14:15 - 15:30

Oral presentation: Translational research in sleep apnoea: from the molecule and the signal to the clinic

Disease(s) : Sleep and breathing disorders

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

Chairs : Claire Arnaud (Grenoble, France), Manuel Sanchez De La Torre (Lleida, Spain)

OA4383	**Sleep apnea syndrome and atherosclerosis: VE-Cadherin as a new antiatherogenic target?** Olfa Harki (LA TRONCHE, France), Sophie Bouyon , Emeline Lemarié, Alexandra Demory, Carole Chirica, Isabelle Vilgrain, Jean-Louis Pépin, Gilles Faury, Anne Briançon-Marjollet
OA4384	**Proteomic profiling in patients with acute coronary syndrome and obstructive sleep apnea: A post-hoc analysis from the ISAACC study.** Andrea Zapater Matute (Lleida, Spain), Esther Gracia-Lavedan, Gerard Torres, Alicia Sánchez-De-La-Torre, Albina Aldoma, Olga Mínguez, Lydia Pascual, Anunciación Cortijo, Dolores Martínez, Ivan David Benitez, Ferran Barbé, Manuel Sánchez-De-La-Torre
OA4385	**The effect of the GLP-1 analogue Liraglutide on intermittent hypoxia-induced systemic insulin resistance in vivo** Ailbhe King (Dublin 4, Ireland), Claire Arnaud, Guillaume Vial, Emma Billoir, Bilgehan Ozcan, Elise Belaidi, Cliona O'Donnell, Silke Ryan
OA4386	**Short-term continuous positive air pressure (CPAP) treatment: effects on cardiac structural changes and function in patients with obstructive sleep apnea (OSA)** Laima Kondrataviciene (Kaunas, Lithuania), Egle Tamulenaite, Egle Ereminiene, Skaidrius Miliauskas
OA4387	**Long non-coding RNA FKSG29 over-expression in patients with obstructive sleep apnea modulates intermittent hypoxia-induced oxidative stress and cell apoptosis via sponging miR-23a-3p-IL6R signaling** Yung-Che Chen (Kaohsiung, Taiwan), Meng-Chih Lin, Po-Yuan Hsu, Chang-Chun Hsiao, Ting-Ya Wang

OA4388	**Polysomnographic characterization of the circadian blood pressure patterns in patients with obstructive sleep apnea** Lucia Pinilla (Lleida, Spain), Olga Mínguez, Maria Aguilà, Rafaela Vaca, Iván David Benítez, Gerard Torres, Olga Mediano, Juan Fernando Masa, Maria Jose Masdeu, Ferran Barbé, Manuel Sánchez-De-La-Torre
OA4389	**Autophagy impairment in patients with obstructive sleep apnea mediates intermittent hypoxia-induced apoptosis and cytotoxicity via hypermethylation of the MAP1LC3B and ATG5 promoter regions** Yung-Che Chen (Kaohsiung, Taiwan), Meng-Chih Lin, Po-Yuan Hsu, Chang-Chun Hsiao, Ting-Ya Wang
OA4390	**Intermittent hypoxia and pregnancy in a rat model: respiratory and metabolic effectson mothers and offspring** Esther Valverde Pérez (Valladolid, Spain), Jesus Prieto-Lloret, Oscar Ríos-Rodríguez, Marta De Pablos, Ángela Gómez-Niño, Ricardo Rigual, Ana Obeso, Isaac Almendros, Ramón Farré, Asunción Rocher, Elena Olea
OA4391	**DYSLIPIDEMIA PREVALENCE IN NON-OBESE NON-DIABETIC PATIENTS WITH OBSTRUCTIVE SLEEP APNEA: DOES SEX MATTER?** Mehmet Sezai Taşbakan (Izmir, Turkey), Ozen K. Basoglu, Merak Kayikcioglu
OA4392	**Late Breaking Abstract - Inflammasome activation: A keystone of proinflammatory response in obstructive sleep apnea** Elena Díaz García (Madrid, Spain), Sara García, Enrique Alfaro, Ana Jaureguizar, Raquel Casitas, Begoña Sanchez, Ester Zamarrón, Juan Fernández, Francisco García, carolina cubillos
OA4393	**Discussion** All Speakers

8D Session 488 14:30 - 16:50

Skills workshop: SW9 Thoracic ultrasound

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 : Konstantina Kontogianni (Heidelberg, Germany)

14:30	**The normal thoracic cavity** Valentina Pinelli (Sarzana, Italy), Beenish Iqbal (London, United Kingdom)	**4394**
15:00	**Pleural effusion and/or pleural thickening** Gilles Mangiapan (Creteil, France), Giovanni Volpicelli (Torino (TO), Italy)	**4395**
15:30	**Case studies** Hugh Welch (Bristol, United Kingdom), John Wrightson (Oxford, United Kingdom)	**4396**
16:00	**Lymph node biopsy using models** Rachid Tazi Mezalek (Barcelona, Spain), Rachel Mercer (Winchester, United Kingdom)	**4397**

Studio - online Session 489 15:30 - 16:30

Language session: French programme 2022

A joint ERS/SPLF session

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

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

Tag(s) : COVID

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Respiratory critical care physician, Radiologist

Chairs : Marc Humbert (Le Kremlin-Bicêtre, France), Marion Delcroix (Leuven, Belgium), Jesus Gonzalez Bermejo (Montlignon, France)

15:30	**Recommandations pour la prise en charge de l'asthme : GINA 2021 versus SPLF 2021 / Recommendations for the management of asthma** Chantal Raherison-Semjen (Pointe-à-Pitre, Guadeloupe)	**4398**
15:40	**Que retenir des recommandations internationales sur les pneumopathies d'hypersensibilité ? / International recommendations on hypersensitivity pneumonitis** Vincent Cottin (Lyon, France)	**4399**
15:50	**Discussion and Q&A** All Speakers	**4400**

16:00	**Embolie pulmonaire et exacerbation de BPCO / Pulmonary embolism and exacerbation of COPD** Francis Couturaud (Brest, France)	**4401**
16:10	**Actualités Covid-19 / The latest on COVID-19** Claire Andrejak (Amiens, France)	**4402**
16:20	**Discussion and Q&A** All Speakers	**4403**

8N Session 495 15:45 - 17:00

Oral presentation: Pneumonia

Disease(s) : Airway diseases Respiratory critical care

Method(s) : General respiratory patient care Respiratory intensive care Cell and molecular biology Epidemiology Public health

Chairs : Tobias Welte (Hannover, Germany), Chair to be confirmed

OA4404	**Investigating neutrophil AMPK activity in COVID-19 and pneumonia** Yan Hui Giam (Dundee (Angus), United Kingdom), Merete B Long, Lilia Delgado, Hani Abo-Leyah, Holly R Keir, Thomas Pembridge, Rebecca Hull, Amy Gilmour, Chloe Hughes, Hollian Richardson, Diane Cassidy, Amelia Shoemark, James D Chalmers
OA4405	**Clinical efficacy between cefoperazone-sulbactam and prolonged infusion of piperacillin-tazobactam in the treatment of severe CAP, HAP and VAP: a retrospective multicenter cohort study** Chuan Yen Sun (Taipei, Taiwan), Wei Chih Chen
OA4406	**The efficacy of telavancin in comparison to linezolid on endotracheal tube biofilm in pigs with MRSA pneumonia>** KASRA KIAROSTAMI (Barcelona, Spain), Denise Battaglini, Anna Motos, Leticia Bueno Freire, Alba Soler Comas, Hua Yang, Minlan Yang, Francesco Pagliara, Eli Aguilera Xiol, Andrea Meli, Joaquim Bobi, Tarek Senussi Testa, Francesco Idone , Montserrat Rigol, Gianluigi Li Bassi, Laia Fernández-Barat, Antoni Torres
OA4407	**Machine learning for mortality prediction in community-acquired pneumonia emergency admissions** Daniel Lozano-Rojas (Leicester, United Kingdom), Alistair A Mcewan, Gerrit Woltmann, Robert C Free
OA4408	**Patients with COVID-19 versus non-COVID-19 community-acquired pneumonia** Athanasios Konstantinidis (Ioannina, Greece), Adamantia Liapikou, Haralampos Milionis, Angelos Liontos, Vasilios Tsimihodimos, Konstantinos Exarchos, Konstantina Gartzonika, Christos Kittas, Gerasimos Baxevanos, Thomas Tzimas, Evaggelia Chrysostomou, Nikolaos Zotos, Lampros Papageorgiou, Chrysavgi Terrovitou, Daniil Daniilidis, Charalampos Triantafyllidis, Theodora Argiriadou, Anastasia Chli, Eleni Tsouchnika, Vasiliki Kossyvaki, John Skiadas, Damianos Menegas, Cristina Méndez, Claudia Schwarz, Elizabeth Begier, Bradford D. Gessner, Michael Toumbis, Study Egnatia Group
OA4409	**Impact of severe lymphopenia on outcome of patients with pneumonia and positive pneumococcal urinary antigen** Luis Alberto Ruiz Iturriaga (Barakaldo (Vizcaya), Spain), Leyre Serrano Fernández, Silvia Pérez-Fernández, Sonia Castro Quintas, Amaia Urrutia Gajate, Beatriz González Quero, Alejandro Rezola Carasusan, Amaia Artaraz Ereño, Ainhoa Gómez Bonilla, Pedro Pablo España Yandiola, Rafael Zalacain Jorge
OA4410	**Development of AI models to predict mortality and long-term hospitalization in pneumonia** Taiki Furukawa (Nagoya (Aichi), Japan), Shintaro Oyama, Kikue Sato, Shotaro Misawa, Ryuji Kano, Hirokazu Yarimizu, Yoshimune Shiratori
OA4411	**Neutrophils in elderly hospitalised community acquired pneumonia patients are immature and migrate inaccurately** Shaun Thein (Birmingham (West Midlands), United Kingdom), Aduragbemi Faniyi, Frances Grudzinska, Onn Thein, Kylie Belchamber, Jaimin Patel, Dhruv Parekh, Aaron Scott, Elizabeth Sapey, David Thickett
OA4412	**The diagnostic and prognostic role of plasminogen activator inhibitor-1 (PAI-1) in hospitalized patients with pneumonias of different etiologies** Kseniia Bielosludtseva (Dniepropetrovsk, Ukraine)
OA4413	**Late Breaking Abstract - Are undernutrition and obesity associated with poor outcomes after hospitalization with community-acquired pneumonia – a prospective cohort study.** Maria Hein Hegelund (Hillerød, Denmark), Camilla Koch Ryrsø, Christian Ritz, Arnold Dungu, Rikke Krogh-Madsen, Birgitte Lindegaard, Daniel Faurholt-Jepsen
OA4414	**Discussion** All Speakers

8F Session 496 15:45 - 17:00

Oral presentation: New insights into diagnostic and experimental paediatric pulmonology

Disease(s) : Airway diseases

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

Chairs : Dirk Schramm (Düsseldorf, Germany), Raffaella Nenna (Rome, Italy)

OA4415	**Histological and structural effects of biodegradable polydioxanone stents in the rabbit trachea.** Alvaro Gimeno Diaz De Atauri (Madrid, Spain), Rocio Morante, Alicia Usategui, María López, Mª Carmen Luna, Salome Albi, Jose L. Pablos, Juan L. Anton-Pacheco Sanchez
OA4416	**Caspase-1 and interleukin-18 in children with post infectious bronchiolitis obliterans** Tuğba Şişmanlar Eyuboglu (Ankara, Turkey), Ayse Tana Aslan, Tugba Ramaslı Gursoy, Sevgi Pekcan, Mehmet Kose, Melih Hangul, Latife Arzu Aral, Vedat Bulut
OA4417	**Comparison of the lung clearance index in preschool children with primary ciliary dyskinesia and cystic fibrosis** Jobst Röhmel (Berlin, Germany), Friederike Doerfler, Cordula Koerner-Rettberg, Folke Brinkmann, Anne Schlegtendal, Martin Wetzke, Isa Rudolf, Simone Helms, Joerg Grosse-Onnebrink, Yin Yu, Thomas Nuesslein, Irena Wojsyk-Banaszak, Sebastian Becker, Olaf Eickmeier, Olaf Sommerburg, Heymut Omran, Mirjam Stahl, Marcus Mall
OA4418	**Low nitric oxide in Primary Ciliary Dyskinesia due to impaired NOS activity – data driven hypothesis** Anne Schlegtendal (Bochum, Germany), Lisa Eggenkemper, Folke Brinkmann, Thomas Lücke, Christoph Maier, Dimitrios Tsikas, Cordula Koerner-Rettberg
OA4419	**Diffusion capacity for nitric oxide (DLNO) in paediatric cardiopulmonary disease** Astrid Madsen Ring (Gentofte, Denmark), Frederik Fouirnaies Buchvald, Kim Gjerum Nielsen
OA4420	**The Relationship of Radiological Scoring with Clinical Findings and Pulmonary Function Decline in Primary Ciliary Dyskinesia** Nagehan Emiralioğlu (Ankara, Turkey), Berna Oguz, Beste Özsezen, Dilber Ademhan Tural, Birce Sunman, Halime Nayır Büyükşahin, Ismail Güzelkaş, Didem Alboğa, Meltem Erdal, Ebru Yalçın, Deniz Doğru, Nural Kiper, Uğur Özçelik
OA4421	**The 'knee' pattern in spirometry flow-volume curve in children: does it relate to tracheomalacia?** Wicharn Boonjindasup (Bangkok, Thailand), Julie Marchant , Margaret Mcelrea, Stephanie Yerkovich, Rahul Thomas, Ian Masters, Anne Chang
OA4422	**Late Breaking Abstract - Saliva as an alternative to nasopharyngeal swabs for detection of respiratory syncytial virus (RSV) in children** Annefleur Langedijk (Utrecht, Netherlands), Orchid Allicock, Michelle Van Wijk, Devyn Yolda-Carr, Daniel Weinberger, Anne Wyllie, Louis Bont
OA4423	**Discussion** All Speakers

8L Session 497 15:45 - 17:00

Oral presentation: Nursing aspects in asthma and COPD: self-management and pulmonary rehabilitation

Disease(s) : Airway diseases

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

Chairs : Andreja Sajnic (Zagreb, Croatia), José Miguel Dos Santos Castro Padilha (Porto, Portugal)

OA4424	**Comparing results of the Asthma Control Test and Severe Asthma Quality of life Questionnaire in patients with severe asthma on biologics** Mariana Rezelj (Stahovica, Slovenia), Jana Tršan, Irena Počvavšek, Tea Močnik, Anja Simonič, Tina Morgan, Peter Kopač, Sabina Škrgat
OA4425	**Impact on the quality of life of patients with COPD after three non-pharmacological interventions.** Sabina Miranda Valladares (La Laguna, Spain), Belen Gonzalez Sanchez, Marta Entrambasaguas Martin, Francisca Bernal Prados, Marta Perez Redondo, Maria Jesus Prunera Pardell, Adolfo Domenech Del Rio
OA4426	**The impact on number of hospitalizations and lenght of hospital stay for patients with advanced COPD affiliated with a cross-sectorial lung team.** Birgit Refsgaard Iversen (Århus N, Denmark), Lotte Rodkjaer, Vibeke Bregnballe, Anders Løkke
OA4427	**Patients' experience of automated oxygen administration during hospitalization with acute exacerbation in COPD - a qualitative study.** Charlotte Sandau Bech (Hvidovre, Denmark), Ingrid Poulsen, Vibeke Nørholm, Dorthe Gaby Bove

OA4428	**Pain perception in COPD patients across the COVID-19 pandemic** Maria Granados Santiago (Alcaudete, Spain), Jesús González Dueñas, Andrés Calvache Mateo, Ángela Benítez Feliponi, Alejandro Heredia Ciuró, Marie Carmen Valenza
OA4429	**Pulmonary rehabilitation maintenance programmes: What makes the difference?** Liliana Silva (Matosinhos, Portugal), Tiago Maricoto, Patrício Costa, Joana Berger, Miguel Padilha
OA4430	**The effect of early pulmonary rehabilitation on the treatment of ICU chronic obstructive pulmonary disease with severe respiratory failure** Fangbo Zhao (Changchun (Jilin), China)
OA4431	**Pulmonary telerehabilitation in the COVID era - pilot program** Sérgio Filipe Alves Vaz (Vila Real, Portugal), Ana Isabel Loureiro, Rita Queiros Rodrigues, Miguel Padilha
OA4432	**Lockdown impact in patients with severe and very severe COPD** Sabina Miranda Valladares (La Laguna, Spain), Marta Entrambasaguas Martin, Belen Gonzalez Sanchez, Marta Perez Redondo, Francisca Bernal Prados, Maria Jesus Prunera Pardell, Adolfo Domenech Del Rio
OA4433	**Late Breaking Abstract - Development, and evaluation of a handheld digital inspiratory airflow resistance monitor, to aid remote respiratory consultations in primary care, post the COVID-19 pandemic.** Lindsay Welch (Southampton (Hampshire), United Kingdom), Kacper Wlodarczyk, Aditya Revat, George Everdell, Martin Grigorov, Neil White
OA4434	**Discussion** All Speakers

8M Session 498 15:45 - 17:00

Oral presentation: Relevant news in rare interstitial lung diseases

Disease(s) : Interstitial lung diseases Respiratory critical care

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

Chairs : Elisabeth Bendstrup (Aarhus N, Denmark), Cormac McCarthy (Dublin 4, Ireland)

OA4435	**Pleuropulmonary manifestations of VEXAS syndrome** Raphaël Borie (Paris, France), Marie Pierre Debray, Alexandra Audemard, Alexis Guedon, Louis Terriou, Valentin Lacombe, Estibaliz Lazaro, Aurore Meyer, Alexis Mathian, Samuel Ardois, Guillaume. Vial, Thomas Moulinet, Benjamin Terrier, Yvan Jamilloux, Mael Heblig, Jean David Bouaziz, Eve Zakine, Roderau Outh, Sylvie Groslerons, Adrien Bigot, Edouard Flamarion, Marie Kostine, Pierrick Henneton, Sebastien Humbert, Arnaud Constentin, Maxime Samson, Nadine Magy, Celine Dieval, Pascal Biscay, Hervé Lobbes, Kilifa Meghit, Amelie Servettaz, Leo Adelaide, Julie Graveleau, Benjamin De Sainte Marie, Vivien Guillotin , Joris Galland, Olivier Kostminder, Sophie Georgin Lavaille, Arsene Mekinian
OA4436	**Exploring the role of matrix metalloproteinase 2 (MMP-2) as a biomarker in lymphangioleiomyomatosis** Meritxell Boada Pérez (Barcelona, Spain), Eva Maria Revilla Lopez, Victoria Ruiz De Miguel, Susana Gomez Ollés, Berta Saez
OA4437	**COVID-19 in patients with Pulmonary Alveolar ProteinosisA European multicenter study** Effrosyni D. Manali (Athens, Greece), Spyros Papiris, Ilaria Campo, Francesca Mariani, Maria Kallieri, Lykourgos Kolilekas, Andriana I Papaioannou, Efsun Gonca Chousein, Erdogan Cetinkaya, Francesco Bonella, Raphael Borie, Maria Kokosi, Thomas Pickworth, Maria Molina-Molina, Mercè Gasa, Elżbieta Radzikowska, Justyna Fijolek, Stéphane Jouneau, Emmanuel Gomez, Cormac Mccarthy, Elisabeth Bendstrup, Wojciech J. Piotrowski, Rishi Pabary, Alice Hadchouel , Nathalie Coolen-Allou, Tiago Alfaro, Carlos Robalo Cordeiro, Elvira-Markela Antonogiannaki, Ioannis P. Tomos, Despoina Papakosta, Theodoros Kontakiotis, Panagiota Panagiotou, Konstantinos Douros, Andrea Schams, Sara Lettieri, Vassiliki Papaevangelou, Christina Kanaka-Gantenbein, Anna Karakatsani, Stelios Loukides, Ulrich Costabel, Bruno Crestani, Cliff Morgan, Ryushi Tazawa, Andrew Bush, Matthias Griese
OA4438	**High Prevalence and impact of lung cancer in Surfactant related gene mutation carriers** Alexandre Brudon (Paris, France), Nadia Nathan, Marie Legendre, Serge Amselem, Julien Bermudez, Diane Bouvry, Jacques Cadranel, Aurélie Cazes, Tristan Degot, Céline Delestrain, Rémi Diesler, Ralph Epaud, Pascale Fanen, Anne Gondouin, Anne Guillaumot, Sandrine Hirschi, Sylvie Leroy, Sylvain Marchand-Adam, Hilario Nunes, Clément Picard, Grégoire Prévot, Martine Reynaud, Paul De Vuyst, Lidiwine Wemeau, Bruno Crestani, Gérard Zalcman, Vincent Cottin, Raphael Borie
OA4439	**Two distinct trajectories of FEV1 in Adult Pulmonary Langerhans Cell Histiocytosis** Amira Benattia (Paris (Île-de-France), France), Raphaël Porcher, Emmanuelle Bugnet, Constance De Margerie-Mellon, Gwenaël Lorillon, Abdellatif Tazi

OA4440	**Correlation of radiological findings and pulmonary function tests in pulmonary alveolar microlithiasis** Punchalee Kaenmuang (Songkhla, Thailand), Asma Navasakulpong
OA4441	**A DIPNECH deep dive** Marissa O'Callaghan (County Cork, Ireland), Hussein Almeamar, Margaret Gleeson, David Murphy, Dermot O'Toole, Aurelie Fabre, Rachel Crowley, Cormac Mccarthy
OA4442	**Cyst burden on high-resolution computed tomography (HRCT) correlates with VEGF-D in lymphangioleiomyomatosis** Evelyn Lynn (Blackrock (Co. Dublin), Ireland), Marissa Ocallaghan, Joseph Morrow, Niamh Boyle, Aurelie Fabre, Jonathan Dodd, Michael Keane, David Murphy, Cormac Mccarthy
OA4443	**Plasma exchange are not associated with better outcome in MDA5 Rapidly-Progressive Interstitial Lung disease.** Pierre Bay (Creteil, France), Marc Pineton De Chambrun, Rothstein Vicent, Matthieu Mahevas, Nicolas De Prost, Antoine Roux, Benjamin Zuber, Dominique Israël-Biet, Abdellatif Tazi, Hervier Baptiste, Mouthon Luc, Arsene Mekinian, Christophe Deligny, Raphael Borie, Jean Claude Meurice, Alain Meyer, Pascaline Priou, Laurent Savale, Luc De Saint Martin, Pierre Yves Brillet, Philippe Khafagy, Olivier Benveniste, Hilario Nunes, Yves Allenbach, Yurdagul Uzunhan
OA4444	**Discussion** All Speakers

8A - live streamed | Session 499 | 16:00 - 17:30

Clinical trials session: ALERT 4: Asthma and interventional pulmonology

Aims : Including the ALERT sessions (Abstracts Leading to Evolution in Respiratory Medicine Trials), these formats showcase important and very late-breaking clinical trial data from all respiratory disease areas. Presenters, session chairs and viewers will take part lively discussions on the presented trials.

Disease(s) : Thoracic oncology Airway diseases

Method(s) : Endoscopy and interventional pulmonology Imaging General respiratory patient care Surgery

Tag(s) : Clinical

Chairs : Walter De Wever (Leuven, Belgium), Elżbieta Magdalena Grabczak (Warszawa, Poland), Daniela Gompelmann (Vienna, Austria)

Discussants : Isabelle Opitz (Zurich, Switzerland), Guy Brusselle (Ghent, Belgium)

RCT4445	**Late Breaking Abstract - Tezepelumab reduces mucus plugging in patients with uncontrolled, moderate-to-severe asthma: the phase 2 CASCADE study** Christopher E. Brightling (Leicester (Leicestershire), United Kingdom), Lars H Nordenmark, Claire Emson, Åsa Hellqvist, James Johnston, Hans Greberg, Janet M. Griffiths, John D. Newell Jr, Jane R. Parnes, Gene Colice
RCT4446	**RCT Abstract - Use of digital measurement of medication adherence and lung function to guide the management of uncontrolled asthma: The INCA Sun randomized clinical trial** Richard Costello (Dublin 9, Ireland), Liam Heaney, Des Murphy, Elaine Machale
RCT4447	**Wrap-up by discussant and discussion** Guy Brusselle (Ghent, Belgium)
RCT4448	**Late Breaking Abstract - Comparative Effect of Lung volume reduction surgery for Emphysema and Bronchoscopic lung volume reduction with valve placement: the CELEB trial.** Sara Catherine Buttery (London, United Kingdom), Adam Lewis, Lorna Latimer, Samuel V Kemp, Pallav L Shah, David Waller, Kelvin Lau, Simon Jordan, Neil Greening, Sri Rathinam, Winston Banya, Alan J B Kirk, Rocco Biliancia, Sara Tenconi, Kay Housley, Rod Lawson, Michael C Steiner, Nicholas S Hopkinson
RCT4449	**Late Breaking Abstract - Sustained health-related quality of life in patients with severe heterogenous emphysema treated with spiration valve system at 24-month follow-up (EMPROVE)** Gerard J. Criner (Philadelphia, United States), Antoine Delage, Kirk Voelker, Simon Martel, Emprove Investigators The Emprove Trial Investigator Group
RCT4450	**Wrap-up by discussant and discussion** Isabelle Opitz (Zurich, Switzerland)
RCT4451	**A randomized controlled trial evaluating the benefit of cone beam CT guidance to electromagnetic navigation bronchoscopy for the diagnosis of pulmonary nodule** Benjamin Bondue (Bruxelles, Belgium), Olivier Taton, Fadi Tannouri, Myriam Remmelink, Dimitri Leduc
RCT4452	**RCT Abstract - Endosonography with or without confirmatory mediastinoscopy for resectable lung cancerA randomized clinical trial** Jouke T. Annema (Amsterdam, Netherlands), Jelle Bousema, Marcel Dijkgraaf, Erik Van Der Heijden, Ad Verhagen, Frank Van Den Broek

RCT4453	**Wrap-up by discussant and discussion** Isabelle Opitz (Zurich, Switzerland)	
RCT4454	**Closing remarks** All Speakers	

8B - live streamed Session 500 16:00 - 17:30

Hot topics: Towards elimination of COPD

Innovative views from the Lancet Commission on COPD

Aims : From a revised definition of the disease and its exacerbations to a new aetiological classification, the Lancet Commission on COPD puts forward unprecedented concepts around needed steps to undermine one of the major health problems worldwide. The aims of this session are as follows: to identify the reasons why COPD became a worldwide major health problem; to discuss current shortcomings in COPD diagnosis and therapy; to explore new diagnostic methods for COPD; to appraise an unprecedented aetiological classification of the disease; to discuss the proposed work-up for an acute exacerbation and its diagnosis; to review unmet targets in COPD therapy; to identify deliverable read-outs for COPD control and elimination.

Disease(s) : Airway diseases | Pulmonary vascular diseases | Respiratory infections

Method(s) : Cell and molecular biology | 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, Pathologist, Patient, Physician in Pulmonary Training, Physiologist, Radiologist, Respiratory physiotherapist, Scientist (basic, translational), Respiratory therapist

Chairs : Katerina Antoniou (Heraklion, Greece), Apostolos Bossios (Stockholm, Sweden), Sabine Kleinert (London, United Kingdom)

16:00	**Why is COPD a pandemic? What matters to patients?** MeiLan K. Han (Ann Arbor, United States)	**4455**
16:15	**Revisiting the diagnosis and classification of COPD** Daiana Stolz (Basel, Switzerland)	**4456**
16:30	**Pharmacological and nonpharmacological unmet needs in COPD** Donald Sin (Vancouver (BC), Canada)	**4457**
16:45	**How do we eliminate COPD?** Mark Dransfield (Birmingham, United States)	**4458**
17:00	**Discussion and Q&A** All Speakers	**4459**

8C - live streamed Session 501 16:00 - 17:30

Clinical cases: Lungs on fire: Respiratory critical care / Sleep and Breathing disorders

Aims : To facilitate the presentation of 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

Tag(s) : Clinical

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

Chairs : Maxime Patout (Paris, France), Maria Bonsignore (Palermo, Italy), João Carlos Winck (Vila Nova de Gaia, Portugal)

Discussants : Marieke L. Duiverman (Groningen, Netherlands), Leo Heunks (Amsterdam, Netherlands)

16:00	**Case 1 incl. panel discussion and Q&A - Author: J. P. Duarte dos Santos Oliveira Rodrigues (Portugal)** Marieke L. Duiverman (Groningen, Netherlands)	**4460**
16:22	**Case 2 incl. panel discussion and Q&A - Author: A. F. Pacheco Reyes (Spain)** Leo Heunks (Amsterdam, Netherlands)	**4461**
16:44	**Case 3 incl. panel discussion and Q&A - Author: A. Breslavsky (Israel)** Marieke L. Duiverman (Groningen, Netherlands)	**4462**
17:06	**Case 4 incl. panel discussion and Q&A - Author: M. Thilakarathna (Sri Lanka)** Leo Heunks (Amsterdam, Netherlands)	**4463**

8G - live streamed Session 502 16:00 - 17:30

Hot topics: The practice and the planet: how can climate change and air pollution be addressed from clinical practice?

Aims : to provide an overview of the newest evidence of impacts of air pollution and climate change on respiratory health and discuss the role of respiratory clinicians in climate change mitigation and adaptation.

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

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

Tag(s) : Translational

Target audience : Adult pulmonologist/Clinician, General practitioner, Patient

Chairs : Sara De Matteis (Cagliari, Italy), Rafael E. de la Hoz (New York, United States)

16:00	**Why should clinicians care about climate change?**	**4464**
16:15	**Planetary health as a priority in medical training** Josep Maria Anto Boque (Barcelona, Spain)	**4465**
16:30	**Clinical relevance of the new WHO air quality guidelines and how to consider exposure to low-levels of air pollution in adults: an overview** Zorana Andersen (Frederiksberg, Denmark)	**4466**
16:45	**Exposure to low-levels of air pollution and respiratory diseases in children: an overview** Erik Melén (Stockholm, Sweden)	**4467**
17:00	**Discussion and Q&A** All Speakers	**4468**

8H - live streamed Session 503 16:00 - 17:30

Symposium: Malignant pleural effusion management: applying the evidence in 2022 Session

Aims : to review the current biological understanding and potential mechanisms of malignant effusion progression and the implications for practice; to explain the relationship between anatomy, physiology and symptoms in pleural disease and the implications for practice; to describe evidence about optimal talc pleurodesis, including its use thoracoscopically; to provide insight into the current evidence for adjunctive treatments with indwelling plural catheters and novel indwelling plural catheter devices and their evidence.

Disease(s) : Thoracic oncology

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

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Medical Student, Respiratory critical care physician, Pathologist, Radiologist, Scientist (basic, translational), Thoracic oncologist, Thoracic surgeon

Chairs : Najib M. Rahman (Oxford, United Kingdom), Georgia Hardavella (Athens, Greece)

16:00	**From malignant effusion to malignant progression: what do translational studies tell us?** Rachelle Asciak (SIGGIEWI, Malta)	**4469**
16:15	**Understanding the impact, treatment response and outcome of malignant pleural effusions** Gary Yc Lee (Perth (WA), Australia)	**4470**
16:30	**Inpatient pleurodesis: translating the evidence into practice** Najib M. Rahman (Oxford, United Kingdom)	**4471**
16:45	**Adjunctive indwelling pleural catheter management: from outpatient talc to drug-eluting catheters** Nick Maskell (Bristol (Avon), United Kingdom)	**4472**
17:00	**Discussion and Q&A** All Speakers	**4473**

Studio - online Session 504 16:45 - 17:15

Pro-Con debate: Is pharmacological or non-pharmacological management the priority for the patient who wants to be " less breathless and do more"

Aims : to describe the definition and prevalence of chronic breathlessness; to compare the latest evidence of pharmacological and nonpharmacological management for persons living with chronic breathlessness and identify the research gaps; to improve the clinical care of the person living with chronic breathlessness by utilising a blend of nonpharmacological and pharmacological strategies in the right patient at the right time.

Disease(s) : Airway diseases Interstitial lung 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

Chairs : Richard Costello (Dublin 9, Ireland), Nicolas Roche (Paris, France), Christopher E. Brightling (Leicester (Leicestershire), United Kingdom)

16:45	**Pharmacological management is the priority to improve chronic breathlessness** David Currow (Sydney (NSW), Australia)	**4474**
16:55	**Non-pharmacological management is the priority to improve chronic breathlessness** Rachael A. Evans (Leicester (Leicestershire), United Kingdom)	**4475**
17:05	**Discussion and Q&A** All Speakers	**4476**

Studio - online Session 505 17:15 - 17:30

News from the Studio: Congress wrap-up

Chairs : Richard Costello (Dublin 9, Ireland), Christopher E. Brightling (Leicester (Leicestershire), United Kingdom), Nicolas Roche (Paris, France)

17:15	**Discussion and Q&A** All Speakers	**4477**

18:00-19:30
INDUSTRY EVENING SYMPOSIUM SEE PAGE 1

PG room 1 Session 516 09:30 - 13:00

Postgraduate course: PG1 Part I: Cardiovascular and neurological consequences of obstructive sleep apnoea: an update

Aims : to summarise the current knowledge of the many clinical faces of obstructive sleep apnoea (OSA) characterised by a variable degree of daytime sleepiness, gender differences of OSA symptoms and differences in the presence of comorbid insomnia, resulting in various comorbidities. It will cover the heterogeneity of OSA and its cognitive outcomes, especially in terms of attention and executive functions, and the potential bidirectional relationship with dementia, focusing on early identification, prevention and treatment strategies. The physiological and biochemical mechanisms connecting OSA with metabolic syndrome and diabetes, clinically meaningful phenotyping, improved prognosis and personalised treatment will be covered. The impact of the severity of OSA on the risk and outcomes of cardiovascular diseases and evidence of the impact of OSA treated with or without continuous positive airway pressure (CPAP) on morbidity and mortality outcomes will be discussed. The challenges facing sleep medicine regarding the important effect of CPAP on patient outcomes and the role of compliance will be highlighted.

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

Method(s) : Epidemiology | General respiratory patient care | Physiology

Tag(s) : Clinical

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 Bonsignore (Palermo, Italy), Matteo Bradicich (Zollikerberg, Switzerland)

09:30	**Clinical OSA phenotypes from sleepiness to mild and asymptomatic OSA and their relevance** Sophia E. Schiza (Heraklion, Greece)	**4502**
09:50	**Discussion and Q&A** Sophia E. Schiza (Heraklion, Greece)	**4503**
10:00	**Stroke, minimal cognitive impairment/dementia and OSA: a bidirectional relationship?** Speaker to be confirmed	**4504**
10:20	**Discussion and Q&A** Speaker to be confirmed	**4505**
10:30	**Break**	**4506**
10:45	**Various pathophysiological mechanisms leading to cardiovascular sequalae of OSA and their relevance** Carolina Lombardi (Milano (MI), Italy)	**4507**
11:05	**Discussion and Q&A** Carolina Lombardi (Milano (MI), Italy)	**4508**
11:15	**What is the impact of OSA treated with or without CPAP on cardiovascular morbidity and mortality outcomes?** Dries Testelmans (Leuven, Belgium)	**4509**
11:35	**Discussion and Q&A** Dries Testelmans (Leuven, Belgium)	**4510**
11:45	**Break**	**4511**
12:00	**Group assignment** Sophia E. Schiza (Heraklion, Greece), Carolina Lombardi (Milano (MI), Italy), Dries Testelmans (Leuven, Belgium), Speaker to be confirmed	**4512**

PG room 1 Session 517 14:00 - 17:30

Postgraduate course: PG1 Part II: outcomes of central sleep apnoea and hypoventilation syndromes

Aims : to summarise the current knowledge of early recognition and effective hypoventilation treatment using various currently available treatment modalities with the scope to improve patient-centred outcomes; different clinical phenotypes of Central sleep apnoea (CSA) in heart failure (HF) patients, their correlation with prognosis and their relevance for identifying individualised therapeutic strategies to improve morbidity, mortality and patient-centred outcomes; early recognition and effective preoperative and postoperative management of patients with sleep-disordered breathing and use of anaesthetics to improve patient safety and outcomes of surgery; and various types of sleep diagnostic tests (type I–IV), their use depending on the patient's profile and their strengths and limitations.

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

Method(s) : Epidemiology | General respiratory patient care | Physiology

Tag(s) : Clinical

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 : Dries Testelmans (Leuven, Belgium), Marta Susana Monteiro Drummond Freitas (Maia, Portugal)

14:00	**Clinical phenotypes of CSA: relevance for treatment decisions and patient outcomes** Winfried J. Randerath (Solingen, Germany)	**4513**
14:20	**Discussion and Q&A** Winfried J. Randerath (Solingen, Germany)	**4514**
14:30	**Obesity hypoventilation syndrome: one size does not fit all. Which patients will benefit from various therapeutic options?** Jean-Louis Pépin (Grenoble, France)	**4515**
14:50	**Discussion and Q&A** Jean-Louis Pépin (Grenoble, France)	**4516**
15:00	**Break**	**4517**
15:15	**Preoperative and postoperative evaluation of patients with various forms of sleep-disordered breathing: relevance for patient outcomes** Özen K. Basoglu (Izmir, Turkey)	**4518**
15:35	**Discussion and Q&A** Özen K. Basoglu (Izmir, Turkey)	**4519**
15:45	**Type I–IV diagnostic modalities: which one to choose according to various forms of sleep-disordered breathing** Renata L. Riha (Edinburgh (Edinburgh), United Kingdom)	**4520**
16:05	**Discussion and Q&A** Renata L. Riha (Edinburgh (Edinburgh), United Kingdom)	**4521**
16:15	**Break**	**4522**
16:30	**Group assignment** Winfried J. Randerath (Solingen, Germany), Jean-Louis Pépin (Grenoble, France), Özen K. Basoglu (Izmir, Turkey), Renata L. Riha (Edinburgh (Edinburgh), United Kingdom)	**4523**

PG Room 2 Session 518 14:00 - 17:30

Postgraduate course: PG2 Paediatric respiratory diseases: focus on infections

Aims : to provide clinicians with practical take-home messages regarding the key management and health policy issues related to respiratory disease in children, focusing on airway and lung infections; to provide a state-of-the-art update on four important paediatric topics, namely, SARS-CoV-2, infections in cystic fibrosis, tuberculosis and complicated pneumonia.

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, General practitioner, Medical Student, Respiratory critical care physician, Paediatrician, Physician in Pulmonary Training, Respiratory therapist

Chairs : Stefan Unger (Edinburgh (Edinburgh), United Kingdom), Marijke Proesmans (Leuven, Belgium)

14:00	**SARS-CoV-2-associated lung infections in children** Ahmad Kantar (Bergamo (BG), Italy)	**4524**
14:20	**Discussion and Q&A** Ahmad Kantar (Bergamo (BG), Italy)	**4525**
14:30	**Infections in children with cystic fibrosis in the era of highly effective modulator therapy** Speaker to be confirmed	**4526**

14:50	**Discussion and Q&A** All Speakers, Speaker to be confirmed	**4527**
15:00	**Break**	**4528**
15:15	**Update on lung tuberculosis in children** James Seddon (London, United Kingdom)	**4529**
15:35	**Discussion and Q&A** James Seddon (London, United Kingdom)	**4530**
15:45	**Management of complicated pneumonia in children** Speaker to be confirmed	**4531**
16:05	**Discussion and Q&A** All Speakers, Speaker to be confirmed	**4532**
16:15	**Break**	**4533**
16:30	**Group assignment** Ahmad Kantar (Bergamo (BG), Italy), James Seddon (London, United Kingdom), Speaker to be confirmed	**4534**

PG room 1 Session 519 09:30 - 15:00

Postgraduate course: PG3 Pleural disease: Applying the evidence

Aims : to discuss the large volume of high-quality trial data being published about pleural disease, including phase III trials in several subspecialty areas and updated international guidelines that are due to be published in early 2022. In terms of malignant pleural effusion, participants will be able to select the optimal diagnostic strategy, including thoracoscopy and direct-to-biopsy approaches, and explain the proven advantages and disadvantages of different management options to facilitate patient-centred, evidence-based care. In terms of pleural infection, participants will be able to correctly diagnose and identify patients requiring drainage, adjunctive intrapleural therapies and referral for surgery, deploy risk prediction scores and explain relevant translational and antimicrobial data. In terms of pneumothorax, participants will be able to differentiate between patients requiring admission and those suitable for ambulatory management, based on recent phase III trials, and identify the importance of familial pneumothorax and ongoing trials, including those involving the use of suction. In terms of mesothelioma, participants will be able to select optimal diagnostic and treatment strategies including first- and second-line immunotherapy and learn about the role of regional multidisciplinary teams and options for patients with early-stage disease, including radical surgery and ongoing clinical trials.

Disease(s) : Respiratory infections Thoracic oncology

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

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Nurse, Physician in Pulmonary Training, Thoracic oncologist, Thoracic surgeon

Chairs : Kevin Blyth (Glasgow (Glasgow), United Kingdom), Nick Maskell (Bristol (Avon), United Kingdom)

09:30	**Evidence-based diagnosis and management of malignant pleural effusion** Selina Tsim (Glasgow (Glasgow), United Kingdom)	**4535**
09:50	**Discussion and Q&A** Selina Tsim (Glasgow (Glasgow), United Kingdom)	**4536**
10:00	**Interactive case: malignant pleural effusion** Radhika Banka (Mumbai (Maharashtra), India)	**4537**
10:30	**Break**	**4538**
10:45	**Stratified therapy for pleural infection: integrating outcome prediction, intrapleural therapy and surgery** Najib M. Rahman (Oxford, United Kingdom)	**4539**
11:05	**Discussion and Q&A** Najib M. Rahman (Oxford, United Kingdom)	**4540**
11:15	**Interactive case: pleural infection** Deirdre B. Fitzgerald (Perth, Australia)	**4541**
11:45	**Break**	**4542**
12:00	**Pneumothorax: is ambulatory care ready for prime time?** Rob Hallifax (Oxford (Oxfordshire), United Kingdom)	**4543**
12:20	**Discussion and Q&A** Rob Hallifax (Oxford (Oxfordshire), United Kingdom)	**4544**
12:30	**Interactive case: pneumothorax** Julius P. Janssen (Nijmegen, Netherlands)	**4545**
13:00	**Lunch break**	**4546**
14:00	**Mesothelioma: integrating new therapies, better diagnostics and clinical trials** Vasiliki Panou (Odense, Denmark)	**4547**
14:20	**Discussion and Q&A** Vasiliki Panou (Odense, Denmark)	**4548**
14:30	**Interactive case: mesothelioma** Anna Bibby (Bristol (Avon), United Kingdom)	**4549**

PG Room 2 Session 520 14:00 - 17:30

Postgraduate course: PG4 Back to clinical physiology

From respiratory mechanics and gas exchange to clinical physiologic interventions

Aims : to explain the basic principles of respiratory physiology and how they can be applied to clinical practice.

Disease(s) : Pulmonary vascular diseases Respiratory critical care

Method(s) : General respiratory patient care Physiology Respiratory intensive care

Tag(s) : Clinical

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

Chairs : William Stringer (Long Beach, United States), Camille Rolland-Debord (clermont-ferrand, France)

14:00	**From pulmonary gas exchange to the interpretation of arterial blood gases** Paolo Palange (Rome, Italy)	**4550**
14:20	**Discussion and Q&A** Paolo Palange (Rome, Italy)	**4551**
14:30	**Pulmonary circulation: from physiology to clinical applications** Silvia Ulrich (Zurich, Switzerland)	**4552**
14:50	**Discussion and Q&A** Silvia Ulrich (Zurich, Switzerland)	**4553**
15:00	**Break**	**4554**
15:15	**Respiratory mechanics and respiratory muscle function** Caroline Jolley (London, United Kingdom)	**4555**
15:35	**Discussion and Q&A** Caroline Jolley (London, United Kingdom)	**4556**
15:45	**TThe mechanics of breathing in intensive care unit patients, particularly in the era of COVID-19** Laurent Brochard (Toronto (ON), Canada)	**4557**
16:05	**Discussion and Q&A** Laurent Brochard (Toronto (ON), Canada)	**4558**
16:15	**Break**	**4559**
16:30	**Group assignment** Paolo Palange (Rome, Italy), Silvia Ulrich (Zurich, Switzerland), Caroline Jolley (London, United Kingdom), Laurent Brochard (Toronto (ON), Canada)	**4560**

PG room 1 Session 521 08:30 - 12:00

Postgraduate course: PG5 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

Tag(s) : Clinical

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

Chairs : Apostolos Bossios (Stockholm, Sweden), Mona Al-Ahmad (Kuwait, Kuwait)

08:30	**Latest updates in the guidelines of asthma: diagnosis and management** Ayşe Arzu Yorgancıoğlu (Konak, Turkey)	**4561**
08:50	**Discussion and Q&A** Ayşe Arzu Yorgancıoğlu (Konak, Turkey)	**4562**
09:00	**Assessing and monitoring asthma** Florence Schleich (Liège, Belgium)	**4563**
09:20	**Discussion and Q&A** Florence Schleich (Liège, Belgium)	**4564**
09:30	**Break**	**4565**
09:45	**Making sense of phenotypes and endotypes in asthma** Renaud Louis (Liège, Belgium)	**4566**
10:05	**Discussion and Q&A** Renaud Louis (Liège, Belgium)	**4567**
10:15	**Pharmacological treatment and current controversies** Guy Brusselle (Ghent, Belgium)	**4568**
10:35	**Discussion and Q&A** Guy Brusselle (Ghent, Belgium)	**4569**
10:45	**Break**	**4570**
11:00	**Interactive cases by participants** Stylianos Loukides (Athens, Greece), Manali Mukherjee (Hamilton (ON), Canada), Ayşe Arzu Yorgancıoğlu (Konak, Turkey), Angela Zacharasiewicz (Wien, Austria)	**4571**

PG Room 2 Session 522 14:00 - 17:30

Postgraduate course: PG6 Masterclass in COPD

Aims : to describe methods of diagnosing, assessing and managing patients with COPD; to present methods of 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, Medical Technical Assistant, Nurse, Patient, Physician in Pulmonary Training, Physiologist

Chairs : Apostolos Bossios (Stockholm, Sweden), Ayşe Arzu Yorgancıoğlu (Konak, Turkey)

14:00	**Latest updates in the guidelines for COPD: diagnosis and management** Konstantinos Kostikas (Ioannina, Greece)	**4572**
14:20	**Discussion and Q&A** Konstantinos Kostikas (Ioannina, Greece)	**4573**
14:30	**Assessing and monitoring COPD** MeiLan K. Han (Ann Arbor, United States)	**4574**

14:50	**Discussion and Q&A** MeiLan K. Han (Ann Arbor, United States)	**4575**
15:00	**Break**	**4576**
15:15	**Making sense of phenotypes and endotypes in COPD** Daiana Stolz (Basel, Switzerland)	**4577**
15:35	**Discussion and Q&A** Daiana Stolz (Basel, Switzerland)	**4578**
15:45	**Pharmacological treatment and current controversies** Alberto Papi (Cona, Ferrara, Italy)	**4579**
16:05	**Discussion and Q&A** Alberto Papi (Cona, Ferrara, Italy)	**4580**
16:15	**Break**	**4581**
16:30	**Interactive cases by participants** Stylianos Loukides (Athens, Greece), Miriam Barrecheguren Fernandez (Barcelona, Spain), Daiana Stolz (Basel, Switzerland)	**4582**

PG room 1 Session 523 08:30 - 12:00

Postgraduate course: PG7 How to improve research strategies in pneumonia

ECRAID-base project

Aims : to review limitations of pneumonia research and potential advances in this field to improve research and the development of future trials in pneumonia in both community and hospital settings.

Disease(s) : Respiratory infections

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

Tag(s) : Clinical

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

Chairs : Eva Polverino (Barcelona, Spain), Marc Bonten (Utrecht, Netherlands)

08:30	**Strengths and limitations of clinical trials in pneumonia** Tobias Welte (Hannover, Germany)	**4583**
08:50	**Discussion and Q&A** Tobias Welte (Hannover, Germany)	**4584**
09:00	**Advances in microbiological diagnosis of respiratory tract infections** Cristina Prat Aymerich (Utrecht, Netherlands)	**4585**
09:20	**Discussion and Q&A** All Speakers, Cristina Prat Aymerich (Utrecht, Netherlands)	**4586**
09:30	**Break**	**4587**
09:45	**Definition criteria of pneumonia from the perspective of regulatory agencies** Radu Botgros (London, United Kingdom)	**4588**
10:05	**Discussion and Q&A** All Speakers, Radu Botgros (London, United Kingdom)	**4589**
10:15	**Adaptative trials in respiratory tract infections** Speaker to be confirmed	**4590**
10:35	**Discussion and Q&A** All Speakers, Speaker to be confirmed	**4591**
10:45	**Break**	**4592**
11:00	**Group assignment** Tobias Welte (Hannover, Germany), Radu Botgros (London, United Kingdom), Cristina Prat Aymerich (Utrecht, Netherlands), Speaker to be confirmed	**4593**

PG Room 2 Session 524 14:00 - 17:30

Postgraduate course: PG8 The challenges of chronic noninvasive ventilation

A case-based discussion

Aims : to discuss titration of chronic noninvasive ventilation (NIV) in patients with bulbar complaints, including how to adjust patients, additional therapies and techniques, when to decide that NIV goals have not been achieved, when to switch to invasive mechanical ventilation and when to decide to stop; to discuss titration of chronic NIV in patients with chronic obstructive pulmonary disease (COPD), including whether to aim for high-intensity NIV, how to adjust patients to high-intensity NIV, the back-up respiratory rate, inspiration and expiration times and new modes; to discuss the detection and clinical consequences of patient-ventilator asynchrony, including whether this should be treated in chronic care and how to reliably detect it; to discuss the value of alternative (autotitrating) modes, including whether AVAPS and EFL titration modes or other alternatives should be used.

Disease(s) : Paediatric respiratory diseases Respiratory critical care Sleep and breathing disorders

Method(s) : General respiratory patient care Physiology 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, Paediatrician, Patient, Respiratory physiotherapist, Respiratory therapist

Chairs : Marieke L. Duiverman (Groningen, Netherlands), Jesus Gonzalez Bermejo (Montlignon, France)

14:00	**Chronic NIV in patients with bulbar disease: challenges and goals** Peter J. Wijkstra (Groningen, Netherlands)	**4594**
14:20	**Discussion and Q&A** Peter J. Wijkstra (Groningen, Netherlands)	**4595**
14:30	**Chronic NIV in patients with COPD: what is the best way to go?** Chloé Cantero (Paris, France)	**4596**
14:50	**Discussion and Q&A** Chloé Cantero (Paris, France)	**4597**
15:00	**Break**	**4598**
15:15	**Is patient-ventilator asynchrony also important in chronic care?** Michelle Ramsay (Esher, United Kingdom)	**4599**
15:35	**Discussion and Q&A** Michelle Ramsay (Esher, United Kingdom)	**4600**
15:45	**New NIV modes: what is available, and when should they be used?** Maxime Patout (Paris, France)	**4601**
16:05	**Discussion and Q&A** Maxime Patout (Paris, France)	**4602**
16:15	**Break**	**4603**
16:30	**Group assignment** Peter J. Wijkstra (Groningen, Netherlands), Michelle Ramsay (Esher, United Kingdom), Maxime Patout (Paris, France), Chloé Cantero (Paris, France)	**4604**

PG room 1 Session 525 08:30 - 12:00

Postgraduate course: PG9 Diagnosing pulmonary hypertension: what a pneumologist should know

Aims : to explain how to correctly diagnose pulmonary hypertension via a stepwise approach, how to perform the diagnostic tests in the correct order, how to interpret the radiology results correctly and how to perform and interpret right heart catheterisation data correctly; to describe the right heart physiology and explain how to interpret right heart parameters correctly; to explain how to apply this knowledge using interactive cases.

Disease(s) : Pulmonary vascular diseases

Method(s) : Imaging Physiology Pulmonary function testing

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, Clinical researcher, Medical Student, Respiratory critical care physician, Paediatrician, Patient, Physician in Pulmonary Training, Radiologist

Chairs : Mona Lichtblau (Zürich, Switzerland), Marion Delcroix (Leuven, Belgium), Louise Bouman-van der Waal (Piershil, Netherlands)

08:30	**The diagnostic algorithm in pulmonary hypertension** David Kiely (Sheffield (South Yorkshire), United Kingdom)	**4605**
08:50	**Discussion and Q&A** David Kiely (Sheffield (South Yorkshire), United Kingdom)	**4606**
09:00	**The radiology of pulmonary hypertension** Deepa Gopalan (LONDON, United Kingdom)	**4607**
09:20	**Discussion and Q&A** Deepa Gopalan (LONDON, United Kingdom)	**4608**
09:30	**Break**	**4609**
09:45	**Correctly performing right heart catheterisation and interpreting the data** Gabor Kovacs (Graz, Austria)	**4610**
10:05	**Discussion and Q&A** Gabor Kovacs (Graz, Austria)	**4611**
10:15	**Evaluation of right ventricular function** Anton Vonk Noordegraaf (Amsterdam, Netherlands)	**4612**
10:35	**Discussion and Q&A** Anton Vonk Noordegraaf (Amsterdam, Netherlands)	**4613**
10:45	**Break**	**4614**
11:00	**Interactive cases** Athénaïs Boucly (Le Kremlin Bicètre, France), Mitja Jevnikar (Paris, France), Rui Miguel Costa Adão (Oliveira de Azeméis, Portugal)	**4615**

PG Room 2 Session 526 14:00 - 17:30

Postgraduate course: PG10 Spirometry today: from theory to practice

Aims : to explain the basic principles of spirometry and how to perform it in a standardised and safe way during and after the COVID-19 pandemic following the standardisation of spirometry (ATS-ERS) 2019 update.

Method(s) : Physiology Pulmonary function testing

Tag(s) : Clinical

Target audience : Adult pulmonologist/Clinician, General practitioner, Medical Technical Assistant, Physician in Pulmonary Training, Physiologist, Respiratory physiotherapist, Respiratory therapist

Chairs : Pierantonio Laveneziana (Paris, France), Monika Franczuk (Warszawa, Poland)

14:00	**The physiological basis of the flow volume curve** Frans H.C. De Jongh (Enschede, Netherlands)	**4616**
14:20	**Discussion and Q&A** Frans H.C. De Jongh (Enschede, Netherlands)	**4617**

14:30	**Ensuring quality and safety of your spirometry service** Aisling McGowan (Dublin 15, Ireland)	**4618**
14:50	**Discussion and Q&A** Aisling McGowan (Dublin 15, Ireland)	**4619**
15:00	**Break**	**4620**
15:15	**Spirometry: effective performance** Rachel Ong-Salvador (Amsterdam, Netherlands)	**4621**
15:35	**Discussion and Q&A** Rachel Ong-Salvador (Amsterdam, Netherlands)	**4622**
15:45	**Spirometry: what can go wrong and how to rectify it** Karl Sylvester (Cambridge (Cambridgeshire), United Kingdom)	**4623**
16:05	**Discussion and Q&A** Karl Sylvester (Cambridge (Cambridgeshire), United Kingdom)	**4624**
16:15	**Break**	**4625**
16:30	**Group assignment** Frans H.C. De Jongh (Enschede, Netherlands), Aisling McGowan (Dublin 15, Ireland), Rachel Ong-Salvador (Amsterdam, Netherlands), Karl Sylvester (Cambridge (Cambridgeshire), United Kingdom)	**4626**

INDUSTRY SESSIONS

8A - live streamed Session 53 08:00 - 09:15

Industry Early Morning Symposium: Understanding RSV: Identifying high risk adults

Organised by Janssen Pharmaceutica NV

Chairs : Francesco Blasi (Milan, Italy)

08:00	**Welcome and introductions** Francesco Blasi (Milan, Italy)	**72**
08:10	**Understanding RSV: Burden of disease in high-risk adults** Ting Shi (Edinburgh (Edinburgh), United Kingdom)	**73**
08:30	**RSV and chronic respiratory diseases: What are the consequences?** Marc Miravitlles (Barcelona (CT), Spain)	**74**
08:50	**Scientific exchange and Q&A** Francesco Blasi (Milan, Italy)	**75**
09:10	**Closing remarks** Francesco Blasi (Milan, Italy)	**76**

8B - live streamed Session 54 08:00 - 09:15

Industry Early Morning Symposium: mRNA science: Transforming the management of respiratory infections

Organised by Moderna

Chairs : Roger Paredes (Barcelona, Spain)

08:00	**Welcome and introduction** Roger Paredes (Barcelona, Spain)	**77**
08:05	**mRNA platform technology and its potential beyond COVID-19** Melissa Moore (Massachusetts, United States)	**78**
08:20	**Current landscape and unmet needs in respiratory medicine** Eva Polverino (Barcelona, Spain)	**79**
08:40	**Revolutionizing the respiratory disease landscape through advances in vaccinology**	**80**
09:00	**Live Q&A** Roger Paredes (Barcelona, Spain), Eva Polverino (Barcelona, Spain), Melissa Moore (Massachusetts, United States)	**81**

8C - live streamed Session 55 08:00 - 09:15

Industry Early Morning Symposium: Critical Therapeutic Advances for Optimizing Clinical Outcomes in MAC Lung Disease: An Evidence-to-Practice Update

Organised by Insmed

Chairs : Christoph Lange (Borstel, Germany)

08:00	**The Challenging Morbidity, Risk, and Therapeutic Continuum of MAC Lung Disease: What Have Learned from ERS Treatment Guideline, Real World Experience, and Recent Trials Focused on High Risk/Refractory MAC Lung Disease? How Do We Best Match Antimicrobial Therapies with Individual Patients with NTM-PD?** Christoph Lange (Borstel, Germany)	**82**
08:15	**Optimizing Management of MAC Lung Disease with Guideline-Based Therapy: Current, Evidence- and Trial-Based Recommendations for Applying ATS/IDSA/ERS/ESCMID Treatment Plans for NTM-PD to the Front Lines of Patient Care for Refractory and Advanced MAC Pulmonary Disease** Stefano Aliberti (Milano (MI), Italy)	**83**
08:35	**Clinical and Microbiologic Confirmation of MAC Lung Disease: Guiding Antibiotic Selection and Intensity Based on Systematic Microbiological Testing, Risk Stratification, Severity Score Indexes, and Prompt Recognition of Disease Severity Based on Radiographic Findings and Patient Co-Morbidities** Michael Loebinger (London, United Kingdom)	**84**

08:55	**From Trials to Treatment for Challenging Patients with MAC Lung Infection—The Role, Safety, Indications, Evidence, and Practical Aspects of Deploying Inhaled Antimicrobial Formulations to Ensure Regimen Adherence, Minimize Side Effects, and Ensure Antimicrobial Course Completion for MAC Lung Disease** Francesco De Blasio (Pozzuoli (NA), Italy)	**85**

8G - live streamed Session 56 08:00 - 09:15

Industry Early Morning Symposium: Simplement it: Treatable Traits in practice

Organised by GSK

Chairs : Chris Compton (Brentford, Middlesex, United Kingdom)

08:00	**Opening and introduction** Chris Compton (Brentford, Middlesex, United Kingdom)	**86**
08:05	**Proactively managing patients and long-term risk using Treatable Traits** Ian Douglas Pavord (Oxford (Oxfordshire), United Kingdom)	**87**
08:20	**Can we simplify the approach by prioritising prime traits?** Peter Gibson (Newcastle, Australia)	**88**
08:35	**Spotlight on sentinel events in asthma and COPD: exacerbations need a zero-tolerance approach** Mona Bafadhel (London, United Kingdom)	**89**
08:50	**Let's implement Treatable Traits: an illustrative case** Thys van der Molen (Groningen, Netherlands)	**90**
09:00	**Q&A and close** Chris Compton (Brentford, Middlesex, United Kingdom)	**91**

8J Session 58 08:00 - 08:45

Industry Skills Lab Workshop: Breaking Research -Physiological Effects of the Novel DuetTM Asymmetrical Cannula on COPD

Organised by Fisher & Paykel Healthcare

Chairs : Stefano Nava (Bologna (BO), Italy), Ulla Møller Weinreich (Ålborg, Denmark)

08:00	**Nasal high flow therapy in COPD patients using a novel asymmetric cannula** Gerard J. Criner (Philadelphia, United States)	**99**
08:18	**Nasal High Flow in Post-Exacerbation COPD** Lara Pisani (Bologna (BO), Italy)	**100**
08:36	**Prong size, pressure, pCO2: how to optimise NHF therapy** Jens Bräunlich (Leipzig, Germany)	**101**

8K Session 59 08:00 - 08:45

Industry Skills Lab Workshop: Central airway bronchoscopy – oncological and benign conditions

Organised by Erbe Elektromedizin GmbH

Chairs : Jürgen Hetzel (Tuebingen, Germany)

08:00	**Introduction** Doreen Werner	**102**
08:05	**Intro-lecture on different disease states & application of Erbe-solutions** Jürgen Hetzel (, Switzerland)	**103**
08:15	**Hands-On** Jürgen Hetzel (Tuebingen, Germany), Carlos Disdier Vicente (simancas, Spain), Daniela Gompelmann (Vienna, Austria)	**104**
08:40	**Discussion** Jürgen Hetzel (, Switzerland), Carlos Disdier Vicente (simancas, Spain), Daniela Glockenhammer-Timm (München, Germany)	**105**

8J Session 105 10:30 - 11:15

Industry Skills Lab Workshop: Considerations for ventilator and PI selection for NIV

Organised by Philips

Chairs : Julie Yarascavitch (Encinitas, United States)

10:30	**Considerations for ventilators in NIV** Javier Belda (Valencia, Spain)	**704**

8K Session 106 10:30 - 11:15

Industry Skills Lab Workshop: What would you do…?Join an interactive session where you get to have your say on NIV patient setup!

Organised by ResMed

Chairs : Claudia Crimi (Catania (CT), Italy), OLIVIER SAGNARD (Saint Priest, France)

10:30	**An interactive session where you can chat with the experts**	**706**
10:48	**Deep dive into NIV settings in a leakage system and learn how to optimise them to adopt, manage and improve therapy for your patients (includes clinical cases)**	**707**
11:06	**Whether you're just starting out in NIV management or you're more advanced, this session is suitable for all levels of ventilation knowledge**	**708**

8A - live streamed Session 133 13:00 - 14:00

Industry Lunchtime Symposium: Neo/adjuvant treatment in resectable NSCLC: optimising patient selection to improve outcomes

Organised by AstraZeneca

Chairs : Kostas Syrigos (Athens, Greece)

13:00	**Welcome and introduction** Kostas Syrigos (Athens, Greece)	**822**
13:07	**Changing landscape in resectable NSCLC: (neo-)adjuvant therapies introduce new challenges** Cecilia Pompili (Leeds, United Kingdom)	**823**
13:19	**Optimising biomarker testing to meet the new needs in resectable NSCLC:how to be rapid and comprehensive** Ignacio I. Wistuba (Houston, United States)	**824**
13:31	**Optimising diagnostic work-up utilising advances in endoscopic techniques: robotic bronchoscopy as a tool to improve outcomes** Krish Bhadra (Chattanooga, United States)	**825**
13:46	**Panel discussion and live Q&A: What is needed to meet the expectation of tomorrow´s patient?** Kostas Syrigos (Athens, Greece), Cecilia Pompili (Leeds, United Kingdom), Ignacio I. Wistuba (Houston, United States), Krish Bhadra (Chattanooga, United States)	**826**

8B - live streamed Session 134 13:00 - 14:00

Industry Lunchtime Symposium: Importance of Adult Vaccination in the Evolving Pneumococcal Disease Landscape

Organised by Pfizer

Chairs : Antoni Torres Marti (Barcelona, Spain)

13:00	**Welcome and Introduction** Antoni Torres Marti (Barcelona, Spain)	**827**
13:05	**Public Health Impact of PCVs on All-Cause Pneumonia** Joe Lewnard (Berkeley, United States)	**828**

13:25	**Addressing a New Era to Help Protect Against Pneumococcal Disease in Adults** Cristina Mendez (Alcobendas (Madrid), Spain)	**829**
13:45	**Live Faculty Discussion and Q&A Session** Antoni Torres Marti (Barcelona, Spain), Joe Lewnard (Berkeley, United States), Cristina Mendez (Alcobendas (Madrid), Spain)	**830**
13:58	**Closing Remarks** Antoni Torres Marti (Barcelona, Spain)	**831**

8C - live streamed Session 135 13:00 - 14:00

Industry Lunchtime Symposium: COVID-19 and respiratory patients: remaining risks and challenges

Organised by GSK

Chairs : Krystal Evans (Brentford, United Kingdom)

13:00	**Welcome and introductions** Krystal Evans (Brentford, United Kingdom)	**832**
13:05	**COVID-19 evolution: where are we now and where are we headed?** Marta Boffito (London, United Kingdom)	**833**
13:20	**COVID-19 and the risk to respiratory patients: strategies to optimise management** Tobias Welte (Hannover, Germany)	**834**
13:35	**Interactive case studies** Krystal Evans (Brentford, United Kingdom), Tobias Welte (Hannover, Germany), Marta Boffito (London, United Kingdom)	**835**
13:45	**Panel discussion and Q&A** Krystal Evans (Brentford, United Kingdom), Tobias Welte (Hannover, Germany), Marta Boffito (London, United Kingdom)	**836**
13:55	**Key takeaways** Tobias Welte (Hannover, Germany)	**837**

8G - live streamed Session 136 13:00 - 14:00

Industry Lunchtime Symposium: Asthma and beyond: anti-IgE continues to play a major role

Organised by Novartis Pharma AG

Chairs : Celeste Michala Porsbjerg (Copenhagen, Denmark)

13:00	**Welcome and Introduction** Celeste Michala Porsbjerg (Copenhagen, Denmark)	**838**
13:05	**Why still target IgE pathways in the airways?** Oscar Palomares (Madrid, Spain)	**839**
13:20	**Why does anti-IgE remain important in the management of severe asthma?** Andrew Menzies-Gow (London, United Kingdom)	**840**
13:35	**Why look beyond asthma? Anti-IgE in the treatment of co-morbidities** Philippe Gevaert (Ghent, Belgium)	**841**
13:45	**Q&A with all speakers** Celeste Michala Porsbjerg (Copenhagen, Denmark)	**842**
13:55	**Summary and close** Celeste Michala Porsbjerg (Copenhagen, Denmark)	**843**

8H - live streamed Session 137 13:00 - 14:00

Industry Lunchtime Symposium: Implementing asthma guidelines for better care of patients and planet

Organised by AstraZeneca

Chairs : Eric D. Bateman (Cape Town, South Africa)

13:00	**Welcome and Introduction** Eric D. Bateman (Cape Town, South Africa)	**844**
13:10	**2022 Asthma In Review: a patient perspective** Tonya Winders (Hendersonville, United States)	**845**
13:15	**What can we do to address SABA over-reliance?** Ashraf Alzaabi (Abu Dhabi, United Arab Emirates)	**846**
13:25	**SENTINEL Project: implementation of a maintenance and reliever treatment algorithm into practice in Hull, UK** Michael Crooks (East Riding of Yorkshire, United Kingdom)	**847**
13:45	**Audience Q&A** Eric D. Bateman (Cape Town, South Africa)	**848**
13:55	**Meeting close and summary** Eric D. Bateman (Cape Town, South Africa)	**849**

8M Session 138 13:00 - 14:00

Industry Lunchtime Symposium: Re-IMAGinING the pathway for clinical decision making in rare lung diseases – moving towards a united vision

Organised by CSL Behring GmbH

Chairs : Daiana Stolz (Basel, Switzerland), Charlie Strange (Charleston, United States)

13:00	**Welcome and introduction to the faculty and symposium topics** Daiana Stolz (Basel, Switzerland), Charlie Strange (Charleston, United States)	**850**
13:05	**Pars pro toto ILD: Improving diagnosis and differentiation** Daiana Stolz (Basel, Switzerland), Marlies S. Wijsenbeek (Rotterdam, Netherlands)	**851**
13:15	**OSIC: A Renaissance approach to imaging in rare lung diseases** Elizabeth Estes (Holland, United States)	**852**
13:25	**Exacerbations in AATD: Impact on lung density** Noel Gerard McElvaney (Dublin, Ireland), Charlie Strange (Charleston, United States)	**853**
13:35	**Summary and introduction of the Q&A session** Daiana Stolz (Basel, Switzerland), Charlie Strange (Charleston, United States)	**854**
13:40	**Live Q&A and closing remarks** Daiana Stolz (Basel, Switzerland), Charlie Strange (Charleston, United States)	**855**
13:00	**Re-IMAGinING the pathway for clinical decision making in rare lung diseases – moving towards a united vision**	**4630**

8J Session 165 14:00 - 14:45

Industry Skills Lab Workshop: Life Is Easier With a Hands-on Approach - Get More Confidence and Improve Your Outcomes

Organised by Olympus Europa SE & Co. KG

Chairs : António Apolinário Bugalho De Almeida (Lisboa, Portugal)

14:00	**EBUS-TBNA: Handling all procedure steps safely and efficiently** António Apolinário Bugalho De Almeida (Lisboa, Portugal)	**1348**
14:00	**Peripheral Bronchoscopy: Plan, access and identify peripheral lesions for successful sampling** Ales Rozman (Golnik, Slovenia)	**1349**
14:00	**Emphysema and Air Leak treatment with EVIS X1: Elevating the standard of therapeutic interventions** Matthias Hecker (Gießen, Germany)	**1350**
14:00	**Medical Thoracoscopy: A semi-rigid approach to see and treat diseases in the thoracic cavity** Enric Barbeta Sanchez (Barcelona, Spain)	**1351**

8K Session 166 14:00 - 14:45

Industry Skills Lab Workshop: Oral appliance : a rising alternative option for OSA patients in Europe

Organised by ResMed

Chairs : Christoph Schoebel (Berlin-Mitte, Germany)

14:00	**Exploration of the current reimbursement models in Europe.**	**1352**
14:15	**Outcomes from the ALASKA study related to MAD treatment.**	**1353**
14:30	**How digitalisation of the oral care pathway can aid follow-up and collaboration.**	**1354**

Industry Virtual Channel Session 198 18:00 - 19:00

Industry Virtual Symposium: The connected approach: exploring a new era of chronic respiratory disease management with digital inhalers

Organised by Teva Pharmaceuticals Europe B.V.

Chairs : Liam G. Heaney (Belfast (Belfast), United Kingdom)

18:00	**Welcome and opening address** Liam G. Heaney (Belfast (Belfast), United Kingdom)	**1495**
18:10	**How can we break the pattern of poor inhaler use in asthma and COPD?** Per Rönmark (Nyköping, Sweden)	**1496**
18:25	**Digital inhalers – a new solution to an old problem?** Nawar Diar Bakerly (Salford (Lancashire), United Kingdom)	**1497**
18:40	**Discussion and audience questions** Liam G. Heaney (Belfast (Belfast), United Kingdom)	**1498**

8A - live streamed Session 199 18:00 - 19:30

Industry Evening Symposium: Management of Pulmonary Fibrosis: What Now?

Organised by Boehringer Ingelheim International GmbH

Chairs : Fernando J. Martinez (New York, United States)

18:00	**Introduction** Fernando J. Martinez (New York, United States)	**1499**
18:05	**Lessons Learned from Clinical Trials** Toby Maher (Los Angeles, United States)	**1500**
18:25	**Management Guidelines and Challenges** Luca Richeldi (Roma, Italy)	**1501**
18:45	**The Future of Research and Clinical Care** Marlies S. Wijsenbeek (Rotterdam, Netherlands)	**1502**
19:05	**Q&A** Fernando J. Martinez (New York, United States)	**1503**

8B - live streamed Session 200 18:00 - 19:30

Industry Evening Symposium: Remission in Severe Asthma: an achievable treatment goal in the biologics era?

Organised by AstraZeneca

Chairs : Andrew Menzies-Gow (London, United Kingdom)

18:00	**Welcome and Introduction** Andrew Menzies-Gow (London, United Kingdom)	**1504**

18:10	**Remission in chronic inflammatory diseases: learnings from rheumatoid arthritis** Josef Smolen (Vienna, Austria)	**1505**
18:25	**Clinical remission in severe asthma: a potential new treatment goal?** David Price (Singapore, Singapore)	**1506**
18:45	**Clinical remission in severe asthma: what does the data tell?** Andrew Menzies-Gow (London, United Kingdom), Ian Douglas Pavord (Oxford (Oxfordshire), United Kingdom)	**1507**
19:10	**Meeting close and Q&A** Andrew Menzies-Gow (London, United Kingdom)	**1508**

8C - live streamed Session 201 18:00 - 19:30

Industry Evening Symposium: A triple approach to shifting the asthma paradigm: inhaled therapy, digital technology and environment

Organised by Novartis Pharma AG

Chairs : Christine Jenkins (McMahons Point (NSW), Australia)

18:00	**Welcome and Introduction** Christine Jenkins (McMahons Point (NSW), Australia)	**1509**
18:05	**Shifting the paradigm with inhaled asthma therapy, including panel discussion** Richard Van Zyl-Smit (Cape Town, South Africa)	**1510**
18:35	**Shifting the paradigm with digital health care, including panel discussion** Christopher Licskai (London (ON), Canada)	**1512**
19:00	**Shifting the paradigm with environmental approaches, including panel discussion** Ashley Woodcock (Manchester (Greater Manchester), United Kingdom)	**1514**
19:25	**Conclusion: Shifting the paradigm with a triple approach to asthma** Christine Jenkins (McMahons Point (NSW), Australia)	**1516**

8G - live streamed Session 202 18:00 - 19:30

Industry Evening Symposium: Addressing the challenges of the breathless patient: Beyond the obvious

Organised by Janssen Pharmaceutica NV

Chairs : Marion Delcroix (Leuven, Belgium), Sean Gaine (Dublin, Ireland)

18:00	**Welcome and introduction** Marion Delcroix (Leuven, Belgium)	**1517**
18:10	**Pitfalls in diagnosing the breathless patient** **Discussion** Luke Howard (London, United Kingdom), Marion Delcroix (Leuven, Belgium), Sean Gaine (Dublin, Ireland)	**1518**
18:35	**Why pulmonary hypertension classification can be difficult** **Discussion** Pilar Escribano- Subias (Madrid, Spain), Marion Delcroix (Leuven, Belgium), Sean Gaine (Dublin, Ireland)	**1519**
19:00	**My patient is diagnosed with PH. What are the treatment options?** Silvia Ulrich (Zurich, Switzerland)	**1520**
19:15	**Q&A with the faculty** Marion Delcroix (Leuven, Belgium), Sean Gaine (Dublin, Ireland), Pilar Escribano- Subias (Madrid, Spain), Silvia Ulrich (Zurich, Switzerland), Luke Howard (London, United Kingdom)	**1521**
19:25	**Key messages and closing remarks** Sean Gaine (Dublin, Ireland)	**1522**

8H - live streamed | Session 203 | 18:00 - 19:30

Industry Evening Symposium: How molecular pharmacology is improving patient outcomes in COPD

Organised by GSK

Chairs : Chris Compton (Brentford, Middlesex, United Kingdom), MeiLan K. Han (Ann Arbor, United States)

18:00	**Opening and introduction** Chris Compton (Brentford, Middlesex, United Kingdom), MeiLan K. Han (Ann Arbor, United States)	**1523**
18:05	**Efficacy by design: from pharmacology to effective therapy** Kai Michael Beeh (Wiesbaden, Germany)	**1524**
18:25	**Are all triple therapies the same? Learning from head-to-head and indirect comparisons** Claus Vogelmeier (Marburg, Germany)	**1525**
18:45	**Real-world evidence on triple therapy: what have we learned?** David M. G. Halpin (Exeter, United Kingdom)	**1526**
19:05	**Panel discussion and Q&A** Chris Compton (Brentford, Middlesex, United Kingdom), MeiLan K. Han (Ann Arbor, United States), Kai Michael Beeh (Wiesbaden, Germany), Claus Vogelmeier (Marburg, Germany), David M. G. Halpin (Exeter, United Kingdom)	**1527**

8N | Session 204 | 18:00 - 19:30

Industry Evening Symposium: Delivering High Value Care for Asthma & COPD

Organised by Orion Pharma and Menarini Group

Chairs : Alvar Agusti Garcia-Navarro (Barcelona, Spain)

18:00	**Welcome: Patient-physician relationships and the new normal** Alvar Agusti Garcia-Navarro (Barcelona, Spain)	**1528**
18:10	**Empowering patients to become equal partners in their care: Experience from Finland** Tuula Vasankari (Kaarina, Finland)	**1529**
18:25	**How to select the most appropriate inhaler with your patients** Federico Lavorini (Firenze (FI), Italy)	**1530**
18:40	**Avoiding pitfalls in asthma and COPD care** Christer Janson (Uppsala, Sweden)	**1531**
18:55	**The carbon footprint of asthma and COPD care** Lauri Lehtimäki (Tampere, Finland)	**1532**
19:10	**Q&A and panel discussion** Alvar Agusti Garcia-Navarro (Barcelona, Spain), Tuula Vasankari (Kaarina, Finland), Federico Lavorini (Firenze (FI), Italy), Lauri Lehtimäki (Tampere, Finland)	**1533**
19:25	**Wrap up and close** Alvar Agusti Garcia-Navarro (Barcelona, Spain)	**1534**

8F | Session 205 | 18:00 - 19:30

Industry Evening Mini-Symposium: Dare to challenge the status quo: AATD, bronchiectasis, and new research

Organised by Grifols

Chairs : Marc Miravitlles (Barcelona (CT), Spain)

18:00	**Welcome and introduction** Marc Miravitlles (Barcelona (CT), Spain)	**1535**
18:05	**Screening for severe Alpha-1 Antitrypsin Deficiency (AATD) and evolving results** Ilaria Ferrarotti (Pavia (PV), Italy)	**1536**

18:25	**Real world registry comparison studies on augmentation therapy** **When should augmentation therapy be started in severe AATD patients? What parameters are of relevance?** **point – counterpoint** **Do we need clearly defined starting criteria for augmentation therapy?** Alice Turner (Birmingham (West Midlands), United Kingdom), Marc Miravitlles (Barcelona (CT), Spain)	**1537**
19:00	**Hot topic** **The protease–antiprotease imbalance in infectious diseases: COVID-19 and Bronchiectasis** **Clinical trial results on Alpha-1 Antitrypsin in COVID-19** Oliver Mcelvaney (, Ireland)	**1538**
19:20	**2022 ALTA awards ceremony** Antonio Paez Regadera (Barcelona, Spain)	**1539**
19:25	**Summary and Close** Marc Miravitlles (Barcelona (CT), Spain)	**1540**

8L Session 206 18:00 - 19:30

Industry Evening Mini-Symposium: Update: Clinical Adoption in High-Flow Therapy (HFT)

Organised by ResMed

Chairs : Maxime Patout (Paris, France), Adam Benjafield (Sydney, Australia)

18:10	**A typical COPD patient using at-home HFT: A case study** Salvador Diaz Lobato (Colmenar Viejo (Madrid), Spain)	**1541**
18:30	**Presenting the results of the UK feasibility study on HFT** Rebecca D'Cruz (London, United Kingdom)	**1542**
18:50	**Innovative digital pathways in chronic care management** Chris Carlin (Glasgow (Glasgow), United Kingdom)	**1543**
19:10	**Danish HFT Guidelines and their implications: An update** Ulla Møller Weinreich (Ålborg, Denmark)	**1544**

8M Session 207 18:00 - 19:30

Industry Evening Mini-Symposium: Management of non-tuberculous Mycobacterium avium complex pulmonary disease (MAC-PD) – what the future holds

Organised by Insmed Ireland Ltd.

Chairs : Gernot G.U. Rohde (Frankfurt am Main, Germany), Eva Polverino (Barcelona, Spain)

18:00	**MAC-PD in Europe – identifying the patient at risk** Eva Polverino (Barcelona, Spain)	**1545**
18:15	**Diagnosis, management and prescribing patterns for MAC-PD in Europe** Charles Haworth (Cambridge, United Kingdom)	**1546**
18:30	**VOTING:** **Adherence to treatment guidelines among physicians**	**1547**
18:35	**Pitfalls and gaps in NTM clinical practice guidelines – how to follow** Claire Andrejak (Amiens, France)	**1548**
18:50	**Treatment options for MAC-PD disease when oral GBT is not successful** Stefano Aliberti (Milano (MI), Italy)	**1549**
19:05	**VOTING:** **Adherence to treatment among patients**	**1550**
19:10	**Panel discussion:** **Learnings and expectations for the future – the path forward physicians would want to see** Gernot G.U. Rohde (Frankfurt am Main, Germany), Eva Polverino (Barcelona, Spain), Charles Haworth (Cambridge, United Kingdom), Claire Andrejak (Amiens, France), Stefano Aliberti (Milano (MI), Italy)	**1551**

Industry Virtual Channel — Session 208 — 08:00 - 09:15

Industry Virtual Symposium: The Climate Change as a Risk to Respiratory Health

Organised by Haleon

Chairs : Christopher Carlsten (Vancouver (BC), Canada)

08:00	**The challenge of climate change and health: Time to act** Kian Fan Chung (London, United Kingdom)	**1552**
08:15	**Health Impacts of Air Pollution and Climate Change in Low and Middle Income Countries** Sundeep Santosh Salvi (Pune (Maharashtra), India)	**1553**
08:30	**Firesmoke and Lung Health: Responses to an Increasing Threat** Christopher Carlsten (Vancouver (BC), Canada)	**1554**
08:45	**Impact of climate change on pediatric allergies and respiratory disorders** Gary Wong (Shatin, Hong Kong)	**1555**
09:00	**Q&A with speakers** Kian Fan Chung (London, United Kingdom), Sundeep Santosh Salvi (Pune (Maharashtra), India), Christopher Carlsten (Vancouver (BC), Canada), Gary Wong (Shatin, Hong Kong)	**1556**

8A - live streamed — Session 209 — 08:00 - 09:15

Industry Early Morning Symposium: Biomarkers Matter in the Long-term Treatment of Severe Asthma

Organised by Sanofi Regeneron

Chairs : Giorgio Walter Canonica (Milano (MI), Italy)

08:00	**Introduction and Opening Remarks** Giorgio Walter Canonica (Milano (MI), Italy), Arnaud Bourdin (Montpellier Cedex 5, France), Diego Maselli (San Antonio, United States)	**1557**
08:05	**From Bench to Bedside: Clinical and Scientific Utility of Biomarkers in Type 2 Asthma** Giorgio Walter Canonica (Milano (MI), Italy)	**1558**
08:15	**Long-Term Impact of Dupilumab Across Type 2 Asthma Phenotypes** Diego Maselli (San Antonio, United States)	**1559**
08:30	**Improving Long-Term Outcomes While Reducing OCS Use** Arnaud Bourdin (Montpellier Cedex 5, France)	**1560**
08:45	**Panel Perspectives: Why Biomarkers Matter** Giorgio Walter Canonica (Milano (MI), Italy), Arnaud Bourdin (Montpellier Cedex 5, France), Diego Maselli (San Antonio, United States)	**1561**
08:55	**Audience Q&A** Giorgio Walter Canonica (Milano (MI), Italy), Arnaud Bourdin (Montpellier Cedex 5, France), Diego Maselli (San Antonio, United States)	**1562**
09:10	**Closing Remarks** Giorgio Walter Canonica (Milano (MI), Italy), Arnaud Bourdin (Montpellier Cedex 5, France), Diego Maselli (San Antonio, United States)	**1563**

8B - live streamed — Session 210 — 08:00 - 09:15

Industry Early Morning Symposium: Heterogeneity of inflammation in asthma: a matter of airway epithelium?

Organised by AstraZeneca

Chairs : Louis-Philippe Boulet (Québec (QC), Canada), Celeste Michala Porsbjerg (Copenhagen, Denmark), Gianni Marone (Napoli (NA), Italy)

08:00	**Welcome, introduction, and opening remarks** Louis-Philippe Boulet (Québec (QC), Canada)	**1564**

08:05	**Bronchial epithelium in health and disease** Christian Domingo Ribas (Sabadell (Barcelona), Spain), Celeste Michala Porsbjerg (Copenhagen, Denmark), Louis-Philippe Boulet (Québec (QC), Canada)	**1565**
08:15	**Asthma inflammation from the triggers' point of view** Katrin Milger-Kneidinger (Munich, Germany), Celeste Michala Porsbjerg (Copenhagen, Denmark), Louis-Philippe Boulet (Québec (QC), Canada)	**1566**
08:25	**The epithelium - a driving force behind airway hyperresponsiveness** Paola Rogliani (Roma (RM), Italy), Louis-Philippe Boulet (Québec (QC), Canada), Celeste Michala Porsbjerg (Copenhagen, Denmark)	**1567**
08:35	**Inflammation, remodelling and remission – how is the epithelium involved** Pascal Chanez (Marseille, France), Celeste Michala Porsbjerg (Copenhagen, Denmark), Louis-Philippe Boulet (Québec (QC), Canada)	**1568**
08:50	**Panel Q&A** Gianni Marone (Napoli (NA), Italy)	**1569**
09:10	**Summary and close** Celeste Michala Porsbjerg (Copenhagen, Denmark)	**1570**

8C - live streamed Session 211 08:00 - 09:15

Industry Early Morning Symposium: The Science of COVID 19 mRNA Vaccines: Innovation to Anticipate the Evolving Prevention Paradigm

Organised by Pfizer

08:00	**Welcome and introduction** Eva Polverino (Barcelona, Spain)	**1571**
08:05	**A new era of vaccine development** Miguel Prudêncio (Lisbon, Portugal)	**1572**
08:15	**How vaccines can meet the evolving challenges related to COVID-19** Eva Polverino (Barcelona, Spain)	**1573**
08:45	**Approaches to tackle COVID-19: mRNA vaccine and oral treatments** Miguel Prudêncio (Lisbon, Portugal)	**1574**
08:55	**Panel discussion / Q&A** Eva Polverino (Barcelona, Spain), Miguel Prudêncio (Lisbon, Portugal)	**1575**
09:10	**Closing remarks** Eva Polverino (Barcelona, Spain)	**1576**

8G - live streamed Session 212 08:00 - 09:15

Industry Early Morning Symposium: Tailoring treatment for uncontrolled asthmatic patients: from theory to practice

Organised by Chiesi Farmaceutici S.p.A.

Chairs : Ana Fernandez Tena (Oviedo (Asturias), Spain), Johann Christian Virchow (Rostock, Germany)

08:00	**Aiming for asthma remission and disease modification** Alvaro A. Cruz (Salvador (BA), Brazil)	**1577**
08:20	**Tailoring treatments in moderate to severe asthma: the TAILOR study** Guy Brusselle (Ghent, Belgium)	**1578**
08:35	**Identifying asthma patients who profit from dual and triple therapy** Johann Christian Virchow (Rostock, Germany)	**1579**
08:55	**Q&A** Johann Christian Virchow (Rostock, Germany), Ana Fernandez Tena (Oviedo (Asturias), Spain), Guy Brusselle (Ghent, Belgium), Alvaro A. Cruz (Salvador (BA), Brazil)	**1580**

8H - live streamed Session 213 08:00 - 09:15

Industry Early Morning Symposium: Redefining asthma goals: the evolving era of proactive control

Organised by GSK

Chairs : Kenneth R. Chapman (Toronto (ON), Canada)

08:00	**Welcome, introductions, meeting objectives** Kenneth R. Chapman (Toronto (ON), Canada)	**1581**
08:02	**Asthma management and appropriate reliever use: APPaRENT challenges** Kenneth R. Chapman (Toronto (ON), Canada)	**1582**
08:17	**Evolving data from existing clinical trials: the power of modelling** Dave Singh (Manchester, United Kingdom)	**1583**
08:32	**MASTERing asthma management: redefining treatment goals** Guy Brusselle (Ghent, Belgium)	**1584**
08:47	**Summary/conclusion** Kenneth R. Chapman (Toronto (ON), Canada)	**1585**
08:50	**Real-world results: debating clinical applications of proactive regular dosing** Kenneth R. Chapman (Toronto (ON), Canada), Dave Singh (Manchester, United Kingdom), Guy Brusselle (Ghent, Belgium)	**1586**
09:00	**Q&A session** Kenneth R. Chapman (Toronto (ON), Canada), Dave Singh (Manchester, United Kingdom), Guy Brusselle (Ghent, Belgium)	**1587**

8M Session 214 08:00 - 09:15

Industry Early Morning Mini-Symposium: The vicious vortex of bronchiectasis, tackling the cornerstone of inflammation

Organised by Insmed Ireland Ltd.

Chairs : Montserrat Vendrell Relat (Girona, Spain)

08:00	**Introduction and overview** Montserrat Vendrell Relat (Girona, Spain)	**1588**
08:05	**NCFBE a consequence of inflammatory dysregulation?** Amelia Shoemark (Dundee (Angus), United Kingdom)	**1589**
08:20	**The biology of NCFBE – exploring the endotypes as treatable traits** Stuart Elborn (Belfast (Belfast), United Kingdom)	**1590**
08:35	**Targeting inflammation, a cornerstone in the vicious vortex of NCFBE** Pieter Goeminne (Bornem, Belgium)	**1591**
08:50	**Panel discussion** Pieter Goeminne (Bornem, Belgium), Montserrat Vendrell Relat (Girona, Spain), Stuart Elborn (Belfast (Belfast), United Kingdom), Amelia Shoemark (Dundee (Angus), United Kingdom)	**1592**
09:10	**Summary and close** Montserrat Vendrell Relat (Girona, Spain)	**1593**

8J Session 215 08:00 - 08:45

Industry Skills Lab Workshop: Recent Trial Results for Home Nasal High Flow and COPD

Organised by FISHER & PAYKEL HEALTHCARE

Chairs : Nicholas Hart (London, United Kingdom), Claudia Crimi (Catania (CT), Italy)

08:00	**Home nasal high flow therapy in COPD patients following a recent hospitalization** Gerard J. Criner (Philadelphia, United States)	**1594**
08:18	**Safety and effectiveness of domiciliary nasal high flow therapy for stable hypercapnic COPD patients** Kazuma Nagata (Kobe, Japan)	**1595**

08:36	**Feasibility of home high-flow therapy after severe exacerbation of COPD: a mixed methods randomised control trial** Rebecca D'Cruz (London, United Kingdom)	**1596**
08:54		**1597**

8K Session 216 08:00 - 08:45

Industry Skills Lab Workshop: Peripheral Bronchoscopic biopsy solutions with radial EBUS and navigation planning

Organised by FUJIFILM

Chairs : Rachid Tazi Mezalek (Barcelona, Spain), Felipe Andreo Garcia (Montgat, Spain), Pere Trias Sabria (Barcelona, Spain)

08:00	**Introduction** Rachid Tazi Mezalek (Barcelona, Spain)	**1598**
08:15	**Hands On Session + Q&A**	**4629**

8J Session 259 10:30 - 11:15

Industry Skills Lab Workshop: ERS/ATS PFT Interpretation Standards - an Artificial Intelligence View

Organised by Vyaire Medical Products Ltd.

Chairs : Sanja Stanojevic (Halifax (NS), Canada), Marko Topalovic (Kessel-lo, Belgium)

10:30	**PFT Interpretation Standards - an Artificial Intelligence View** Sanja Stanojevic (Halifax (NS), Canada), Marko Topalovic (Kessel-lo, Belgium)	**2214**

8K Session 260 10:30 - 11:15

Industry Skills Lab Workshop: Understanding the value of Patient-Reported Outcome Measures (PROM) and Patient Engagement tools in clinical practice.

Organised by ResMed

Chairs : Joan Escarrabill Sanglas (Barcelona, Spain), Kimberly L. Sterling (Indianapolis, United States)

10:30	**Introduction to PROM and Patient-Reported Experience Measures (PREM)** Joan Escarrabill Sanglas (Barcelona, Spain)	**2215**
10:45	**The influence of patient engagement tools and PROM on PAP treatment adherence in obstructive sleep apnoea patients** Jean-Louis Pépin (Grenoble, France)	**2216**
11:00	**A demonstration of ResMed's AirSense 11 patient feedback tool, Care Check-In, integrated with myAir and AirView** Clémence Dini (Lyon, France)	**2217**

Industry Virtual Channel Session 285 13:00 - 14:00

Industry Virtual Symposium: Advancing care in alpha-1 antitrypsin deficiency: Working towards meeting holistic patient needs

Organised by Takeda Pharmaceuticals International GmbH

Chairs : Marc Miravitlles (Barcelona (CT), Spain)

13:00	**Introduction from the Chair: AATD disease background and EARCO Registry data** Marc Miravitlles (Barcelona (CT), Spain)	**2332**
13:10	**ARALAST® NP (RYMPHYSIA®) [Alpha-1 Proteinase Inhibitor (Human)] Clinical Efficacy Study: Advancing research in patients with AATD** Jason Homsy (Cambridge, United States)	**2333**
13:20	**Working towards holistic management of AATD: A lung and liver disease** Virginia Clark (Gainesville, United States)	**2334**
13:30	**A patient's vision for the future of care in AATD. Can we get there, and how?** Frank Willersinn (Bruxelles, Belgium)	**2335**

13:40	**Panel discussion: Moving forward together: Priorities for the advancement of care in AATD** Marc Miravitlles (Barcelona (CT), Spain), Jason Homsy (Cambridge, United States), Virginia Clark (Gainesville, United States), Frank Willersinn (Bruxelles, Belgium)	**2336**
13:55	**Summary and close** Marc Miravitlles (Barcelona (CT), Spain)	**2337**

8A - live streamed Session 287 13:00 - 14:00

Industry Lunchtime Symposium: COPD management today: Made-to-measure or one-size-fits-all?

Organised by Boehringer Ingelheim International GmbH

Chairs : Sarah Jarvis (London, United Kingdom)

13:00	**Starting on the right path: How can I optimise treatment initiation in my patient?** **Treatment alterations: How can I ensure a perfect fit for my patient?** **The final fitting: Is this inhaler right for my patient?** Sarah Jarvis (London, United Kingdom), Peter J. Barnes (London, United Kingdom), John R Hurst (London, United Kingdom), Marc Miravitlles (Barcelona (CT), Spain)	**2339**
13:50	**Q&A and closing comments** Sarah Jarvis (London, United Kingdom), Peter J. Barnes (London, United Kingdom), John R Hurst (London, United Kingdom), Marc Miravitlles (Barcelona (CT), Spain)	**2340**

8B - live streamed Session 288 13:00 - 14:00

Industry Lunchtime Symposium: Time to raise standards of care for patients with COPD

Organised by AstraZeneca

Chairs : Fco.De Borja García Cosío Piqueras (Palma de Mallorca, Spain), Mona Bafadhel (London, United Kingdom)

13:00	**Welcome, introduction, and opening remarks** Mona Bafadhel (London, United Kingdom), Fco.De Borja García Cosío Piqueras (Palma de Mallorca, Spain)	**2341**
13:05	**Time to change: challenging the status quo of COPD management** Fco.De Borja García Cosío Piqueras (Palma de Mallorca, Spain)	**2342**
13:15	**Time to act: prompt identification of patients with COPD and their underlying risk** Mona Bafadhel (London, United Kingdom)	**2343**
13:29	**Time to treat: earlier intervention to prevent exacerbations and reduce the risk of mortality** Dave Singh (Manchester, United Kingdom)	**2344**
13:43	**Time to CONQUER COPD: ensuring quality standards in patient care** David Price (Singapore, Singapore), Fco.De Borja García Cosío Piqueras (Palma de Mallorca, Spain), Mona Bafadhel (London, United Kingdom), Dave Singh (Manchester, United Kingdom)	**2345**
13:57	**Summary and close** Fco.De Borja García Cosío Piqueras (Palma de Mallorca, Spain)	**2346**

8C - live streamed Session 289 13:00 - 14:00

Industry Lunchtime Symposium: A unified approach: improving patient outcomes in severe asthma and comorbid eosinophilic diseases

Organised by GSK

Chairs : Peter H. Howarth (Brentford, United Kingdom), Joaquim Mullol Miret (Barcelona, Catalonia, Spain)

13:00	**Welcome and introduction** Peter H. Howarth (Brentford, United Kingdom), Joaquim Mullol Miret (Barcelona, Catalonia, Spain)	**2347**
13:15	**Joining forces: combating eosinophilic disease progression across the unified airway** Christian Domingo Ribas (Sabadell (Barcelona), Spain), Martin Wagenmann (Düsseldorf, Germany)	**2348**
13:45	**Managing real-world patients: putting the pieces together** Peter H. Howarth (Brentford, United Kingdom), Joaquim Mullol Miret (Barcelona, Catalonia, Spain), Martin Wagenmann (Düsseldorf, Germany), Christian Domingo Ribas (Sabadell (Barcelona), Spain)	**2349**

13:55	**Q&A** Peter H. Howarth (Brentford, United Kingdom), Joaquim Mullol Miret (Barcelona, Catalonia, Spain), Christian Domingo Ribas (Sabadell (Barcelona), Spain), Martin Wagenmann (Düsseldorf, Germany)	**2350**

8G - live streamed Session 290 13:00 - 14:00

Industry Lunchtime Symposium: Take a Deep Breath: The Evolving Role of Biologics in Pediatric Severe Asthma

Organised by Sanofi Regeneron

13:00	**Inhale: Understanding the True Burden of Pediatric Severe Asthma and Underlying Type 2 Inflammation** Eckard Hamelmann (Bielefeld, Germany)	**2351**
13:25	**Exhale: Can Biologics Meet the Clinical Needs of Pediatric Asthma Patients?** Leonard Bacharier (Nashville, United States)	**2352**
13:50	**Panel Discussion and Q&A** Eckard Hamelmann (Bielefeld, Germany), Leonard Bacharier (Nashville, United States)	**2353**

8H - live streamed Session 291 13:00 - 14:00

Industry Lunchtime Symposium: Recovering the "Lost Art" of Breathing in COPD and Asthma

Organised by Menarini group

Chairs : Alvar Agusti Garcia-Navarro (Barcelona, Spain)

13:00	**Introduction** Alvar Agusti Garcia-Navarro (Barcelona, Spain)	**2354**
13:05	**Symptoms and Exacerbations: two sides of the same coin** Claus Vogelmeier (Marburg, Germany)	**2355**
13:20	**Time matters: The opportunity to reduce mortality in COPD** David M. G. Halpin (Exeter, United Kingdom)	**2356**
13:35	**Ensuring effectiveness through a simplified treatment approach in an Asthma complex world** Fulvio Braido (Genova, Italy)	**2357**
13:50	**Open discussion** Alvar Agusti Garcia-Navarro (Barcelona, Spain)	**2358**

8M Session 292 13:00 - 14:00

Industry Lunchtime Symposium: Global Access to Spirometry Project (GASP): a pathway to asthma and COPD management in Low- and Middle-Income Countries

Organised by Chiesi Farmaceutici S.p.A.

Chairs : Mario Scuri (Milano, Italy)

13:00	**Chiesi's commitment to respiratory care beyond R&D** Thomas Eichholtz (Utrecht, Netherlands)	**2359**
13:05	**The Chiesi Foundation: a strategic tool for social change. Resources, expertise, and networking for improving the quality of life of patients and their families living in Low-and Middle-Income Countries (LMICs)** Maria Paola Chiesi (Parma (PR), Italy)	**2360**
13:10	**GASP Guyana - Implementing an impactful strategy for asthma management in LMICs: from acute episodic care to sustainable chronic disease management.** Robert D. Levy (Vancouver (BC), Canada)	**2361**
13:30	**GASP Peru - Addressing the burden of COPD: improving access to accurate diagnosis, chronic disease management, patient education, and awareness** Juan Carlos Rojas Marroquín (, Peru)	**2362**
13:45	**GASP key benefits and lessons learned** Robert D. Levy (Vancouver (BC), Canada)	**2363**

13:55	**GASP future perspective: making the world breathe better** Massimo Salvadori (Milano, Italy)	**2364**

8J Session 319 14:00 - 14:45

Industry Skills Lab Workshop: Efficient OSA management with the DreamStation 2 sleep therapy solution

Organised by Philips

Chairs : Cheryl Needham (Wexford, United States)

14:00	**DreamStation 2 sleep therapy solution** Thomas Catalano (Monroeville, United States)	**2863**

8K Session 320 14:00 - 14:45

Industry Skills Lab Workshop: Implementing a digital sleep apnoea pathway in clinical practice

Organised by ResMed

Chairs : Ulla Anttalainen (Paimio, Finland), Chris Carlin (Glasgow (Glasgow), United Kingdom)

14:00	**Implementing a digital diagnostic pathway in clinical practice** Laurien Teunissen	**2864**
14:20	**Case study of an out-of-hospital virtual CPAP pathway in clinical practice** David Jones	**2865**

Industry Virtual Channel Session 354 18:00 - 19:30

Industry Virtual Symposium: Managing hospitalised patients with COVID-19 in the post-vaccination era: The role of antivirals

Organised by Gilead Sciences Europe Ltd

Chairs : Tobias Welte (Hannover, Germany)

18:00	**Managing hospitalised patients with COVID-19 in the post-vaccination era: The role of antivirals** Tobias Welte (Hannover, Germany)	**2997**

8A - live streamed Session 355 18:00 - 19:30

Industry Evening Symposium: New strategies to manage intermediate-risk patients with PAH by advancing Oral Prostacyclin treatment

Organised by Ferrer

Chairs : R James White (Rochester, United States)

18:00	**Introduction** R James White (Rochester, United States)	**3003**
18:05	**Is there a dose-response effect with oral Treprostinil?** Carmine Dario Vizza (Roma (RM), Italy), R James White (Rochester, United States)	**3004**
18:30	**What is the new clinical evidence with oral Treprostinil after FREEDOM-EV trial?** Joanna Pepke-Zaba (Cambridge, United Kingdom), Sandeep Sahay (Houston, United States)	**3005**
18:55	**Round table discussion. Oral treatment combinations in intermediate-risk PAH patients: The place for oral Treprostinil?** Carmine Dario Vizza (Roma (RM), Italy), Joanna Pepke-Zaba (Cambridge, United Kingdom), Sandeep Sahay (Houston, United States), Marius M. Hoeper (Hannover, Germany), R James White (Rochester, United States)	**3006**
19:25	**Closing remarks** R James White (Rochester, United States)	**3007**

8B - live streamed Session 356 18:00 - 19:30

Industry Evening Symposium: Consulting the ORACLE: moving towards a predict and prevent model to raise ambition for patients with severe asthma

Organised by GSK

Chairs : Ian Douglas Pavord (Oxford (Oxfordshire), United Kingdom)

18:00	**Welcome and introduction** Ian Douglas Pavord (Oxford (Oxfordshire), United Kingdom)	**3008**
18:10	**How it all began: demonstrating consistent efficacy of Nucala in RCT and RWE data** Andrea Matucci (Florence, Italy)	**3009**
18:20	**Clinical Remission: defining more ambitious endpoints for patients with severe asthma** Arnaud Bourdin (Montpellier Cedex 5, France)	**3010**
18:30	**Achieving clinical remission through real-world data** Geoffrey Chupp (New Haven, United States)	**3011**
18:45	**Predict and prevent: utilising the ORACLE** Ian Douglas Pavord (Oxford (Oxfordshire), United Kingdom)	**3012**
19:00	**Panel and audience discussion** Arnaud Bourdin (Montpellier Cedex 5, France), Andrea Matucci (Florence, Italy), Ian Douglas Pavord (Oxford (Oxfordshire), United Kingdom), Geoffrey Chupp (New Haven, United States)	**3013**

8C - live streamed — Session 357 — 18:00 - 19:30

Industry Evening Symposium: Introducing Dupilumab for the Treatment of Uncontrolled Pediatric Asthma

Organised by Sanofi Regeneron

Chairs : Leonard Bacharier (Nashville, United States)

18:00	**Opening Remarks** Leonard Bacharier (Nashville, United States), Jonathan Corren (Los Angeles, United States)	**3014**
18:05	**Paediatric Asthma: An Ongoing Global Epidemic** Jonathan Corren (Los Angeles, United States)	**3015**
18:15	**Expert Commentary: Burden of Disease Extends Through Adulthood** Leonard Bacharier (Nashville, United States), Jonathan Corren (Los Angeles, United States)	**3016**
18:25	**The Link Between Type 2 Inflammation and Uncontrolled Paediatric Asthma** Jonathan Corren (Los Angeles, United States)	**3017**
18:35	**Patient Case: Clinical Experience With Dupilumab** Leonard Bacharier (Nashville, United States)	**3018**
18:45	**Relieving the Burden on Children: Dupilumab Improves Asthma Outcomes** Leonard Bacharier (Nashville, United States)	**3019**
19:00	**Expert Commentary: Real-World Use of Dupilumab** Leonard Bacharier (Nashville, United States), Jonathan Corren (Los Angeles, United States)	**3020**
19:10	**Audience Q&A** Leonard Bacharier (Nashville, United States), Jonathan Corren (Los Angeles, United States)	**3021**
19:25	**Closing Remarks** Leonard Bacharier (Nashville, United States), Jonathan Corren (Los Angeles, United States)	**3022**

8G - live streamed — Session 358 — 18:00 - 19:30

Industry Evening Symposium: Proactive risk management: a novel approach to embedding OCS Stewardship into asthma care

Organised by AstraZeneca

Chairs : David Price (Singapore, Singapore)

18:00	**Welcome and introduction** David Price (Singapore, Singapore)	**3023**
18:05	**OCS Stewardship: where we are now?** Giorgio Walter Canonica (Milano (MI), Italy)	**3024**
18:20	**Assessing the impact of OCS use: moving beyond exposure** Liam G. Heaney (Belfast (Belfast), United Kingdom)	**3025**

18:30	**Practical tools to enable risk prediction in asthma** David Price (Singapore, Singapore)	**3026**
18:40	**Panel discussion** David Price (Singapore, Singapore), Giorgio Walter Canonica (Milano (MI), Italy), Liam G. Heaney (Belfast (Belfast), United Kingdom)	**3027**
18:55	**Summary and close** David Price (Singapore, Singapore)	**3028**

8H - live streamed — Session 359 — 18:00 - 19:30

Industry Evening Symposium: Asthma and COPD disease management: learning from the past, evaluating the present and looking to the future

Organised by Teva Pharmaceuticals Europe B.V.

Chairs : Peter J. Barnes (London, United Kingdom)

18:00	**Welcome and opening address** Peter J. Barnes (London, United Kingdom)	**3029**
18:10	**Different decade, same problem – managing asthma and COPD in the 2020s** Hilary Pinnock (Edinburgh (Edinburgh), United Kingdom)	**3030**
18:25	**Controller therapies – why are we still facing the same challenges?** Johann Christian Virchow (Rostock, Germany)	**3031**
18:40	**Looking to the future – how could digital inhalers revolutionise the management of chronic respiratory diseases?** Henry Chrystyn (Bingley (West Yorkshire), United Kingdom)	**3032**
18:55	**Panel discussion: Working together to achieve more connected care** Peter J. Barnes (London, United Kingdom)	**3033**
19:05	**Discussion and audience questions** Peter J. Barnes (London, United Kingdom)	**3034**

8N — Session 360 — 18:00 - 19:30

Industry Evening Symposium: Picturing the human being behind the patient: the latest COPD challenge

Organised by Menarini Group

Chairs : Claudio Micheletto (S.Giovanni Lupatoto, Italy)

18:00	**COPD 2022: new opportunities to take, old enemies to face** Claudio Micheletto (S.Giovanni Lupatoto, Italy)	**3035**
18:10	**Back to basics: symptoms control as the basis for the management of COPD patients** Konstantinos Kostikas (Ioannina, Greece)	**3036**
18:40	**COmmunicating with Patients: our Duty** Jutta Beier (Wiesbaden, Germany)	**3037**
19:00	**Closing remarks** Claudio Micheletto (S.Giovanni Lupatoto, Italy)	**3038**
19:20	**Q&A** Claudio Micheletto (S.Giovanni Lupatoto, Italy)	**3039**

8F — Session 361 — 18:00 - 19:30

Industry Evening Mini-Symposium: Choices in Asthma and COPD Care: How to Maximize Outcomes for Patients

Organised by Orion Pharma

Chairs : Eric D. Bateman (Cape Town, South Africa), Ashley Woodcock (Manchester (Greater Manchester), United Kingdom)

18:00	**Welcome** Ashley Woodcock (Manchester (Greater Manchester), United Kingdom)	**3040**
18:05	**Preventing or treating symptoms in asthma –which is better for your patient?** Federico Lavorini (Firenze (FI), Italy)	**3041**
18:20	**Good treatment outcomes in COPD: What does it take?** Ashley Woodcock (Manchester (Greater Manchester), United Kingdom)	**3042**
18:35	**Inhaler types: What's the difference for your patients?** Charlotte Suppli Ulrik (Virum, Denmark)	**3043**
18:50	**Sustainable asthma and COPD care** Dave Singh (Manchester, United Kingdom)	**3044**
19:05	**Sustainable asthma and COPD care** Ashley Woodcock (Manchester (Greater Manchester), United Kingdom)	**3045**
19:25	**Panel discussion** Eric D. Bateman (Cape Town, South Africa)	**3046**

8L Session 362 18:00 - 19:30

Industry Evening Mini-Symposium: Clinical and Cost Effectiveness of Autotitrating NIV for Obesity Hypoventilation Syndrome: Rise of the Machines

Organised by Philips

Organised by Philips

Chairs : Michael Polkey (London, United Kingdom)

18:00	**Introduction** Nicholas Hart (London, United Kingdom)	**3047**
18:05	**Trial PICO and clinical implications** Nicholas Hart (London, United Kingdom)	**3048**
18:40	**Trial PICO and clinical implications** Maxime Patout (Paris, France)	**3049**
19:15	**Q&A**	**3050**

8M Session 363 18:00 - 19:30

Industry Evening Symposium: IPF and COPD: close siblings or distant cousins?

Organised by F. Hoffmann-La Roche Ltd.

Chairs : Maria Molina Molina (Barcelona, Spain)

18:00	**Opening remarks** Maria Molina Molina (Barcelona, Spain)	**3051**
18:05	**Debate: IPF and COPD are distant cousins** Katerina Antoniou (Heraklion, Greece)	**3052**
18:17	**Debate: IPF and COPD are close siblings** Venerino Poletti (Forlì, Italy)	**3053**
18:29	**Rebuttal** Venerino Poletti (Forlì, Italy), Katerina Antoniou (Heraklion, Greece)	**3054**
18:35	**COPD - new treatment approaches** Claus Vogelmeier (Marburg, Germany)	**3055**
18:55	**IPF - new treatment approaches** Luca Richeldi (Roma, Italy)	**3056**
19:15	**Q&A** Maria Molina Molina (Barcelona, Spain), Katerina Antoniou (Heraklion, Greece), Venerino Poletti (Forlì, Italy), Claus Vogelmeier (Marburg, Germany), Luca Richeldi (Roma, Italy)	**3057**

Industry Virtual Channel — Session 365 — 08:00 - 09:15

Industry Virtual Symposium: Childhood ILD (chILD): addressing the challenges

Organised by Boehringer Ingelheim International GmbH

Chairs : Matthias Griese (München, Germany)

08:00	**Introduction** Matthias Griese (München, Germany)	**3058**
08:05	**chILD: what do we know?** Nicolaus Schwerk (Hannover, Germany)	**3059**
08:20	**Challenges in the management of chILD** Lisa Young (Philadelphia, United States)	**3060**
08:35	**InPedILD trial of nintedanib in chILD** Robin Deterding (Aurora, United States)	**3061**
08:55	**Panel discussion** Matthias Griese (München, Germany)	**3062**

8A - live streamed — Session 366 — 08:00 - 09:15

Industry Early Morning Symposium: What role will antivirals play in treating COVID-19 this winter and beyond?

Organised by Shionogi

Chairs : Andreas Johannis Karas (Ascot, United Kingdom)

08:00	**Welcome & Introduction** Andreas Johannis Karas (Ascot, United Kingdom)	**3063**
08:05	**What do we expect to see from COVID-19 this winter and into 2023?** Santiago Moreno (Madrid, Spain)	**3064**
08:30	**How are antivirals best utilised to minimise the impact of COVID-19 this winter?** Yohei Doi (Toyoake, Japan)	**3065**
08:55	**Chair led panel discussion** Andreas Johannis Karas (Ascot, United Kingdom)	**3066**

8B - live streamed — Session 367 — 08:00 - 09:15

Industry Early Morning Symposium: Clinical Improvement as Endpoint in PAH

Organised by MSD

Chairs : Olivier Sitbon (Le Kremlin-Bicêtre, France)

08:00	**Welcome and Opening Lecture:** **Prognostic value of Improvement endpoints in Pulmonary Arterial Hypertension** Marius M. Hoeper (Hannover, Germany)	**3067**
08:20	**Multicomponent Improvement Endpoint Thresholds in Past and Current PAH Clinical Trials** Stephan Rosenkranz (Köln, Germany)	**3068**
08:30	**Multicomponent Clinical Improvement vs. Clinical Worsening endpoints: PROs & CONs** Olivier Sitbon (Le Kremlin-Bicêtre, France)	**3069**
08:45	**Round Table Q&A/discussion** **Moderated by: Olivier Sitbon** Olivier Sitbon (Le Kremlin-Bicêtre, France)	**3070**
09:10	**Summary and Close** Olivier Sitbon (Le Kremlin-Bicêtre, France)	**3071**

8G - live streamed | Session 369 | 08:00 - 09:15

Industry Early Morning Symposium: Your chronic respiratory disease patients – What do you know about their risk of infectious disease?

Organised by GSK

Chairs : Javier Díez Domingo (Valencia, Spain)

08:00	**Welcome and introduction** Javier Díez Domingo (Valencia, Spain)	**3077**
08:10	**The shadow of pertussis in chronic respiratory disease** Giovanni Gabutti (LAVAGNA, Italy)	**3078**
08:23	**Shingles: understanding the risk and evolving prevention strategies** Tobias Welte (Hannover, Germany)	**3079**
08:36	**Vaccination of respiratory diseases patients – how can we increase the coverage?** Rosario Menendez Villanueva (Valencia, Spain)	**3080**
08:49	**Panel discussion** Javier Díez Domingo (Valencia, Spain), Tobias Welte (Hannover, Germany), Rosario Menendez Villanueva (Valencia, Spain), Giovanni Gabutti (LAVAGNA, Italy)	**3081**
09:09	**Summary and closure** Javier Díez Domingo (Valencia, Spain)	**3082**

8H - live streamed | Session 370 | 08:00 - 09:15

Industry Early Morning Symposium: Keeping It Simple: Providing Precision Medicine to Adults With Severe Asthma

Organised by Sanofi Regeneron

08:00	**Predicting the Response: Using Type 2 Biomarkers to Navigate the Biologic Landscape in Adults With Severe Asthma** Oscar Palomares (Madrid, Spain), Enrico Marco Heffler (Milano, Italy)	**3083**
08:20	**Achieving Control Without Oral Corticosteroids: An Expert Review of Guideline-Driven Management of Adult Severe Asthma With Biologics** Enrico Marco Heffler (Milano, Italy)	**3084**
08:30	**The Road Ahead: Plotting the Course for Maintaining Long-Term Improvements in Adults With Severe Asthma** Andrew Menzies-Gow (London, United Kingdom), Oscar Palomares (Madrid, Spain)	**3085**
09:00	**Panel Discussion** Oscar Palomares (Madrid, Spain), Enrico Marco Heffler (Milano, Italy), Andrew Menzies-Gow (London, United Kingdom)	**3086**
09:10	**Q&A** Oscar Palomares (Madrid, Spain), Enrico Marco Heffler (Milano, Italy), Andrew Menzies-Gow (London, United Kingdom)	**3087**

8M | Session 371 | 08:00 - 09:15

Industry Early Morning Mini-Symposium: Tackling pulmonary disease in children and adults with cystic fibrosis: Has the paradigm shifted?

Organised by Vertex Pharmaceuticals (Europe) Limited

08:00	**Introductory animation** Silvia Gartner (Barcelona, Spain)	**3088**
08:02	**Chair's intro: A changing landscape in cystic fibrosis (CF)** Silvia Gartner (Barcelona, Spain)	**3089**
08:12	**The importance of preserving CF lung function and structure from early ages** Marcus Mall (Berlin, Germany)	**3090**

08:22	**Monitoring lung disease: Beyond spirometry** Pedro Mondejar Lopez (Molina de Segura (Murcia), Spain)	**3091**
08:32	**Growing older with CF: A new paradigm for pulmonologists?** Nicholas Simmonds (London, United Kingdom)	**3092**
08:42	**Panel discussion and audience polling** Silvia Gartner (Barcelona, Spain)	**3093**
09:12	**Chair's close: A look ahead** Silvia Gartner (Barcelona, Spain)	**3094**

8J Session 372 08:00 - 08:45

Industry Skills Lab Workshop: Eucapnic Voluntary Hyperpnea (EVH) Provocation Test: A practical guide to using EVH challenges to diagnose Exercise Induced Bronchoconstriction.

Organised by GANSHORN Medizin Electronic GmbH

Chairs : John Dickinson (Canterbury, United Kingdom)

08:00		**3095**

8K Session 373 08:00 - 08:45

Industry Skills Lab Workshop: A New Era in Distal Mucus Management

Organised by PhysioAssist

Chairs : Laurent Morin (Aix-en-Provence, France)

08:00	**Introduction by chairman** Laurent Morin	**3096**
08:02	**Simeox technology** Florence Danet	**3097**
08:06	**Why Airway Clearance is important** João Winck	**3098**
08:15	**Results of Simeox Homecare Bronchiectasis trial** Sylvie Leroy	**3099**
08:25	**Questions & Answers**	**3100**
08:30	**Simeox hands-on**	**3101**

8J Session 416 10:30 - 11:15

Industry Skills Lab Workshop: ARIKAYCE liposomal®: a practical guide to use

Organised by Insmed

Chairs : Roald van der Laan (Huijbergen, Netherlands), Stefano Aliberti (Milano (MI), Italy)

10:30	**Welcome** Roald van der Laan (Huijbergen, Netherlands)	**3685**
10:35	**Introduction** Stefano Aliberti (Milano (MI), Italy)	**3686**
10:40	**Overview of ARIKAYCE liposomal and demonstration of its use** Roald van der Laan (Huijbergen, Netherlands)	**3687**
10:50	**A practical guide to ensuring a successful early-user experience** Stefano Aliberti (Milano (MI), Italy)	**3688**
11:05	**Summary and close** Roald van der Laan (Huijbergen, Netherlands)	**3689**

8K Session 417 10:30 - 11:15

Industry Skills Lab Workshop: Lung Cancer Diagnostic Pathway: CT with AI analysis to Bronchoscopic Diagnosis

Organised by FUJIFILM

Chairs : Khalid Tazi Sidqui (Casablanca, Morocco), Felipe Andreo Garcia (Montgat, Spain)

10:30	**Introduction** Khalid Tazi Sidqui (Casablanca, Morocco)	**3690**

8A - live streamed Session 444 13:00 - 14:00

Industry Lunchtime Symposium: Evolving concepts in the treatment of nosocomial pneumonia

Organised by MSD

Chairs : Despoina Koulenti (Brisbane, Australia), Tobias Welte (Hannover, Germany)

13:00	**Welcome and opening remarks** Tobias Welte (Hannover, Germany), Despoina Koulenti (Brisbane, Australia)	**3805**
13:04	**What's new since the last guideline publication?** Antoni Torres Marti (Barcelona, Spain)	**3806**
13:22	**What has real-world evidence taught us?** Ignacio Martin-Loeches (Dublin, Ireland)	**3807**
13:40	**Panel Discussion** Tobias Welte (Hannover, Germany), Despoina Koulenti (Brisbane, Australia), Ignacio Martin-Loeches (Dublin, Ireland), Antoni Torres Marti (Barcelona, Spain)	**3808**
13:56	**Closing Remarks** Despoina Koulenti (Brisbane, Australia), Tobias Welte (Hannover, Germany)	**3809**

8B - live streamed Session 445 13:00 - 14:00

Industry Lunchtime Symposium: Going FURTHER: from surviving to thriving on the asthma patient journey

Organised by GSK

Chairs : Rob Cook (London, United Kingdom)

13:00	**Welcome and opening** Rob Cook (London, United Kingdom)	**3810**
13:05	**Living with asthma: the patient perspective** Olivia Fulton (Edinburgh (Edinburgh), United Kingdom)	**3811**
13:15	**Health literacy for better patient outcomes: fostering simple and trustful communication in respiratory healthcare** Nicole Hass (Villagarcía de Arosa/ Pontevedra, Spain)	**3812**
13:25	**Improving patient care and outcomes through shared decision-making: the role of motivational communication** Kim Lavoie (Montréal (QC), Canada)	**3813**
13:35	**Live Q&A** Rob Cook (London, United Kingdom), Nicole Hass (Villagarcía de Arosa/ Pontevedra, Spain), Olivia Fulton (Edinburgh (Edinburgh), United Kingdom), Kim Lavoie (Montréal (QC), Canada)	**3814**

8C - live streamed Session 446 13:00 - 14:00

Industry Lunchtime Symposium: NOVELTY study: Why it is novel, and why it is needed

Organised by AstraZeneca

Chairs : Helen Reddel (Sydney, Australia), Alberto Papi (Cona, Ferrara, Italy), Hana Müllerová (Cambridge, United Kingdom)

13:00	**The importance of the NOVELTY study population** Helen Reddel (Sydney, Australia)	**3815**

13:15	**Treatable traits associated with physician-assigned diagnoses and physician-assessed severities** Rosa Faner Canet (Barcelona, Spain)	**3816**
13:30	**Patterns of ventilatory dysfunction across physician-assigned diagnoses and severities of asthma /COPD : ADPro xenon MRI and lung physiology substudy** James M. Wild (Sheffield (South Yorkshire), United Kingdom)	**3817**
13:45	**The future for NOVELTY** Alberto Papi (Cona, Ferrara, Italy)	**3818**
13:55	**Meeting close**	**3819**
14:00		**3820**

8G - live streamed — Session 447 — 13:00 - 14:00

Industry Lunchtime Symposium: Management of Pulmonary Hypertension associated with ILD: Present and Future

Organised by Ferrer

Chairs : Vincent Cottin (Lyon, France)

13:00	**Introduction** Vincent Cottin (Lyon, France)	**3821**
13:05	**Burden of Disease and unmet needs: screening and early referral relevance** Juergen Behr (München, Germany)	**3822**
13:20	**The landmark INCREASE study** Steven D Nathan (Falls Church, United States)	**3823**
13:45	**Round table discussion: Screening of PH in ILD patients: most useful tools and ideal process** Juergen Behr (München, Germany), Steven D Nathan (Falls Church, United States), Vincent Cottin (Lyon, France)	**3824**

8H - live streamed — Session 448 — 13:00 - 14:00

Industry Lunchtime Symposium: Can we do more for our COPD patients? New frontiers in clinical care

Organised by Chiesi Farmaceutici S.p.A.

Chairs : Leonardo Michele Fabbri (Modena, Italy)

13:00	**New roads towards COPD prevention, earlier diagnosis and treatment** Alvar Agusti Garcia-Navarro (Barcelona, Spain)	**3825**
13:15	**An identity card to effectively detect a COPD exacerbation: The Rome proposal** Leonardo Michele Fabbri (Modena, Italy)	**3826**
13:30	**Patients and inhalers: navigating the options to ensure the most suitable match** Kai Michael Beeh (Wiesbaden, Germany)	**3827**
13:45	**Q&A** Alvar Agusti Garcia-Navarro (Barcelona, Spain), Leonardo Michele Fabbri (Modena, Italy), Kai Michael Beeh (Wiesbaden, Germany)	**3828**

8M — Session 449 — 13:00 - 14:00

Industry Lunchtime Symposium: Diagnosis of Incidental CT findings: Insights on guidelines, tools and various approaches – Building on EBUS-TBNA and advancing to peripheral bronchoscopy?

Organised by Olympus Europa SE & Co. KG

Chairs : Felix J.F. Herth (Heidelberg, Germany)

13:00	**Introduction to incidental CT findings and recommendations from guidelines** Felix J.F. Herth (Heidelberg, Germany)	**3829**
13:10	**Which tools do we already have for diagnosis?** Samy Lachkar (Rouen, France)	**3830**

13:20	**What do we get next?** Juliana Guarize (Milano (MI), Italy)	**3831**
13:30	**Interactive case discussion** Felix J.F. Herth (Heidelberg, Germany), Samy Lachkar (Rouen, France), Juliana Guarize (Milano (MI), Italy)	**3832**

8J Session 476 14:00 - 14:45

Industry Skills Lab Workshop: Non-Invasive Bronchoscopic Treatment for Severe Emphysema Patients using The Zephyr Valve - Assess. Target. Treat.Slebos, Dirk-Jan; Shah, Pallav L.

Organised by Pulmonx

Chairs : Dirk-Jan Slebos (Groningen, Netherlands), Pallav L. Shah (London, United Kingdom)

14:00	**Tools to use in selecting the right patients with Severe Emphysema that would benefit most from The Zephyr Valve. Asses.** Dirk-Jan Slebos (Groningen, Netherlands)	**4326**
14:10	**The How-To on The Zephyr Valve treatment to ensure the expected outcomes. Target. Treat.** Pallav L. Shah (London, United Kingdom)	**4327**
14:20	**Practical Hands-On Session with guidance from experienced users**	**4328**

8K Session 477 14:00 - 14:45

Industry Skills Lab Workshop: Single Use Bronchoscopy— New Possibilities & Tips and Tricks

Organised by Vathin Medical

Chairs : Fotios Sampsonas (Patra, Greece), Javier Flandes Aldeyturriaga (Madrid, Spain)

14:00	Fotios Sampsonas (Patra, Greece)	**4329**

8A - live streamed Session 511 18:00 - 19:30

Industry Evening Symposium: Identifying Patients with Chronic Cough

Organised by MSD

Chairs : Christian Domingo Ribas (Sabadell (Barcelona), Spain)

18:00	**Opening Remarks** Christian Domingo Ribas (Sabadell (Barcelona), Spain)	**4478**
18:10	**Mechanisms of Cough – What do we need to know to understand our patients?** Jaclyn Smith (Manchester (Greater Manchester), United Kingdom)	**4479**
18:30	**A patient case of chronic cough; what do the ERS guidelines say?** Alyn Hugh Morice (Cottingham, United Kingdom)	**4480**
18:50	**A patient case of chronic cough; learnings from a recent Canadian consensus** Imran Satia (Hamilton, Canada)	**4481**
19:10	**Q&A and panel discussion** Christian Domingo Ribas (Sabadell (Barcelona), Spain)	**4482**

8C - live streamed Session 512 18:00 - 19:30

Industry Evening Symposium: New Frontiers in COPD—Where Are We Heading?

Organised by Sanofi Regeneron

Chairs : Alvar Agusti Garcia-Navarro (Barcelona, Spain)

18:00	**Welcome and Introductions** Alvar Agusti Garcia-Navarro (Barcelona, Spain)	**4483**
18:05	**A GETomics Perspective of COPD: What Is It?** Alvar Agusti Garcia-Navarro (Barcelona, Spain)	**4484**
18:15	**Advances in Our Understanding of Inflammation in COPD** Stephanie Christenson (San Francisco, United States)	**4485**

18:30	**Knowns and Unknowns in COPD Management** MeiLan K. Han (Ann Arbor, United States)	**4486**
18:50	**Changing Treatment Paradigms: The Evolving Biologic Landscape in COPD** Dave Singh (Manchester, United Kingdom)	**4487**
19:05	**Panel Discussion** Alvar Agusti Garcia-Navarro (Barcelona, Spain), Stephanie Christenson (San Francisco, United States), MeiLan K. Han (Ann Arbor, United States), Dave Singh (Manchester, United Kingdom)	**4488**
19:20	**Audience Q&A** Alvar Agusti Garcia-Navarro (Barcelona, Spain), Stephanie Christenson (San Francisco, United States), MeiLan K. Han (Ann Arbor, United States), Dave Singh (Manchester, United Kingdom)	**4489**

8N Session 514 18:00 - 19:30

Industry Evening Symposium: Non-Cystic Fibrosis Bronchiectasis: Don’t Neglect Neutrophilic Inflammation

Organised by Insmed

Chairs : Eva Polverino (Barcelona, Spain)

18:00	**Welcome and Introductions** Eva Polverino (Barcelona, Spain)	**4496**
18:05	**Current State of Affairs in NCFBE** Eva Polverino (Barcelona, Spain), Stefano Aliberti (Milano (MI), Italy), Holly R. Keir (Dundee (Angus), United Kingdom)	**4497**
18:20	**Refocus on Immunity and Neutrophils in NCFBE** Holly R. Keir (Dundee (Angus), United Kingdom)	**4498**
18:45	**Panel discussion and Audience Q&A** Eva Polverino (Barcelona, Spain), Stefano Aliberti (Milano (MI), Italy), Holly R. Keir (Dundee (Angus), United Kingdom)	**4499**
18:55	**Emerging Treatments for NCFBE** Stefano Aliberti (Milano (MI), Italy)	**4500**
19:15	**The Future of NCFBE Management** Eva Polverino (Barcelona, Spain), Stefano Aliberti (Milano (MI), Italy), Holly R. Keir (Dundee (Angus), United Kingdom)	**4501**

CHAIR AND COORDINATOR INDEX

Name, Session number

A

ABASCAL BOLADO B., 469
ADCOCK I., 142, 475
ADNER M., 67
AFONSO M., 82, 293
AGUSTI GARCIA-NAVARRO A., 204, 291, 512
AL-AHMAD M., 521
ALCAZAR NAVARRETE B., 68, 461
ALFAHL Z., 392
ALIBERTI S., 416
ALIVERTI A., 312, 375
ALTENBURG J., 391
ALVES JUNIOR J., 225
AMARO RODRIGUEZ R., 78, 391
ANANTH S., 450
ANDREO GARCIA F., 216, 417
ANGELIDIS I., 464
ANNEMA J., 38, 249, 276
ANNESI MAESANO I., 341
ANTONIOU K., 40, 185, 250, 267, 480, 500
ANTTALAINEN U., 245, 320
APHRIDASARI J., 77
ARDURA-GARCIA C., 46, 72, 409, 427
ARMSTRONG M., 233
ARNAUD C., 487
ATHANASSIADI K., 229

B

BACHARIER L., 357
BACKER V., 468
BAFADHEL M., 175, 288
BAHMER T., 450
BAKAKOS P., 175
BAL C., 224
BARDIN P., 244
BARGAGLI E., 40, 238
BARNES P., 359
BARRECHEGUREN FERNANDEZ M., 97, 252, 269
BATEMAN E., 137, 361
BAYAT S., 42, 129
BEDAWI E., 327
BEECH A., 67
BELO RAVARA S., 100
BELTRAMO G., 472
BENDSTRUP E., 498
BENJAFIELD A., 206
BERTOLETTI L., 50, 169, 189
BEYDON N., 46, 131, 184
BHATNAGAR R., 327
BIANCO A., 222, 461
BIELOSLUDTSEVA K., 397
BINGLE C., 162
BJERMER L., 404
BLASI F., 53
BLUM T., 51, 96, 115, 348
BLYTH K., 51, 81, 519
BONNESEN BERTELSEN B., 297
BONSIGNORE M., 192, 481, 501, 516
BONTA P., 84
BONTEN M., 523
BOON M., 228
BOOTS A., 36, 412
BORIE R., 155
BOS S., 147
BOSSIOS A., 52, 94, 113, 414, 480, 500, 521, 522
BOUCLY A., 83
BOULET L., 210
BOUMAN-VAN DER WAAL L., 525
BOUTOU A., 293, 379
BRACKE K., 316
BRADICICH M., 45, 163, 516
BRATOVÁ M., 151
BRIGHTLING C., 92, 93, 324, 344, 468, 504, 505
BRUSSE-KEIZER M., 68, 311
BUENDIA ROLDÁN I., 155
BUGALHO DE ALMEIDA A., 165
BUMBACEA D., 153
BURGY O., 315
BURTIN C., 301
BUSH A., 103, 107, 332, 347, 424

C

CANONICA G., 209
CANTERO C., 88
CARLIN C., 320
CARLSTEN C., 208, 298
CASAS M., 146, 282
ÇAYLI CANDEMIR I., 233
CECCATO A., 305
CHALMERS J., 102, 231
CHAPMAN K., 213, 296
CHARPIDOU A., 236
CHHAJED P., 84
CHOROSTOWSKA-WYNIMKO J., 96, 115, 348, 415
CHOTIRMALL S., 234
COMPTON C., 56, 203
COOK R., 445
COŞKUN N., 86
COSTELLO R., 92, 93, 118, 504, 505
COTTIN V., 447
COUTURAUD F., 377
CRAVEN R., 269
CREAMER A., 393
CREMONA T., 66, 222
CRESTANI B., 185
CRIMI C., 106, 215, 471
CROMBAG L., 310
CRUZ J., 48
CRUZ CARMONA M., 226, 298

D

DAGLI E., 49
DAHL M., 452
DE BRANDT J., 230
DE GODOY I., 177
DE JONG C., 145
DE JONGH F., 368, 434
DE LA HOZ R., 49, 341, 482, 502
DE MATTEIS S., 384, 482, 502
DE SADELEER L., 154
DE TORRES TAJES J., 177
DE WEVER W., 38, 479, 499
DELCROIX M., 118, 202, 239, 489, 525
DELLACA R., 159, 313
DEMEYER H., 148, 217
DEN DEKKER M., 35
DENNISTON P., 151
DEVULDER J., 473
DIAMANT Z., 451
DICKINSON J., 372
DÍEZ DOMINGO J., 369
DILEKTAŞLI A., 144
DINH-XUAN A., 95, 114
DOMAGAŁA-KULAWIK J., 172
DOMINGO RIBAS C., 511
DONNELLY L., 168, 188
DORTAS JUNIOR S., 382
DOS SANTOS CASTRO PADILHA J., 497
DUARTE R., 39, 102, 235
DUITMAN J., 66
DUIVERMAN M., 43, 88, 122, 524
DUMAS O., 49, 71

E

EICHSTAEDT C., 466
ELIA S., 47, 229
EL-MERHIE N., 462
ERCAN S., 463
ESCARRABILL SANGLAS J., 260
EVANS K., 135
EVANS R., 63, 376

F

FABBRI L., 448
FAIZ A., 339
FANER CANET R., 119
FARVER-VESTERGAARD I., 302
FERNANDES DE CARVALHO C., 148
FERNANDEZ TENA A., 212
FISSER C., 87, 400
FLANDES ALDEYTURRIAGA J., 477
FLÉCHET C., 306
FORIS V., 83
FRANCZUK M., 526
FRANSSEN F., 42, 261
FREGONESE L., 152
FREI A., 390
FRILLE A., 393
FROIDURE A., 40, 82, 99
FUNKE-CHAMBOUR M., 465
FUSTIK S., 46, 73, 219

G

GAILLARD E., 145, 340
GAINE S., 202
GAMARRA F., 464
GAPPA M., 98, 117
GARCIA AYMERICH J., 97, 116
GARCÍA COSÍO PIQUERAS F., 288, 368
GARCIA MOYANO M., 238
GARCIA-BASTEIRO A., 39, 235
GEISER T., 317
GEPHINE S., 158
GILLE T., 42, 304
GIMENO SANTOS E., 75, 304
GLASGOW A., 402
GLOECKL R., 388
GOEMINNE P., 432
GOMPELMANN D., 38, 121, 249, 338, 479, 499
GONÇALVES PINTO P., 398
GONZALEZ BERMEJO J., 489, 524
GOSENS R., 171, 191
GOTERA RIVERA C., 52, 140, 246
GOUTAKI M., 46, 282, 457
GRABCZAK E., 38, 324, 344, 479, 499
GREENE C., 36, 253, 270, 485
GRIESE M., 365
GRIGG J., 186
GULER S., 154

H

HAMUTCU ERSU R., 131, 485
HAN M., 203
HANSEN K., 37
HARARI S., 250, 267
HARDAVELLA G., 34, 51, 96, 115, 273, 406, 483, 503
HART N., 215
HASSIBI S., 317
HEANEY L., 198
HEDMAN L., 455
HEIJINK H., 36, 339
HEINZER R., 275, 474
HELBO SKAARUP S., 157
HELLEMONS M., 47, 147
HERNANDEZ CARCERENY C., 430
HERNANDEZ GONZALEZ F., 173, 308
HERTH F., 449
HETZEL J., 59
HEUNKS L., 43, 122, 252, 269, 283
HIGHAM A., 380
HINKS T., 76, 139
HIRANI N., 465
HO V., 90
HOLLAND A., 130, 484
HOWARTH P., 289
HUBER R., 172
HUI I., 312
HUIVANIUK O., 379
HUMBERT M., 97, 116, 169, 189, 489
HURLEY K., 402

I

IDZKO M., 52, 257
INAL-INCE D., 48
IOAN I., 227, 313

J

JARA PALOMARES L., 309, 377
JARVIS S., 287
JENKINS C., 201
JOANNES A., 99
JOHANNESSEN A., 49, 70, 186
JOLLEY C., 129
JONKMAN A., 183
JORDAN R., 85
JOUNEAU S., 394

K

KACHKOVSKA V., 385
KALTSAKAS G., 284
KANKAANRANTA H., 295
KARAGIANNIDIS C., 43, 183
KARAS A., 366
KATSAOUNOU P., 100
KEIR H., 39, 167, 187, 462
KELLY E., 94, 113, 405
KHOR Y., 394
KISIEL M., 389
KLEINERT S., 500
KOCKS J., 241
KOLB M., 168, 188
KOLEKAR S., 42, 150
KONGE L., 311
KONSOULOVA-KIROVA A., 236
KONTOGIANNI K., 157, 488
KONTSEVAYA I., 463
KORANTENG J., 244
KOULENTI D., 444
KOVACS G., 396, 478
KRAFT M., 294, 411, 475
KREUTER M., 40, 267
KRISHNAN S., 143
KURMI O., 49, 383, 431
KWAPISZEWSKA-MARSH G., 466

L

LADJEMI M., 401
LADOR F., 239
LAHOUSSE L., 295
LAMOT S., 177
LANGE C., 55, 306
LANGER D., 48
LAURSEN C., 38, 374
LAVENEZIANA P., 176, 325, 345, 405, 526
LAVIZZARI A., 46, 386
LEE R., 307
LEWKO A., 301
LEX C., 64
LIAPIKOU A., 495
LICHTBLAU M., 50, 169, 189, 478, 525
LIPMAN M., 120
LJUNGGREN M., 91
LOEBINGER M., 39, 432
LOMBARDI C., 474
LOMBARDI E., 227
LOMMATZSCH M., 224
LOPEZ VARELA E., 143, 225
LÓPEZ-CAMPOS BODINEAU J., 452
LORENT N., 79, 303
LOUIS R., 223
LOUKIDES S., 140
LUTAS A., 458

M

MADGE S., 330
MAES T., 89, 142
MAILLEUX A., 36, 161, 472
MAKONGA-BRAAKSMA J., 48, 325, 345, 413
MALPASS A., 331
MANSOURI N., 440
MARCINIAK S., 401
MARCOS RODRIGUEZ P., 460
MARONE G., 210

MARQUES DA SILVA R., 459
MARRA A., 328
MARTINEZ F., 199
MARTÍNEZ VÁZQUEZ M., 241
MARTIN-LOECHES I., 160, 314
MARTINS DE MATOS NAVARRO GUIA M., 471
MASEKELA R., 228
MASKELL N., 519
MASTERSON C., 315
MATHIOUDAKIS A., 119, 404
MCCARTHY C., 40, 498
MCDONNELL M., 303, 453
MCGOWAN A., 218
MEINERS S., 171, 191, 248
MELONI F., 47, 326, 346, 410, 428
MENZIES-GOW A., 200
MERCER R., 467
METTING E., 398
MICHAELOUDES C., 89
MICHELETTO C., 360
MIGLIORE M., 47, 433
MILANESE M., 69
MILENKOVIĆ B., 454
MIRANDA VALLADARES S., 459
MIRAVITLLES M., 205, 285
MOLINA MOLINA M., 40, 363
MÖLLER A., 46, 98, 117, 299, 409, 427
MØLLER WEINREICH U., 58
MONTEIRO DRUMMOND FREITAS M., 517
MOOR K., 40, 250, 441
MORAIS A., 177
MORICE A., 141
MORIN L., 373
MORTENSEN E., 152, 232
MORTY R., 46, 258
MUKHERJEE M., 139, 414
MÜLLER V., 240
MÜLLEROVÁ H., 446
MULLOL MIRET J., 289
MUNAVVAR M., 38, 121, 467
MUNOZ GALL X., 71
N
NARDINI M., 433
NARSAVAGE G., 430
NAVA S., 58
NEDER J., 470
NEEDHAM C., 319
NEMERY B., 226
NENNA R., 300, 496
NIELSEN A., 150
NIETO FONTARIGO J., 247
NOLAN C., 158
NOVOA VALENTIN N., 74
NYBERG A., 75, 388
O
OJANGUREN ARRANZ I., 442
OLIVER A., 328
ÖNER EYÜBOĞLU A., 80, 120
ONG-SALVADOR R., 62
P
PAPI A., 446
PAREDES R., 54
PARK H., 297
PATAKA A., 163, 256
PATOUT M., 43, 87, 206, 283, 338, 481, 501
PAVLIŠA G., 86
PAVORD I., 356
PENGO M., 245
PENNATI F., 375
PERCH M., 101, 387
PEREIRA CATARATA M., 51, 81, 177, 415
PEREIRA DE ALBUQUERQUE A., 399
PETRARCA L., 457
PIETERSEN P., 276
PIJNENBURG M., 46, 409, 427
PINNOCK H., 42, 95, 114, 220, 411, 429, 434, 486
PIQUILLOUD L., 314
PLANQUETTE B., 156
POBEREZHETS V., 42
POLKEY M., 362
POLVERINO E., 39, 167, 187, 207, 254, 271, 514, 523
PORSBJERG C., 136, 210, 247, 382
POUWELS S., 243
PRICE D., 358
PROESMANS M., 46, 255, 518
PROSCH H., 174, 397
PULIDO ZAMUDIO T., 309
Q
QU J., 406
R
RABY K., 473
RAHMAN N., 51, 418, 483, 503
RAMJUG S., 274
RANDERATH W., 45, 321, 407, 425
REDDEL H., 446
REDOLFI S., 104
REYNAERT N., 36, 316
RICCIARDI S., 74
RICCIARDOLO F., 69, 223
RIHA R., 318
RINGSHAUSEN F., 330
ROBALO CORDEIRO C., 177, 410, 428
ROCHE N., 164, 305, 504, 505
ROHDE G., 207, 231
ROLANDSSON ENES S., 412
ROLLAND-DEBORD C., 76, 159, 399, 520
ROMÁN RODRIGUEZ M., 42, 486
ROSENKRANZ S., 343
ROVINA N., 70, 160
RUSCONI F., 146
RYAN S., 275
S
SAEZ GIMENEZ B., 387
SAGLANI S., 64, 456
SAGNARD O., 106
SAJNIC A., 48, 497
SALGADO CASTRO F., 272, 294
SAMPSONAS F., 477
SANCHEZ DE LA TORRE M., 45, 256, 487
SAXER S., 396
SCHIZA S., 45, 321, 407, 425
SCHLEICH F., 52, 381
SCHOEBEL C., 166
SCHRAMM D., 46, 300, 496
SCHUSTER A., 385
SCHWARZ E., 403
SCURI M., 292
SENGUPTA A., 243
SGALLA G., 308
SHAH A., 234
SHAH P., 476
SHOEMARK A., 78
SHTEINBERG M., 392
SIBILA VIDAL O., 232
SIMONDS A., 170, 190, 251, 268
SIMONELLI C., 484
SITBON O., 50, 274, 367, 408, 426, 478
SIVAPALAN P., 284, 451
SLEBOS D., 476
SMALLWOOD N., 469
SMITH J., 141
SMITH L., 62
SOMBORAC BAČURA A., 161
SORIANO J., 431
SOTGIU G., 167, 187, 254, 271
SPAGNOLO P., 40
SPANEVELLO A., 453
SPENGLER C., 242
SPERLING S., 79
SPINOU A., 389
SPRUIT M., 376
SRETER K., 307
STAHL M., 219, 299
STANOJEVIC S., 259
STERLING K., 260
STOLZ D., 138, 322, 342, 460
STRAIF K., 384
STRANGE C., 138
STRINGER W., 520
SUH E., 329
SUPPLI ULRIK C., 49, 253, 270
SYLVESTER K., 48, 192, 218, 458
SYRIGOS K., 133
T
TAMISIER R., 318
TAN H., 72
TÁRNOKI Á., 38, 174
TARNOKI D., 149, 240
TAZI MEZALEK R., 216
TAZI SIDQUI K., 417
TEICHMAN D., 168, 188
TESTELMANS D., 45, 403, 517
TIDDENS H., 149
TIETZOVA I., 153
TOFFART A., 34
TOMASSETTI S., 237
TOPALOVIC M., 259
TORRES MARTI A., 134
TRIAS SABRIA P., 216
TRISOLINI R., 310
TROMEUR C., 156
TROOSTERS T., 130, 170, 190, 248, 411, 429
TSIKRIKA S., 144, 455
TSIM S., 128
TUFVESSON E., 164
TURNER A., 296
U
UBAGS N., 36, 258
ULLER L., 52, 257, 272, 380
ULRICH S., 50, 323, 343
UNGER S., 255, 518
USMANI O., 52, 220, 322, 342, 434
V
VAES A., 390
VAGHEGGINI G., 42, 63
VALENZUELA C., 237
VAN BRAECKEL E., 442
VAN DER LAAN R., 416
VAN DER SCHEE M., 381
VANFLETEREN L., 246
VASSE G., 162, 440
VELTKAMP M., 40, 395
VENDRELL RELAT M., 214
VERBRAECKEN J., 91
VERGES S., 60, 242, 470
VERHULST S., 184
VICENTE C., 85
VIJVERBERG S., 456
VIKJORD S., 383
VIRCHOW J., 212
VITACCA M., 77, 230
VOGIATZIS I., 42
VOLPATO E., 302
VONK NOORDEGRAAF A., 50, 323, 343
VORSELAARS A., 395
VOS R., 47, 101
W
WAGNER D., 90
WALTER K., 408, 426
WELTE T., 326, 346, 354, 406, 444, 495
WHITE R., 355
WIJKSTRA P., 329, 413
WIJSENBEEK M., 40
WINCK J., 43, 122, 400, 481, 501
WINDERS T., 116
WOODCOCK A., 361
WUYTS W., 40, 173
Y
YARASCAVITCH J., 105
YORGANCIOĞLU A., 251, 268, 322, 342, 522
YUKSEL A., 454
Z
ZACHARASIEWICZ A., 46, 98, 117, 340
ZANNIN E., 386
ZWITSERLOOT A., 73

DISCUSSANT INDEX

Name, Session number

A
ALIVERTI A., 251
ANTONIOU K., 324
B
BRUSSELLE G., 499
BUSH A., 409
C
CHALMERS J., 187
CHARPIDOU A., 96
D
DRUMMOND D., 251
DUIVERMAN M., 501
F
FRANSSEN F., 113
G
GAGA M., 342
GAPPA M., 409
H
HEUNKS L., 501
J
JANES S., 96
JIMÉNEZ CASTRO D., 169
M
MIRAVITLLES M., 342
MOLINA MOLINA M., 267
O
OPITZ I., 499
S
SIMONDS A., 324
SINGH D., 113
SPAGNOLO P., 267
STOLZ D., 187
U
ULRICH S., 169

SPEAKER INDEX

Name, Presentation number

A

AGUSTI GARCIA-NAVARRO A., 635, 1528, 1533, 1534, 2354, 2358, 3825, 3828, 4483, 4484, 4488, 4489

AKDIS C., 2173

ALBERTO DOS ANJOS DE SOUSA C., 2890

ALEJANDRE ALCÁZAR M., 2210

ALIBERTI S., 83, 1549, 1551, 2181, 3686, 3688, 4497, 4499, 4500, 4501

ALMENDROS LOPEZ I., 702, 2196

ALVIRA C., 2209

ALZAABI A., 846

AMAN J., 653

ANDERSEN T., 3667

ANDERSEN Z., 4466

ANDERSON G., 1469

ANDREJAK C., 695, 1548, 1551, 4402

ANNEMA J., 29

ANNESI MAESANO I., 721

ANTO BOQUE J., 4465

ANTONIOU K., 28, 3052, 3054, 3057, 3719

ARNAUD C., 2195

ASCIAK R., 2294, 3104, 3691, 4396, 4469

B

BACHARIER L., 2352, 2353, 3014, 3016, 3018, 3019, 3020, 3021, 3022

BACHMANN T., 2245

BACKER V., 4339

BAFADHEL M., 19, 89, 2341, 2343, 2345, 2871

BANDIRALI B., 3715

BANKA R., 4537

BARBERÀ MIR J., 2876

BARBETA SANCHEZ E., 1351

BARNES P., 2339, 2340, 3029, 3033, 3034

BARRECHEGUREN FERNANDEZ M., 4582

BARTON E., 3693

BASOGLU Ö., 4518, 4519, 4523

BATEMAN E., 844, 848, 849, 3046

BEDAWI E., 22, 2296

BEEH K., 1524, 1527, 3827, 3828

BEHR J., 3822, 3824

BEIER J., 3037

BELCHER E., 3645

BELDA J., 704

BENDIXEN M., 3103, 3692, 3694

BENDSTRUP E., 2157

BENZO R., 1602, 2221, 2927

BEOVIĆ B., 2248

BERASTEGUI GARCIA C., 2898

BEYDON N., 735

BHADRA K., 825, 826

BHATNAGAR R., 2294

BHATT J., 744

BIBBY A., 4549

BIEDERER J., 2981

BIELICKI J., 27

BILTON D., 1469

BLASI F., 72, 75, 76

BLUM T., 2993, 3628

BLYTH K., 4355

BOFFITO M., 833, 835, 836

BOGAARD H., 31

BOGAERT D., 2930

BOKAN A., 4615

BONELLA F., 3717

BONTA P., 2153

BOS L., 3630, 3701

BOTGROS R., 4588, 4589, 4593

BOUCLY A., 4615

BOULET L., 1564, 1565, 1566, 1567, 1568

BOURDIN A., 639, 1557, 1560, 1561, 1562, 1563, 1579, 3010, 3013

BOYTON R., 4348

BRACKE K., 1376

BRAIDO F., 2357

BRÄUNLICH J., 101

BROCHARD L., 4344, 4557, 4558, 4560

BROCK J., 2151

BRUSSELLE G., 23, 1376, 1578, 1580, 1584, 1586, 1587, 4568, 4569

BUGALHO DE ALMEIDA A., 1348

BURGOS RINCON F., 1491, 1492

BURTIN C., 1600, 2925

BUSH A., 3642, 3644

C

CADRANEL J., 3681

CALFEE C., 654, 3701, 4343

CAMUS P., 2158

CANONICA G., 1557, 1558, 1561, 1562, 1563, 3024, 3027

CANTERO C., 4596, 4597, 4604

CAPELLETTO E., 3682

CARBERRY J., 2986

CARLIN C., 1543

CARLSTEN C., 1554, 1556

CARLUCCI A., 776

CARRIER M., 1472

CATALANO T., 2863

CAVALERI M., 4588, 4589, 4593

CAZZOLA M., 1467

CHALMERS J., 10, 1464, 1466, 2179

CHANEZ P., 1568

CHANG A., 8

CHAPMAN K., 1581, 1582, 1585, 1586, 1587

CHARPIDOU A., 647, 649

CHAVANNES N., 1370

CHIESI M., 2360

CHOI A., 1375

CHOROSTOWSKA-WYNIMKO J., 727, 2232, 2993

CHOTIRMALL S., 2178

CHOW C., 3771

CHRISTENSON S., 4485, 4488, 4489

CHRYSTYN H., 3032, 3074

CHUNG K., 1552, 1556

CHUPP G., 3011, 3013

CIFRIAN MARTINEZ J., 2898

CIRILLO D., 1357

CLARENBACH C., 14

CLARK V., 2334, 2336

ÇOLAK Y., 36

COMPTON C., 86, 91, 1523, 1527

CONRAD M., 1377

COOK R., 3810, 3814

COOPER B., 15, 744

CORREN J., 3014, 3015, 3016, 3017, 3020, 3021, 3022

COSTA ADÃO R., 4615

COSTELLO R., 740

COTTER S., 724

COTTIN V., 5, 3821, 3824, 4399

COUTURAUD F., 1474, 4401

CRESTANI B., 2897

CRIMI C., 776

CRINER G., 99, 1594

CROOKS M., 847

CRUZ A., 1577, 1580

CUNNINGHAM-RUNDLES C., 2990

CURROW D., 4474

D

DAGLI E., 33, 1460

DANDURAND R., 3771

DAVIES J., 4526, 4527, 4534

D'CRUZ R., 1542, 1596, 2171

DE BLASIO F., 85

DE JONGH F., 3768, 3769, 3770, 4616, 4617, 4626

DE KRAKER M., 4590, 4591, 4593

DE WEVER W., 4333

DELCROIX M., 1517, 1518, 1519, 1521, 2974

DEMEYER H., 2219

DEN DEKKER M., 42

DENNISTON P., 3693

DERCLE L., 4356

DERDE L., 652, 4590, 4591, 4593

DETERDING R., 3061

DIAR BAKERLY N., 1497

DIAZ LOBATO S., 1541

DÍEZ DOMINGO J., 3077, 3081, 3082

DILEKTAŞLI A., 1460

DINH-XUAN A., 2931

DINI C., 2217

DISDIER VICENTE C., 104, 105

DJUKANOVIC R., 18

DOI Y., 3065

DOLEZAL B., 2894

DOMAGAŁA-KULAWIK J., 4354

DOMINGO RIBAS C., 1565, 2348, 2349, 2350, 4478, 4482

DRANSFIELD M., 4458

DRES M., 775

DRIEHUYS B., 2978

DUIVERMAN M., 2168, 3699, 4460, 4462

E

EICHHOLTZ T., 2359

EKELUND U., 2893

EKSTRÖM M., 645, 1491, 1492

ELBORN S., 1357, 1590, 1592, 4369

ELIA S., 725, 2994, 3648

ESCARRABILL SANGLAS J., 2215

ESCRIBANO- SUBIAS P., 1361, 1519, 1521

ESPOSITO S., 659

ESTES E., 852

EVANS K., 832, 835, 836

EVANS R., 4475

EVERAERTS S., 4332

EVREN E., 1484

F

FABBRI L., 3826, 3828

FAHY J., 639

FAIBISCHEW PRADO G., 1427

FAILA K., 3709

FALSTER C., 2295

FANER CANET R., 16, 3816

FARRÉ VENTURA R., 26

FARVER-VESTERGAARD I., 1603, 2928

FAUROUX B., 3711

FERINI S., 4504, 4505, 4512

FERNANDEZ TENA A., 1580

FERRAROTTI I., 1536

FESHCHENKO Y., 2230

FIRSOVA A., 2241

FITZGERALD D., 4541

FOWLER S., 4338

FRANKLIN M., 731

FRASER E., 2980

FREGONESE L., 4350

FREUND Y., 3639

FROIDURE A., 2896

FULTON O., 3811, 3814

G

GABUTTI G., 3078, 3081

GAGA M., 730, 732, 2968, 2970

GAINE S., 1518, 1519, 1521, 1522, 2975

GAPPA M., 812, 1372, 3641, 3643

GARABELLI B., 3666

GARCÍA COSÍO PIQUERAS F., 2341, 2342, 2345, 2346

GARTNER S., 3088, 3089, 3093, 3094

GEVAERT P., 841

GIBELLINI L., 1377

GIBSON P., 88

GILLET L., 1487

GIOVAGNOLI M., 4354

GLEESON F., 2980

GLOCKENHAMMER-TIMM D., 105

GOCHICOA RANGEL L., 3771

GOEMINNE P., 1591, 1592

GOMPELMANN D., 104

GONZALEZ BERMEJO J., 777

GOPALAN D., 4607, 4608

GOSENS R., 30

GRIECO D., 34

GRIESE M., 3058, 3062

GROTE L., 2867

GUARIZE J., 3831, 3832

H

HABIB G., 3722

HAJIZADEH N., 1478

HALL C., 2981

HALL G., 738

HALLIFAX R., 4543, 4544

HALPIN D., 1526, 1527, 2356

HAMELMANN E., 2351, 2353

HAMMAD H., 657

HAN M., 1523, 1527, 2874, 4455, 4486, 4488, 4489, 4574, 4575

HANSEN K., 43, 52

HARDAVELLA G., 38, 2995

HARRISON S., 2221

HART N., 1479, 3047, 3048

HASS N., 3812, 3814

HAWORTH C., 1546, 1551

HEANEY L., 1495, 1498, 3025, 3027

HECKER M., 1350

HEDNER J., 2985

HEFFLER E., 3083, 3084, 3086, 3087

HEINZER R., 3635

HENNINK M., 37

HERNÁNDEZ R., 3723

HERTH F., 35, 2147, 3829, 3832

HETZEL J., 103, 104, 105

HEUNKS L., 4461, 4463

HIGGINSON I., 728

HILDEBRAND J., 1377

HILLMAN T., 4464

HOEPER M., 1363, 2973, 3006, 3067

HOFFMANN-VOLD A., 2896

HOLLAND A., 644, 1371, 1491, 1492

HOLMES E., 1480

HOMSY J., 2333, 2336

HOSEY M., 1480

HOWARD L., 1518, 1521

HOWARTH P., 2347, 2349, 2350

HUMBERT M., 44, 2877

HURST J., 13, 2339, 2340, 2988, 3638

I

IDZKO M., 633

IQBAL B., 3691, 4394

J

JACK S., 2892

JAKSCH P., 3647

JANES S., 648, 650

JANSON C., 1531

JANSSEN J., 4545

JANSSENS J., 3668

JARVIS S., 2339, 2340

JAVAHERI S., 3697

JENKINS C., 1509, 1516

JENY F., 3716

JEVNIKAR M., 4615

JIMÉNEZ CASTRO D., 1366, 1368, 3707

JOHNSON M., 3724

JOLLEY C., 4555, 4556, 4560

JONES S., 1601, 2926

JONES S., 641

JONES T., 651

JOOS G., 730, 732

K

KAHLMANN V., 3716

KALKMAN P., 42
KANTAR A., 4524, 4525, 4534
KAPELLOS T., 1485
KARAGIANNIDIS C., 2170, 3701, 4345
KARAS A., 3063, 3066
KATSAOUNOU P., 1459
KEIR H., 4497, 4498, 4499, 4501
KIELY D., 4605, 4606
KLARLUND PEDERSEN B., 2893
KLION A., 4340
KLUGE H., 2227
KNEYBER M., 2236
KOCKS J., 3650
KOK A., 42
KOLB M., 722
KONTOGIANNI K., 3105
KOREVAAR D., 709
KOSTIKAS K., 3036, 4572, 4573
KOULENTI D., 3805, 3808, 3809
KOVACS G., 17, 4330, 4331, 4610, 4611
KRAFT M., 4341
KREUTER M., 2156
L
LACHKAR S., 3830, 3832
LAMBRECHT B., 657
LANGE C., 32, 82, 694, 696, 1358
LANGER D., 108, 1422
LANKEIT M., 1475
LAROUMAGNE DUMETRE S., 4471
LATZIN P., 814
LAVENEZIANA P., 107, 1421
LAVOIE K., 3813, 3814
LAVORINI F., 1530, 1533, 3041, 3075
LEE G., 4470
LEHTIMÄKI L., 1532, 1533
LEISMAN D., 651
LEVETT D., 2892
LEVY R., 2361, 2363
LEWNARD J., 828, 830
LEWTHWAITE H., 2893
LEX C., 812, 813
LIBERT Y., 41
LICHTBLAU M., 742, 2976, 4330, 4331
LICSKAI C., 1512
LIPMAN M., 3703
LLOYD J., 1489, 1490
LO D., 3651
LOEBINGER M., 84
LOMBARDI C., 2984, 4507, 4508, 4512
LOMBARDI E., 736
LOUIS R., 3695, 4566, 4567
LOUKIDES S., 744, 4571, 4582
LOWE D., 2989
LUCCHI M., 3646
LÜCKEN M., 1483, 2240
LUNDBERG I., 2899
M
MAGLIONE P., 2988
MAHER T., 1500
MAKONGA-BRAAKSMA J., 3771
MALHOTRA-KUMAR S., 2246
MALL M., 3090, 4370
MALPASS A., 2222
MAMMARAPPALLIL J., 2981
MANGIAPAN G., 3102, 4395
MARONE G., 1569
MARTINEZ F., 1499, 1503
MARTÍNEZ GARCÍA M., 3633, 4509, 4510, 4512
MARTIN-LOECHES I., 2929, 3807, 3808
MASELLI D., 1557, 1559, 1561, 1562, 1563
MASKELL N., 4472
MATHIOUDAKIS A., 12, 2932
MATTHAY M., 2237
MATUCCI A., 3009, 3013
MAZIERES J., 3681
MAZZOLAI L., 1475
MCAULEY D., 2235
MCCARTHY C., 2155
MCELVANEY N., 853
MCELVANEY O., 1538
MCGARVEY L., 21
MCGOWAN A., 4618, 4619, 4626
MCINTYRE G., 1477
MCNAMARA P., 3710
MCNICHOLAS W., 26
MCQUILTEN Z., 651
MELÉN E., 4467
MELGERT B., 2175
MELONI F., 1377
MENDEZ C., 829, 830
MENENDEZ VILLANUEVA R., 3080, 3081
MENZIES-GOW A., 840, 1504, 1507, 1508, 3085, 3086, 3087
MERCER R., 3694, 4397
MESSINEO L., 2986
MESZAROS G., 2972
MEYER K., 1486
MEYTS I., 2988
MICHELETTO C., 3035, 3038, 3039
MILGER-KNEIDINGER K., 1566
MIRAVITLLES M., 74, 1469, 1535, 1537, 1540, 2332, 2336, 2337, 2339, 2340, 2969, 2971
MOLINA MOLINA M., 698, 2223, 2225, 3051, 3057
MÖLLER A., 1461
MØLLER WEINREICH U., 1544
MONDEJAR LOPEZ P., 3091
MONTEIRO DRUMMOND FREITAS M., 2869
MOOKHERJEE N., 2176
MOORE M., 78, 81
MORAWIEC E., 775
MORENO S., 3064
MORICE A., 4480
MUKHERJEE M., 4571
MÜLLER V., 4335
MULLOL MIRET J., 2347, 2349, 2350
MUNAVVAR M., 2152
MURPHY P., 2171
N
NAGATA K., 1595
NATHAN S., 3823, 3824
NAVA S., 39, 1369, 4346
NAVALESI P., 2169
NAWIJN M., 2239
NELSON-PIERCY C., 3707
NIELSEN H., 638
NOSSENT E., 2879
NOVELLO S., 3682
NUNES H., 3719
O
O'DONNELL D., 107
OGLESBY I., 4371
OLIVEIRA FERNANDES M., 1428, 3682
OLIVER A., 2242
ONG-SALVADOR R., 1493, 1494, 3769, 4621, 4622, 4626
OPITZ I., 3645
OTERO CANDELERA R., 1475
P
PAEZ REGADERA A., 1539
PALANGE P., 4550, 4551, 4560
PALOMARES O., 839, 3083, 3085, 3086, 3087
PANERONI M., 1481
PANOU V., 4547, 4548
PAPI A., 1360, 2872, 3818, 4579, 4580
PARATI G., 3633
PAREDES R., 77, 81
PARK J., 1375
PATAKA A., 110, 703, 1424
PATOUT M., 3049, 4601, 4602, 4604
PAVORD I., 87, 1507, 3008, 3012, 3013
PEKER Y., 2867
PÉPIN J., 2216, 3698, 4515, 4516, 4523
PEPKE-ZABA J., 3005, 3006
PERCH M., 2991
PERKINS G., 3637
PETERSEN R., 25
PETTIGREW M., 1355
PIETERSEN P., 3103, 3692, 3694
PINELLI V., 3103, 4394
PINNOCK H., 3030, 3770, 3771
PIQUILLOUD L., 775, 4345
PIRES DE DIAS MARQUES A., 24
PISANI L., 100
POBEREZHETS V., 2228
POLETTI V., 709, 3053, 3054, 3057
POLVERINO E., 20, 79, 81, 1469, 1545, 1551, 1571, 1573, 1575, 1576, 2180, 4349, 4496, 4497, 4499, 4501
POMPILI C., 823, 826
PORSBJERG C., 632, 838, 842, 843, 1565, 1566, 1567, 1568, 1570
POSTMA M., 2247
POUWELS S., 1374
POWELL P., 4351
PRAT AYMERICH C., 4585, 4586, 4593
PRICE D., 1506, 2345, 3023, 3026, 3027, 3028
PRICE L., 3717
PROESMANS M., 3710, 4531, 4532, 4534
PROSCH H., 4336
PRUDÊNCIO M., 1572, 1574, 1575
PSALLIDAS I., 3693
R
RAGHU G., 698
RAHERISON-SEMJEN C., 733, 4398
RAHMAN N., 648, 650, 4471, 4539, 4540
RAMSAY M., 4599, 4600, 4604
RANDERATH W., 3696, 4513, 4514, 4523
RAUCH A., 1371
RAVAGLIA C., 2144
REDDEL H., 3815
REDOLFI S., 109, 1423
RENZONI E., 643, 2990
RICE M., 2174
RICHELDI L., 1501, 3056, 3057
RIHA R., 7, 4520, 4521, 4523
ROBALO CORDEIRO C., 44
ROBINSON P., 737, 814, 815
RODRIGUES SILVA A., 3723
ROGLIANI P., 1468, 1567
ROHDE G., 1551
ROJAS MARROQUÍN J., 2362
RØMHILD DAVIDSEN J., 2297, 3102
RÖNMARK P., 1496
ROSENFELD M., 738
ROSENKRANZ S., 3068
ROZMAN A., 1349
RYAN S., 3632
S
SAGLANI S., 658
SAHAY S., 3005, 3006
SALAS R., 4464
SALVADORI M., 2364
SALVI S., 1553, 1556
SAMPSONAS F., 4329
SANCHEZ O., 3705
SANCHEZ DE LA TORRE M., 109, 702, 1423
SANCHEZ QUIROGA M., 2869
SANGUINETTI M., 2245
SATIA I., 4481
SAXER S., 742
SCHAEFFER M., 700
SCHERPEREEL A., 4355
SCHILLER H., 2243
SCHIZA S., 4502, 4503, 4512
SCHLEICH F., 637, 4563, 4564
SCHRAMM D., 3712
SCHUERMANS D., 1491, 1492
SCHWARZ S., 4596, 4597, 4604
SCHWERK N., 3059
SEDDON J., 4529, 4530, 4534
SEGAL L., 1355
SEIDENBERG A., 1459
SEIJO MACEIRAS L., 1425
SENN N., 4465
SHAH P., 4327
SHAKESPEARE J., 1421
SHANKAR-HARI M., 652
SHAVERDIAN N., 3683
SHI T., 73
SHOEMARK A., 1589, 1592
SHOJAEE S., 4471
SIDDIQUI S., 3652
SILLEN M., 2220
SILVERSIDES J., 652
SIMMONDS N., 3092
SIMONDS A., 744, 3634, 3668
SIN D., 4457
SINGH D., 1583, 1586, 1587, 2344, 2345, 2873, 3044, 4487, 4488, 4489, 4572, 4573
SINGH S., 2891
SITBON O., 3069, 3070, 3071
SKEVAKI C., 4585, 4586, 4593
SLEBOS D., 4326
SMITH J., 636, 4479
SMOLEN J., 1505
SNOECKX A., 4353
SOLER P., 2988
SOLOVIC I., 2231
SPAGNOLO P., 2224, 2226, 3719
SPANEVELLO A., 11
SRETER K., 3683
STANOJEVIC S., 6, 2214
STEENBRUGGEN I., 744
STOLZ D., 850, 851, 854, 855, 1463, 1465, 4456, 4577, 4578, 4582
STRAIF K., 4348
STRANGE C., 850, 853, 854, 855
SUMMERS C., 651, 3630
SUPPLI ULRIK C., 3043
SVENNINGSEN S., 2979
SYK J., 3651
SYLVESTER K., 4623, 4624, 4626
SYRIGOS K., 822, 826
SZLUBOWSKI A., 2146
T
TACCONELLI E., 1357
TAGLAUER E., 2211
TAN H., 818, 819
TAZI MEZALEK R., 1598, 3105, 4397
TAZI SIDQUI K., 3690
TESTELMANS D., 2868, 4509, 4510, 4512
THÉBAUD B., 2212
THOMEER M., 3691, 4394
TIDDENS H., 2180
TINGAY D., 3713
TOFFART A., 40
TOPALOVIC M., 2214
TORRES MARTI A., 827, 830, 831, 2929, 3806, 3808
TOUSSAINT M., 3666
TSILIGIANNI I., 3721

TSIM S., 4535, 4536
TURNER A., 1537
U
UBAGS N., 2933
ULRICH S., 741, 1365, 1367, 1520, 1521, 4552, 4553, 4560
USMANI O., 744, 1470, 3073, 3695, 3768, 4341
V
VAES A., 1601, 2926
VAN DEN BERGHE G., 3701
VAN DER HEIJDEN E., 2145
VAN DER LAAN R., 3685, 3687, 3689
VAN DER MOLEN T., 90
VAN INGEN J., 694, 696
VAN MEERBEECK J., 726
VAN ZYL-SMIT R., 1510
VANNORSDALL T., 1480
VASANKARI T., 1529, 1533
VEATCH O., 2194
VELTKAMP M., 3718
VENDRELL RELAT M., 1588, 1592, 1593
VERBRAECKEN J., 2983
VERGES S., 701
VERHAMME K., 636
VERHULST S., 816, 817
VICENTE C., 3653
VIJSMA D., 656
VIOLA MUÑOZ L., 1426
VIRCHOW J., 633, 1579, 1580, 3031
VIZZA C., 3004, 3006
VOGELMEIER C., 1525, 1527, 2355, 3055, 3057
VOLPICELLI G., 3692, 4395
VON MUTIUS E., 660, 2930
VONK NOORDEGRAAF A., 4612, 4613
VOS R., 2899
VOTRUBA J., 2150
W
WADE D., 1480
WAGENMANN M., 2348, 2349, 2350
WAINWRIGHT C., 4526, 4527, 4534
WARE L., 2234
WARNATZ K., 2988
WAXMAN A., 2878
WELCH H., 3104, 4396
WELSCH M., 2894
WELTE T., 720, 730, 834, 835, 836, 837, 1356, 2997, 3079, 3081, 3805, 3808, 3809, 4583, 4584, 4593
WHITE R., 3003, 3004, 3006, 3007
WIJKSTRA P., 4594, 4595, 4604
WIJSENBEEK M., 642, 719, 851, 1362, 1502
WILD J., 2978, 3817
WILLERSINN F., 2335, 2336
WINDERS T., 845
WINDISCH W., 4596, 4597, 4604
WISTUBA I., 824, 826
WONG G., 1555, 1556
WOODCOCK A., 1514, 3040, 3042, 3045
WRIGHTSON J., 3104, 4396
X
XIE L., 3629
Y
YORGANCIOĞLU A., 4561, 4562, 4571
YOUNG L., 3060
YURCHENKO O., 2229
Z
ZACHARASIEWICZ A., 4571
ZAR H., 4531, 4532, 4534
ZHONG N., 3627
ZUILY S., 1473

AUTHOR INDEX

Name, Abstract number

A

A ABDELFATTAH R., PA3483
A FONSECA J., PA2136, PA4323
A LEHTIMAKI L., PA2136
A LEWIS R., PA470
A POPOV T., PA2136
A STEMPEL D., PA3862, PA3863
A TORRES-DUQUE C., PA2136
A. AKDIS C., OA2204
A. DOS SANTOS E., PA1047
A. LEICK E., PA908
A. LOTUFO P., PA908
A. MENDES M., OA802
A. R. BRANDAO-RANGEL M., PA1288, PA2578, OA4362
A. RIBEIRO J., PA1906
A. RODRÍGUEZ D., OA2962
A. TORRES-DUQUE C., PA4323
A. WUYTS W., OA3793
A.B. WARK P., PA3549, OA3750
A.RAZAK H., PA1011
A.TORRES-DUQUE C., PA1330
A.W.M. TIDDENS H., PA1671
AAGAARD R., OA2901
AAKERØY L., PA4249
AAKKO J., PA247
AALDEREN ., OA141
AALØKKEN T., PA1961
AALTONEN V., PA860
AANELAND H., OA140
AANERUD M., PA3229
ABACOPD STUDY GROUP T., OA753
ABAD J., PA2773
ABAD J., PA2719, PA4092, PA4245
ABAD CAPA J., PA379, OA767, PA2423, PA2708, PA3403
ABAD CHAMORRO L., PA3518
ABADÍA C., PA348, PA4067, PA4068, PA4078
ABADÍA MOLINA C., OA3776
ABADIR P., PA4267
ABALI H., PA2045, PA2720, PA3224
ABANTO M., PA2616
ABBASLI L., PA945
ABBATTISTA L., PA2509
ABD AZIZ Z., PA549
ABD RAHIM ., PA1773
ABD RAZAK R., PA549
ABDALLAH S., PA531
ABDALLAH S., PA4231
ABDEL AAL H., PA2601
ABDELAZIZ A., PA3483
ABDELAZIZ A., PA1994
ABDELAZIZ H., PA203, PA205, PA4090
ABDELAZIZ M., PA3483
ABDEL-AZIZ M., PA3551, PA3560
ABDEL-AZIZ M., OA2949, PA3256, PA3268, PA3548
ABDEL-AZIZ M., OA141
ABDELFATTAH A., PA3276
ABDELFATTAH R., PA858
ABDELGHANY M., PA1892
ABDELKABIR A., PA314, PA1784, PA1788, PA1790
ABDELKBIR A., PA314, PA1257, PA1783, PA1784, PA1785, PA1786, PA1788, PA1790, PA1791, PA1793, PA1794, PA2626, PA2631, PA3939
ABDELKEBIR ., PA316, PA1785
ABDELKEBIR A., PA1783, PA2631
ABDELKEFI M., PA1100
ABDELLATIF S., PA1311
ABDELLAZIZ R., PA238
ABDELRAHMAN N., PA506
ABDELRAZEK M., PA3424
ABDENNADHER ., PA314
ABDENNADHER M., PA316, OA1604, PA1782, PA1783, PA1784, PA1785, PA1786, PA1788, PA1790, PA1793, PA2626, PA2631
ABDENNADHER M., PA317, PA1791, PA1792
ABDENNEJI S., PA1853, PA2605
ABDERLKBIR A., PA317
ABDESSALEM H., OA2191
ABDI A., PA190
ABDO M., PA934, PA3573, PA3880, PA3881, PA3948
ABDRAEVA A., PA2048
ABDUGANIEVA E., PA209, PA3878
ABDUKAHIL S., RCT716
ABDUL JABBAR A., PA386
ABDUL KADIR R., PA1219
ABDUL KASHEM MOHAMMAD M., PA184
ABDUL RAHAMAN J., PA1073
ABDUL RANI M., PA519, PA1219
ABDUL SAMAD A., PA504
ABDULAI R., PA4262
ABDULAI R., OA2955, PA3198
ABDULLAH A., PA2740
ABDULLAH Q., PA1212
ABDULLAH S., PA504
ABDULQAWI R., PA4171
ABDURRAHMAN Y., PA336
ABE M., OA1394
ABEL F., PA2857
ABELLAN A., OA2303
ABELLEIRA R., PA3359
ABEYRATHNA D., PA2600
ABID N., PA342, PA343, PA3590, PA4293
ABID S., PA625, PA1100, PA2089, PA2096, PA2561, PA2564, PA2848
ABID W., PA301, PA313, PA1102, PA1780, PA1922, OA2191
ABIG K., PA344
ABIMUSA A., PA1212
ABIR H., PA1907
ABISHEGANADEN J., PA1113, PA1819, PA1878
ABMA W., PA3156
ABO K., OA3664
ABO R., PA4192
ABO E-MAGD G., PA4223
ABOELHASSAN A., PA2005
ABOKLAISH A., PA3278, PA3279
ABO-LEYAH H., PA2610, RCT2883, PA4066, OA4404
ABOUBAKAR F., PA1048
ABOUELASRAR SALAMA S., PA2811
ABOZID H., PA3136, PA3146
ABRAHAM D., OA1452
ABRAHAM T., PA182, PA899, PA900
ABRAHAM T., PA3287
ABRAHAMS A., OA135
ABRAHAMSEN R., PA2471
ABRAM S., PA1258
ABRAMS E., PA4010
ABRAMSON M., OA1415, PA1688, PA1699, PA1735, PA2085, PA2482, PA3906
ABREU AGUIAR M., PA3487
ABRISHAMIAN L., OA3796
ABSIEH N., PA3190
ABTIN F., OA1406
ABU BAKAR A., PA504
ABU HUSSEIN N., PA3346
ABU OSMAN M., PA1773
ABUBAKAR I., OA763
ABU-HILU N., PA382
ABUSAMRA R., PA1093
ACAR M., PA289
ACASSAT S., OA3130
ACCORDINI S., PA243, PA948
ACEBO P., PA1174
ACERANTI A., PA547, OA1634
ACEVEDO-PRADO A., PA3960
ACHAIAH A., PA2738, PA3433
ACHARD P., OA2916
ACHARYA A., PA2587
ACHILLE A., PA543
ACHIT H., PA1710
ACIBAL K., PA3535
ACKERMANN M., PA4277
ACOSTA C., PA2460
ACOSTA FERNÁNDEZ O., PA1208, PA4043
A'COURT C., RCT711
ADA V., PA484
ÅDALEN S., OA140
ADAM L., PA3354
ADAM M., RCT715
ADAM O., PA2513
ADAM S., PA1068
ADAMS L., OA3106
ADAMS N., PA2043
ADAMS W., PA2654
ADAMSON S., RCT2883
ADÃO R., PA4140
ADASME R., PA1017
ADCOCK I., PA578, PA918, PA922, PA923, PA2565
ADCOCK I., OA1411, PA3560
ADCOCK I., OA141, PA3561, PA3563, PA3873, PA4262
ADDALA D., PA433, PA441, OA785
ADDIS J., RCT2161
ADEB P., PA2021
ADEGBITE B., PA4100
ADEGBITE D., PA2462
ADEGNIKA A., PA4100
ADEJUMO I., PA2774
ADEL M., PA1791
ADELAIDE L., OA4435
ADEMHAN TURAL D., PA1771, PA2025, OA4420
ADHIKARI T., PA1709, PA3218
ADIA U., PA1215
ADIL F., PA2494
ADIL M., PA430
ADIR Y., PA382, PA3466, PA3468
ADLER H., PA1827, PA1833, PA3245, PA3247
ADMETLLÓ M., PA387
ADMETLLO PAPIOL M., PA1182, PA1715
ADNAN G., PA1202
ADNER M., PA919, PA3156
ADOCK I., PA3564
ADRIE C., PA1248, PA1249
AELBRECHT C., OA686, PA1286, OA3793, PA4265
AERTS G., OA3793
AERTS J., PA2447
AERTS J., PA3490
AERTS J., PA2456
AERTS R., PA3490
AEUMJATURAPAT S., PA3208
AFFERNI C., PA2817
AFHTINOS A., PA437
AFIF H., PA2372, PA2439, PA4260
AFIF M., PA3397
AFONSO M., PA451
AFONSO BADARÓ MARQUES C., PA3319
AFRAZI M., PA4115
AFREIXO V., OA802
AFTHINOS A., PA2613
AFZAL S., OA3740, PA3921, PA4264
AFZAL W., PA1169
AGAMI A., PA598, PA599
AGAPITOU T., PA958, PA3369
AGAR M., PA1657
AGARWAL D., PA513, PA1716, PA1722, PA4208
AGARWAL R., PA1876
AGARWAL S., PA445
AGBAKOU M., PA2608
AGELL C., PA3505
AGGELOPOULOU A., PA3207
AGGELOPOULOU C., PA1840
AGIUS T., PA1049
AGLE M., PA3150
AGMY G., PA2005
AGMY G., RCT715
AGNANDJI S., PA4100
AGOSTONI P., PA461, PA3327
AGRAWAL A., PA3170, PA3413
AGRAWAL R., PA404
AGRAWAL Y., PA3233
AGUADO S., PA1018
AGUADO AGUDO M., PA2097, PA2849
AGUADO IBÁÑEZ S., PA1019, PA1029, PA3297
AGUAS M., PA1259
AGUDELO-ROMERO P., PA1294, OA2943
AGUELO-VELILLA A., PA384
AGÜERO CALVO J., PA1662
AGUIAR P., PA961, PA971
AGUIAR R., PA4082
AGUILÀ M., OA1437, OA4388
AGUILAR J., OA2186
AGUILAR M., PA1018
AGUILAR R., PA2798
AGUILAR PÉREZ M., PA1019, PA1029, PA3297
AGUILAR-DURÁN H., PA4285
AGUILAR-MEZA J., PA864, PA1222, PA2042, PA3526, PA3837, PA4281
AGUILERA XIOL E., OA4406
AGUSTÍ À., PA196, PA449, OA666, PA1268, PA1700, PA1835, PA2792, PA3610, PA4127
AGUSTONI F., PA2636, OA3761
AHLAWAT K., PA4272
AHMAD A., PA3401
AHMAD H., PA2771, PA2772, PA2776
AHMAD K., PA2132
AHMAD K., PA2747
AHMAD N., PA389
AHMED A., PA203, PA205, PA4090
AHMED E., PA586
AHMED H., PA2443
AHMED H., PA163
AHMED J., PA628
AHMED O., PA4196

AHMED R., PA4241
AHMED S., PA1774
AHMED U., PA2625
AHMED Z., PA3363, PA4196
AHMED Z., PA2740
AHMED KHAN S., PA1169
AHN K., PA1894
AHOKAS E., PA1242, PA2035
AHRENS E., RCT2164
AHROUD M., PA2131
AHSAN ALI S., PA1881
AHUJA N., PA2441
AHUMADA S., PA2558
AICHAOUIA C., PA155, PA354, PA1055, PA1200, PA2094
AICKLIN U., OA2914
AIDE N., PA402
AIDINIS V., PA4129
AIGNER C., PA2382
AIGNER E., PA2429, PA2430
AINLEY A., PA2566
AINSLIE P., PA2763
AIRAKSINEN L., PA257
AIRÒ E., OA2272
AIRÒ P., PA472, OA1450, PA1952
AIS DAZA A., PA469, PA2095
AISA P., PA1992
AISHAH A., PA3600
AISSA S., PA264, PA530
AISSAT A., PA2479
AIT MOUDDENE N., PA4260
AIT-HADAD W., PA3230
AITHAL G., OA1618
AITKEN C., OA3106
AIYEGBUSI O., PA412
AJATA CHURA A., PA1238
AJMERA P., PA3407
AJWANI N., PA2627
AJWANI N., PA3533
AKAMATSU T., PA929, PA1902
AKBAR I., PA2861
AKBAR S., PA874, PA3338
AKBARSHAHI H., PA3157
AKBHARSHAHI H., PA926
AKCA B., PA441
AKCAY S., PA355, PA3148
AKDEMIR KALKAN I., PA1065
AKGÜL ERDAL M., PA2853
AKGUN M., PA446, PA447, OA1605, PA3244
AKINLADE B., OA2950, OA2952, OA2955
AKIYAMA A., PA3145
AKOGULLARI D., PA577
AKOUMIA F., PA4145
AKPINAR E., OA1628, PA3848
AKROUT I., PA620, PA1105, PA2637, PA2638
AKSAMIT T., OA3754
AKSAN A., OA3127
AKSELROD H., PA2596
AKSET M., PA3194
AKSOY T., OA3775
AKTAS B., PA329, PA330, PA332
AKTAŞ TAPISIZ A., PA1756
AKTER N., PA2771
AKTER S., PA4198, PA4199
AKYAN SOYDAŞ Ş., PA296, PA1756, PA1759, PA2500
AKYIL TOKGÖZ F., PA2045
AKYILDIZ B., PA1329, PA2412, PA2413
AKYLBEKOV A., PA2048
AKYUZLUER GUNES S., PA3929
AL ALAM D., PA590, OA669
AL BUTAIHI I., PA1185
AL DUHAILIB Z., PA557, RCT716
AL HEIALY S., PA2827
AL HELOU A., PA563, PA2106, PA4058
AL MARJ E., PA2479, OA2921
ALABBADI G., PA4171
ALABDULHADI D., PA4171
ALABED S., PA462, PA464, PA470, PA1971
ALABI A., PA4100
ALACQUA M., PA1330
ALAGESAN S., PA2843
AL-AHMAD M., PA1330, PA2136, PA2727, PA4323
ALAHMARI M., PA2770
ALAJJURI M., PA1093
ALAMEERI A., PA3304
ALAMOUDI A., PA1886, PA2770
ALAMRI F., PA628
ALANAZI T., PA616
ALANDEJANI F., PA462, PA470
ALARCÓN CEDEÑO R., PA4011
ALARD S., OA2324
ALBACAR N., PA2792, PA4127
ALBANESE P., OA668
ALBANNA A., PA628
ALBAYA-MORENO A., PA3538
ALBAYRAK N., PA4275
ALBERA C., PA573
ALBERREET M., PA616
ALBERS G., PA579
ALBERT R., OA750
ALBERT BARBERÀ J., PA2686
ALBERTI M., PA1957, PA1958
ALBERTINI C., OA3125
ALBERTINI R., PA2578
ALBI S., OA4415
ALBICINI F., PA948, PA3851
ALBLAS H., PA1185
ALBOĞA D., PA2853, OA4420
ALBRECTSEN PAINE M., PA4021
ALBU G., PA556
ALBUJA HIDALGO A., PA4159
ALBUQUERQUE A., PA520, PA537, PA538, PA2375, PA2799, PA3850
ALBUQUERQUE LEAL A., PA1956
ALCADA J., PA1261
ALCAIDE-ALDEANO A., PA2666
ALCARAZ J., PA4101
ALCARAZ BARCELONA M., PA2691
ALCARAZ SERRANO V., PA334, PA4013
ALCARAZ-SERRANO V., PA3395
ALCARRAZ L., PA195
ALCAZAR NAVARRETE B., PA3180, PA3252
ALCÁZAR-NAVARRETE B., PA3919
ALCOBA S., PA3506
ALCOLEA S., OA144
ALCOLEA BATRES S., PA863
ALDABAYAN Y., PA624
ALDAG C., PA1136
ALDAKHIL A., PA624
ALDÀS I., PA2773, PA4245
ALDECO M., OA1620, PA3962
ALDHAHIR A., PA624, PA2770
ALDIK G., PA2712
ALDOBYANY A., PA628
ALDOMA A., OA4384
ALDRAIWIESH I., PA624, PA2770
ALDRIDGE R., OA763
ALEGRE SEGURA C., PA1674
ALEISSI S., PA630
ALEKSANDROWICZ K., PA865
ALEKSOVA M., PA3200
ALEMAO C., PA3168, PA3897
ALENCAR A., PA3222
ALESUTAN ., PA3465
ALEXANDER C., PA2712
ALEXANDER D., OA1400, PA2008
ALEXANDER M., PA1007
ALEXANDRE A., PA3427, OA3791
ALEXANDRE F., PA366, PA371, PA4197, PA4211
ALEXANDRINO DE SOUZA PINHEIRO M., PA1913
ALEXANDRU M., OA2306, PA3980
ALEXANDRU S., PA4093
ALEXANDRU S., PA1056
ALEXIOU C., PA1863, PA2043
ALEXIS N., OA1416
AL-FARES A., RCT716
ALFARO E., OA4392
ALFARO T., OA4437
ALFAYA I., PA4245
ALFAYA FIAÑO I., PA2423
ALFAYATE SÁNCHEZ J., PA3410
ALFERES DE LIMA D., PA1834, PA2610, PA4066
ALFFENAAR J., PA2630
ALFONSO-CRISTANCHO R., PA236, PA2416, PA2417, OA3679, PA3920, PA4186
ALGHAMDI H., PA616
ALGHAMDI R., PA2764
ALGHAMDI S., PA624, PA2770
ALGHISI F., PA3996
ALHAMDOOSH M., PA3432
AL-HAMEED F., RCT716
ALHARBI A., PA616
ALHARBI Z., PA2068
ALHARITHI Y., PA3901
ALHAZZANI W., PA557, RCT716
AL-HUDA F., PA3179, PA3956
ALI A., PA3594
ALI H., PA3904
ALI K., PA3305
ALI M., PA578, PA922
ALI M., PA2774
ALI M., PA2806
ALI N., PA2827
ALI N., OA2958, OA3753
ALI R., PA2023
ALI R., PA540
ALI S., PA4082
ALI S., PA1884
ALI AL-NESF M., PA2727
ALI GARCÍA I., PA3876
ALI KHAN M., PA505
ALIAGA PARERA J., PA366
ALIAS A., PA1773
ALIBERTI A., PA4279, PA4280
ALIBERTI S., PA2114, OA3747, OA3748, OA3753, OA3779, PA4238
ALICANDRO G., PA283
ALICANTE P., PA353
ALIMANI G., PA1707, PA1713
ALINE S., OA794
ALISCH D., PA3577
ALISON B., PA184
ALISON J., OA801, PA1802
ALIVERTI A., PA1253, OA1619
ALIYEVA G., PA426
ALIZADEH BAHMANI A., PA3268
AL-JAHDALI H., PA616
ALJAMA VIZCARRA C., PA3237
ALJBAWI W., OA1626
ALJEHANI M., PA2369
ALJISHI A., PA4171
ALKAN ÖNCEL A., PA154
ALKEWAIBEEN A., PA616
ALKHALIFAH A., PA616
ALKHANFAR D., PA1971
ALKHOSHAIBAN A., PA1298
ALKHOUZAIE M., PA2764
ALKURAYA F., PA2053
ALLAM V., PA3165
ALLAN R., PA1295
ALLANORE Y., OA1450, OA1453, PA1952
ALLEGRETTI M., PA2596
ALLEGRI C., PA553, PA554, PA2778
AL-LEHEBI R., PA1330, PA2136
ALLEN A., PA3166
ALLEN N., PA975
ALLEN N., PA248
ALLEN R., PA2794
ALLENBACH Y., OA2314, OA4443
ALLGAEUER S., PA2612
ALLICOCK O., OA4422
ALLINNE J., PA4268
ALLINSON J., PA1113
ALLISON B., PA4050
ALLOUCH A., PA871, PA2383, PA3362
ALLOUCHE A., PA162
ALLWOOD B., PA2420
ALMANSA R., PA4283
ALMARIO A., PA4200
ALMEAMAR H., OA4441
ALMEIDA C., OA746
ALMEIDA É., PA3380
ALMEIDA E., PA311
ALMEIDA F., OA2255, PA3222
ALMEIDA I., PA2754
ALMEIDA J., PA1918
ALMEIDA P., PA4082
ALMEIDA R., PA4214
ALMEIDA R., PA2737, PA3487, PA3503
ALMEIDA S., OA806, PA1036, OA3119, PA4207
ALMEIDA V., PA525, PA4228
ALMEIDA FONSECA J., PA2737, PA3487
ALMEIDA MONTEIRO R., PA2797, PA4282
ALMENDROS I., PA592, PA595, PA608, PA2052, PA3450, PA4101, PA4269, OA4390
ALMONACID SÁNCHEZ C., PA1346
ALMOND H., PA152
ALMONTE BATISTA W., PA2691
ALMQVIST C., OA2949, PA3268, PA3548
ALMQVIST G., OA9002
ALMUSA Z., PA4171
AL-NAJJAR H., PA2700
AL-NESF AL-MANSOURI M., PA3153
ALONSO A., OA3120
ALONSO T., PA1938
ALONSO FERNÁNDEZ A., PA1184
ALONSO LECUE P., PA466
ALONSO PÉREZ T., PA1705, PA2569
ALONSO TEJEDOR M., PA2140

ALOTAIBI N., PA2770
ALOUANE R., PA1856
ALOUI A., PA264
ALOULOU J., PA625
ALOULOU Y., PA620, PA2638, PA3936
ALPEREN C., PA355
ALQAHTANI A., PA624, PA2770
ALQAHTANI J., PA624, PA1712, PA2770
ALQURASHI E., PA628
ALQURASHI H., PA628
ALRABEEAH S., PA624, PA2770
ALRAIMI A., PA981, PA982, PA983, PA984, PA993
ALSAFADI H., PA2787
ALSAGGAF R., PA628
ALSAID A., PA2764
ALSAIF H., PA2053
AL-SAJEE D., PA933, PA935, OA2203
ALSAJI N., PA933, PA935, OA2203
ALSHAHRANI M., PA557, RCT716
ALSHARHAN M., PA2827
ALSHARIFI A., PA1240, PA2861
ALSHLOWI M., PA982, PA983, PA984, PA993
ALSINA RESTOY X., PA4019
ALSOMALI H., PA455, PA1808
ALSUBHEEN S., PA1034
ALTARAIHI S., PA240
ALTARELLI M., OA790, OA792
ALTAY O., PA1771
ALTENBURG J., PA381, OA3748
ALTER P., PA1669, PA4062
ALTHOBIANI M., PA3418
ALTHOBIANI M., PA1955
ALTIN S., PA1094, PA3224, OA3775
ALTINCATAL A., OA2950, OA3672
ALTINTAŞ D., PA282, PA2496
ALTRAJA A., PA942, PA1330, PA2136, PA4301, PA4323
ALTREE T., PA3600
ALTUBE L., PA1910
ALTUNBAŞ S., OA1628
ALTUNSOY S., PA964
ALTUNTAŞ N., PA1065
ALVARADO MIRANDA M., PA385
ALVAREZ M., PA2533
ALVAREZ S., PA2595
ALVAREZ T., PA2595
ÁLVAREZ ÁLVAREZ P., PA3518
ÁLVAREZ MARÍNEZ C., PA204
ALVAREZ MARTÍNEZ C., PA206, PA2105
ÁLVAREZ OROZCO I., PA3957
ALVAREZ-COCA J., PA286
ALVAREZ-NAPAGAO S., PA545
ÁLVAREZ-SALA WALTHER R., PA185, PA863, PA1674, PA2653
ALVARO R., PA4017
ALVES A., PA318
ALVES C., PA3586
ALVES L., OA2205
ALVES M., OA1449, OA1454
ALVES M., PA444, PA1969
ALVES DA SILVA P., PA468, PA1980
ALVES VALENTE M., PA2641
ALVES VAZ S., OA4431
ALVES-CORREIA M., PA2737, PA3487, PA3503
ALVES-MOREIRA L., PA3879
ALVING K., PA1679, PA2136
ALWAFI H., PA3217
ALYAMI H., PA3217
ALYAMI M., PA3217
ALYAMI R., PA3262
ALYAMI S., PA2660
ALYMBEKOVA A., PA2048
ALZAABI A., PA2026, PA2374
ALZATE GRANADOS J., PA2421
ALZINA X., PA4127
AMADDEO A., PA3986
AMADO J., PA3386
AMADO DIAGO C., PA1662
AMAN J., OA1438, PA2614
AMANI H., PA2098
AMANI K., PA205, PA4090
AMANI M., PA3954
AMARA B., PA3485
AMARA I., PA3298
AMARA M., PA3466
AMARAL A., OA3738
AMARAL R., PA1679, PA2136, PA2737, PA3487, PA3503
AMARAL CORGO A., PA3297
AMARAL IBIAPINA PARENTE A., PA1913
AMARASEKARA T., PA2422
AMARASINGHE G., PA3946
AMARO R., PA4013
AMARO-RODRÍGUEZ R., PA3395
AMAT F., PA3958
AMATA M., PA3851
AMATI F., PA2114, OA3753
AMATNGALIM G., PA2057, PA3556
AMATUCCI S., PA1160
AMBREEN A., PA1903
AMBROCIO-ORTIZ E., PA1275, PA1283, PA4285
AMBROISE J., PA4265
AMBROSE C., PA4313
AMBROSE C., OA2251, OA3676
AMBROSE C., OA3670, PA4312
AMBROSINO N., PA370
AMBROSINO P., PA361
AMENI K., PA203
AMERI P., PA461
AMIAD N., PA506
AMIN A., PA3274
AMIR GILANI S., PA161
AMIRA O., PA2098
AMIRALI A., PA505
AMMAN H., PA244
AMMAR J., PA168, PA1177, PA1851
AMMAR M., PA2623
AMMAR R., PA234, PA1703, PA1839, PA1993
AMMAR S., OA2191
AMMIT A., PA2073
AMMOUS A., PA2785
AMOR S., PA3308
AMORIM A., OA2327
AMORIM D., PA2428, PA4156
AMORIM S., PA971
AMORIM CORREA R., PA1966
AMOROSO M., PA553
AMPELAKIOTOU K., PA3528
AMPELIOTI S., PA1882, PA2389
AMPLEFORD E., PA876
AMPUERO LÓPEZ A., OA3121
AMRAN D., PA4162
AMSELEM S., OA4438
AMZOU S., PA2429, PA2430
ANA S., OA746
ANAGIOTOS A., OA2306, PA3980
ANAGNOSTOPOULOS A., PA4129
ANAGNOSTOPOULOS N., PA2038, PA2431
ANAGNOSTOPOULOU C., PA1869, PA2038, PA2519
ANAGNOSTOPOULOU P., PA293, PA1004, PA2056
ANANDAKUMAR A., PA4064
ANANDAVELU R., PA2403
ANANTH S., PA2103
ANANYEVA L., OA1450, PA1952
ANASTASIOU N., PA340, PA1139, OA1380, PA1921, PA2604, PA4014
ANCEL J., PA201
ANCOCHEA J., PA1648
ANCOCHEA J., PA1705, PA1938
ANCOCHEA BERMÚDEZ J., PA2569, PA4054
ANDERMATT R., PA1254
ANDERSEN C., OA1388
ANDERSEN E., PA1932
ANDERSEN H., PA880, PA1684, PA3189
ANDERSEN J., PA1333, PA3868
ANDERSEN L., PA2746
ANDERSEN M., OA2276
ANDERSEN R., PA4105
ANDERSEN T., PA1676
ANDERSEN Z., PA2484
ANDERSON D., PA3373
ANDERSON G., PA3408
ANDERSON G., PA922, PA1825
ANDERSON M., PA2020
ANDERSON N., OA1635
ANDERSON S., OA763
ANDERSSON C., PA2833
ANDERSSON H., PA1961
ANDERSSON L., PA1337
ANDERSSON M., PA940, PA1704
ANDERSSON MARFORIO S., PA3326
ANDIA ITURRATE J., PA1310
ANDRADA G., PA989
ANDRADE C., PA1017
ANDRADE L., PA1281
ANDRADE ALMEIDA P., PA4003
ANDRÉ E., PA2449
ANDRÉ N., PA415
ANDRE S., OA2324
ANDREAS S., PA490, PA491, OA753, PA1669
ANDREASSEN A., PA472
ANDREASSON J., OA1379, OA2267
ANDREASSON K., PA327
ANDREEN N., PA1838
ANDREI D., PA427
ANDREIEVA I., PA3602
ANDREINI R., PA2589
ANDREJAK C., PA3345
ANDREO GARCÍA F., OA767, PA2423, PA2708
ANDREONE S., PA2817
ANDREWS F., PA1908
ANDRIAMAHENINA N., PA1001
ANDRIAMBOLOLONA R., PA1001
ANDRIANARISOA A., PA1001
ANDRIANOV V., PA3615
ANDRIJEVIC A., PA1110
ANDRIJEVIC I., PA1110
ANDRINOPOULOU E., PA1671, PA2489
ANDRINOPOULOU E., OA2951
ANDRITSOU M., PA3926
ANDRONACHE L., PA4030
ANDRZEJEWSKA M., PA2498
ANELLI M., PA553, PA554, PA2778
ANENBERG S., PA2484
ANEVLAVIS S., OA785
ANG K., PA1086
ANG Y., PA1878
ANGELIDIS I., PA1827, PA1833, OA2966
ANGELINA QUERENCIAS A., PA921
ANGELINI E., PA975
ANGELUCCI S., OA2256
ANGERMAN B., PA1273
ANGINO A., PA2469
ANGRILL SELLÉS N., PA533, PA551, PA1071
ANGUERA DE FRANCISCO G., PA3298
ANISCENKO J., OA2200
ANKERST J., PA210, PA3895
ANKUDAVICIUS V., PA480
ANNAHEIM S., PA2090
ANNALS M., PA1228
ANNEKE T., PA184
ANNEMA J., PA496, OA766, PA2694, PA2714, PA3478, RCT4452
ANNEMA J., PA497
ANNEMA J., OA769, PA930
ANNESI MAESANO I., PA939
ANNESI-MAESANO I., PA2469, OA2959
ANNIBALI S., PA554
ANNUNZIATA A., PA2577
ANNUNZIATO F., PA4232
ANOKAR A., PA1726, PA2705
ANOOP C., PA223
AÑORBE E., PA1992
ANSARI K., OA3777
ANSARI M., PA1827
ANSARI M., PA598, PA599, OA662, OA668, PA1833, OA2966
ANTÃO J., PA318, PA1036, OA3119
ANTHRACOPOULOS M., PA1745, PA3507
ANTIKAINEN H., PA2476
ANTILA M., OA2950
ANTIN-OZERKIS D., PA1935
ANTIPKIN Y., PA1760
ANTIPPA P., OA2269
ANTOINE-PITTERSON P., PA563
ANTON G., OA4360
ANTONAKIS E., PA2613
ANTONAKOS G., PA1264, OA2317
ANTONANGELO L., PA2797, PA4065, PA4282
ANTONELLI INCALZI R., PA407, PA924, PA1213
ANTONIADI M., PA1758, PA3507
ANTONIADIS A., PA303, PA310
ANTONICELLI L., PA948, PA3216
ANTONIO M., PA403, PA2611
ANTONIOU K., PA2389, PA2393, PA2401, OA3774, PA4125
ANTONOGIANNAKI E., PA1917
ANTONOGIANNAKI E., OA4437
ANTON-PACHECO SANCHEZ J., OA4415
ANTONS J., OA3117

ANTUS B., PA193, PA2427, PA3236, PA3243
ANTUSOVA Z., PA3841
ANUJAN P., PA2065
ANUJAN, P., PA1298
ANWAR A., PA2712
ANWAR M., PA2771, PA2772, PA2776
ANYFANTI M., PA2697
AOGÁIN M., PA1113
AOGÁIN* M., OA2958
AOKI A., PA2632
AOUINA H., PA1090, PA1176, PA2575, PA3936
AOUN N., PA1143
AOUN Z., PA1143
AOUST L., PA452, PA2844
APARECIDA TEODORO ALCANTARA VERRI B., PA321, PA322
APOLLONATOS G., PA2431
APOLLONATOU V., PA2431
APOLLONATOU V., PA1840
APOSTOLOS B., PA184
APPENZELLER P., PA475, PA2680, PA2681, PA2689
APPERE DE VECCHI C., PA517
APPIAGYEI F., PA516
APREA I., PA2845
APRILE V., PA299
AQUILINI F., PA2454
ARA J., PA3409
ARABI Y., PA557
ARABI Y., RCT716
ARAI N., OA1394
ARAI T., OA1394
ARAI Y., PA2656
ARAL L., OA4416
ARANCIBIA C., PA1815
ARANCIBIA HERNANDEZ F., PA1255
ARANCON D., OA676
ARANGOITIA FERNANDEZ BACA M., PA1899
ARANZABAL ORGAZ L., PA527
ARATA V., PA885
ARATARI M., PA312
ARAÚJO D., PA2641
ARAÚJO BARROS COELHO D., OA3791
ARAVA S., PA2806, PA4069
ARAYA J., PA2790
ARAZ O., OA1605
ARBANE G., PA2029
ARBETTER D., PA4187
ARBIB F., PA3592
ARBILLAGA-ETXARRI A., PA334, OA2962
ARCARO G., PA536, PA543
ARCHER L., PA3520
ARCHONTOGEORGIS K., PA614
ARCIDIACONO D., PA268
ARCOVIO S., PA3598
ARDESI F., PA217, PA887
ARDISASMITA M., PA2740
ARDOIS S., OA4435
ARDURA-GARCIA C., PA1005, PA1006, PA1007
ARELLANO M., OA789
ARELLANO VENGOECHEA M., PA2434
ARENA R., PA3327, PA4219
ARENCIBIA A., PA2585
ARENTS E., PA326, OA3122
ARENY A., PA3527
ARENY BALAGUERÓ A., PA3570
ARENY-BALAGUERÓ A., OA3663, PA4266
ARESE Y., PA1258, PA1260
ARFAOUI H., PA2372, PA2439, PA3397, PA4260
ARGAUD L., PA1248, PA1249
ARGENTE DEL CASTILLO RODRÍGUEZ P., PA1184
ARGENTINA M., PA3176
ARGHIR O., PA427
ARGIRIADOU T., PA4025, OA4408
ARGOMANDKHAH H., PA2384
ARGULA R., OA2279
ARGYROPOULOU P., PA960
ARIANNA A., PA3844
ARIAS ARIAS E., PA2859
ARIENTI C., PA375
ARIGLIANI M., OA1445, PA1751
ARIKAN O., OA1627
ARIN A., OA2265
ARIS E., PA1891
ARISH N., PA506
ARISMENDI E., PA2134
ARISMENDI NUNEZ E., PA2125
ARITA M., PA164
ARITA M., PA1962
ARITI C., PA1330, PA3607
ARIYUREK M., PA154
ARIZONO S., PA3145
ARJOMANDI M., RCT712, PA932, PA1247
ARJONA PERIS M., PA478
ARKEMA E., PA3436
ARLING C., PA2387
ARMAGANIDIS A., PA1264, OA2317
ARMENDÁRIZ N., OA1630
ARMENGOT M., OA2306, PA3214, PA3980
ARMESTAR F., PA4074
ARMITAGE M., PA1163
ARMONI DOMANY K., PA1008
ARMSTRONG A., PA566
ARMSTRONG I., PA462
ARMSTRONG L., OA128, OA1403, PA3891
ARMSTRONG N., PA2584
ARNAL P., PA2860
ARNALICH FERNÁNDEZ F., PA863, PA1674
ARNALICH MONTIEL M., PA1674
ARNALICH MONTIEL V., PA863
ARNAUD B., PA184
ARNAUD C., OA4385
ARNAUDOV D., PA1872
ARNAUDOVA-DANEVSKA I., PA1872
ARNDAL E., PA3341
ARNDT H., PA360
ARNE E., PA184
ARNE LIAUG HOFF D., PA1137
ARNEDILLO MUÑOZ A., PA469, PA2095
ÄRNLÖV J., PA1701
ARNOLD D., PA1099
ARNOTT C., PA2022
ARNSPERGER A., PA3474
ARONDI S., PA2380
ARONNE L., PA872
AROOJ P., PA1141
ARPUTHAN ABISHEGANADEN J., OA3747, OA3750
ARREGUY NOGUEIRA L., PA1966
ARREZA J., PA419
ARRIETA NARVAEZ P., PA4159
ARRIGO E., PA893, PA895
ARROYO VARELA M., PA4250, PA4253, PA4258
ARRUDA L., PA1290
ARSÈNE S., PA4080
ARSHAD A., OA770
ARSLAN M., PA4201
ARSLAN Y., OA4361
ARTARAZ EREÑO A., OA4409
ARTAUD-MACARI E., PA1193
ARTEAGA A., PA3259
ARTEAGA-MARRERO N., PA1208
ARTIFONI M., PA2608
ARTIGAS A., PA3527, PA3570, OA3663, PA4266
ARTIGNAN B., PA2608
ARTIOLI S., PA1206
ARULSELVI S., PA4069
ARVIG M., OA2901
ARVJI A., PA3150
ARYAL B., PA1709
ARZT M., PA2846, PA2847, PA4296
ASAD R., OA3760
ASADA K., PA1902
ASADUZZAMAN M., PA232, PA2633
ASAMI M., PA4180
ASAMOAH-BOAHENG M., PA2117, PA2411
ASARI A., PA920
ASCANIUS JACOBSEN P., PA3922
ASCHENBRENNER F., PA4122
ASCIAK R., PA428
ASFUROGLU P., PA271, PA282, PA296, PA2496, PA2500, PA2505, PA2510, PA3244
ASGARI A., PA1129
ASGHAR S., OA2942
ASHARAM K., PA1003, PA3963
ASHEK A., PA2672
ASHFORD S., OA4364
ASHIHARA E., PA2067
ASHISH A., PA1162
ASHLEY S., PA2000
ASHRAF A., PA3544
ASHRAF S., PA3544
ASHRAFI R., PA1246
ASHTON R., PA4202
ASIF H., PA3544
ASIMAKOS A., PA362, PA2517, PA2522
ASLAN A., PA271, PA282, PA296, PA1756, PA2496, PA2500, PA2505, PA2510, OA4416
ASLANIS V., PA1932
ASMA K., PA203, PA205, PA4090
ASMA O., PA203, PA205, PA4090
ASMANIDOU M., PA958
ASO GONZÁLEZ S., PA2434
ASQUIER KHATI A., PA2608
ASRAT S., PA4268
ASSALY R., PA4234
ASSAYAG D., PA3415
ASSING K., PA2394, OA3677
ASSIS PIRES G., PA1956
ASSOU S., PA586, PA2060, PA3583
ASSOULINE J., PA1748, PA1749
ASTARA K., OA797
ASTLEY J., OA128, PA3891
ASTON P., PA192
ASTON V., PA160
ÅSTRAND A., PA3394
ASTRAND M., PA3201
ASTUA A., PA1256
ATA P., PA289
ATAG E., PA277, PA1756
ATAMNA A., PA3308
ATANASOVSKA A., PA1721
ATAOGLU O., PA3244
ATAS A., PA289
ATHANASIOU N., PA3528, PA4082
ATHANASIOU T., OA3763
ATHANASSIADI K., PA3539, OA3763
ATIA M., PA2784
ATIENZA-MATEO B., PA2789, PA2795, PA2808
ATMOWIHARDJO L., OA1438
ATOUI F., PA221
ATRIPALDI L., PA872
ATRIPALDI L., PA2804
ATTANASI M., PA3959
ATTANAYAKE P., PA3542, PA3543
ATTAWAR S., PA3302
ATTIA M., PA1257, PA1782, PA1792
ÄTTINGSBERG E., PA2658
ATWOOD M., PA3416
AUBERTIN G., PA517
AUBOURG F., OA2959
AUBREY N., PA1817
AUCKLAND K., PA4135
AUDEMARD A., OA4435
AUFFRAY C., OA141
AUGERINOU I., PA1854
AUGSTYNOWICZ-KOPEC E., PA2629
AUJAYEB A., PA441, PA552, OA785, PA1074, PA1075, PA1076, PA1077, PA1080, PA2643, PA2649, PA3368, PA4157
AUL R., PA874, PA3338
AUNG H., PA158
AUNG N., OA3743
AUNG Z., PA4162
AURÉLIE F., PA4118
AURORA P., OA1445, PA1751
AUSÍN P., PA164
AUSIN P., PA2133, PA3871
AUSIN HERRERO P., PA2126
AUTERI S., PA1957, PA1958
AUTILIO C., PA558
AVALIANI T., PA2620, PA2624
ÁVALOS PÉREZ-URRIA E., PA1705, PA2569, PA4054
AVANZI L., PA2066, PA4172
AVANZINI M., OA3659
AVARLIS P., PA2389
AVENARD G., OA2310
AVERBUCH D., PA1762, PA3967
AVERSA L., OA686, PA1286, OA3793, PA4265
AVIAN A., PA477, OA2276, PA4136
AVILA M., OA767
ÁVILA TERZI M., PA2708
ÁVILA-VALENCIA J., PA2528
AVILÉS F., PA3165
AVITAL S., PA382
AVNI B., PA3183
AVRAM C., PA1939
AVRAMOVSKA A., OA1455
AWAD M., PA2635
AWADH A., PA630
AWAN H., PA911
AWAN S., PA1884
AXELSON T., PA1767
AXELSSON M., OA3726, OA3727
AY P., PA277, PA966, PA968, PA972
AYACHI J., PA3383
AYACHI J., PA2777, PA2782, PA2783
AYADI A., PA314
AYDIN F., PA1896
AYEB J., PA266, PA3842
AYED A., PA4217

AYED K., PA1214, PA1856, PA4217
AYED S., PA2780, PA2781
AYED W., PA1067, PA1122
AYEDI H., PA2368
AYEDI H., PA2096
AYEDI Y., PA1257, PA3939
AYESH H., PA4234
AYHAN Y., PA277, PA289, PA1756
AYOZ S., PA2743
AYUBI D., PA2612
AYYAZ S., PA1169
AYZIT KILINÇ A., PA277, PA282, PA296, PA1756, PA2500
AZAGAMI S., PA1118
AZAM A., PA1081
AZAM I., PA1202
AZAP A., OA1627
AZAZA A., PA2782, PA2783
AZEVEDO A., PA3509
AZEVEDO H., PA3850
AZEVEDO I., PA2737
AZIM A., OA3674
AZOULAY E., PA1248, PA1249
AZOURI F., PA1143
AZTATZI-AGUILAR G., PA3526, PA4281
AZULAI H., PA1303
AZUMA A., OA1396

B

B. LAURSEN C., PA1087, OA2903
B. MATOS A., PA4160
B. SCHILLER H., PA3174
B. SORIANO J., PA1705
BAALBAKI N., PA2614
BAAMONDE VEIGA B., PA3297
BAAS F., PA1078
BABA R., PA3892
BABA T., PA1168
BABA DIKWA A., PA3893
BABA-DIKWA A., OA749
BABAOGLU E., OA3127
BABATSEVA-VAGENA I., PA1068
BABIK B., PA2759
BABLISHVILI N., PA2620, PA2624
BABU A., PA3452
BABU B., PA2499
BABU PS S., PA1877
BACCELLI A., PA2766
BACCI M., PA2595
BACCOLINI V., PA4005
BAČELIĆ GABELICA A., PA2710, PA4170
BACHAR N., PA910
BACHARIER L., RCT2164, OA2952, OA2955
BACHARIER L., OA2950
BACHER K., PA1012
BACHERT C., PA3197
BACHMANN A., OA2954
BACHOUCH I., PA1667, PA1928, PA2639
BACKER V., PA942, OA3745, PA3910, PA3951
BACKMAN H., PA244, PA937, PA940, PA942, PA953, PA1704, PA1708, PA1720, PA2446, OA3736
BACON A., PA3207
BADENES BONET D., PA1182, PA1715
BADER-MEUNIER B., PA452
BADESCH D., OA2273
BADHE Y., PA3233
BADI Y., PA3563
BADIA J., PA449
BADIGER R., PA4237
BADOLATO R., PA3986
BADOVINAC S., PA2710, PA4170
BADRI O., PA2096, PA2564
BAESS A., PA2755
BAEZA S., OA2262, PA3409
BAFADHEL M., RCT711, PA902, PA3607, PA3610, PA3625, PA3886
BAFNA S., PA979
BAGIROV A., PA945
BAGNASCO A., PA4017
BAGNERA C., PA3571, OA3659, PA4280
BAHAMMAM A., PA630
BAHARI JAVAN S., PA3618
BAHIA J., PA2592
BAHLOUL A., PA2089
BAHLOUL A., PA2848
BAHLOUL N., PA313, PA2735
BAHMER T., PA876, PA934, PA1015, OA2954, PA3948, OA4360
BAHRI G., PA1122
BAHRON A., PA879, PA1692, PA2542
BAI J., PA1262
BAI L., PA2409
BAIGES BADIA M., PA533, PA1071
BAIKOV A., PA2066
BAILEY B., PA1757
BAILEY E., PA2425
BAILEY S., PA1210
BAILLIEUL ., PA1315
BAILLIEUL S., PA2763, PA2860, PA3592
BAILLY S., PA1248, PA1249, PA1326, PA3592
BAIN A., PA3594
BAIN S., PA1097
BAINES K., PA578, PA891
BAIOCCHI P., PA4005
BAIRD J., OA1442
BAIRD L., PA274
BAJIYA V., PA338, PA4085
BAJPAI J., PA416, OA3777
BAK S., OA2316
BAKAIMI I., PA626
BAKAKOS P., PA894, PA947, PA2036, PA2389, PA4129
BAKAL I., PA3308
BAKALI M., PA4216
BAKAR A., PA1716
BAKAR ATEŞ F., PA3929
BAKEBE A., PA2635
BAKER C., PA1081
BAKER J., OA749, PA3893
BAKER J., PA3584
BAKER J., PA2058
BAKER J., OA3655
BAKER K., PA2043
BAKER M., PA3615
BAKHSHALIYEVA D., PA945
BAKHTI A., PA316
BAKIRI A., PA2038
BAKKE ., PA2809
BAKKE P., PA1089, PA3255, OA4373
BAKKE P., OA1411
BAKKER J., PA2004
BAKOS R., PA2576
BAL C., PA1683, PA3903
BAL N., PA289
BALABAN Z., PA2607
BALACHANDRA L., PA3897
BALACHANDRAN A., PA4239
BALAGNY P., PA1314
BALAGUER CARTAGENA M., PA3298
BALAMUGESH T., OA793, PA4091
BALANEȚCHI L., PA1267
BALASUBRAMANIAN N., PA470
BALASUBRAMANIAN V., PA2682
BALATA H., PA2700
BALBI B., PA369, OA1414, PA3873
BALBIN E., PA3405
BALBINO F., PA2732
BALBIR-GURMAN A., PA472
BALCAN B., PA336, PA618, PA619, PA2365, PA4305
BALCELLS E., OA2962
BALCELLS VILARNAU E., PA1182
BALCELLS VILARNAU E., PA1715
BALCHEN T., PA4174
BALCI Ş., PA3437
BALDACCI S., PA2468, PA2469, PA3216
BALDERACCHI A., PA4248
BALDI B., PA2799
BALDI F., PA461
BALDUYCK M., PA1278, PA1280, PA2431
BALDWIN M., PA1867
BALDWIN M., OA131, PA364, PA1228, PA2580
BALDWIN M M., PA2592
BALESTRO E., PA1164, PA1178, OA1457, PA1970, PA3372
BALL G., PA1261
BALL J., OA128, PA3891
BALL M., PA428
BALLARD E., PA1088
BALLAS E., PA626
BALLESTER LLOBELL B., OA3656
BALLESTER-LOPEZ C., OA2966
BALLESTEROS J., PA3538
BALLESTEROS BIZOSO M., PA1184
BALLHAUSEN S., OA4360
BALLÓK B., PA3522
BALLOUMI N., PA265, PA1667
BALMES J., PA932
BALOGH Á., OA3110
BALOSKI M., PA2111
BALS R., PA1669, PA2430, PA4062
BALSELLS-COSTA M., OA2912
BALSHAW R., PA581, PA591
BALTAXE E., PA2696
BALTAZAR V., PA2546
BALTAZAR CHÁVEZ V., PA2549, PA2551, PA2552
BALTAZAR-CHÁVEZ V., PA2544, PA2545, PA2547
BALTE P., PA248
BALZAN F., PA3519
BALZAN M., PA3620
BAMBERG E., PA4192
BAMBINA S., PA442
BAMHA H., PA3397
BAMONDE L., PA3960
BANAEI-KASHANI F., PA4263
BAÑAS CONEJERO D., PA1344, PA2124, PA2125, PA2134, PA2135
BAND M., RCT2883
BANDERA A., OA3779
BANDI S., PA4098
BANDINI E., PA537
BANDO M., PA1168
BANERJEE P., PA4183
BANFI P., PA2538
BANFI P., PA375
BANGSBORG J., PA2415
BANIASAD A., PA859
BANKA R., PA441, OA782, PA4095
BANKS V., OA747, PA2109
BANKS V., PA2118, PA2119, PA3619
BANSAL A., OA3679
BANSAL A., OA141
BANSAL S., PA1880
BANYA W., OA135, RCT4448
BANZA LUBABA C., PA1725
BANZA LUBABA NKULU C., PA1729
BAOQING S., PA1654
BAPTISTE H., OA4443
BAQUI A., PA1774
BARAC Y., PA3308
BARAKETI E., PA260, PA261, PA262, PA3241, PA3242
BARAL R., PA1086
BARALDO S., PA259, PA2814
BARANEK T., PA1829
BARANOWSKA-KUCZKO M., PA2690
BARANOWSKI R., PA302, OA765, OA768
BARANSKA I., PA2629, OA3790
BARANY N., OA1383
BARAT A., OA4379
BARATA F., PA1918
BARATA F., PA3382
BARATELLA E., OA2913
BARATTO C., PA1973
BÁRBARA C., PA1324, PA2461
BARBARESSOU Z., PA3926
BARBATO A., PA406, PA2814
BARBAZZA I., OA2258
BARBÉ F., PA195, PA545, OA1437, PA1846, OA2282, OA2284, OA2291, PA2802, PA4102, PA4283, OA4384, OA4388
BARBER C., PA223, OA1409
BARBER C., PA2437
BARBER D., PA1805, PA2736, PA2742
BARBER S., OA4374
BARBERÀ C., PA2802, PA4283
BARBERÀ J., PA2682
BARBERÀ J., PA3450
BARBERA J., PA449, OA2276, OA3120
BARBERO E., PA1203
BARBERO HERRANZ E., PA1346
BARBETA E., PA2798, PA3531
BARBETA SÁNCHEZ E., PA533, PA551, PA1071
BARBI E., PA3986
BARBICH T., PA1958
BARBIER V., OA804
BARBIERI M., PA399
BARBOSA K., PA3912
BARBOSA M., PA444, PA1969
BARBRO D., PA184
BARBUI T., PA553
BARCELLOS R., PA2375
BARCZI E., PA443, PA2652, PA3295
BARCZYK A., PA548, PA2664
BARDESSONO M., PA573
BARDI G., PA2589
BÅRDSEN T., PA1741
BARENDRECHT H., PA2536
BARFZADE E., PA4274
BARGAGLI E., OA1452, OA1456, OA2256, PA3299, PA3300, PA3371, OA3787, PA4116
BARGAJE M., PA1726, PA2027, PA3233
BARHOUM H., PA1303
BARIČEVIĆ D., PA2710, PA4170
BARILE S., OA748
BARINOW-WOJEWODZKI A., PA4259
BARJAKTAREVIC I.,

RCT712, OA1406, OA1416, PA2121
BARJAKTAREVIC I., PA911
BARKAN T., PA2651
BARKER D., PA891
BARKER P., PA2136, PA4323
BARKER R., PA1858, PA1859
BARLOW A., PA1144
BARNAŚ M., PA2664
BARNE M., PA2027
BARNES P., PA3584, PA3585
BARNES P., PA2058
BARNES P., OA3655
BARNES R., PA2534
BARNEY A., OA793
BARNIEH L., PA4037
BARONI AURÍLIO R., PA1913
BAROSO A., PA883, PA2436, PA2440
BARR R., PA248, PA975, PA2121
BARRADAS L., PA4156
BARRADELL A., PA363, PA4206
BARREIRO E., PA376, PA385, PA387
BARREIRO PORTELA E., PA3403
BARRELLA HARBOE Z., PA2415
BARRETO M., PA3957
BARRETO E SILVA PITTA D., PA272
BARRETT E., PA3179, PA3956
BARRETT M., PA973, PA1658, PA1659
BARRIA L., PA1061
BARRIA P., OA789
BARRIGA R., PA1652, PA2374
BARRIL S., PA1174
BARRIO HERRAIZ E., OA767, PA2708
BARROS-COELHO D., PA1960
BARROSO M., PA545
BARROSO FERREIRA D., PA3482
BARROS-POBLETE M., PA2529
BARRUECO-FERRERO M., PA2011
BARRUECO-OTERO E., PA2011
BARRY G., PA2043
BARSCH CORNACCHINI S., PA380
BAR-SHAI A., PA454, PA1132, PA2451, PA3339, PA3513
BARTA I., PA193, PA2427, PA3236, PA3243
BARTCZAK A., PA482, PA483
BARTEL S., PA2069
BARTEL T., PA2382
BARTELINK I., OA1438
BARTELINK I., PA2614
BARTEN G., OA753
BARTH S., PA3494
BARTHOLMAI B., PA2008
BARTHOLOMEW K., PA173
BARTLETT E., RCT2161
BARTLETT J., PA4164
BARTOLI G., PA4248
BARTOLONI A., PA442
BARTOL-SÁNCHEZ M., PA2011
BARTON A., PA2422, PA3363, PA4196
BARTON C., PA2019
BARUA I., PA472
BARUTÇU AKINCI B., PA1224
BARUTTA L., PA1258
BARZON V., PA4248
BAS IKIZOGLU N., PA277
BASARA L., PA3624
BAŞARAN A., PA282
BAŞARAN E., PA296, PA2496, PA2500
BASBINAR Y., PA1136
BASCUAS ARRIBAS M., PA286
BASHIR A., PA1261
BASILE E., PA1258
BASILLE D., PA1193
BASINA B., PA4049, PA4057
BASIRAT A., PA873, PA2606
BASSI T., OA1432, OA1433, OA1434, OA3108
BASSIL S., PA304
BASSLER K., PA2812
BASTOS H., PA3427
BASU K., OA2185
BASZA M., PA1033
BATADUWAARACHCHI V., PA223, PA2437
BATARILO HADAR M., PA3447
BATES S., PA3560
BATHE G., PA2559
BATIHAN G., PA2001, OA3759, OA3766
BATINI C., OA3737, PA4247
BATTA R., OA1397, PA3377
BATTAGLIA S., PA3216, PA3851
BATTAGLINI D., PA545, OA4406
BATTEN T., RCT2884
BATTIKH M., PA2458
BATTLE C., PA1260
BATUR A., OA3127
BATY F., PA1320, PA2090, PA3382
BAUER F., PA2090
BAUER M., PA2048
BAUER M., RCT2881
BAUER R., PA4183
BAUER S., PA3453
BAUER T., PA1925
BAUERSACHS J., PA1254
BAUGH A., PA248
BAULEO C., OA2272
BAUMAN G., PA997, OA1623
BAUMANN H., PA888
BAUMANN Y., PA976, OA1446
BAUMERT T., OA2944
BAUMLE M., OA1613
BAUNEGAARD HVIDBERG L., PA4021
BAUTISTA A., PA3456
BAUTISTA MORENO R., PA4250, PA4253, PA4258
BAX S., PA4241
BAXAN N., PA2672
BAXEVANOS G., PA4025, OA4408
BAXTER N., OA4374
BAXTER S., OA1606
BAY P., OA2314, OA4443
BAYA C., PA1311
BAYAHI L., PA3390, PA4052
BAYAT S., PA1235, OA3111
BAYAV S., PA3521
BAYDILI K., PA4201
BAYES H., PA3373
BAYLAROVA K., PA945
BAYLER R., OA3127
BAYLIS L., PA236, PA3920
BAYLY J., OA4364
BAYOU S., PA524
BAYOUDH A., PA3540
BAYRAM H., OA3775
BAYSAL E., PA1136
BAYSAL E., PA336
BAZAN-SOCHA S., OA1410
BAZHUNI POMBO SANT'ANNA M., PA1913
BAZZA A., PA868, PA1874
BAZZAN E., PA259, PA2814, OA3657
BEARDSMORE ., PA982
BEARDSMORE C., PA981, PA983, PA984, PA993
BEASLEY R., OA1412, PA3246
BEAUCHAMP M., PA373
BEAUDIN S., PA3900
BEAUFILS F., PA3992, PA3993, PA4000
BEAULÉ R., PA2385
BEAUMONT M., PA328
BEAUPERTHUY T., PA1180
BEAUPERTHUY LEVY T., PA3298, PA4287
BEBAROVA M., PA4319
BECEIRO M., PA1938
BECERRA M., OA756
BECERRA URIBE N., PA3957
BECH C., OA4427
BECH M., PA2838
BECH RASMUSSEN D., PA561, PA4203
BECHINI J., PA3409
BECHINI BERNARD J., OA767
BECHRIFA E., PA1067
BECK M., PA3205, PA3206
BECKER C., PA3874
BECKER M., PA2812
BECKER S., OA4417
BECKER T., OA2954
BECKER Y., PA2087
BECKER DA SILVA A., PA3509
BECKERMAN R., PA4037
BECKEROVA D., PA4319
BECKERS J., PA2787, PA3245
BECKERT H., OA665
BECKMAN K., PA3554
BEDAK O., PA2756
BÉDARD A., OA2302, PA3230
BEDAWI E., PA433, OA782
BEDAWI E., PA441, OA785
BEDI N., PA380
BEDIR DEMIRDAG T., PA1756, PA1759, PA1896
BEDNARCZUK N., PA3285
BEDNARCZYK A., OA9002
BEDNAREK J., PA1134, OA3783, PA4107
BEEBE S., PA2842
BEECH A., OA1417, PA3187, PA3893
BEECKMANS H., PA603, OA686, OA687, PA1030, PA1286, OA3793, PA4265
BEEH K., PA515
BEEKMAN J., PA2057, PA3556
BEEN BUCK S., PA3606
BEERS M., PA2081
BEERSAERTS A., OA804
BEGBEY A., PA1237
BEGIER E., PA2452, PA2462, PA4025, OA4408
BEGO T., PA2756
BÉGUERET H., OA2936
BEGUM S., PA199
BEHAN L., PA3977, PA3979
BEHERA A., PA3463
BEHR J., PA1936
BEHR J., PA593, PA598, PA599, OA668, PA1687, PA1934, PA2567, PA2787, PA4121
BEHRENDT L., PA3470
BEHRENS T., PA1736
BEHZADI A., PA859
BEIGELMAN A., RCT2164
BEINEMA T., PA2553
BEIRNE P., PA2659
BEJAOUI T., PA4052
BEJAR F., PA4071
BEK L., PA2447
BEK M., PA2456
BEKEN B., PA1756
BEKKEMA R., OA1609
BEKKER H., PA4206
BEKKER N., PA1276
BEKKER N., PA1282, PA3576
BEKKI A., PA1180, PA4287
BEL E., PA497, PA930, PA1338, PA2397, PA2402, PA3207, OA3679
BEL AIBA R., PA3568
BELAID L., PA221
BELAIDI E., OA4385
BELAK Z., PA2123, PA2128, PA2129
BELBAL R., PA3284
BELCHAMBER K., OA3778, OA4411
BELDA S., PA1183
BELENKO GENTET L., PA1640
BELFIELD G., PA610, PA1273
BELFOR K., PA3164
BELGACEMI R., PA590, PA2837
BELGE C., PA1020, PA1973
BELHADJ I., PA3966
BELHADJ N., PA4141
BELHOUEN H., PA1124
BELKARTY B., OA3752
BELKHIR D., PA1054, PA3342, PA3343
BELL C., OA3802
BELL H., PA1934
BELL J., OA2919
BELL J., PA2026, PA3246
BELL J., OA2964
BELL P., OA3128
BELL S., PA2616
BELLA S., PA3996
BELLAMY S., PA1914
BELLANI S., OA1457
BELLEY-CÔTÉ E., PA557, RCT716
BELLIDO HERNÁNDEZ L., PA4256
BELLIL Y., PA1105
BELLO D., OA2958
BELLO S., PA348, PA4067, PA4068, PA4078
BELLO DRONDA S., OA3776
BELLOCCHIA M., PA573
BELLOU E., PA340, PA1849, PA2604, PA4014
BELLOU E., PA401, PA1998
BELLOU V., PA3905
BELLOUMI N., PA1067, PA1122, PA1124, PA1928
BELLOUMI N., PA2639
BELLU S., PA3975
BELLUSCI S., PA590
BELMANS F., OA1402
BELMONTE I., PA1278
BELO RAVARA S., PA961, PA971
BELOUKAS A., PA1707, PA1713
BELOUSOVA N., OA685, PA1028, PA3307
BELOZERTSEVA C., OA2904
BELPERIO J., OA1406, PA2599
BELTON L., PA229, PA912, OA1412
BELVISI M., PA1273
BEN L., PA4268
BEN AMARA K., PA1785
BEN ABDELGHAFFAR H., PA1105
BEN ABDELGHAFFAR H., PA620, PA2638
BEN AFIA L., PA1724, PA2713
BEN ALI M., PA342, PA343, PA3590, PA4293
BEN AMAR J., PA1176, PA3936
BEN AMAR J., PA1090,

PA2575
BEN AMARA K., PA1778, PA1779, PA1793, PA2626
BEN AMI R., PA1303
BEN ARAB E., PA3966
BEN ATTIG Y., PA1090, PA1778, PA1779
BEN ATTIG Y., PA3936
BEN AYED A., PA1780
BEN AYED A., PA301, PA1102, PA1922, OA2191
BEN BRAIEK D., PA2777, PA2782, PA2783
BEN CHETRIT E., PA1303
BEN DHIA I., PA1214, PA4217
BEN FARHAR L., PA390
BEN FARHAT L., PA2007
BEN HLIMA G., PA1922
BEN ISMAIL K., PA1057, PA3540
BEN JAZIA R., PA2777, PA2782, PA2783
BEN JEMAA A., PA260, PA261, PA262, PA1732, PA3241, PA3242
BEN JEMAA A., PA2458
BEN JEMAA S., PA3510
BEN JEMIA E., PA1176, PA1778, PA1779, PA2575, PA3936
BEN JMEAA S., PA226
BEN KHAMSA JAMELEDDINE S., OA126, PA4002
BEN KHELIL J., PA2780, PA2781
BEN KRAYEN I., PA1853, PA2605
BEN LAZREG N., OA126, PA4002
BEN MANSOUR A., PA1909, PA1912, PA2101
BEN MANSOUR S., PA2782, PA2783
BEN MESSAOUD R., PA1315
BEN MOUSSA O., PA1177
BEN RADHIA B., PA1787
BEN REJEB B., PA3842
BEN REJEB B., PA1996
BEN SAAD H., PA530
BEN SAAD S., PA1909, PA1912, PA2101
BEN SAID H., PA265
BEN SALAH I., PA2735
BEN SALAH N., PA390, PA1054, OA1604, PA2007, PA3342, PA3385
BEN SALEM A., PA1996, PA2623, PA3842
BEN SASSI S., PA871, PA2096, PA3390
BEN SLIMENE N., PA1057, PA3540
BEN TAHER S., PA2094
BEN TALEB C., PA1996
BEN ZVI H., PA2651
BENAKIS G., PA303, PA310
BENALI R., PA221
BEN-AMI S., PA454
BENAMORE R., PA441, PA3433
BENATTIA A., OA4439
BENAVIDES CÓRDOBA V., PA2528, PA2529, PA2532
BENAZZO A., PA3571
BENBRAHIM F., PA3269, PA3271
BENBRAIEK D., PA3383
BENCE N., PA574
BENCHEKROUN S., PA3269
BENCHETRIT S., PA1131, PA3339, PA3370
BENCHIMOL L., PA1824
BENDIEN S., PA2402
BENDSTRUP E., PA2732
BENDSTRUP E., PA457, OA691, PA1101, PA1149, PA1153, PA1706, PA1945, PA2080, PA2667, PA3335, PA3431, PA3441, PA4124, OA4437
BENEDETTI P., PA487, PA1663
BENEDETTI P., PA2031, PA3152
BENEDETTO I., PA3509
BENEDETTO U., PA1789
BENEDIKTSDOTTIR B., PA956, PA3221
BENEGAS M., PA449
BENESCH M., PA963, PA3941
BENESOVA K., PA3845
BENESOVA K., PA3841
BENESTAD M., PA1741
BENET J., PA1926
BENFANTE A., PA3851
BENGTSSON C., PA3593
BENGTSSON T., OA1397, OA1412, PA3377
BENHALIMA B., PA3147
BENINI F., PA2430
BENÍTEZ I., PA1846, PA2802, PA4283
BENITEZ I., OA2282, OA4384, OA4388
BENÍTEZ FELIPONI Á., PA3356, PA4009, OA4428
BENITO A., PA187
BENJAFIELD A., PA973, PA1326, PA2846
BENJAMIN N., PA471, PA474, PA1976, PA2677
BENJAZIA R., PA3383
BENJELLOUN M., PA3485
BENJELLOUNE H., PA1108, PA2617, PA3480
BENJEMIA E., PA1090
BENNETT A., PA2674
BENNETT D., PA3299, PA3300
BENNETT J., PA171, PA176
BENNETT J., PA275, PA279, PA281
BENNETT M., OA3109
BENOIT A., PA2744
BENOIT E., PA4232
BENOIT K., PA2594
BENOIT L., PA3350
BENSALAH N., PA3343
BENSENOR I., PA3222
BENSON V., PA2416, PA2417
BENTHAMI KBIBI M., PA1021
BENTO L., PA544
BENVENISTE O., OA4443
BENZ E., OA4378
BENZA R., PA473
BENZARTI A., PA2458
BENZARTI A., PA260, PA261, PA262, PA1732, PA3241, PA3242
BENZARTI W., PA264, PA530
BERAN A., PA4234
BERARDI G., PA4104
BERASTEGUI C., OA689
BERASTEGUI GARCÍA C., PA478
BERCE V., PA3548
BERECIARTUA A., PA1992
BEREDIMAS N., PA3502
BERENTSCHOT J., PA2447
BERENTSCHOT J., PA2456
BERETTA M., PA553
BEREZHINSKIY H., PA3571
BERG R., PA3341
BERG R., PA4221
BERGA MONTANER F., PA1184
BERGAMASCHI F., PA2508
BERGANTINI L., OA2256, PA3299, PA3300, PA3371, OA3787, PA4116
BERGÉ A., PA2479, OA2921
BERGE M., PA2069
BERGER D., PA1006
BERGER D., PA1005
BERGER I., PA1230, PA2582
BERGER J., OA4429
BERGER M., OA2284, OA2287, PA3601
BERGER M., PA518
BERGER P., OA2936, PA3955, PA3992, PA3993, PA4000
BERGER T., PA3902
BERGERON A., PA3345
BERGHMANS N., PA2811
BERGMANN K., PA936
BERGMANN M., PA441
BERGONZI M., PA868, PA1874
BERGOT E., PA402, PA1989
BERGQUIST J., PA1218
BERGSTRÖM A., PA1754, OA2946, PA3231
BERGUM N., PA3949
BERGWIK J., PA2831, PA2833
BERILLO E., PA442, PA4232
BERKMAN N., PA1127, PA3183
BERKUN Y., PA1766
BERLAIMONT V., PA1891, PA3199
BERLENDIS M., PA2380
BERLIER C., PA2681, PA2689
BERLOWITZ D., OA2911, OA2914
BERMEJO J., PA545
BERMEJO-MARTÍN J., PA2802, PA4283
BERMUDEZ E., OA3133
BERMUDEZ J., OA4438
BERMUDEZ BARON N., PA1704
BERMUDO G., PA1147, PA2585
BERMUDO-PELOCHE G., PA2666
BERNABE BARRIOS M., PA4159
BERNADY A., PA3944
BERNAL PRADOS F., OA4425, OA4432
BERNAL SOBRINO J., PA204, PA206, PA2105
BERNARD A., PA2030, PA2763
BERNARD S., PA3620
BERNARDI E., PA1258
BERNARDINELLO N., PA1164, PA1178, PA1970, PA3372
BERNARDINO V., OA1453
BERNARDO J., OA3765
BERNASCONI E., PA1940, OA3794
BERNEY S., PA2767
BERNHARDSEN G., PA2760
BERNHOFF C., PA4191
BERNITZKY D., PA1140, PA3347
BERNSTEIN E., PA2662
BERRAR TORRE I., PA881
BERRESHEIM H., PA1736, PA1737
BERRET E., OA3679
BERRIET A., PA328
BERRY A., PA3488
BERRY M., PA2767
BERSHADENKO Y., PA4049
BERTACCHINI L., OA4359
BERTAGNA DE MARCHI L., PA536
BERTEAUD E., PA3944
BERTELSEN R., PA3906
BERTELSEN R., OA1415, PA3221
BERTHON B., PA578, PA918
BERTI E., PA524
BERTIN S., PA1164
BERTINETTI C., PA1304
BERTINI M., PA1092
BERTOLACCINI L., PA307, PA481, PA1258, PA1260, PA2472, OA3764
BERTOLAZZI C., PA458, PA1951
BERTOLETTI L., OA3129, OA3130, PA3461
BERTOLI M., PA2116, PA2120
BERTOLINI F., PA883, PA893, PA895, OA1414, PA3873
BERTON D., PA3509, PA4222
BERTON D., PA4224, PA4229
BERTON D., PA3519
BERTONI A., PA975
BERTONI A., PA248
BERTUCCIO F., PA1953, PA4280
BERTULIS J., RCT2887
BERTZOUANIS A., PA1745
BESBES M., PA2780, PA2781
BESHAYREH M., PA628
BESLI G., PA1756
BESMA D., PA1907
BESSMA D., PA424, PA534, PA4300
BESTRY I., OA3790
BET P., OA1438
BET P., PA2614
BETANCOURT-PEÑA J., PA2528
BETKA S., OA794, PA3506
BETTA M., OA2284
BETTANY M., PA4023
BETTEX D., PA3455
BETTINSON H., PA2706
BETTY F., PA184
BEURNIER A., PA524, PA1989, OA2274, OA2280
BEUSCHLEIN F., OA2918
BEUTHER D., PA218
BEX V., PA3250
BEYDON N., PA517, PA1748, PA1749, PA1750
BEYENE T., OA2963, PA3946
BEYNON R., OA2187
BEZERRA S., OA2255
BEZZA E., PA524
BEZZEGHOUD S., PA3461
BEZZI M., OA772, OA2906
BHAGWAT S., PA3615
BHAKARE M., PA3363
BHALANI N., PA3377
BHALERAO A., PA1722
BHALLA A., PA1296, PA3173, OA3673
BHALLA A., PA2806
BHAMANI A., OA676
BHANDARI S., PA4237
BHARTI R., PA3568
BHARTIA B., OA2264, PA2659
BHAT R., PA3285
BHATNAGAR R., OA785, PA1087, OA2903
BHATRAJU N., PA3170, PA3413
BHATT J., PA1010
BHATT N., PA429
BHATT S., PA911
BHATTACHARJEE M., PA2598
BHATTACHARYA S., OA669
BHATTACHARYYA B., PA2598
BHATTARAI P., PA2793, PA3549

BHAVRA K., PA986
BHAVSAR P., PA2565, PA2819, PA3563, PA3564
BHAVSAR P., PA2066, RCT2882, PA4172
BHINGARDEVE R., PA2627, PA3533
BHONGIR R., PA2831, PA2833
BHUSAL S., PA3218
BHUTANI M., PA1330, OA4377
BIADENE G., PA442
BIAŁAS A., PA2664
BIAŁEK-GOSK K., PA907
BIANCARDI A., OA128, OA1403, PA3891
BIANCHI F., PA1345
BIANCHI L., PA375
BIANCHI L., OA137
BIANCHI P., PA1261
BIANCO A., PA872
BIANCO I., PA554
BIARDEL S., PA3583
BIASIOLI M., PA268
BIAZ Z., PA3485
BIBAKI E., PA2393, PA2401, OA3774
BIBBY A., PA429, PA2650
BIBBY A., OA787
BICA M., PA2597
BIDDISCOMBE M., PA2407
BIDDISCOMBEE M., PA4314
BIEBACH L., PA2845, PA3404
BIEDERER J., PA3888
BIEKSIENE K., PA882, PA2397, PA3207, OA3679
BIELOSLUDTSEVA K., PA1226
BIELOSLUDTSEVA K., PA3836
BIELOSLUDTSEVA K., PA347, PA351, PA510, PA866, PA867, PA870, PA1837, PA1977, PA3378, PA3469, PA4070, OA4412
BIELSA S., OA785
BIERI O., OA1623
BIERING SØRENSEN T., PA3839
BIERING-SØRENSEN T., PA1083, PA1695, PA2415, OA2901, PA3182
BIERTZ F., PA4062
BIESMA D., PA3448
BIFFI A., PA283
BIGNAMI F., PA3166
BIGOT A., OA4435
BIJ DE VAATE E., PA2581
BIJELIĆ D., PA418
BIJNENS E., PA1842, OA3799
BIKDELI B., PA1179
BIKMALLA S., PA1085
BIKOV A., PA3879, PA4050, PA4299
BILAL H., PA1204
BILENKO N., PA1132, PA2451
BILIANCIA R., RCT4448
BILJANA Z., PA184
BILKEI-GORZO O., PA3567
BILLAN M., PA1127
BILLOIR E., OA4385
BILYUKOV R., PA4292
BINAY S., OA2310
BINDRABAN S., PA2583
BINGLE C., PA1298, PA2064, PA2065, PA2068
BINGLE L., PA1298, PA2064, PA2065, PA2068
BINGÖL ., PA2500
BINGÖL A., PA282, PA296, PA2496
BINI F., PA1172
BINI L., OA2256
BINKOVA E., OA790, OA792
BINNIAN I., RCT711
BINNIE W., PA3423
BINTALIB H., PA3435
BIONDARO S., PA3195
BIRADAR M., PA4158
BIRAY-AVCI C., PA2049
BIRCAN E., PA1699
BIRCH H., PA200, OA3802
BIRCH R., PA4194
BIRCHARD D., PA4268
BIRNHUBER A., PA4136
BIRONZO M., PA1258
BIRRELL M., PA4310
BIRRING S., PA905
BIRRING S., PA179, PA1151
BIRRING S., PA173, PA177, PA178
BISCAY P., OA4435
BISCHETTI G., OA1619
BISGAARD ., OA141
BISGAARD H., OA143, OA145, OA148, PA992, PA1755, OA2189, OA2190
BISHOP J., OA801, PA1802
BISLIMOVSKA D., PA1721
BISPO N., PA3219
BITOS K., PA2048
BITTER H., PA472
BIVOLARSKA A., PA3572
BIZA R., PA553, PA554, PA2778
BIZYMI N., PA2393, PA2401
BIZYMI N., OA3774
BIZZOTTO D., OA3110, PA3186
BJARNSHOLT T., PA1111, PA4174
BJELAKOVIC M., PA1852, PA3376
BJERG A., PA940, PA950
BJERMER L., PA210, PA576, PA3582, PA3895
BJERRUM A., PA880, PA3189
BJERRUM A., PA1684, PA2394, OA3677
BJÖRK E., PA2020
BJÖRKANDER S., PA2815, OA2946
BJØRKEKJÆR H., PA472
BJÖRKLUND L., PA2751
BJORKLUND S., PA1287
BJÖRKMAN K., PA288
BJÖRNSSON M., PA2535
BLAAUWENDRAAD S., PA3959
BLACKHAM H., PA1768
BLACKWELL D., PA4192
BLAGEV D., PA160
BLAIKLEY J., PA1939
BLAIS E., PA2747
BLAIS-LECOURS P., PA3530
BLAISS M., PA2390
BLANC F., PA2608
BLANC F., PA3301
BLANCH L., OA3663, PA4266
BLANCHARD A., PA2488
BLANCHARD E., PA3345
BLANCHARD M., OA2284, OA2288
BLANCHET-LEGENS A., PA957
BLANCHON S., PA1013
BLANCO I., OA2276, PA2686, OA3120, PA3450, PA4019
BLANCO R., PA2789, PA2808
BLANCO-ALMAZÁN D., PA2047
BLANCO-APARICIO M., PA1648
BLANCO-APARICIO M., PA1686, PA2124, PA2125
BLANK N., PA474, PA1976
BLANKE O., PA3506
BLANKESTIJN J., PA3256
BLANTER M., PA2811
BLASI F., OA3747, OA3748, OA3753, OA3779, PA4238
BŁASIŃSKA K., PA1079
BLASKOVIC S., PA2056
BLAVIA I., OA1630
BLAVIA ALOY R., PA1147
BLAYAC M., OA2921
BLEECKER E., PA876, OA1416, PA2121
BLEECKER E., PA911
BLESSING A., PA1140
BLIBECH H., PA390, PA1054, OA1604, PA3342, PA3343
BLISTEIN F., OA1402
BLIZOU M., PA947
BLOCH K., PA2688
BLOCH K., PA2048, PA2689, PA2749, PA2750
BLOCH K., OA1440, PA2680
BLOCH K., PA360, PA2681
BLOK S., OA2313
BLOMBERG A., PA244, PA3436, OA3736, PA3923, PA4297
BLOMBERG B., PA944
BLONDEEL A., PA326, OA804, OA805, PA1038, PA1039
BLOX W., PA1078
BLUEMKE D., PA975
BLUM T., PA1925
BLUMER S., PA1175
BLURO I., PA2674
BLYTH K., OA779
BLYTH K., OA787
BLYTH T., PA3968
BLYTHIN A., PA2728
BOADA M., OA4436
BOARINO S., PA4187
BOBI J., OA4406
BOBOLEA I., PA2133
BOBOLI H., PA290
BOCCHINO M., PA353, PA1173, PA2804, PA3844
BOCHENEK G., OA1410
BOCK A., PA2415
BOCK A., OA2901
BOCOUM A., PA3592
BOCQUET L., PA359
BOCZKOWSKI J., PA590, OA663, PA2072, PA2837
BODA B., PA1304
BODDAERT G., OA3762
BODDULURI S., PA911
BODE C., PA1254
BODE H., PA448
BODEMER C., PA452
BODÉN E., OA1379, OA2267
BODINI B., PA1172
BODNAROVA S., PA550
BODTGER U., PA327, OA785, PA1087, OA2903, PA3582, PA4203
BODUROGLU K., PA2853
BOECK L., PA2616
BOEDIJONO F., PA4262
BOEHM P., PA4149
BOEKHOFF C., PA1942
BOEL J., PA2415
BOER J., PA1754
BOERS E., PA973, PA1658, PA1659
BOERS L., OA2313
BOERSMA A., OA785
BOESCH M., PA2090, PA3382
BOFFITO M., RCT2882
BOGAARD H., OA1438, PA1983, OA2313, PA2614
BÖGER R., PA2063
BOGHANIM T., OA664
BOGOEVSKA V., PA2412, PA3618, PA3865
BOGOMOLOV A., PA235
BOGOS K., OA1383
BOGOT N., PA1303
BOGUSŁAWSKI S., PA3294
BØGVALD AARLI B., PA942
BOHACS A., PA443, PA2652, PA3295, PA3429
BOHADANA A., PA506
BÖHM P., PA4136
BOHRA A., PA3377
BOIKO O., PA4048
BOISIER D., PA2558
BOISSEAU C., PA1817
BOISSEL J., PA4080
BOISSOS A., PA942
BOJANG F., OA676
BOJANIC S., OA2263
BOJANOWICZ W., PA1033
BOKAN D., OA2263, PA4008
BOKERN M., PA891
BOLAND A., PA2659
BOLAÑOS-MORALES F., PA3843
BOLDOGH I., PA2833
BOLLMANN A., OA2312
BOLTON C., PA875, PA1860, OA4367
BOLTON C., PA2483
BOMBIERI C., PA243
BONAGURO L., PA2812
BONAITI S., PA1205
BONATO M., PA259, PA2814
BONATTI M., PA2796, PA2836, PA3160
BONCI E., PA1763
BONCI F., PA2450
BONCOEUR E., PA606
BONCOEUR E., PA4130
BOND-ALLISTON A., PA570
BONDARKOVA A., PA2107, OA2321
BONDUE B., PA4275, RCT4451
BONELLA F., OA1393
BONELLA F., PA176, PA1149, OA1456, PA1935, OA4437
BONETTI L., PA3969
BONETTI S., PA554, PA2778
BONHIVER R., PA290, OA1413, PA1824
BONIELLO E., PA159, PA4284
BONILLA ARJONA J., PA4043
BONILLA HERNÁN G., PA2653
BONITO J., PA961
BONNAL C., PA3301
BONNÉ R., PA3991
BONNECHÈRE B., PA1227
BONNEFOY V., PA3345
BØNNELYKKE K., OA141, OA143, OA145, OA148, PA992, PA1755, OA2189, PA3234
BONNESEN B., PA1647, PA1695
BONNET D., OA2278
BONNET M., PA4160
BONNEVIE T., PA359, PA559, PA1870
BONNIAUD P., PA1335
BONNIN M., PA1183
BONNIN VILAPLANA M., PA414, PA1059
BONNINGTON J., OA4367
BONO A., PA1260
BONO F., OA784
BONO R., PA948, PA3216
BONOMI B., PA3281, PA3282
BONOWITZ P., OA665
BÖNSCH M., PA623

BONSIGNORE M., PA4290
BONSIGNORE M., PA4289
BONSIGNORE M., PA4324
BONSIGNORE M., OA2312
BONSU K., PA2117, PA2411
BONT L., OA4422
BONTA P., PA496, OA766, PA2694
BONTA P., PA497
BONTA P., PA498, OA769, PA930
BONTEN M., OA3796
BONTINCK A., OA2199
BONTKES H., OA2313
BONUCCELLI C., PA173, PA177, PA178
BOOMER J., RCT2164
BOON E., PA381
BOON M., PA603, OA2306, PA2811, PA3980
BOON LOW T., OA3747, OA3750
BOONJINDASUP W., PA1752, OA4421
BOOR P., PA4277
BORADE S., PA3363
BORAS Z., PA2586
BORASO M., PA283
BORBJERG LAURSEN C., PA1101
BORCEA C., PA612
BORDAG N., PA574
BORDALLO VÁZQUEZ P., PA2717
BORDAS MARTINEZ J., PA1147, PA2585, PA3597
BORDE A., PA4310
BOREKCI S., PA3994
BORELAND S., OA3752
BORELL L., PA3554
BORG M., PA4105
BORGES J., OA3765
BORGES P., PA2527
BORGHI-SILVA A., PA323, PA1040, PA3327
BORGHUIS T., PA3576
BORGIA G., PA3495
BORGMANN M., PA3364
BORIE R., OA1393
BORIE R., PA4120, OA4435, OA4437, OA4438, OA4443
BORISOVA E., PA857, PA2056
BORJA VARGAS N., OA690, PA1016
BOROBIA FERNÁNDEZ A., PA863
BOROBIA PÉREZ A., PA1674
BOROBIA-IRACHE E., PA384
BORODIY K., PA3449
BOROS A., PA2541
BOROS P., PA532, PA2541, PA3838
BORRES M., PA990, PA991
BORRILL H., PA2373, PA2376
BORRUSO A., OA1622
BORTEY E., OA1395
BORTOLOTTO C., PA1205, PA2636, OA3761
BORUCKI T., PA2413
BORZANI I., OA1619
BORZIKOWSKY C., OA4360
BOS D., OA688
BOS I., PA3164
BOS L., OA1438, PA3527
BOS L., OA2313
BOS S., PA1023
BOSACOMA A., PA3450
BOSARI S., OA3779
BOSCARO F., PA3166
BOSCH DE BASEA M., PA1835, OA2962
BOSE S., PA2598
BOSHKOVSKA K., PA1872, PA3973
BÖSING M., PA344
BOSISIO D., OA2258
BOSKABADY M., PA2419, PA3163, PA4311
BOSNIC-ANTICEVICH S., PA2136, PA3613
BOSSIOS A., PA380, PA2397, PA3182, PA3207
BOSSONE E., PA471
BOSTANOGLU KARACIN A., PA2731, PA2743
BOTNARU V., PA3389
BOTOSCH K., PA2593
BOTSKARIOVA S., PA3267
BOTTIER M., PA1823, OA3748
BOTTONE D., OA2906
BOTVINIKOVA L., PA3481
BOTVINIKOVA L., PA1226, PA3836
BOUACIDA ., PA316
BOUACIDA I., PA314, PA1783, PA1784, PA1786, PA1794, PA2631
BOUASSIDA I., PA317, PA1790
BOUATTOUR N., PA625
BOUAZIZ J., OA4435
BOUAZZA N., PA3955
BOUBAKER F., PA1996
BOUBAKER N., PA155, PA314, PA354, PA1784, PA1788, PA1851
BOUBAYA M., OA3786
BOUCHAREB S., PA266, PA1996, PA2623, PA3842
BOUCHECH R., PA1244
BOUCHET C., PA4142
BOUCLY A., PA1989, OA2280, PA3461
BOUDAWAR N., PA2623
BOUDAWARA N., PA1996, PA3842
BOUDAWWARA N., PA266
BOUDAYA M., PA1090
BOUDAYA M., PA1778, PA1779, PA3936
BOUDEWIJN I., PA3562
BOUDEWIJN I., PA3546
BOUDEWYNS A., PA278
BOUDJELLEL C., PA3282
BOUGACHA M., PA162
BOUGACHA M., PA3390, PA3392, PA4052
BOUGARD N., PA2392
BOUGUERRA K., PA1667
BOUGUERRA K., PA2639
BOUHOULA M., PA264
BOUJIBAR F., PA1870
BOUJNAH S., PA2623, PA3842
BOUJNEH S., PA266
BOULAY M., PA2385
BOULD E., PA3287
BOULET L., PA182, PA899, PA900, PA2385, PA3583
BOULOUKAKI I., PA572, PA3588, PA4291
BOULOUKAKI I., PA614
BOUMPAS D., PA1840
BOUNOUA F., PA398, PA3238, PA3950
BOURBEAU J., PA1035, PA3136, PA3146
BOURDAIS C., PA586, PA2060
BOURDET D., PA2599
BOURDIN A., PA586, PA914, PA1332, PA1338, PA1989, PA2060, PA2136, PA2393, PA2397, PA2480, OA3679, PA4118, PA4313, PA4323
BOUREAU A., PA2608
BOURKE A., PA1808
BOURKE S., PA208, PA1643
BOURKE S., PA1965, PA2794
BOURNE C., PA363
BOUROS D., PA2431, PA2655, PA4129
BOUSEMA J., RCT4452
BOUSEMA T., PA4083
BOUSQUET J., PA941, PA2727, PA3153
BOUSQUET J., OA2916
BOUSSETTA K., PA3966
BOUSSOFFARA L., PA266, PA1996, PA2623, PA3842
BOUTLAS S., OA797, PA1192
BOUTOU A., PA626
BOUTOUYRIE P., PA3592
BOUTRON-RUAULT M., PA3230
BOUVA M., PA295
BOUVART L., PA1817
BOUVRY D., OA3786, OA4438
BOUYON S., OA4383
BOUZAIDI K., PA342, PA343
BOVE D., OA4427
BOVEN J., PA515
BOVO M., PA3372
BOWATTE G., PA1699
BOWE I., PA1808
BOWEN K., OA9002
BOWEN T., PA4249
BOWERMAN C., PA2485, PA4004
BOWERMAN K., PA3168
BOWLER R., PA1247, PA4252, PA4263
BOWLER R., PA911, PA2121
BOWYER K., OA4365
BOYANOVA N., PA2676
BOYD G., PA1965
BOYEA T., PA3615
BOYER L., PA524, PA590, OA663, PA2072, PA2837, PA3345
BOYERS A., PA4064
BOYLE K., OA124
BOYLE N., OA4442
BOYRACI N., PA3224
BOZ C., PA4117
BOZADJI V., PA3972
BOŽANIĆ B., PA450, PA1852, PA3376
BOZZALLA-CASSIONE E., PA1953
BOZZI C., OA2913
BOZZINI S., PA3571, OA3659, PA4279, PA4280
BRABANDT B., PA997, OA1623
BRABRAND M., OA2907
BRACCIONI F., PA543
BRACHT D., PA2053, PA2845
BRACK M., PA1830
BRACKA I., PA340, PA401, PA1998, PA2563, PA2604, PA4014
BRACKE K., OA2199
BRACKE K., OA662
BRADBURY A., OA1442
BRADBURY T., PA2103
BRADDING P., PA4183
BRADFORD W., PA4117
BRADLEY B., PA3601
BRADLEY C., OA1618
BRADLEY C., OA783, OA2264, PA2659
BRADLEY P., PA1081
BRADSHAW T., PA1743, RCT2165
BRADY J., PA2843
BRAESTER A., PA1181
BRAGA S., PA2699, PA3380
BRAGA BITTENCOURT L., PA297
BRAGANZA S., PA3473
BRAGANZA MENEZES D., OA762, PA1895
BRAGHIROLI A., PA4290
BRAHAM Y., PA266
BRAHEM A., PA264
BRAHEM E., PA1792
BRAHIM D., PA265, PA1067, PA1122, PA1124
BRAHIM S., PA3987
BRAHMI H., PA2777
BRAHMI N., PA2575
BRAININ P., PA1083
BRALS D., OA763
BRAM S., RCT2164
BRAMMER K., PA563
BRAND K., PA1818
BRAND M., PA1974
BRANDAN N., PA3856, PA3867
BRANDENBERGER C., PA2071, PA2839
BRANDSMA C., PA594, PA1271, PA1276, PA1279, PA1282, PA2069, PA2075, OA2199, PA3576, PA4262
BRANDSTETTER S., PA3256, PA3268, PA3548
BRANISLAVA M., PA184
BRANTLY M., PA3615
BRAO PÉREZ I., PA2434
BRÁS-SILVA C., PA4140
BRAT K., PA306, OA3758, PA3849, PA4108, PA4319
BRATH M., PA1641, PA4056
BRATH CHRISTENSEN R., PA1641
BRATKE K., PA925
BRATOVÁ M., PA306, OA3758, PA4108
BRAUBACH P., PA1942
BRAUN C., PA2008
BRAUN F., PA3502
BRAUNSTAHL G., PA213, OA2206, PA2402, PA3609, PA3896
BRAUTIGAM Z., PA1296
BRAVARD A., PA957
BRAVIN A., PA1235, OA3111
BRAVO C., PA1161
BRAVO L., PA449
BRAVO S., PA1686
BRAVO GUTIÉRREZ O., PA1274
BRAVO MASGORET C., PA478
BRAY J., OA128, OA1403, PA3891
BRCIC L., OA1383, PA4136
BREA-DIAKITE D., PA1829
BREBOROWICZ A., PA294, PA3555
BREDA NETO C., OA2330
BREEN R., PA2625
BREGNBALLE V., OA4426
BREIHOLZ O., PA2816
BREISNES H., PA4278
BREJNROD ., OA141
BREMNER S., OA2185
BREMOND M., PA1804
BREÑA ATIENZA J., PA2813
BRENDAN D., PA3354
BRENOT P., OA2274
BRESLAVSKY A., PA1132, PA2451
BRETONNIÈRE C., PA3301
BRETT S., PA4273
BREUER O., PA1762, PA1766, PA3967
BREULS S., OA804, OA805, PA1038, PA1039, PA3444
BREUSS A., PA3604
BREW A., PA1215
BREW J., OA1630

BREWIS M., PA1982, PA4220
BREYER M., PA237, OA2304
BREYER M., PA2442, PA4053
BREYER M., OA119, PA1661, PA1700, OA3115, PA3136, PA3146, PA3903, PA3990
BREYER- KOHANSAL R., PA3136, PA3146
BREYER-KOHANSAL R., OA119, PA237, PA1661, PA1700, OA2304, PA2442, OA3115, PA3903, PA3990, PA4053
BRIAN E., OA3762
BRIANÇON-MARJOLLET A., OA4383
BRICEÑO FRANQUIZ W., PA1179
BRICMONT N., PA290, OA1413, PA1824
BRICOLERI I., PA256
BRIDEVAUX P., OA790, OA792
BRIEND G., PA517
BRIESE S., PA2612
BRIGGS A., PA2584, PA3365
BRIGGS S., OA798
BRIGHT F., PA2616
BRIGHT S., RCT711
BRIGHTLING C., PA3562
BRIGHTLING C., PA986, RCT2883
BRIGHTLING C., OA2326, PA3191, OA3800
BRIGHTLING C., PA3210, RCT4445, OA9002
BRIKI I., PA3966
BRILLET P., OA4443
BRILLET P., PA524, OA2959, PA3345, OA3786
BRINCHAULT G., PA3890
BRINCKS J., PA216
BRINDICCI C., PA3260
BRINKE A., PA882
BRINKMAN ., OA141
BRINKMAN P., PA876, PA3548
BRINKMANN F., OA4417, OA4418
BRIONES GÓMEZ A., PA493
BRITES-PEREIRA M., PA1801
BRITO J., PA468, PA1980
BRITO M., PA2463
BRITO O., PA1806
BRITTAIN D., PA3853, PA3858, PA3859, PA3864
BRITTON P., PA949, PA1757
BRIVIO M., PA554
BRIX S., OA143
BRIZOLA L., PA546, OA2323, PA2799
BRIZOLA L., PA2375
BRKIĆ E., PA2756
BROCH K., PA472
BROCHARD L., PA3312, PA3318
BRØCHNER C., OA1399
BROCK J., OA771
BRODERICK M., PA2682
BROEDERS M., PA2402
BROESE J., OA745
BROMAN L., OA2315
BRÖMS K., PA194, PA211, PA2016, PA2102
BRONKHORST E., OA745
BRØNSTAD E., PA4249
BROOK M., OA1403, PA3891
BROOK M., OA128
BROOKE J., OA1618
BROOKES J., RCT2884
BROOKHART M., PA2765
BROOKMAN S., PA3274
BROOKS C., PA3904
BROOKS D., OA800, OA807, PA1034, PA1801, PA1807, PA2744, OA3119, PA3498
BROOKS R., PA1766
BROSCHEWITZ J., OA1384, PA2646
BROSNAHAN N., PA2418
BROTHERSTON S., OA1444
BROUARD J., PA3955
BROUWER M., RCT2881
BROWN A., PA578, PA918, PA922, PA1825, PA3897
BROWN C., PA3615
BROWN E., PA4273
BROWN G., PA152, PA3488
BROWN J., OA675, PA2019
BROWN J., PA441
BROWN J., OA3800
BROWN K., RCT2887
BROWN L., PA2625
BROWN L., PA2700
BROWN L., PA4010
BROWN M., PA1815
BROWN R., PA3492, PA3493
BROWN R., PA2807
BROWN S., PA160
BROWN S., PA3151, PA3287
BROWN S., RCT712
BROWN T., PA223, PA428, PA890, PA2437
BROWN T., PA2051
BROWN V., PA1104
BROŻEK G., OA674, PA995
BRU V., PA3301
BRUCE K., OA135
BRUCHFELD J., PA2535
BRUDON A., OA4438
BRUENING T., PA1737
BRUFFAERTS N., PA3490
BRUGGER J., PA1140
BRUGHA R., PA1751
BRUGIÈRE O., OA692
BRUGNIAUX J., PA2763
BRUGUET GONZÁLEZ J., PA551
BRÛLÉ E., PA4146
BRUM M., PA3970
BRUM ANTUNES M., PA297
BRUN P., OA1414, PA3873
BRUN DEL RE U., PA3364
BRUNBORG C., OA1450, PA1952
BRUNEEL F., PA1248, PA1249
BRUNEL H., PA1870
BRUNETTI N., PA461
BRUNI C., PA472
BRÜNING T., PA1736
BRUNJES H., OA135
BRUNNSTRÖM H., PA4133
BRUNO A., PA1260
BRUNO F., PA963, PA3941
BRUNO G., PA1338
BRUNO H., OA794
BRUNO N., OA2200
BRUNTON A., PA1901
BRUSA A., PA2017
BRUSCHI C., PA369
BRUSELLE G., PA4323
BRUSSE - KEIZER M., OA2266
BRUSSE-KEIZER M., PA4210
BRUSSE-KEIZER M., PA4205
BRUSSELLE G., PA230, PA876, OA2199, PA2814, OA3113, PA3210, PA3212, PA3384, OA3678, PA3855, PA3869, PA4185, PA4315, OA4378
BRUSSINO L., OA3679
BRUSTAD N., OA145, OA2189
BRUTSCHE M., PA1320, PA1940, PA2090
BRUTSCHE M., PA3382
BRUUN J., PA2394
BRUYNEEL M., OA2324
BRYAN A., PA1246
BRYANT L., PA986
BRYANT S., PA1890
BRYL M., PA4259
BRYS A., PA1991
BS J., PA4036
BU F., OA675
BUABBAS S., RCT716
BUBNOV R., PA1207, PA3443
BUCHAN D., PA2092, PA3857
BUCHAN E., PA269, PA2858
BUCHNER M., PA2730
BUCHS S., PA3202, PA3203
BUCHVALD F., OA4419
BUCHWALD I., OA681
BUCKLEY C., PA873
BUCKLEY C., PA367
BUCOVA M., PA4119
BUCSÁN C., PA4205
BUCULEI I., PA3928, PA3935
BUDAJ I., PA2003
BUDDEN K., PA3168
BUDDEN K., PA3897
BUDGEN N., PA2026
BUDHAN S., PA2010, PA3154
BUDIMIR B., PA2710, PA4170
BUEKERS J., PA3490
BUELTHOFF E., PA931
BUENDIA ROLDÁN I., PA4047
BUENDÍA-ROLDÁN I., PA1292, PA1836, PA1963, PA2801, PA4285
BUENGER J., PA1737
BUENO L., PA2798, PA3531
BUENO FREIRE L., PA4013, OA4406
BUENO ZAMORA H., PA204, PA206, PA2105
BUENO-FREIRE L., PA197, PA3395
BUENZLI S., OA1440, PA2048
BUERGIN A., PA2749
BUESS C., OA122
BUGNET E., PA3345, OA4439
BUGYIK E., OA1383
BUHL R., PA1678, PA1682, PA1683, PA1687, PA3623
BÜHLER L., PA2645
BÜHLING F., PA1818
BUHR R., RCT712, PA2121
BUI D., PA1699, PA2482
BUKLIOSKA ILIEVSKA D., PA2111
BULLENS D., OA2937
BULLOCK E., PA2736
BULLWINKEL J., PA3239, PA3240
BULMAN W., PA1948
BULTS R., PA2069
BULUT N., PA4201
BULUT V., OA4416
BUNEL V., OA2314, PA3301
BÜNGER J., PA1736
BUNNE J., PA950
BUÑO SOTO A., PA863
BUNTROCK-DÖPKE H., PA3548
BUNYARD P., PA453
BUONAMICO E., PA159, PA2131, OA2329, PA3178, PA4284
BUONAURO A., PA1173
BUONOCORE A., PA3844
BUONPENSIERO P., PA3495
BURASCHI R., OA137
BURBANKS-IVEY J., PA1948
BURBAUM B., PA2429
BURCHARD E., PA3554
BURDEN T., OA785
BURECK J., PA2847
BURGDORF D., RCT2164
BURGE P., PA1163, PA1733
BURGE S., PA251, PA3997
BURGEL P., PA3886, PA3890
BURGESS A., OA2306, PA3980
BURGESS J., PA3576
BURGHUBER O., PA4053
BURGHUBER O., PA2442
BURGHUBER O., PA3136, PA3146
BURGHUBER O., OA119, PA237, OA2304
BURGHUBER O., PA1661, PA1700, PA3990
BURGOS F., OA3113
BURGOS LOZANO J., PA2434
BURGSTALLER G., PA598, PA599, OA662, PA2787, PA3477, OA3656
BURGY O., OA3656
BURHAN H., OA1404
BURHAN H., PA396, PA890, PA1123, PA2384, PA2386, PA2396
BURHAN SHAKER S., PA1706
BURKART C., PA2087
BURKE H., PA1273, OA3109
BURKE-GAFFNEY A., PA4148
BURKILL S., PA2136, PA4323
BURMAN A., PA3579
BURMAN L., PA2087
BURMANJE J., PA3904
BURN E., OA2303
BURNETT B., RCT2881
BURNEY P., OA3738
BURNHAM C., RCT2164
BURNS S., PA4060
BURNS S., PA3435
BURRI A., PA3364
BURSAL DURAMAZ B., PA1756
BURTIN C., PA318, OA809, PA1221, PA1801, OA3118
BURTON C., PA4174
BURTON L., PA2748, PA3139
BURTON M., PA1096
BURY T., PA886
BUSBY J., PA890, PA4323
BUSCETTA M., PA3898
BÜSCHER E., PA488
BUSH A., OA141, PA980, PA985, PA987, PA3286, OA4437
BUSH E., PA4115
BUSHE J., PA1830
BUSHEV J., PA2111
BUSSE H., PA1135, PA2646
BUSSE S., OA665
BUSSE W., PA3191, PA3209
BUSSE W., PA4321
BUSSE W., OA3675
BUSTAMANTE D., PA1899
BUSTO E., PA187
BUSTOS C., PA3259
BUT N., PA186, PA346
BUTLER C., PA1890
BUTLER C., PA1290
BUTLER D., PA270
BUTLER M., PA2397
BUTORAC PETANJEK B., PA3624
BUTOV D., PA4086

BUTOVA T., PA4086
BUTT U., PA518
BUTTERY S., RCT2161
BUTTERY S., RCT4448
BYAMUNGU L., OA2308
BYRNE A., PA579
BYRNE A., PA423, OA761, PA2630
BYRNE C., PA2668
BYRNES D., PA1826, PA1832, PA2843

C

C CHRISTOFF G., PA1330, PA2136, PA4323
C JONES R., PA1330
C. AQUINO-SANTOS H., OA4362
C. CAMPOS E., PA908
C. SCHUSTER S., OA3750
C. WEBER H., PA3549
CABALLERO J., PA2802, PA4283
CABALLERO LÓPEZ C., PA2727
CABALLERO SEGURA F., PA569
CABALLERO-LÓPEZ C., PA3153
CABEZAS PASTOR E., PA3410
CABRAL M., OA746
CABRERA R., PA2798, PA3531
CABRERA GUERRERO S., PA3951
CABRERA LOPEZ C., PA2813
CABRERA MARTOS I., PA2526, PA3356, PA4009
CABRERA ORTEGA R., PA4013
CABRERIZO CARREÑO H., PA2141
CABRIADA NUÑO V., PA1309, PA1310, PA1319
CABRITA B., PA3386
CACHIM A., PA3503
CACKOWSKI M., PA1920
CADIOU J., PA4145
CADRANEL J., PA352, PA3345, PA4071, OA4438
CAETANO F., PA1261
CAETANO MOTA P., PA444, PA3428
CAETANO-MOTA P., PA1960, PA1969
CAFORIO G., PA3458
ÇAĞLAR B., OA4361
ÇAĞLAR H., PA296, PA2500
CAGLAYAN P., PA1191
CAGLIONI F., PA554, PA2778
CAGUANA O., PA164
CAGUANA VÉLEZ O., PA1182, PA1715
CAHN A., OA1403
CAI Q., PA2615
CAI T., PA2081
CAILLE P., PA4197
CAIN E., PA1889
ÇAKIR ., PA2500
ÇAKIR E., PA277, PA282, PA289, PA296, PA1756, PA2496
ÇAKMAKÇI S., PA446, PA447
CALABRESE C., PA872
CALABRÒ A., PA375
CALABUIG A., PA1161
CALANCEA E., PA2377, PA2687
CALANCEA V., PA2377, PA2687
CALARASU C., PA1900, PA3329
CALARESO A., PA399
CALCATERRA V., PA2509
CALCIANO L., PA243, PA948
CALCO G., PA3901
CALDANI L., PA3502
CALDERON R., OA756
CALDERON ALCALÁ M., PA4233
CALDERON-ALCALÁ M., PA4244
CALDERS P., PA326
CALENDER A., PA3446
CALERO ACUÑA C., PA3403
CALIENDO G., OA2257
CALISKAN C., OA1393
ČALKOVSKA A., OA2318
CALLAHAN S., PA160
CALLEJAS GONZÁLEZ F., PA2691
CALLERO A., PA3552
CALLES PLATA I., PA3358
CALLISTER M., OA2264, PA2659
CALMEL C., OA3780
CALÒ O., PA2398, PA3215, PA4320
CALS-MAURETTE M., OA1633
CALTAGIRONE R., PA1259
ÇALTEPE G., PA282, PA296, PA2496, PA2500
CALVACHE MATEO A., PA1924, PA3356, PA3358, OA4428
CALVAT A., PA366, PA4211
CALVERLEY P., PA3879
CALVERLEY P., PA4178
CALVO C., OA144
CALVO M., PA3586
CALVO RADO N., PA1184
CALVO SÁNCHEZ M., PA1147, PA3597
CALVO-ÁLVAREZ U., OA2202
CALVO-HENRÍQUEZ C., OA2202
CALZETTA L., PA529, PA2122, PA2410, PA3169, PA3175, PA3616, PA4128, PA4307
CAMACHO MENDOZA N., PA2549, PA2551, PA2552
CAMACHO-MENDOZA N., PA2544, PA2546, PA2547, PA3837
CÂMARA S., PA3225, PA3228
CAMARDELLI F., PA3616
CAMARENA A., PA4285
CAMARGO L., OA2255
CAMARINHA C., PA2754
CAMBIER M., PA4103
CAMBONI D., PA4296
CAMELI M., OA3787
CAMELI P., OA1452, OA2256, PA3371, OA3787, PA4116
CAMERDELLI F., PA529
CAMERON A., PA1658, PA1659
CAMIDGE L., OA747, PA2109
CAMINERO LUNA J., PA1911
CAMINO SERRANO M., PA286
CAMMARATA G., PA438, PA2840
CAMPAGNINI S., PA375
CAMPAINHA S., PA1171
CAMPAÑA E., PA3527
CAMPAÑA DUEL E., PA4266
CAMPAÑA-DUEL E., OA3663
CAMPBELL C., PA1104
CAMPBELL D., PA245
CAMPBELL J., PA163, PA1730
CAMPEROS MORENO R., PA863
CAMPEROS MORENO R., PA185, PA1674
CAMPISI R., PA4324
CAMPLING J., PA2452
CAMPO I., OA4437
CAMPOS E., OA2330
CAMPOS E., PA537
CAMPOS M., PA3615
CAMPOS DE AZEVEDO A., PA3509
CAMPOS DOS SANTOS P., PA1685
CAMPOS MIRANDA DUARTE SUCENA M., PA2435
CAMPOS SILVA S., PA2642
CAMPOS TÉLLEZ S., PA339
CAMPOS-HERRERO NAVAS M., PA1911
CAMPRUBI M., PA3527
CAMPRUBÍ-RIMBLAS M., PA3570, OA3663, PA4266
CAMPS C., OA3751
CAMUS C., PA3911
CAN ., PA2500
CAN D., PA282, PA296, PA2496
CAN G., PA3994
CAN OKSAY S., PA277
CANALI G., PA2507
CAÑAS ARBOLEDA A., PA2421
CANAVAN J., PA1858
CANÇADO J., OA748
CANCELA DA FONSECA FERREIRA SANTOS G., PA627, PA4160
CANCELLIERI A., PA2695
CANCELO DÍAZ L., PA1309
CANDIA C., PA353, PA361, PA411, PA1954
CANE J., PA1295
CANEIRAS C., PA202, PA410
CANEJA C., PA2066, RCT2882, PA4172
CANELAS G., PA3379
CANHOTO D., OA3679
CANINO G., PA876
CANIULAF C., PA1017
CANN J., PA610
CANO D., PA1044
CANO I., PA2741, OA4366
CANO SANZ E., PA1115, PA4233, PA4235
CANONICA G., PA4186
CANONICA G., PA184, PA914, PA2397
CANONICO M., PA1173
CANORA A., PA1173
CANO-SANZ E., PA4244
CANOTILHO M., PA2428
CANOUI-POITRINE F., PA3345
CANSECO J., PA1290
CANSEVER L., PA1094
CANSUN F., PA2001
CANT E., PA1823, OA3748
CANUET M., PA4150
CANUL J., PA2683
CAO S., PA915
CAO W., PA4041
CAO X., PA877
ČAPEK V., PA3578
CAPENER D., OA128, PA470, OA1403, PA3891
CAPITELLI L., PA353, PA2804, PA3844
CAPPELLI C., PA2512
CAPPUCCIO A., PA461
CAPRIOTTI S., PA2472
CAPUANO A., PA2131, OA2329
CAPUANO E., PA436
CAPUOZZO A., OA751
CARACCIO P., PA2472
CARAMORI G., OA1414, PA3873
CARASSO S., PA3466
CARBALLO N., PA2133, PA3871
CARBALLO LÓPEZ D., PA4235
CARBALLO-LÓPEZ D., PA4244
CARBALLOSA DE MIGUEL M., OA2319
CARBONE L., PA312
CARBONI E., PA3969
CARD T., OA798
CÁRDENAS-FUENTES G., PA1835
CARDIA F., PA3487
CARDILLO G., PA312, OA784
CARDINALE L., PA1997
CARDINI C., OA3679
CARDINI M., PA3149
CARDOSO A., PA526
CARDOSO C., PA431
CARDOSO C., PA2641
CARDOSO S., RCT2882
CARDOS-ROSCA L., PA3532
CARDOT E., PA3301
CARDOUAT G., PA4142
CARDOZO A., PA4275
CARIGNANI C., PA4181
CARINGELLA A., PA3178
CARIOLI G., PA553
CARLEO A., PA1944, OA2256
CARLEO F., PA312
CARLIER F., OA692
CARLIN C., PA2381, PA3489, PA4060
CARLING M., PA441
CARLOS P., OA756
CARLSEN K., OA140
CARLSEN P., PA3137, PA3144
CARLSON L., PA2855
CARLSTEN C., PA3248
CARLSTEN C., PA591, PA2086
CARLUCCI A., PA868, PA1874
CARMONA P., PA4283
CARO F., PA1957
CARO F., PA1958
CAROBBIO A., PA553
CARON B., PA1710
CARP L., PA1929
CARPAGNANO G., PA159, PA1066, PA2131, OA2329, PA3178, PA4284
CARPÉN O., OA670
CARPENÈ N., PA2454
CARPIO SEGURA C., PA863, PA2653
CARPIO SEGURA C., PA185, PA1674
CARR S., OA2917
CARRAFIELLO G., OA1619
CARRARO S., PA3472
CARRATURO A., PA4126
CARREIRA P., PA472
CARREIRA S., PA526
CARRERA CUEVA C., PA4022
CARRIÇO F., PA615, PA627
CARRIERO V., PA883, PA893, PA895, OA1414, PA3873
CARRION COLLADO N., PA4024, PA4033
CARRIZO L., PA2533
CARROL T., PA4248
CARROLL M., OA3751
CARROLL O., PA918
CARROLL R., PA1187
CARROLL T., PA1278
CARROZZI L., PA2454
CARSI KUHANGANA T., PA1725, PA1729
CARSON R., PA3471
CARTA A., PA2048
CARTER B., PA1768
CARTER N., PA1240, PA2861
CARTER S., PA3309
CARTER V., PA515, OA748, PA914, PA2400, PA3607
CARTER-LANG C., PA2592
CARTON S., PA1010
CARTWRIGHT L., PA222
CARTWRIGHT S., RCT711
CARTY B., PA3287

CARUANA E., OA784
CARUGATI M., PA2114
CARUSO C., PA4186
CARUSO D., PA1260
CARUSO M., OA1411
CARUSO P., PA1302, PA2796, PA2836, PA3160
CARVALHO A., PA3427, PA3428
CARVALHO C., PA605, PA2077
CARVALHO C., OA2205
CARVALHO D., PA3427, PA3428
CARVALHO I., PA444, PA1969
CARVALHO J., PA1906
CARVALHO L., PA417
CARVALHO M., PA2707
CARVALHO R., PA525
CARVALHO T., PA417
CARVALHO FRANCESCANTONIO MENEZES T., OA3123
CARVALHO SILVA M., PA2642
CARVALHO-PINTO R., PA324, OA808, PA1814
CARVO J., OA746
CASADEVALL C., PA196
CASAL A., PA3359
CASALE T., OA3675
CASANOVA MACARIO C., PA2813
CASARIN LÓPEZ F., PA2545, PA2549, PA2551, PA2552
CASARÍN-LÓPEZ F., PA2544, PA2545, PA2546, PA2547
CASARTELLI A., PA2753, PA4077
CASAS I., OA144
CASAS I., PA4074
CASAS S., PA2792
CASAS S., PA3306
CASAS RECASENS S., PA1268
CASAS-RECASENS S., OA666, PA4127
CASAULTA C., PA3569
CASCAIS C., PA444
CASCAIS-COSTA C., PA1969
CASCAVAL V., PA4030
CASE K., PA1290
CASES VIEDMA E., PA493, PA2515
CASITAS R., OA4392
CASPER T., RCT2164
CASSAING S., PA3301
CASSAR M., PA1886
CASSEE F., OA2964
CASSIDY D., PA1823, RCT2883, OA3798, OA4404
CASSINA E., OA784
CASTANDET J., PA392
CASTAÑEDA S., PA2795
CASTAÑEDA T., PA1847
CASTAÑOS C., PA3952
CASTANYER A., PA366, PA4211
CASTEIGT J., PA3944
CASTEJON DIAZ R., PA558
CASTELLA E., OA767
CASTELLÀ M., PA3450
CASTELLARI C., PA909
CASTELLI G., PA1178, OA1457, PA1970, PA2692
CASTELLI S., PA4126
CASTELLO-SIMÕES V., PA1040
CASTELLUCCI B., PA353
CASTELLVÍ I., PA472
CASTILLO C., PA2118, PA2119, PA3619
CASTILLO D., PA1174
CASTILLO SÁNCHEZ I., PA551
CASTILLO VILLEGAS D., OA1456
CASTILLO VIZUETE J., PA3214
CASTILLO-ESCARIO Y., PA164
CASTRO C., OA2327
CASTRO M., RCT2164, OA3672, OA3676, PA4312, PA4321
CASTRO M., PA3482
CASTRO QUINTAS S., PA1309, PA1310, PA1319, OA4409
CATALAN-MATAMOROS D., PA2732
CATALANO C., OA791, PA4005
CATALDO D., PA575
CATALINAS MUÑOZ E., PA151, PA206, PA1639
CATANI C., PA554, PA2778
CATANIA G., PA4017
CATCHPOLE A., PA4064
CATRAVAS J., PA2842
CATRAVAS J., PA2835
CATTELAN A., PA3372
CATTHOOR F., PA2047
CATY G., PA1048
CAUDRI D., PA1671, PA2489
CAUSON L., PA2503, PA2504
CAUX F., OA2959
CAVACO M., PA415
CAVACO M., PA431
CAVAGNA L., PA1953
CAVALERA C., PA2538
CAVALHERI V., OA809, PA2527
CAVALIERE A., PA2017
CAVALLA D., OA1438
CAVALLARO D., PA3299, PA3300, PA4116
CAVALLARO G., PA2017
CAVALLI C., PA3969
CAVALLI F., PA2122, PA2410, PA4128
CAVAZZA A., PA442
CAVE A., PA502
CAVENEY S., OA9002
CAVERSACCIO N., OA2306, PA3980
CAVIEZEL C., PA315, PA1781
CAVIGLI E., PA442
ÇAYIRLI E., PA3224
ÇAYLI CANDEMIR I., OA4361
CAZAUNAU M., PA2479, OA2921
CAZES A., PA2786, PA4111, PA4120, OA4438
CAZORLA O., PA2480
CAZORLA RIVERO S., PA2813
CAZZANIGA S., PA554
CAZZOLA M., PA2410, PA3616, PA4178
CEBALLOS GUTIÉRREZ J., PA3340
CEBERIO HUALDE L., PA1170
CEBOLA M., PA325
CEBOLLA A., PA1227
CEBOLLADA A., PA348, PA4067, PA4068, PA4078
CEBOLLADA SOLANAS A., OA3776
CECATO A., PA1847
CECCATO A., PA197, PA545, PA2802, PA3527, OA3663, OA3797, PA4013, PA4266, PA4283
CECCHETTO A., PA536
CECCHIN D., PA3472
CECCHINI M., PA3424
CEJUDO P., PA2590
ČEKEREVAC I., PA3207
CELANT L., PA1983
CELEBI C., PA1136
CELEDÓN J., PA938
CELEDÓN J., PA876
CELI A., PA2454, OA3657
ÇELIK A., PA3437
CELIK G., OA3679
CELIK K., PA3572
CELIK S., PA3244
ÇELIK S., PA2496
CELIK Y., PA1308, PA4305
CELIKEL ACAR B., PA1896
CELIS PRECIADO C., PA2421
CELLI B., PA2813
CELLI B., PA3198
CELLURA D., PA1273
CELORRIO N., OA2962
CEMMI F., PA868, PA1874
CENA T., PA399
CENDÓN A., PA4074
CENGIZ SEVAL G., PA153
CENTANNI S., PA2766
CENTENO CLEMENTE C., OA767, PA2708
CENTIS R., PA217, PA887
CENTOFANTI J., RCT716
CEOLTA-SMITH J., PA3834
CEPA M., PA3487
CERCHIONE R., PA3495
CERCOS J., PA1235, OA3111
CERDA A., PA2533
CERDÁN DE LAS HERAS J., PA2732
CERESA M., PA1835
CEREZO LAJAS A., PA569, PA2031
CERIANA P., PA369
CERIEGI F., OA3657
CERINI T., OA4363
CERIT CAKIR A., PA3244
CERNAT R., PA3928, PA3935
CERNECKA H., PA574, PA4123
CERON N., PA4106
CERÓN PISA N., OA752
CERPES S., PA926
CERPS S., PA3157
CERQUA F., PA872
CERQUA I., OA2257, PA3162
CERRA C., OA789
CERUTI P., PA2380
CERVERA E., PA3409
CESARI M., PA1213
CESARIO F., PA406
CESCHIN G., PA1205
CESTELLI L., PA1698
CETIN N., PA2716, PA3846
CETIN BEYAZ N., PA3244
CETIN KARA H., PA289
CETINKAYA E., PA4201, OA4437
CEULEMANS L., PA603, OA686, PA1020, PA2006
CEULEMANS L., OA687, PA1021, PA1030
CEULEMANS L., PA1286, PA4265
ÇEVIK AKYIL R., OA3730
CEYHAN B., PA618, PA619
CEYHAN M., PA966, PA968, PA972
CEYLAN K., OA3759, OA3766
CEZARD A., PA1829
ÇFTCI F., PA1065
CHAABANE I., PA342, PA343
CHAABANE M., PA489, PA3374
CHAABI K., PA1090, PA1176, PA3936
CHAARI Z., PA301, PA313, PA1102, PA1780, PA1922, OA2191
CHABOT F., PA1317, PA1710, PA2837, PA3345, PA3464
CHABUKSWAR R., PA513
CHACCOUR C., OA1630
CHACCOUR J., OA1630
CHAFEKAR K., PA3394
CHAGNON F., PA3954
CHAHINE G., PA1143
CHAI C., PA519, PA1219
CHAIDAS K., PA2099
CHAIEB A., PA424, PA2785, PA4300
CHAIGNE B., OA2959
CHAILLAN HUNTINGTON C., OA2254, OA2940
CHAIMA T., PA4300
CHAINI E., PA437, PA2613
CHAKER A., OA126, PA4002
CHAKER L., PA3384
CHAKIR J., OA2941, PA3583
CHAKMA M., PA2407
CHAKRABORTY A., PA593
CHALABI J., RCT716
CHALERMBOON C., PA2530
CHALITSIOS C., PA875
CHALMERS G., PA3373
CHALMERS J., PA382, PA515, PA3391
CHALMERS J., PA380, PA1823, OA2326, PA2610, RCT2883, OA2939, OA3748, OA3751, OA3800, PA4066, OA4404
CHALMERS J., PA508, PA1834, PA3394
CHALMERS J., OA3798
CHAŁUBIŃSKI M., PA1831
CHAMAA A., PA1143
CHAMBERS F., PA1808, PA1863
CHAMBERS L., PA412
CHAMPIGNEULLE B., PA2048, PA2763
CHAN E., OA2269
CHAN H., OA128, OA1403, PA3891
CHAN K., OA2192
CHAN K., OA3781
CHAN L., PA2066, PA4172
CHAN M., PA949
CHAN P., OA2192
CHAN R., OA2192
CHAN R., OA3781
CHAN R., OA1418, PA3511, PA3512, PA3866
CHAN S., PA3366, PA4208
CHAN W., PA2573
CHAN Y., PA3177
CHAND B., PA3218
CHANDAK A., PA1893
CHANDAN M., PA3834
CHANDRA R., OA3796
CHANDY S., PA4239
CHANEZ P., OA1411, PA3890
CHANG A., PA1752
CHANG A., PA2482, PA2726, PA3987, OA4421
CHANG C., PA3615
CHANG C., PA1916, PA4109
CHANG C., PA1897
CHANG S., PA1657
CHANG W., PA2051
CHANG Y., PA180
CHANG Y., PA1289
CHANG Y., PA4261
CHANNICK R., PA2675
CHANNOUNE K., PA1108, PA2617, PA3480
CHANOINE S., PA3230
CHAO C., PA2460
CHAOUAT A., PA1317, PA1710, PA3464
CHAOUCH N., PA489, PA3374
CHAPANERI J., PA914
CHAPARRO BRIONES P., PA501
CHAPLIN E., PA364, PA1867, PA2592,

PA4193
CHAPMAN K., PA3853, PA3858
CHAPMAN R., PA2776
CHARALAMBOUS G., PA1068
CHARALAMPOPOULOS A., PA462, OA2277, PA3467
CHARBONNEL L., PA371, PA4211
CHARBONNIER J., PA494, PA1671, PA2489
CHARFI M., PA994
CHARFI M., PA1072, PA3344
CHARFI M., PA1311
CHARLES E., PA3471
CHARLES M., OA2302
CHARLEY-MONACA C., PA2862
CHARLWOOD J., PA4175
CHARMAN S., OA1616, OA2917
CHARPIDOU A., PA1917
CHARPIN D., PA1001
CHARUWORN P., PA2595
CHASSAGNON G., OA2959
CHATEAU T., PA1710
CHÂTEAUVERT N., PA3530
CHATELET D., PA2062
CHATELIER J., PA2387
CHATHURANTHA S., PA528
CHATTERJI S., PA1024, OA1436, PA2696
CHATTI S., PA264
CHATZIANASTASIOU A., PA3161
CHATZIMAVRIDOU-GRIGORIADOU V., PA1707, PA1713
CHATZIPANAGIOTOU S., PA2511
CHATZIPETROU R., PA3369
CHATZOPOULOS E., PA960
CHAUBEY S., PA1696
CHAUDHARI S., PA1711
CHAUDHARY M., PA911
CHAUDHRY S., PA1751, PA2857
CHAUDHURI N., PA1935, PA1939, PA2654
CHAUDHURI R., PA890, PA3204, PA3207, PA3857
CHAUDRI M., PA165
CHAUDRI R., PA2418
CHAUHAN A., PA1261
CHAUHAN A., PA428, OA1409, PA2437
CHAUHAN L., PA1190
CHAURASIA S., PA408
CHAUVEAU M., PA2608
CHAUVET C., PA4146
CHAVANNES N., OA745
CHAVDA J., PA1000, OA2961
CHAVES J., OA3129
CHAVES LOUREIRO C., PA225, PA2397
CHÁVEZ-GALÁN L., PA1836, PA2801, PA4047, PA4285
CHAWES ., OA141
CHAWES B., OA148, PA992, PA1755, OA2189, OA2190
CHAWES B., OA145
CHAWLA A., PA4169
CHAWLA R., PA4169
CHCIAŁOWSKI A., PA865, OA3772
CHE DAUD C., PA1773
CHEADLE C., PA583, PA584
CHEBBI S., PA1724, PA2713
CHECKLEY W., OA2960
CHEIKHROUHOU S., PA534, PA1675, PA2785
CHELABI S., PA3461
CHELLAPPAH G., PA2106, PA4058
CHEMINGUI S., PA1124
CHEN C., PA3352
CHEN C., PA4183
CHEN C., PA1289
CHEN C., PA1646
CHEN H., PA1269
CHEN J., OA3737, PA4247
CHEN K., PA4144
CHEN K., PA2475
CHEN L., PA1892, PA1893
CHEN M., PA1933
CHEN M., RCT2161
CHEN Q., PA2075
CHEN R., PA915
CHEN R., PA2494
CHEN T., PA2475
CHEN W., PA938
CHEN W., OA4405
CHEN W., PA190
CHEN W., PA1330
CHEN X., PA4267
CHEN Y., OA1632
CHEN Y., PA1289
CHEN Y., PA4183
CHEN Y., PA2597
CHEN Y., PA598, OA668
CHEN Y., PA2621
CHEN Y., OA1385
CHEN Y., PA4088, PA4097, PA4261, OA4387, OA4389
CHEN Y., PA4032
CHEN Y., PA2489
CHEN Z., OA2192
CHEN SHUALI C., PA1303
CHENARD M., PA4150
CHENG A., PA1028
CHENG C., PA4249
CHENG M., PA1252, PA1655, PA2861
CHENG M., OA3802
CHENG P., PA3471
CHENG Y., PA1865
CHENG Z., PA2069
CHENIVESSE C., OA133, PA3351
CHENNOUFI A., PA4052
CHEN-SHUAI C., PA506
CHEONG A., PA503, PA504, PA3497
CHEONG J., OA3752
CHEONG J., OA121
CHERIAN S., RCT716
CHERIF H., PA994, PA1072, PA1311, PA3344
CHERMITI F., PA1667, PA1928, PA2639
CHERREZ-OJEDA I., PA2727, PA3153
CHERRY C., OA669
CHERUBINO F., PA217
CHESOV D., PA3389, PA4093
CHETAN I., PA2014
CHETTA A., PA2410
CHEUNG A., PA4192
CHEUNG C., PA436
CHEUNG W., OA1400, PA2008
CHEUVART B., PA3199
CHEVALIER A., PA4080
CHEVALIER F., PA3446
CHEVANCE G., PA3490
CHEW C., PA4164
CHEW F., PA241, PA876, PA955, PA1689, PA1878, PA3553, PA3559
CHIA C., PA2793, PA3549
CHIANESE M., PA4126
CHIANG S., OA756
CHIAPPERO C., PA573
CHIARONI J., PA3306
CHIBA H., OA1394
CHICHIRELO-KONSTANTYNOVYCH K., PA3840
CHIERICOZZI M., PA4236
CHIMERA D., PA2454
CHIN A., PA3945
CHIN K., PA2573
CHIN K., PA2675
CHINNA K., PA1011, PA1716
CHINO V., PA1953, PA4280
CHIPPS B., PA218
CHIRAZ K., PA2383
CHIRICA C., OA4383
CHIRINO G., PA3856
CHIRINOS J., PA531
CHIRON R., PA3955
CHIRONNA M., PA1066
CHISHIMBA L., PA2386, PA2396
CHITSUTHIPAKORN W., PA3208
CHIU C., PA4064
CHIUMELLO D., PA1253
CHIUMELLO D., PA4238
CHLI A., OA4408
CHŁOŃ-RZEPA G., PA3158
CHLOROS A., PA626
CHLOROS D., PA1840
CHLOUPKOVA R., PA3845
CHMELAROVA A., PA2854
CHO J., PA2630
CHO J., PA1923
CHO J., PA1923
CHO J., PA391
CHO M., OA3755, PA4263
CHO P., PA179, PA1151, PA3508
CHO Y., PA1341, PA1342, PA4325
CHOATE R., PA1901, OA3749, OA3754
CHOE K., PA391
CHOHAN M., OA785
CHOHAN P., PA165
CHOI C., PA1142
CHOI C., PA4035
CHOI H., OA755, PA2453
CHOI H., OA2316
CHOI J., PA4325
CHOI J., PA1941
CHOI J., PA3889
CHOI J., PA3971
CHOI K., PA1327
CHOI K., PA3887
CHOI S., OA2316
CHOI S., PA1027
CHOI W., PA1165
CHOKRI K., PA1787
CHOLIDOU K., PA2038
CHONG H., PA2727
CHONG I., PA4087
CHONG Y., PA2087
CHONG NETO H., PA3153
CHONG-NETO H., PA2465
CHOO X., PA3177
CHOO-KANG B., PA3373
CHOPRA A., PA2806
CHOPRA M., PA1877
CHOPRA M., PA1877
CHOROSTOWSKA-WYNIMKO J., PA1277, PA1278, PA1280, PA2430, PA2432, PA2435, PA4112, PA4259
CHOTIRMAL S., PA3560
CHOTIRMALL S., PA1113, PA1819, OA2958, OA3753
CHOTIRMALL S., PA1878
CHOUCHANE A., PA264
CHOUDHARY C., PA338, PA4085
CHOUDHURY G., PA3501
CHOUDHURY M., PA1883
CHOUGALE S., PA2705
CHOUKÉR A., PA4075
CHOUKOUR M., PA1710
CHOUR A., PA2747
CHOURPILIADI C., PA1128
CHOUSEIN E., OA4437
CHOVANEC Z., PA306, OA3758
CHOW C., OA684, OA685, PA1028, OA3112, PA3307, PA3423, PA3515
CHOW E., PA2405, PA2406
CHOWDHURY B., PA171, PA176, PA181
CHOWDHURY M., PA2064, PA2065
CHOWDHURY M., PA1298
CHOWDHURY S., PA408
CHOY D., PA1271
CHOZIN I., PA1070
CHREIF H., PA2003
CHRIS COMPTON C., PA2119
CHRISTENSEN H., OA3727
CHRISTENSEN J., PA3341
CHRISTENSEN M., PA2834
CHRISTENSEN N., PA3414
CHRISTER J., PA184
CHRISTIE J., OA2269
CHRISTIE M., OA2269
CHRISTINA D., PA1735
CHRISTMANN M., PA1818
CHRISTODOULATOS G., PA1264, OA2317
CHRISTOFF G., PA2727
CHRISTOFF G., PA2400
CHRISTOPHER D., OA793, PA1845, PA1968
CHRISTOPHER D., PA2555, PA2570, PA4091
CHRISTOPHER D., PA4239
CHRISTOPHER L., PA1822
CHRISTOPHER M., PA3347
CHRISTOPHER S., PA1968
CHRISTOPHERSEN A., OA770
CHRISTOPOULOS A., PA1328
CHRISTOPOULOS I., PA1328
CHRISTOPOULOU M., PA1328
CHRISTOPOULOU M., PA1299, PA1301
CHRONIS C., PA1840
CHRYSANTHOPOULOU E., PA1264, OA2317
CHRYSIKOS S., PA377, PA378, PA1114, PA2613, PA2697, PA4129
CHRYSOCHOOU E., PA1745, PA2495
CHRYSOSTOMOU E., OA4408
CHU C., PA4273
CHU D., PA557
CHU N., PA2615
CHUA F., OA1452
CHUA Y., PA1011
CHUA Z., PA3559
CHUANG H., PA2083, PA2475
CHUATRAKOON B., PA2530
CHUDASAMA A., PA3393
CHUKWUSA E., OA4364
CHUNG C., PA2768
CHUNG E., PA4035
CHUNG F., PA2819
CHUNG F., PA3399
CHUNG H., PA4173
CHUNG K., PA3564
CHUNG K., OA141, PA923, OA1411, PA2565, PA3560, PA3561, PA3563, PA4262
CHUNG K., PA3883

CHUNG K., PA2768
CHUNG L., PA2136
CHUNG M., PA1148
CHUNG P., PA2046
CHURCH C., PA1982, PA4220
CHURCH W., PA4192
CHURRUCA ARRÓSPIDE M., PA1938, PA4233
CHURRUCA-ARRÓSPIDE M., PA4244
CHUSAKUL S., PA3208
CHYNKIAMIS N., PA367, PA1869, PA2038, PA2519
CIANI L., PA442, PA2762, PA4232
CIANI O., OA3764
CIAPONI L., PA3536
CIARROCCHI L., PA2692
CICCHETTI M., PA1066
CICERI L., PA4236
CICERO A., PA4178
CICIRIELLO F., PA283, PA3996
CICOLINI G., PA4017
CIERNA PETEROVA I., PA3841
ČIERNÁ PETEROVÁ I., PA3412
CIESIELSKA M., PA482, PA483
CIET P., PA1671, OA2951
CIFRIÁN J., PA2789, PA2795, PA2808
CIFRIÁN MARTÍNEZ J., PA466, OA690, PA1016
ÇIFTCI F., PA1251, PA3190
CIFUENTES HURTADO D., PA3931
CIGLER H., PA3835
CIHANGIR B., PA1125, PA1133, PA2562
ÇILEDAĞ A., PA1065, PA1251, PA3190
CILLIS G., PA4128
CILLONIZ C., OA3797, PA4039
CILLONIZ CAMPOS C., PA1847, PA4038
CILLUFFO G., PA1693
CIMAS HERNANDO J., PA501
CIMINO G., PA2512
ÇINAR C., PA336, PA618, PA619, PA2365, PA2607
ÇINAR G., PA1065
ÇINAR O., PA2568
ÇINARKA H., PA4201
CINDRIC S., PA2053, PA2845
CINEL G., PA282, PA296, PA1756, PA1759, PA1896, PA2496, PA2500, PA2501
CINI E., PA2589
CIOBANU N., PA4093
CIOBOATA R., PA3329
CIOLPAN D., PA1267
CIOMAGA E., PA3147
CIONE E., OA751, PA4190
CIPOLLA A., PA4324
CIPOLLI M., PA283, OA1622
CIPOLLINA C., PA3898
CIPRUT A., PA289
CIRILLO D., OA666
CIRIMINNA R., PA2840
CIRINO G., OA2257, PA3162
CIRONE M., PA2017
CISNEROS C., PA2125, PA3214
CISTERNE C., PA3954
CISTERNINO C., PA2398, PA3215, PA4320
CISTULLI P., PA1326, OA2291
CISTULLI P., PA1316
CITGEZ E., OA2266
CITO G., PA3169
CITTADINI A., PA471
CITTERIO M., RCT2162
CIUCA I., PA2491, PA2493, OA2905
CIVELLI M., PA1302, OA2258, PA2796, PA2836, PA3160, PA3166
CIZEAU I., PA298
CLAES L., OA804, PA2518
CLAESSEN G., PA1020, PA1973
CLANCHY J., OA4374
CLANCY L., OA680, PA970, PA3933
CLANCY L., OA678, PA3932, PA3942
CLARE M., PA3354
CLARENBACH C., PA1940
CLARENBACH C., PA3150
CLARI M., OA3727
CLARK A., PA515
CLARK K., PA1657
CLARK M., OA2960
CLARK M., PA3260
CLARK M., PA3357
CLARKE G., PA2000
CLAUDIA E K., PA1007
CLAUS M., OA2324
CLAUS P., PA1021
CLAUSSON C., PA2797, PA2833, PA4065, PA4282
CLAVERO-SÁNCHEZ T., PA2011
CLAVIJO-CORNEJO D., PA458, PA1951
CLAY R., PA2008
CLAYDON A., PA2503, PA2504
CLAYTON J., PA1245
CLEMENTE S., PA169, PA526
CLEMM H., PA1741, PA2032, PA2034
CLEMM H., PA1676
CLERES D., PA3382
CLERICI M., OA3779
CLIFF I., PA3995
CLIFFORD R., PA2483
CLIFFORD R., OA671
CLIFTON I., PA374, PA4194
CLIMENTE M., PA2137
CLIVE A., PA429
CLOSA D., PA3570
CLOUTIER M., PA876
ĆMIEL A., PA482, PA483
ÇOBANOĞLU N., PA282, PA296, PA2496, PA2500, PA3290, PA3521, PA3929
COBELENS F., OA763
COBO I., PA449, PA1835
COCA M., OA4366
COCARI A., PA612
COCCONCELLI E., PA1164, PA1178, OA1457, PA1970, PA3372
COCKMARTIN L., OA1401
COCKX M., PA2811
CODREANU A., PA4093
COECK C., PA1935
COELHO J., PA273
COELHO L., OA2330
COELHO S., PA1733
COENEGRACHTS T., PA456
COGHLAN P., PA1967, PA2702
COGO P., PA3986
COHEN D., PA2694, PA3478, PA4276
COHEN D., PA4187
COHEN E., OA2254, OA2940
COHEN E., PA1303
COHEN J., PA1642, PA4059
COHEN S., PA382
COHEN S., OA2938, PA4310
COHEN T., PA4093
COHEN Y., PA1248, PA1249
COHEN-HAGAI K., PA1131, PA3339, PA3370
COHEN-KAMINSKY S., PA4145
COHRT A., PA3377
COIFFARD B., PA3301, PA3306
ÇOKUĞRAŞ H., PA277, PA282, PA296, PA1756, PA2496, PA2500
ÇOLAK Y., PA897, OA3740, PA3921
ÇOLAKOĞLU ER H., OA1628
COLANARDI M., PA4254
COLARUSSO C., PA411
COLÁS C., PA3214
COLDWELL B., PA2481
COLE A., PA3615
COLE K., PA1316
COLECCHIA D., PA1302
COLEIRO M., PA1805
COLEMAN C., PA3886
COLES J., PA2062
COLICE G., OA2251, OA3670, OA3676, RCT4445, OA9002
COLIN C., PA3345
COLL P., PA590, PA2479, OA2921
COLLADA CARRASCO J., PA2859
ÇOLLAK A., PA289, PA2496
COLLEY C., PA1889, OA2254
COLLIER G., OA1403, PA3891
COLLIER G., OA128
COLLIGAN G., PA1000, OA2961
COLLIN A., PA610
COLLINGRIDGE D., PA160
COLLINI P., OA1403
COLLINS A., PA1123
COLLINS A., PA396
COLLINS M., PA2830
COLLIS P., PA3886
COLLISON A., PA3946
COLL-LLADO M., PA4137
COLNAGHI M., PA3282
COLOMBO C., PA546, OA2323, PA2375
COLOMBO C., PA283, OA1619
COLOMBO G., PA1338
COLOMBO R., PA4279
COLUNGA BIANCATELLI R., PA2835, PA2842
COMABELLA A., PA3586
COMAS SERRANO M., PA1715
COMBES A., OA2314
COMBRET Y., PA359, PA1870
COMELLAS A., RCT712
COMELLAS A., PA911
COMENDUCCI A., OA2310
COMES A., PA2609
COMES RAGA A., PA4024
COMIN C., PA442
COMINI L., PA331
COMINS C., OA787
COMPTE M., PA3409
COMPTE VIVES M., PA379
COMPTON C., PA200, OA747, PA915, PA2109, PA2110, PA2118, PA3619
COMUNE M., PA1197
CONCEIÇÃO G., PA4140
CONCHA M., PA1255
CONDE M., PA2707
CONDE P., PA4266
CONDE R., PA467, PA1972, PA1984, PA1987
CONDE OLIVEIRA A., PA4207
CONDLIFFE A., RCT2883
CONDLIFFE R., PA462, PA464, PA470, PA1971, OA2276, OA2277, PA3467
CONEJERO HALL L., PA921
CONFALONIERI M., OA2913, PA3458, OA3785
CONFALONIERI P., PA3458, OA3785
CONFORTI F., PA585, PA587, OA2964
CONICA C., PA2448
CONLON T., OA662, OA2966
CONNELL D., RCT2883
CONNELLY C., PA2081
CONNETT J., OA750
CONNOLLY B., PA2807
CONRAD M., PA3174
CONSTANT S., PA1304
CONSTANTINE A., PA4138
CONSTENTIN A., OA4435
CONTE C., PA3911
CONTE G., PA2017
CONTEL J., PA2741
CONTESSA C., PA543
CONTI C., PA553
CONTI L., PA399
CONTI M., PA1763, PA2450, PA2512
CONTIN C., PA259
CONTIN-BORDES C., OA2936
CONTOLI M., OA3113, PA3202, PA3203
CONTRERAS C., OA756
CONTRERAS J., PA885
CONWAY F., RCT2882, PA4172
CONWAY F., PA2066
CONWAY J., PA3418
CONWAY R., OA787
COOK B., OA2251, PA2400, OA3670, OA3676, PA4313
COOK C., PA1804
COOK C., PA4225
COOK D., OA670
COOK D., PA557
COOK D., RCT716
COOK R., OA2964
COOKSON N., PA3499
COOLEN J., OA1401, PA2006, PA3476
COOLEN-ALLOU N., OA4437
COOMBS C., PA2650
COOPE D., PA1228, PA4193
COOPER C., RCT712, OA1406
COOPER C., PA911, PA2121
COOPER D., OA2964
COOPER J., RCT2883
COOPER J., PA3459
COOPER M., PA578, PA2726, PA3987
COOPER M., PA585
COOPER N., PA2557
COOPER R., PA430
COOPER R., PA1245
COOPER W., OA787
COORS M., PA4263
COOSEMANS I., OA804, PA2518
COPELAND F., PA3975
COPPOLA M., PA411
COPPOLA N., PA2596
COPPOLA S., PA1253
CORAZZARI I., PA589
CORBATÓN A., PA2602
CORBEIL F., PA3620
CORBETTA L., PA2628
CORBIÈRE V., PA4275
CORCORAN J., PA1141
CORCUERA P., PA876, OA2949, PA3256, PA3552
CORCUERA ELOSEGUI P., PA3548
CORCUEREA P., PA3268
CORDEIRO A., PA311, PA1812
CORDEIRO C., OA4437
CORDEIRO R., PA431
CORDELL R., PA986
CÓRDOVA T., PA1281

CORDOVILLA PÉREZ R., PA4256
CORETTI A., PA3986
CORETTI M., PA2636
ĆORHODŽIĆ E., PA2756
CORINO A., PA4248
CORKILL D., OA2254
CORMIER M., PA182, PA899, PA900
CORNEJO-CORNEJO L., PA864, PA1222, PA2042, PA3526, PA3837, PA4281
CORNELISSEN C., PA183
CORNET A., RCT2881
CORNET M., PA3301
CORNUAUD P., PA3288
CORRADI M., PA3195
CORRALES A., PA2789, PA2795, PA2808
CORRALES-MEDINA V., PA531
CORRE S., PA3195
CORREA GUTIÉRREZ C., PA884, PA1181, PA2031, PA2108, PA3938
CORREA-JAQUE P., PA473
CORREIA D., OA2289
CORREIA J., PA540
CORREIA R., PA1217
CORREIA DE SOUSA J., PA3487, PA3613
CORREIA-NEVES M., OA2327
CORREN J., OA2251, PA3209, OA3672, OA3675
CORSICO A., PA948, PA3216
CORSICO A., PA1278, PA1280
CORSICO A., PA3851, PA4248
CORSINI F., PA1258
CORSONELLO A., PA406
CORTE T., PA163, PA1730
CORTES M., PA1817
CORTÉS R., OA2319
CORTÉS-COLORADO J., PA1984
CORTESE S., PA2695
CORTEZON GARCES L., PA1319
CORTIJO A., OA4384
CORTIJO J., PA4141
CORVOL H., PA517, OA3780
CORZANI R., PA299
COSBY M., PA3488
COSENTINO M., PA3969
COSÍO B., PA2140
COSIO M., PA2814
COŞKUN BEYAN A., PA254
COSTA A., OA2327
COSTA A., PA2461
COSTA A., PA373
COSTA D., PA909
COSTA F., PA2603
COSTA I., PA2619
COSTA J., PA357, PA3380
COSTA N., PA3911
COSTA P., OA4429
COSTA R., PA315
COSTA R., PA3551
COSTA SOUZA V., OA3123
COSTABEL U., OA4437
COSTANZO S., PA2509
COSTELLO R., PA2711, RCT4446
COSTES B., PA2479
COSTIGLIOLA A., PA872
CÔTÉ A., PA2385
COTELEA E., PA3226
COTON F., PA3406
COTTER I., PA368
COTTER J., OA2327
COTTERILL S., PA2403
COTTER-MUÑOZ L., PA4244
COTTIN V., OA1396, PA1933, PA1934, PA1935, PA2132, PA2431, PA2747, OA4438
COUCHER J., OA3128
COUDYZER W., PA1021, OA1401
COUILLARD S., OA1412
COULIBALY Y., PA524
COULSON S., PA965
COUPER D., OA1416, PA2121
COURAUD S., PA957, PA1915, PA1919, PA3406
COURDEAU-LABOURIE J., PA957
COURSE C., PA1739, PA1744, PA3279, PA4215
COURSE C., PA996
COURT-FORTUNE I., PA3890
COUSINS M., PA1740, PA1742, PA1744, OA2300, PA3278, PA4215
COUTINHO B., PA2527
COUTINHO D., PA4161
COUTO PEREIRA S., PA468, PA1980
COUTO SANT'ANNA C., PA1913
COUTTS C., PA4192
COUTURAUD F., OA2288
COUTY C., PA4080
COUVELARD A., PA4111
COVERSTONE A., RCT2164
COWAN D., PA2092, PA2418, PA3857
COWAN J., PA531
COWAN K., PA2654
COWIE M., PA2847
COX D., PA2856
COX G., PA3321
COX G., PA4060
COX I., PA163, PA1730
COX K., PA1237
COX R., PA944
COYNE K., PA218
COZZANI C., PA3536
COZZI D., PA442
COZZI G., PA3986
COZZOLINO O., PA2797, PA4065, PA4282
CRABTREE RAMÍREZ B., RCT2882
CRAIGIE M., OA3128
CRANE J., PA3904
CRANSTONE K., PA372
CRATER G., PA1943
CRAWFORD A., PA165
CRAWFORD E., PA2648
CRAWFORD L., PA2418
CRAWFORD R., PA3260
CRAWSHAW A., PA1964
CREAMER A., OA676
CREMER J., OA2937
CREPIN L., PA2072
CRESCIMANNO G., PA1092
CRESPO FACORRO B., PA1662
CRESPO SHIJIN C., PA3153
CRESTANI B., OA1393
CRESTANI B., OA664, PA1153, PA2786, PA4111, PA4120, PA4125, OA4437, OA4438
CREUTZENBERG M., PA4296
CRIADO R., PA3153
CRICHTON M., PA1834, PA3391
CRICHTON M., PA1823
CRIDA P., PA1258
CRIEÉ C., PA2758, PA3618, PA3865
CRIEL M., OA809
CRILLY S., OA2285
CRIMI C., PA4324
CRIMI N., PA4324
CRINER G., RCT712
CRINER G., PA3610
CRINER G., RCT4449
CRINION S., PA4224, PA4229
CRINÒ S., PA1763
CRISAFULLI E., PA536
CRISCI R., OA3764
CRISPIM A., PA1044
CRISTEA F., OA1635
CRISTETO PORRAS M., OA690, PA1016
CRISTOFANO F., PA1060
CRNKOVIC S., PA4149
CROCE G., PA2550, PA2753
CROCE S., OA3659
CROMBAG L., PA2714
CROOKS C., OA798
CROOKS M., PA1642, PA2405, PA2406, PA3246, PA4059
CROOKS M., PA1157, PA3142
CROS P., PA517
CROSBIE P., OA2264, PA2659
CROSBY A., PA4152
CROSS L., PA1000
CROSS T., PA242
CROWLEY C., PA1967
CROWLEY L., PA1947, OA3778
CROWLEY R., OA4441
CROWLEY S., OA2306, PA3980
CRUDU V., PA4093
CRUICKSHANK S., OA798
CRUWYS S., PA3159, PA3167
CRUZ A., PA2683
CRUZ Á., PA3551
CRUZ A., PA885
CRUZ A., PA3487
CRUZ C., PA1166
CRUZ J., PA318, PA325, PA1798, PA1801
CRUZ M., PA4163
CRUZ M., PA337, PA876, PA1718
CRUZ T., PA2792, PA4127
CRUZ CARMONA M., PA250, PA2466, PA3237
CRUZ DÍAZ M., PA4043
CRUZ RUÍZ J., PA2691
CRUZ UTRILLA A., PA466
CRUZ-VICENTE F., PA1275
CRYAN S., PA2059
CSERJESI R., PA2576
CSOMA B., PA479
CSOMA Z., PA882, PA2397, PA3207, OA3679
CSÓSZA G., PA479
CUBILLOS C., OA4392
CUBITT A., PA2087
CUCHET P., PA402
CUERPO S., PA449
CUESTA R., PA1322
CUEVAS OCAÑA S., PA2788
CUIJPERS M., PA3991
CUKIER A., OA808
CULEBRAS M., OA689
CULEBRAS-AMIGO M., PA2515
CULGIN S., RCT716
CULLIVAN S., PA1986, PA2684
CUMELLA A., PA2543
CUMIN M., OA3786
CUMMINGS H., PA1642, PA4059
CUMMINGS S., PA1293
CUMPLI C., PA3871
CUMPLI GARGALLO M., PA1715
CUNDRLE JR I., PA306, OA3758
CUNHA A., PA2603
CUNHA P., OA2327
CUNHA R., PA3427, PA3428
CUNHA S., OA3765
CUNHA T., PA2799
CUNHA FILHO H., PA961
CUNHA PAIVA S., PA1956
CUNHA-FILHO H., PA971
CUNNINGHAM G., PA902
CUNNINGHAM S., PA1764, PA1775, OA2186, PA3261, PA3263, PA3270
CUNNINGHAM S., OA1616, PA1774, RCT2887
CUNOOSAMY D., PA4262
CUPERUS L., PA213
ĆUPURDIJA V., PA3207
CURDY M., OA1447
CURROW D., PA1657
CURTEIS T., PA1892
CURTIS J., PA4263
CURTIS J., PA911
CURTIS J., OA1416, PA4252
CURTIS J., PA2121
CUSACK R., PA174, PA933, PA935, OA2203, PA2424, PA3900
CUSHEN B., PA881
CUSHING A., PA3489
CUSHION M., OA3742
CUSTÓDIO C., PA169
CUSTOVIC A., PA3264
CUTHBERT K., OA1606
CUTI F., PA1899
CUTRERA R., PA3986
CUVELIER A., PA359, PA1870
CUVI D., PA3405
CVETKOVIĆ M., PA418, PA421, PA1152, PA3334
CVETKOVSKI B., PA3613
CYZOWSKI T., PA548
CZIRA A., OA747, PA2109
CZIRA A., PA227, PA1691, PA2118, PA2119, PA3619
CZIRJÁK L., OA1450, PA1952
CZYZEWICZ G., PA4259
CZYŻEWSKI D., PA482, PA483
D
D CHALMERS J., OA3750
D EDWARDS G., OA132
D' HOOGHE J., PA497
D. BENÍTEZ I., OA1437
D. CHALMERS J., OA3747
D. GESSNER B., PA4025, OA4408
D'AGOSTINO A., PA471
D'ALESSIO F., PA4267
DA CÂMARA S., PA3310
DA COSTA B., PA1829
DA COSTA L., PA1806
DA CRUZ F., PA1685
DA CUNHA FONSECA A., PA2395
DA SILVA C., OA3678
DA SILVA E., PA1806
DA SILVA J., PA1288
DA SILVA M., PA524
DA SILVA R., PA3509
DA SILVA R., PA2733
DA SILVA S., PA3884
DA SILVA MENEZES A., PA297
DA SILVA SENA C., PA3946
DABAR G., PA1143
DABBOUSSI S., PA155
DABIRI S., PA4274
DABOUSSI S., PA354
DABOUSSI S., PA1055, PA1200, PA2094
DABRAL C., PA445
DĄBROWSKA M., PA907
DABSCHECK E., PA1321
DACCORD C., PA1940
DACHA S., PA2530, PA3318

DADHICH P., PA3872
DAENEN M., OA809
DAG B., PA320
DAGHFOUS H., PA1909, PA1912, PA2101
DAGHFOUS J., PA390, PA3385
DAGLI E., PA966, PA968, PA972
DAGNA L., PA461
D'AGNANO V., PA872
D'AGOSTINO B., OA751, PA4190
D'AGOSTINO C., PA461
DAGOUASSAT M., OA663
DAHABREH M., PA3287
DAHL A., OA1399
DAHL M., PA249, PA897, PA4264
DAHL R., PA4221
DAHL V., PA1101
DAHL ASSING K., PA2136
DAHL SØNDERSKOV L., PA3335
DAHLÉN B., PA380, PA882, PA1337, PA1338, PA2397, OA3679
DAHLÉN S., PA918, PA1337, OA1411, PA3156, PA3560
DAI S., PA3943
DAIGNEAULT T., PA3579
DAINES L., OA3800
DAINTON J., PA3418
DAIRI Y., PA2827
DAIZADEH N., OA3675
DAKIN J., PA2712
DAL A., PA2743
DAL CORSO S., PA1045
DAL CORSO S., PA1044
DAL MOLIN A., PA4017
DAL NEGRO R., PA4178
DAL PRETE A., OA2258
DALAL I., PA1008
DALAMAGA M., PA1264, OA2317
DALE T., PA1082
D'ALESSANDRO M., OA2256, PA3299, PA3371, OA3787, PA4116
D'ALESSIO P., PA1060
D'ALESSSANDRO M., PA3300
DALLA K., OA3801
DALLA LANA K., PA3364, OA4363
DALLA ROSA I., PA259
DALLAGI A., PA262, PA1732, PA2458, PA3242
DALLE CARBONARE L., PA536
DALM V., PA3384
DALMASES M., OA2282
DALPHIN J., PA1697
D'ALTO M., OA2276
DALY K., PA1821, PA1825
DALY R., PA1334
DAM S., PA3182
DAM T., PA2449
DAMADOĞLU E., PA282, PA296, PA2496, PA2500, OA3679
DAMAR G., PA1191
D'AMATO M., PA4279
DAMATTO F., OA2330
DAMIANI L., PA3312
DAN A., OA794
DANA F., OA4366
DANAHAY H., PA4175
D'ANCONA G., PA1339, PA2543, PA3499
DANDANELL JUEL A., PA1194, PA1195
DANESHVAR C., PA1141
DANG M., OA1430
DANHOE S., OA2311
DANIEL J., PA4239
DANIEL M., PA3155
DANIELO V., PA2608
DANIELS J., PA496, PA3478
DANIELS J., OA769
DANIELS J., PA498
DANIIL Z., PA1192, PA2431, PA2655
DANIILIDIS D., OA4408
DANINO N., PA910
DANISH H., PA2702, PA2704
D'ANNA C., PA2840
D'ANNA S., OA1414, PA3873
DANNAOUI E., PA3301
DANNHEIM A., PA1830
DANOPOULOS S., OA669
DANTANARAYANA C., PA2600
DANTAS K., PA2797, PA4065, PA4282
DANTES E., PA427
D'ANTONI L., PA3149, PA4005
DANZO F., PA2753, PA4077
DAOUD S., PA390, PA3343, PA3385
DAOUD S., PA1054, PA3342
DARBRODI A., PA2665
DARBY M., OA2264, PA2659
DARIE A., PA394, PA4034, OA9001
DARKEN P., PA2104, PA3625
DARMAJATI I., PA1888
D'ARMIENTO J., PA3945
DARMON M., PA1248, PA1249
DAROCHA T., PA548
DARRASON M., PA1919, PA3406
DARRIBA FREDERIKS A., PA2449
D'ARRIGO D., PA2472
D'ARTAVILLA LUPO N., PA3599
DARTORA C., PA1178, PA1970, PA3372
DARTUS M., PA3954
DARWICHE K., PA488, OA771, OA772, PA2382, PA2515, PA2693, PA2701
DARWISH M., PA1256
DAS D., PA1716, PA2028, OA4380
DAS N., OA3113, PA3195, PA3885
DAS P., PA4069
D'ASCANIO M., PA4126
DASHKEVICH A., OA686
DASKALOPOULOU-VLACHOGIANNI E., PA622
DASKALOS T., PA2563
DASKALOS T., PA340, PA401, PA1849, PA1998, PA4014
DASSIOS T., PA3283, PA3284, PA3285, PA3291
DATE H., PA4123
DATTA B., PA4272
DAUBY N., PA4275
DAUDVOHRA F., PA1823
D'AURIA E., PA2507, PA2508, PA2509
DAVENPORT P., PA2540
DAVERIO M., PA3372
DAVEY M., PA1237
DAVID A., PA184
DAVID S., PA1254, PA2078
DAVIDSEN J., OA691, PA1333, PA3431, PA3868
DAVIDSON C., PA164
DAVIDSON L., PA1209
DAVIES B., PA275, PA276, PA279, PA281, PA2499
DAVIES D., OA2964
DAVIES D., PA585, PA587
DAVIES E., OA2964
DAVIES J., RCT711
DAVIES M., PA2858
DAVIES M., PA565
DAVIES P., PA269
DAVILA-ROMAN V., OA2960
DAVIS L., PA1795, PA1947, PA2825
DAVIS S., OA2307, PA2487, PA2489
DAVIS S., PA515
DAVISON S., PA2660
DAVY J., PA1096
DAY A., PA2729, PA2734
DAY T., PA2835
DAYNES E., OA131, PA364, PA1228, PA1867, PA2580, PA2592, PA3355
DAZA DIAZ A., PA3289
DAZHAM M., PA1772
D-C MAN W., OA132
D'CRUZ L., PA428
D'CRUZ R., PA192
DE S., OA1610
DE AGRELA MENDES I., PA185, PA1674
DE ALMEIDA MONTEIRO R., PA4065
DE ANDRES DAVID R., PA469, PA2095
DE AZEVEDO A., PA3519
DE BACKER I., OA1405, PA3328
DE BACKER J., PA2588
DE BACKER W., PA1223, PA1234, PA2588
DE BARROS J., PA272
DE BARROS J., PA613
DE BATLLE J., PA1846, OA2282
DE BEKKER I., PA3500
DE BELS D., OA2324
DE BENEDETTO F., PA939
DE BERMONT J., PA3406
DE BERNARD S., OA1388
DE BESSA JUNIOR J., PA885
DE BIASE M., PA4262
DE BIE E., PA1978
DE BIE F., PA4137
DE BLASIO F., PA353
DE BLAY F., PA188, PA263, PA1335, PA1653, PA3205, PA3206
DE BLIC J., PA3955
DE BOER G., OA2206
DE BONDT C., PA1929
DE BONDT M., PA2811
DE BRANDT J., PA335, OA3118
DE BRUIJN M., OA2206, PA3896
DE BRUIJNE M., PA1671
DE BRUIN M., OA766
DE BRUIN S., RCT2881
DE BURCK E., OA3122
DE CARLI G., OA3787
DE CARLO N., PA2533
DE CASTRO CORREA C., PA272
DE CASTRO E GARCIA L., PA297
DE CASTRO MARTÍNEZ F., PA884
DE COMITE A., PA3506
DE COSTER G., PA1069
DE CRAEMER M., PA1037
DE CREM N., PA448, OA1392
DE DIEGO C., PA4067, PA4078
DE DIEGO CABANES C., PA1121, PA2366, PA2457
DE DIEGO RAMOS C., PA348, OA3776, PA4068
DE DOMENICO E., PA2812
DE FAYS C., PA603, PA1030, PA1286, OA3793, PA4265
DE FILIPPIS F., PA2398, PA3215, PA4320
DE FINE LICHT S., OA4376
DE FRAIPONT F., PA4104
DE FRANCESCHI C., PA2479
DE FRANCISCO R., PA2088
DE FRANCISCO T., PA4131
DE GONZALO-CALVO D., PA1846, PA2802, PA4283
DE GRAAFF B., PA163, PA1730
DE GROOTE P., PA1989
DE GROOTH H., OA1435
DE GUIDO I., PA529
DE HOMDEDEU M., PA250, PA337, PA1718, PA2466
DE HOOG K., PA999
DE HOOGH K., OA142, PA1002, PA1003
DE JAGER M., PA3164
DE JONG C., PA1006
DE JONG F., PA3349
DE JONG K., PA951, PA1930, PA2474
DE JONG N., OA688
DE JONGE M., PA4083
DE JONGH F., OA120, OA2266, OA3114
DE JONGH F., OA3760
DE JULI E., PA1160
DE KEYZER F., PA2006
DE KRUIF M., PA3892
DE KRUIF M., PA4288
DE LA CALLE GIL I., PA4235
DE LA CALLE-GIL I., PA4233, PA4244
DE LA DUEÑA L., OA2319
DE LA DUEÑA MUÑOZ L., PA2015
DE LA ESCOSURA MUÑOZ C., PA3518
DE LA ROSA BÁEZ C., PA3554
DE LA ROSA-BÁEZ C., PA3548
DE LA ZERDA D., OA2279
DE LAAT P., OA1612
DE LANGHE E., PA448, OA1392
DE LAS FUENTES L., OA2960
DE LAURETIS A., PA1172
DE LAUZON-GUILLAIN B., OA2302
DE LIMA F., PA2527
DE LIPERI A., PA2454
DE LOOFF M., PA3164
DE LUCA A., PA2512
DE LUQUE J., PA467, PA1972, PA1984, PA1987
DE MAEYER N., PA1038, PA1039
DE MAN A., OA1435
DE MAN F., PA1983
DE MARCHIS M., PA3996
DE MARCO P., PA529
DE MARGERIE-MELLON C., OA4439
DE MASSIMI A., PA312
DE MELO J., PA1891
DE MELO LIMA L., PA1913
DE MESA ÁLVAREZ J., PA339
DE MEYER Y., PA1223, PA2588
DE MIGUEL DIEZ J., PA2108
DE MIGUEL DIEZ J., PA487, PA1181, PA1325, PA1663, PA3876, PA3938
DE MIR-MESSA I., OA2912, OA2955
DE MONTMOLLIN E., PA1248, PA1249
DE MUL B., PA2387
DE NARDI P., PA369
DE NIGRIS E., OA3741
DE PABLOS M., OA4390
DE PALO G., OA2939
DE PAULA VIEIRA R.,

PA2578, OA4362
DE PAULIS A., PA1954
DE PRADO GÓMEZ L., PA2390, PA3191, PA3210
DE PROST N., OA4443
DE RIDDER M., PA3855, PA3869
DE RINALDIS E., PA4262
DE ROOS E., PA876
DE ROOS E., PA2583
DE SADELEER L., PA456, OA687, PA1286
DE SADELEER L., PA448
DE SADELEER L., OA1392, PA4265
DE SAINT MARTIN L., OA4443
DE SAINTE MARIE B., OA4435
DE SAMPAIO NUNES DUARTE SILVA M., OA2328
DE SANTI C., PA2059, PA3580
DE SANTIS R., PA2508
DE SANTIS S., PA461
DE SENY D., OA1451
DE SILVA T., PA1306
DE SILVESTRI A., PA2509
DE SOUZA R., PA1083
DE SOUZA XAVIER COSTA N., PA2797, PA4065, PA4282
DE SOUZA-GALVÃO M., PA4092
DE SOYZA A., OA3751, OA3800
DE TORRES TAJES J., PA2813
DE VINCENTIS A., PA407
DE VITIS C., PA4126
DE VLIEGER G., PA1020
DE VOLDER J., OA2199
DE VOS J., PA586, PA2060, PA3583
DE VOS M., OA750, PA902, PA1973, PA3885
DE VOS N., OA2324
DE VREEDE C., OA1611
DE VRIES G., OA763
DE VRIES H., OA1435, OA2313
DE VRIES M., PA1282
DE VRIES R., OA1621
DE VUYST P., OA4438
DE WAELE E., PA1842, OA3799
DE WEERD W., PA1091
DE WEVER W., OA1401, PA3476
DE WILDE M., PA230
DE WINTER B., PA1069
DE WINTER - DE GROOT K., PA295
DE WINTER-DE GROOT K., PA3556
DE YUN W., OA3750
DE ZORZI E., PA3372
DEAN C., OA3743
DEAN J., PA3520
DEAN L., OA2964
DEAN L., PA585, PA587
DEASY K., PA2704
DEASY K., PA2703, PA2725
DEBBICH S., PA1054
DEBBICHE S., OA1604, PA3342, PA3343
DEBICHE S., PA390, PA2007, PA3385
DEBIEUVRE D., PA957, PA1915
DEBNATH O., PA1305
DEBOECK G., PA1227
DEBOER E., RCT2887
DEBRAY M., OA4435
DEBRAY-GARCIA Y., PA3526, PA4281
DECAESTECKER C., PA4275
DECAESTEKER T., OA2937
DECAMP M., PA4263
DECARLO N., PA1809
DECKERT A., PA1736, PA1737
DECOSTER L., PA4110
DECOUX L., PA2635
DECROISETTE C., PA4104
DECRUE F., OA142, PA1002
DEDICOAT M., OA762, PA1895, PA1908
DEDIU M., PA2491, PA2493, OA2905
DEDONDER J., PA3350
DEFOSSE K., PA888
DEFRANCE C., PA2608
DEGANI-COSTA L., PA963, PA3941
DEGANO B., PA1697
DEGERING J., PA2677
DEGHDEGH K., PA221
DEGOBBI TENORIO QUIRINO DOS SANTOS LOPES F., PA908
DEGOT T., PA3301, OA4438
DEGRASSI M., PA2766
DEHANDSCHUTTER B., PA1729
DEHARA M., PA3436
DEHETTE S., PA957
DEHIO P., PA2616
DEHLINK E., PA3982
DEI A., PA2051
DEI LAZZARETTI I., PA2131
DEKHIL I., PA1214, PA4217
DEKHUIJZEN R., PA3613
DEKKER T., PA930
DEL FANTE C., PA3571
DEL MARMOL V., PA4275
DEL POZO V., PA876, PA2426
DEL RIO B., PA2666
DELACOURT C., PA2844
DELAFOSSE C., PA957
DELAGE A., RCT4449
DELAMPLE D., PA3147
DELANEY B., OA4379
DELANEY R., PA2807
DELASTRE L., PA3406
DELBECK M., PA574
DELBRESSINE J., PA1035
DELCLAUX C., PA517
DELCROIX M., PA1020, PA1973, PA3457
DELEANU O., PA612
DELESTRAIN C., OA2904, OA4438
DELEURAN B., PA3431
DELGADO J., PA3214
DELGADO L., PA2610, RCT2883, OA3798, PA4066, OA4404
DELGADO ORTIZ L., PA3874
DELGADO ROMERO J., PA1648
DELGADO-ECKERT E., PA1340
DELGADO-ORTIZ L., PA1835
DELHEZ M., PA575
DELICE A., PA1041, PA1052
DELIGNY C., OA4443
DELL S., PA1770, PA3473
DELL´ERA S., PA2533
DELLA PASQUA O., PA4185
DELLA ZOPPA M., PA1953, PA3571, OA3659, PA4279
DELLACÀ R., PA1753, PA3281
DELLACÀ R., OA3110, PA3282
DELLACÀ R., OA2913
DELLACA' R., PA3186
DELLACA' R., OA3115
DELLGREN G., PA600, PA4133
DELLSCHAFT N., OA1618
DELMESTRI A., PA3855, PA3869
DELSHAD B., PA4297
DELUCA D., PA934, PA1015, PA2816
DELVERT R., OA2302
DEMANT X., OA692, PA3301
DEMASI C., PA895
DEMCHUK A., PA2113
DEMEESTERE K., PA1069
DEMERTZIS P., PA340, PA401, PA1849, PA1998, PA2563, PA2604, PA4014
DEMETRIO S., PA1979
DEMETRIOU L., PA4186
DEMEULENAERE B., PA1021
DEMEYER H., PA326, OA804, OA805, PA1037, PA1038, PA1039, PA2518, OA3122, PA3444
DEMIR ., PA2500
DEMIR A., PA945, PA3537
DEMIR D., PA2720
DEMIR E., PA282, PA296, PA2496
DEMIRAL Y., PA254
DEMIRKOL B., PA4201
DEMOKRITOU P., OA2958
DEMORY A., OA4383
DEMPSEY N., PA4134
DENEHY L., PA2767
DENEUVILLE L., PA2127
DENG C., PA1934
DENIS A., PA1660
DENIS J., PA4146
DENIS N., PA1926
DENIZ Y., OA2950, OA2952, PA3197, PA3198, PA3209, PA3212, OA3672, OA3675, PA4321
DENNIS C., PA1861
DENNIS P., PA3168
DENNISON P., PA890, OA3674
DENNISS W., PA1802
DENNISTON P., PA441
DENTON C., PA472, OA1452
DENTON C., OA1449
DENTON E., PA4323
DENUTTE Y., PA2540, PA2548
DEOSKAR R., PA1726
DEPALO A., PA1196
DEPIETRO M., PA3492, PA3493
DEPREST J., PA4137
DER VARTANIAN A., PA590, PA2479
DERAEDT Q., PA3199
DERBEL K., PA530
DERBYSHIRE J., RCT2161
DERI O., PA1024, OA1436
DEROISY R., PA886
DEROM E., PA326, PA1038, PA1039, OA3113, OA3122
DE-ROOY L., PA3288
DERSARKISSIAN M., PA2765
DER-TOROSSIAN C., PA1893
DERUMEAUX G., PA590, PA2837
DESACHY M., PA371
DESAI A., PA3286
DESAI D., PA171, PA176, PA181
DESAI M., PA2499, PA2516
DESAI M., PA368
DESAI S., PA1261
DESAINTJEAN C., PA2132
DESBORDES P., OA120
DESCHILDRE A., PA1332, OA2950, PA3264, PA3954, PA3955
DESHAYES S., PA402
DESHMUKH A., PA2002
DESIDERI M., PA2454
DESLÉE G., PA201, PA3890
DESMEDT L., PA2608
DESORT-HENIN V., OA2310
DESPEAUX M., PA3147
D'ESPINEY R., PA436
DESSAU R., PA2415
DESTEFANO S., PA2816
DETERDING R., RCT2887
DETHIER C., PA4110
DE-TORRES J., PA2037, PA4218, PA4224, PA4229
DETRY B., OA692
DETSIKA M., PA3528
DETTORAKI M., PA3161
DEU M., OA689
DEUBY T., OA682
DEUTSCH G., OA669
DEVAMOGLU U., PA2049
DEVANEY R., PA3155
DEVANI N., PA2851
DEVANI P., PA981, PA982, PA983, PA984, PA993
DEVARAJ A., PA1261, RCT2161, PA3377, PA3421
DEVEL L., PA3165
DEVELI E., PA2524
DEVIN F., PA3406
DEVKOTA S., PA1709
DEVOUASSOUX G., PA1919, PA3406
DEVULDER J., OA3655
DEWAAL K., PA3946
DEWAN K., PA2772, PA2776
DEWAR A., PA1666
DEWYSPELAERE G., PA1842, OA3799
DEXTER K., PA3979
DEXTER R., PA1316
DEXTER-SPOONCER R., PA3393
DEY S., PA2793, PA3549
DEZSO K., OA1383
DGHAIES A., PA1200
DHADGE N., PA3233
D'HAENENS A., PA1020
DHAHRI B., PA2458
DHAHRI B., PA1675, PA2785
DHAHRI R., PA1200
DHALIWAL I., OA785
DHALIWAL K., PA3581
DHALIWAL R., PA3413
DHAMDHERE D., PA3363
DHANIK J., PA2503, PA2504
DHAOUADI N., PA3939
DHARA A., PA1190
DHARMAGE S., OA1415, PA1688, PA1699, PA2482
DHASMANA D., RCT2883
DHAWAN V., PA2123, PA2128, PA2129
DHEDA K., OA758
DHEYAULDEEN S., OA2306
DHEYAULDEEN S., PA3980
D'HOOGHE J., PA930
DHOTE R., OA2959
DHUMAL U., PA2587
DI BIASE E., PA3149
DI CIUCCIO F., PA2044
DI GIOIA G., OA2329, PA4284
DI GIUSEPPE F., OA2256
DI JORGI M., PA1763
DI LORENZO V., PA1040
DI MARCO F., PA553, PA554, PA2766, PA2778
DI MARTINO M., PA312
DI MATTEO S., PA1338
DI MATTIA G., PA1763, PA2450, PA2512
DI PASQUA A., PA3495

DI SANO C., PA2840
DI SANTO J., OA2935
DI STEFANO A., PA883, OA1414, PA2440, PA3873
DI TANNA G., PA3143
DI TULLIO F., PA1239
DI VINCENZO S., PA189, PA2840, PA3898
DIAB N., PA182, PA899, PA900
DIAB CÁCERES L., PA151
DIABASANA Z., PA201
DIACONU M., PA2513
DIAFERIA F., PA159, OA2329, PA4284
DIAMANTI E., PA3528
DIAPER J., PA556
DIAS C., PA4207
DIAS H., PA4214
DIAS S., PA3386, PA3427
DIAS S., PA3428
DIAS W., PA2463
DIAS ALMEIDA S., PA3888
DIAS BRESCIA M., OA667
DIAVATOPOULOS D., PA4083
DIAZ A., OA3755
DIAZ A., PA3461
DIAZ A., OA2960
DIAZ D., PA1652, PA2374
DÍAZ E., OA4392
DIAZ E., PA3538
DÍAZ G., PA558
DÍAZ CAMBRILES T., PA2859
DÍAZ FERNÁNDEZ S., PA4092
DIAZ MIRAVALLS J., PA151, PA1639
DIAZ RODRIGUEZ T., PA1757
DÍAZ-CAMPOS R., PA2134
DÍAZ-FERNÁNDEZ S., PA4074
DÍAZ-PEDROCHE M., PA1181
DÍAZ-VALDIVIA N., PA4101
DICICCO L., PA3949
DICIOLLA N., OA3121
DICKENS A., PA515
DICKENS F., PA3393
DICKENS J., PA602
DICKER A., PA1834
DICKER A., OA3748
DICKHOFF C., OA769
DICKINSON J., PA3523
DICKSON J., PA2591
DICKSON J., OA676
DICPINIGAITIS P., PA178
DIDDEN E., PA1974
DIDI T., PA2862
DIDIER A., PA3911, PA4309
DIELLO L., PA4222
DIEMER S., PA288
DIENINGHOFF D., PA2758
DIEP P., PA1961
DIEPENHORST S., PA381
DIERCKX W., PA1223, PA1234, PA2588
DIERDORP B., PA930
DIERICK B., PA3606
DIESLER R., OA4438
DIETSCH F., PA3205, PA3206
DIEVAL C., OA4435
DIEYI C., PA2668
DÍEZ FERRER M., PA499
DÍEZ IZQUIERDO A., OA2912
DIGALAKI A., PA377, PA378, PA1114, PA2613
DIGBY G., PA2736, PA2742
DIGHERA A., PA2509
DIJK L., PA3613
DIJKGRAAF M., RCT4452
DIKER K., PA1771
DIKMEN Z., OA3127
DIKSHIT N., OA3777
DILISSEN E., OA2937
DILLON M., OA3675
DIMA E., PA362, PA2522
DIMAGLI A., PA1789
DIMAKOU K., PA377, PA1114, PA2389, PA2431, PA2613, PA2697, PA4129
DIMAKOU1 K., PA378
DIMEAS I., PA2655
DIMIC JANJIC S., PA1110
DIMITRIOS K., OA797
DIMITRIOU G., PA3277
DIMITROPOLOU C., PA2835
DIMITROULIS I., PA1854
DIMITROVA V., PA405
DIMOPOULOS G., PA1882
DIMOPOULOS K., PA476, OA2275, PA2672, PA4138
DIMOPOULOU I., PA3528
DIMOSTHENIS P., PA184
DIMOV D., PA3188, PA3572
DING C., PA471
DING M., OA2204
DINH-XUAN A., OA3113
DINH-XUAN A., OA1430
DINIZ O., PA3884
DINKOVA-KOSTOVA A., PA2610, PA4066
DIONELLI E., PA1854
DIPPER A., PA429
DIRLAM D., PA888
DIROU S., PA2608
DISTLER J., OA1453
DISTLER O., PA472, OA1450, OA1453, PA1952
DITETOVA K., PA2378
DITTRICH A., PA934
DITTRICH A., PA1015, OA2954, PA3948
DITZ B., PA1279
DIVAC RANKOV A., PA2076
DIVALL P., OA130, PA4216
DIVO M., PA2813
DIVWEDI K., PA3467
DIWAKAR L., RCT2883
DIXEY P., PA2819, PA3564
DIXIT R., PA1711
DIXON L., PA3979
DIZDAS T., OA2265
DIZDAS T., PA1136
DJAMIN R., OA3117
DJANDJI M., PA3198
DJEKIC MALBASA J., OA2263
DJUKANOVIC R., OA141, PA1338, OA1411, PA2397, RCT2884, PA3204, PA3207, PA3560
DLADLA S., PA2478
DMYTRIIEV D., PA2112, PA3621, PA3622, PA3907, PA3916, PA4044, PA4045
DMYTRIIEV K., PA2112, PA3621, PA3622, PA3907, PA3916, PA4044, PA4045
DMYTRIIEVA K., PA2112, PA3907
DMYTRYCHENKO V., PA3388, PA3402
DO W., PA902
DO LAGO V., PA613
DO VALLE S., PA1083
DOBAÑO C., PA2798
DOBBELS F., PA3886
DOBERER D., PA2397
DOBRIN M., PA3928, PA3935
DOBSON R., PA1955
DOCHERTY M., PA179
DOCKRELL D., PA1775, OA2186
DOCKRY R., PA901
DODD J., PA890, OA2305, PA2462, PA2728
DODD J., OA2285, OA4442
DODD R., OA2940
DODGSON J., PA3585
DODLEK N., OA3731
DOE G., OA4374
DOE S., PA890
DOEL T., PA2008
DOERFLER F., OA4417
DOGAN C., PA902
DOĞAN Ö., PA3190
DOGAN R., PA289
DOGAN MÜLAZIMOGLU D., OA1627, PA2731, PA2743
DOGGEN C., PA4205
DOGHAN D., PA3521
DOĞRU D., PA296, PA1771, PA2025, PA2496, PA2500, PA2502, PA2853, OA4420
DOĞRU M., PA1094
DOĞRU S., PA1065
DOĞRU ERSÖZ D., PA282
DOĞU B., PA2379
DOHERTY D., OA3658
DOHERTY D., OA146
DOHERTY K., PA1123
DOIG C., PA4162
DOISNE J., OA2935
DOKE P., PA3924
DOKSIMOVSKI F., PA3973
DOLENC Š., OA1620
DOLHNIKOFF M., PA2797, PA4065, PA4282
DOLL S., PA3174
DOLLIVER W., OA3755
DOLMAGE T., OA130
DOLO V., PA438
DOMAGAŁA-KULAWIK J., PA1134, PA1920, PA4107
DOMANSKI U., PA214
DÖME B., OA1383
DOMENECH DEL RIO A., PA4012, OA4425, OA4432
DOMINELLI P., PA1232
DOMINGO C., PA3212
DOMINGO E., PA1161
DOMINGO MORERA J., PA2686
DOMINGO RIBAS C., PA1344, PA2134
DOMINGO RIBAS E., PA478
DOMINGOS A., PA415, PA431
DOMINGUEZ J., PA4074, PA4092
DOMINGUEZ M., PA2590
DOMINGUEZ BLASCO M., PA2590, PA4022
DOMÍNGUEZ ORTEGA J., PA185, PA1674
DOMÍNGUEZ SANTAELLA M., PA501
DOMINGUEZ SANZ N., PA3314
DOMINGUEZ ZABALETA I., PA487, PA1663, PA2031, PA2108, PA3876, PA3938
DOMINGUEZ-ORTEGA J., PA1648
DOMÍNGUEZ-TREJO B., PA2545
DOMINIQUE B., PA2740
DOMIS N., PA3205, PA3206
DOMNIK N., PA1232, PA2039, PA4230
DONACHIE G., PA1815, PA2818
DONALDSON C., PA1808
DONALDSON G., PA3879
DONALDSON G., RCT2882
DONALDSON G., PA1113
DONATELLI A., PA1205
DONATI P., PA1957, PA1958
DONAY P., PA575
DONEV S., PA3833
DONEVA D., PA2111
DONG C., PA919
DONG D., OA1430
DONGHI S., PA481
DONGO L., PA2394
DONGUINES M., PA2571
DONIZZETTI R., PA3844
DONNAN E., PA423
DONNELLY D., PA3471
DONNELLY L., PA3584, PA3585
DONNELLY L., PA2058
DONNELLY L., OA3655
DONNELLY S., PA873, PA2606
DONOFF S., RCT2886
DONOVAN A., PA4231
DONOVAN C., PA578, PA918, PA922, PA1269, PA1825, PA2812, PA3168
DONOVAN J., OA1452
DONTH LEGER M., PA989
DOOMS C., PA2006
DOORDUIN J., PA522, PA1091, PA1198, PA2040, PA3337
DOR Y., PA1303
DORA P., PA184
DORCA J., PA2666
DORETTO A., PA2520
DORFMÜLLER P., OA668, PA4150
DORIS L., PA1822
DORMAN E., PA2775
DORMOY V., PA201
DORN P., OA1386
DORTAS JUNIOR S., PA1685
D'ORTHO M., PA2862
D'ORTHO M., PA1314
DOS S. ZAMARIOLI L., PA1288
DOS SANTOS F., PA1083
DOS SANTOS M., PA2799
DOS SANTOS CASTRO PADILHA J., OA3729
DOS SANTOS OLIVEIRA VIANNA E., PA256
DOS SANTOS ROCHA A., OA3110
DOSANJH D., PA1964, PA3434
DOSANJH D., RCT2883
DOSKALIUK B., PA2829
DOSSENA F., OA1414, PA3873
DOST M., PA925
DOTTA L., PA3986
DOUCET S., PA1025
DOUGAN C., PA2807
DOUGHERTY G., PA2845
DOUGHERTY G., PA2053
DOUGLASS J., PA1688, PA1876, PA2387
DOUIK EL GHARBI L., OA795, PA871, PA2383, PA3362, PA3392
DOUIK ELGHARBI L., PA162, PA2383
DOULL I., PA1742
DOURADO V., PA2733, PA4219
DOURADO JUNIOR M., PA1806
DOUROS K., PA1769, PA2431, PA2511, PA3507, OA4437
DOUSCHAN P., PA477, PA3462, PA4136
DOUSOVA T., PA2854
DOUTRELEAU S., PA2763, PA2860
DOUWES J., PA3904
DOUZI A., PA2782,

PA2783
DOVE R., PA1000, OA2961
DOW M., PA3489
DOWEY R., RCT2883
DOWNS M., PA2818
DOWNS S., PA2850
DOWNWARD J., PA587, OA2964
DOYEN M., OA1455
DOYLE C., PA2023
DOYLE J., PA1261
DOYLE L., OA121
DRAGANSKI B., OA2287
DRAGISIC D., OA2263
DRAGONIERI S., PA2131, PA3178
DRAKATOS P., PA3333
DRANGE RØKSUND O., PA3137, PA3144
DRANSFIELD M., RCT712
DRAPER A., PA874, PA1336, PA3338
DREANO E., PA2844
DREHER M., PA183, PA3623
DRENGENES C., PA3229, PA3906
DRESCHER F., RCT712
DREYER N., PA2676
DRICK N., PA1687
DRIDI A., PA1786, PA1790
DRISCOLL T., PA1260
DRIVA S., PA3926
DROBNIEWSKI F., OA3752
DROLIAS A., PA1068
DRÖMANN D., OA681
DRUMEZ E., PA3954
DRUMMOND B., PA2121
DRUMMOND M., PA615, PA627, OA2289
DRUMMOND M., PA3882
DRUMMOND S., PA1321
DRUMMONDS L., PA1155
DRYSDALE M., PA1901, OA3802
DU J., PA2615
DU S., PA236, PA3920
DU S., PA3471
DU BERRY C., OA121
DU MEE A., OA1405
DUAN E., RCT716
DUARTE D., PA431
DUARTE M., PA2118, PA2119, PA3619
DUARTE P., PA4001
DUARTE T., PA4001
DUARTE DE ALMEIDA V., PA3541
DUARTE DOS SANTOS OLIVEIRA RODRIGUES J., PA544
DUARTE MIRANDA S., PA1956
DUARTE-SALLES T., OA2303
DUBBELDAM A., PA448, OA1392, OA1401, PA3476
DUBEY C., OA1386
DUBIK P., PA548
DUBINI A., PA442
DUBITSKAYA O., PA2803
DUBON F., PA2567
DUBOWITZ D., PA3475
DUBUS J., PA2594
DUBUS J., PA3955
DUCKWORTH A., PA152, PA3418, PA3488
DUCOIN H., PA3954
DUDBRIDGE F., PA3235
DUDKIN E., PA2812
DUFFY D., PA3288
DUFFY E., PA3581
DUGAS M., PA3404
DUGGAL M., PA1964
DUH M., PA236, PA3920
DUIJTS L., PA3959
DUIJVELAAR E., OA1438, PA2614
DUITMAN J., OA2313
DUIVERMAN M., PA562
DUJARDIN S., PA3490
DULCEY L., PA1259
DUMAS M., OA1615
DUMAS O., PA252, PA253, PA255, PA267, OA2302, PA3230, PA3250
DUMINY-LUPPI D., PA2666
DUMISTRACEL M., RCT2887
DUMITRAS T., PA3972, PA4030
DUMONT P., PA957
DUNACHIE S., PA1306
DUNCAN C., PA2557
DUNGU A., PA4028, OA4413
DUNGWA J., PA3575, PA3894
DUNNINK M., PA3988
DUONG A., PA3579
DUONG M., PA373
DUONG-QUY S., PA3266
DUPIN C., PA2127, PA3345
DUPIN I., OA2936
DUPIN M., OA758
DUPONT L., PA603, PA905, PA1030, OA2937
DUPONT L., OA687
DUPUIS C., PA1248, PA1249
DURAIKANNU C., OA1418
DURAN X., PA376, PA387
DURÁN BARATA D., PA527, PA1107, PA1346
DURAN JORDÀ X., PA1715
DURCAN L., PA3419
DURDIK P., PA2515
DUREZ P., OA1455
DURHAN G., PA154, OA3127, PA3537
DURHEIM M., PA1961
DURHEIM M., PA3525
DURKIN L., PA280, PA2855
DURMAZ D., OA4361
DURNA Z., OA3730
DURRINGTON C., PA462
DURUISSEAUX M., PA1919
DURUTÜRK N., OA4361
DUSART C., OA2324
DUŠEK L., PA3412
DUSSEZ R., PA3601
DUTHOO W., PA2449
DUTTA P., PA3302
DVORACEK M., PA3444
DWARAKANATH A., PA2850
DWIVEDI K., PA462, PA464, PA470, PA1971, OA2277
DWORNICZAK B., PA3404
DWORSKY A., PA2787
DWYER T., OA801
DYAHOVETS K., PA4070
DYBOWSKA M., OA3790
DYHRE-PETERSEN N., PA4191
DYRBUŚ M., PA548
DYRMAN ALSTED S., PA1641
DYTYATKOVSKA Y., PA1331
DZIEDZIC D., PA1920
DZIEDZIC M., PA1920
DZIETKO M., PA2053
DZIUBLYK Y., PA3439
DŽUBUR F., PA1026, PA2710, PA4170
DŽUBUR F., PA3447
E
E BARKER R., OA132
E PFEFFER P., PA2136, PA4323
E WECHSLER M., PA2136
E. MCDONOUGH J., OA3793
E. SCHIZA S., OA2289
E. VAN RAEMDONCK D., OA3793
E. VERLEDEN S., PA3174
E. WHEELOCK C., PA3156
E.PFEFFER P., PA1330
EADEN J., OA1403
EAGAN T., PA2809, PA3229
EAGAN T., PA4251
EAGAN T., PA1300
EAPEN M., PA2793
EARL N., PA1237
EASTON F., PA1914
EASTON N., PA585
EAVES A., PA2051
EBADI Z., PA3336
EBATO T., PA611, OA673, PA1844
EBBERS W., OA1631
EBERT T., PA2646
EBIHARA S., PA1159
EBIHARA T., PA1159
EBRAHIM H., PA1085
ECHAIDE M., PA558
ECHEVARRIA C., PA208, PA1863, PA3908, PA3913
ECHEVARRÍA GUERRERO E., PA1309, PA2572
ECKELMAN B., PA3615
ECKERT D., PA1657, PA3600
ECKERT J., RCT710
ECKHARDT S., PA3623
ECONOMOU N., PA3587
EDAKUNI N., PA4180
EDARA M., PA3407
EDDAOUDI A., PA1290
EDEY A., OA787
EDRIS A., PA4308
EDUARDO NERY L., OA3123
EDWARDS C., PA560
EDWARDS C., PA3494
EDWARDS D., PA3204
EDWARDS L., PA274
EDWARDS L., PA3486
EDWARDS M., PA3204
EDWARDS S., OA4374
EEFTENS M., OA142
EELLIOT C., PA462
EFFING T., PA4210
EFSTATHIOU C., PA1306
EGE M., PA3257
EGELUND G., PA1111
EGENLAUF B., PA471, PA474, PA1976, OA2276, PA2677
EGENOD T., OA772
EGER K., PA2402, PA3207, OA3679
EGER K., PA184
EGESTEN A., PA2831, PA2833
EGGELING S., PA490, PA491
EGGENKEMPER L., OA4418
EGHOLM G., OA2907
EGNATIA GROUP S., PA4025, OA4408
EGODAGE T., PA2600
EHYA H., OA766
EICHSTADT C., PA1976
EICHSTAEDT C., PA471, PA474
EICHSTAEDT C., PA2677
EICKELBERG O., OA662, PA2787
EICKMEIER O., OA4417
EID H., PA349, PA1143, PA2579, OA4358
EIJKEMANS R., OA1617
EILS R., PA1305
EINARSSON G., PA392, PA1104
EINARSSON U., PA1803
EIROS BACHILLER J., PA1705, PA2569, PA4054
EISENBERG I., PA382
EISENHAWER C., PA1736, PA1737
EISENHUT M., PA4084
EISENMANN S., PA490, PA491
EIYA T., PA4079
EIZAGUIRRE S., PA1183
EIZAGUIRRE ANTON S., PA414, PA1059
EJAZ T., PA219
EJAZI A., PA1696
EKANAYAKE L., PA528
EKAWATI D., PA1888
EKEOWA U., PA2771, PA2772, PA2776
EKERLJUNG L., PA953
EKHELIKAR S., PA389
EKLÖF J., PA240, PA246, PA1695, PA2415, PA3232, PA3234, PA3612, PA3839
EKOFF H., PA990, PA991
EKONOMIDOU E., PA3369
EKSTRÖM M., PA1657, OA2290, PA3589, PA3593, OA3739
EKSTRÖM S., PA3231
EKVALL HANSSON E., PA3326
EL EUCH A., PA1100
EL FEKIH L., PA1105
EL FIDHA S., PA2561
EL GHOUL J., PA1853, PA2605
EL GUEBSY Z., PA1214
EL GUEBSY Z., PA4217
EL HACHEM DEBEK A., PA3410
EL HADDAD I., PA976
EL HAFIDI N., PA3269, PA3271
EL HEFNY A., OA2909
EL HUSSEINI K., PA1193, PA4111, PA4120
EL JAMMAL T., PA3446
EL JERRARI Y., PA2449
EL KARAK F., PA1143
EL KHATTABI W., PA2439, PA3397
EL KIK A., PA349, PA1143, PA2579, OA4358
EL MAALEL O., PA264
EL MAHMOUDI S., PA2449
EL MEZNI F., PA1792
EL MOKHTARI N., OA4360
EL MOURAD S., PA3954
EL WADHANE I., PA2089
EL WHADHANE I., PA625, PA2848
EL.KHLOUFI Y., PA3608
ELABRAS FILHO J., PA1685
ELBEHAIRY A., PA2755, PA4230
ELBEK O., PA966, PA968, PA972
ELBER-DOROZKO S., PA1766
ELBERT A., OA1616, OA2917
ELBIALY S., PA2755
ELBIAZE M., PA3485
ELBORN J., PA1876
ELDEEB A., PA2784
ELEANGOVAN N., PA1330
ELEFTHERIOS Z., PA184
ELEMAM N., PA2827
ELENA D., PA425
ELENJICAL R., PA2595
ELENKO E., PA1933
ELESDOUDY A., PA1848
ELEUCH A., PA1703
ELEUCH A., PA234, PA1993

ELEUFTHERIOU K., PA350
ELFAKI A., PA2764
ELHAN A., OA1627, PA2731
ELHOFY M., PA2755
ELHUSSEINI Z., PA3558
ELIASEN A., OA143
ELIE V., OA1633
ELISABETH B., PA184
ELKHATTABI W., PA2372, PA4260
ELKHAWAGA M., RCT715
ELKIN S., OA135
ELLA N., PA4040
ELLAYEH M., OA785
ELLAYEH M., OA782
ELLERVIK U., PA2079
ELLEUCH A., PA2561
ELLEUCH F., PA226, PA1244, PA2752, PA3510
ELLINGHUSEN B., PA172
ELLIOT C., OA2277, PA3467
ELLIOT K., PA1209
ELLIOTT-COOPER T., PA2523
ELLIS A., PA182, PA899, PA900
ELLIS P., PA2106, PA2425, PA2433, PA3917, PA4058
ELLISON J., PA2534
ELLSBURY G., PA2452
ELMALEH-SACHS A., PA248
ELMANKABADI B., PA459
ELMEDANY S., PA4223
ELMETWALEY R., PA4286
ELMSTÅHL S., PA1701
ELNAZIR B., PA2856
ELNEIMA O., OA2326, OA3800
ELORDUY VERGARA E., PA876
ELORZA I., PA2717
ELOWSON L., OA3660
ELOWSSON L., PA600
ELOWSSON RENDIN L., PA608, PA4133, PA4269
ELPERS B., PA2668
ELSEY L., PA892
EL-SHAARAWY B., PA1095, OA2909, PA4154
ELSHAZLY A., PA1095, PA4154
ELSHOF J., PA562
ELSNER MELGAARD M., OA143
ELTON L., PA1290
ELWASEFY M., PA856
ELWING J., PA1979, PA2682
EMBLEY M., PA1965
EMEDOLI D., OA1634
EMERCE E., PA254
EMERSON M., OA1399
EMERSON-STADLER R., PA3882
EMILIOU T., PA368
EMILOVA R., PA3200
EMILSSON Ö., PA903
EMIRALIOGLU N., PA282, PA296, PA1771, PA2025, OA2306, PA2496, PA2500, PA2502, PA2853, PA3980, OA4420
EMMANOUIL P., PA2431
EMMANUEL B., PA3607, PA4187, PA4189
EMMEN E., PA2449
EMMERING J., PA1185
EMOTO N., OA3132
EMRI S., PA1810
EMRICH L., PA2758
EMSON C., RCT4445
ENACHE I., PA4150
ENCHERRY S., PA3954
ENCHEVA M., PA1650
ENCISO J., PA1111
ENDEMAN H., OA1438
ENDERLE M., PA2645
ENDRIGUE T., PA324
ENG C., PA876
ENGAN M., PA3144
ENGELMAIER A., PA1270, PA1272
ENGELS S., PA1186
ENGELS Y., OA745, PA3360
ENGKASAN J., PA4208
ENGLAND E., OA2254
ENGSTRÖM G., PA3923
ENGVALL J., PA3923
ENOKIZU-OGAWA A., PA1665
ENRICO H., PA184
ENRIQUEZ-RODRÍGUEZ C., PA196
ENSEN N., PA3994
ENSINA L., PA2727, PA3153
ENTRAMBASAGUAS MARTIN M., PA4012, OA4425, OA4432
EOM J., PA4173
EPAUD R., OA2904, OA4438
EPIU I., PA3353
ER A., PA446, PA447, PA3244
ERASMUS M., PA1032
ERBAS B., PA2019, PA2482
ERBAŞ I., OA2265
ERCAN S., OA4365
ERÇELIK M., PA446, PA447, PA3244
ERDAL M., OA4420
ERDEM E., OA2306, PA3980
ERDEM S., PA2055
ERDEM ERALP E., PA277, PA285, PA289, PA2497, PA3985
ERDIL T., PA2607
ERDMANN L., PA1668
EREMCIUC S., PA2377, PA2687
EREMINIENE E., OA4386
ERFINANDA L., PA2082
ERGENEKON A., PA277, PA2497
ERGENEKON P., PA285, PA289, PA3985
ERGUN P., OA4361
ERHARD C., PA229, PA912, PA2400
ERHARDT E., RCT2887
ERICO TANNI S., PA613
ERIKSEN L., OA2201
ERIKSSON U., PA172
ERJEFALT J., PA2797, PA2831, PA2833, OA2938, PA4065, PA4282
ERKAN S., OA3775
ERKENS C., OA763
ERKOSAR B., OA3794
ERLEBACH R., PA1254
ERLER J., OA1399
ERMERS P., PA2088
ERMIDOU C., PA3588, PA4291
ERMIS S., PA943, PA3925
ERMOLI M., PA3259
ERN POH M., OA3747
ERNANDEZ C., PA2773
ERNEZ S., PA1732
ERNGREN T., OA2254
ERNST B., PA1991, PA2009
ERNST G., PA1239
ERNST M., OA2918
ERNSTSSON O., PA942
EROL S., PA153, PA1065, PA1251, OA1627, PA2731, PA2743, PA3190
ERRHALT P., PA3453
ERRO IRIBARREN M., PA1019, PA1029, PA3297
ERSSON K., PA1043
ERSU R., PA277
ERTAN Ö., PA1224
ERTAŞ F., OA2265
ERTEM ERALP E., PA1756
ERVIN F., OA125
ERYILMAZ POLAT S., PA282, PA1756, PA1759, PA1771, PA2025, PA2496, PA2501
ERYÜKSEL E., PA336, PA2365
ERYÜKSEL S., PA2607
ESCALANTE P., PA4099
ESCARRER G., PA4131, PA4132
ESCHAPASSE E., PA2608
ESCOBAR I., PA2666
ESCOBAR-SALOM M., OA752
ESCOBEDO E., PA2087
ESCOURROU P., OA1633
ESCRIBANO SUBÍAS P., PA466, PA2686
ESEN K., PA3437
ESKANDARI A., PA975
ESMAIL A., OA758
EŞME M., PA2379
ESPAÑA YANDIOLA P., PA4033, PA4039, OA4409
ESPEJO D., PA250, PA337
ESPEJO CASTELLANOS D., PA2466
ESPERATTI M., PA3527
ESPERSEN C., OA2901
ESPINAL S., PA4204
ESPINO L., PA2602
ESPINOSA GARCÍA E., PA4253
ESPINOSA-ARELLANO A., PA4047
ESPINOZA C., PA1255
ESPINOZA R., PA1227
ESPINUEVA A., PA1892
ESPITIA A., PA1266
ESPITIA THILBAULT A., PA2608
ESPOSITO G., PA1173, PA2009
ESPOSITO R., OA751, PA4190
ESPOSITO R., PA1173
ESPUELA-ORTIZ A., PA876, PA3552
ESPUELAS BORDERIA M., PA4244
ESSAFI F., PA1057, PA3540
ESSAID Y., PA3332
ESSID R., PA1778
ESSILFIE A., PA922, PA1825
ESSONE P., PA4100
ESTABILLO A., PA541
ESTEBAN AMARILLA C., PA2015
ESTEBAN YAGÜE M., PA3876
ESTEBAN-CUCÓ S., PA387
ESTONELL ERILL J., PA4043
ESTRADA-PETROCELLI L., PA164, PA2047
ESZES N., PA2652, PA3295, PA3429
ETAL D., PA1273
ETTER B., PA2492
ETTRONIER L., PA2393
EUDICONE J., PA218
EUI-SIK S., PA1088
EVA K., PA2711
EVANGELISTA M., PA1083
EVANGELISTA P., PA541
EVANGELOU E., PA3905
EVANS D., PA1738, PA1743, RCT2165, OA2943
EVANS D., OA1433, OA3108
EVANS E., PA996
EVANS H., PA2858
EVANS H., OA4374
EVANS J., PA1336
EVANS R., OA130, PA1860, PA2580, PA2584, PA3365, OA4367, OA4374
EVANS R., OA131, PA2013, OA2326, OA3800, PA4216
EVE J., PA160
EVEN B., OA663
EVERAERT S., PA2518
EVERAERTS S., PA1286, OA3671, PA4265
EVERDELL G., OA4433
EVERETT M., PA392, PA1822, OA2916
EVERHARD F., PA3260
EVERLØFF N., PA1195
EVERTSE-SNIJDERS S., PA3349
EVISON M., PA2700
EVKAYA ACAR A., PA1796
EVREN E., OA2935
EWERT R., OA2276
EXARCHOS K., OA4408
EYA Z., PA2098
EYRAUD E., OA2936
EYÜBOĞLU T., PA296
EZIRCAN A., PA2008
EZZAOUIA A., PA489, PA1105

F

F. JAEGER P., PA3888
F. L. C. TIBÉRIO I., PA908
F. RIGHETTI R., PA908
F. XAVIER R., PA1047
FAAGER G., PA1803
FABBRI L., PA3562
FABBRI L., PA2654
FABBRI L., OA748
FABIAN B., PA597
FABIENNE J., PA184
FABIKAN H., PA358
FABRE A., OA4441, OA4442
FÁBREGAS C., PA337
FABRIZIO V., PA2450
FACCHINETTI F., OA2258, PA3164
FACCIOLO F., PA3175, PA4307
FADDEENKOV I., PA4080
FADEL E., OA2274, PA3457
FAGAN M., PA1215
FAGERÅS M., OA1412, OA3678
FAGHY M., PA4202
FAGUNDES XAVIER R., PA321, PA322
FAHEEM NAQVI S., PA1879
FÄHNDRICH S., OA3784, PA4062
FAINARDI V., PA980
FAIRLEY D., PA1104
FAIRUZ B., PA359
FAISAL A., PA4230
FAISAL MAHMOOD S., PA1881
FAIZ A., PA3562
FAIZ A., PA1269, PA1271, PA1279, PA1291, PA2069, PA3546, PA3561, PA4246, PA4262
FAJAC A., PA4071
FAJGELJ V., OA2948
FAKHFAKH R., PA1257, PA3939
FAKHRO M., OA2267
FALANGA F., OA3761
FALCETTA A., PA1260
FALCONE A., PA4235, PA4244
FALCONES B., PA608, PA4269
FALFÁN VALENCIA R., PA1274
FALFÁN-VALENCIA R., PA1275, PA1283, PA1284, PA1292, PA1836, PA1963, PA2801, PA4285
FALK G., PA1777
FALK G., PA2748, PA3139
FALK G., PA1776, PA3141, PA3479
FALK-HÅKANSSON H., PA605, PA2077
FALL T., PA1701

FALQUE L., PA3944
FALQUE L., OA692, PA3301
FALSTER C., OA770, OA2907
FAN E., RCT716
FANARIDIS M., PA572, PA614, PA3588, PA4291
FANCOURT D., OA675
FANEN P., OA4438
FANER J., OA4366
FANER R., PA196, PA449, OA666, PA1268, PA1700, PA1835, PA2792, PA4127
FANFULLA F., PA3598, PA3599, PA4289, PA4290
FANG L., OA2252, PA3171
FANG M., OA3750
FANG Y., PA4097
FANG Z., PA2371
FANIYI A., PA2825, OA4411
FAORO V., PA3608
FARAH H., PA3615
FARAH R., PA1053
FARALDO-GARCÍA A., OA2202
FÄRDIG M., OA140
FARDIN L., PA1235, OA3111
FAREED J., PA1180
FARFAN C., PA1814
FARFÁN BAJAÑA M., PA2727
FARIA M., PA3487
FARIA N., PA525, PA2619, PA3427, PA3428, PA4228
FARIENFAR R., OA1613
FARIETTA T., OA1616
FARINHA I., PA2603
FARISOGULLARI B., PA154
FARKHOOY A., PA211
FARNE H., OA2200
FARNOUD A., PA3477
FAROKHNIA M., PA4274
FAROLFI A., PA2507, PA2508, PA2509
FAROOQI J., PA1879, PA1881, PA1884
FAROUK H., PA1652, PA2026, PA2374
FARRÉ R., PA592, PA595, PA596, PA608, PA2052, PA3395, PA4101, PA4269, OA4390
FARRELL J., PA2411
FARRELL L., PA2856
FARRELLY L., OA676
FARRIOL R., PA2798
FARRONATO A., PA299
FARUQI S., PA890, PA2405, PA2406
FARVER-VESTERGAARD I., PA2537, PA2539
FASOLA S., PA1693, PA2468, PA2469
FASSOLA L., PA1957, PA1958
FAT M., OA1406
FATTIROLLI F., PA2762
FAUGE A., PA366
FAÚNDEZ SILVA M., PA1857
FAURE M., PA3345
FAURHOLT-JEPSEN D., PA1111, PA4028, OA4413
FAURY G., OA4383
FAUSTINI S., PA2455, PA3227
FAUSTINI S., PA1116
FAUSTINO L., PA869
FAUVEL C., PA473
FAVA C., OA2291
FAVERIO P., PA1172
FAVERO I., OA4359
FAWCETT K., PA4308
FAYE A., PA3330
FAYED M., PA1141
FAYON M., PA3955
FAZEKAS B., PA1657
FAZEKAS-PONGOR V., PA1130, PA2576
FAZIO J., PA2121
FAZLEEN A., OA3109, PA4278
FDEZ-PRESA L., PA1201
FECED L., PA3298
FEDERICI A., PA3996
FEDERICO C., PA3276
FEDERICO G., PA3166
FEDIV O., PA212
FEHER A., PA1229
FEIJÓ S., PA4156
FEIJÓ S., PA2428
FEINEIS M., OA3784
FEIPEL V., PA1227
FEKETE K., PA622, PA960
FEKETE M., PA1130, PA1229, PA2576
FEKI W., PA625, PA1100, PA2089, PA2561, PA2735
FEKIH L., PA620, PA2638
FEKIH W., PA1853, PA2605, PA3937
FELBY M., PA3582
FELDER F., PA1061
FELEKOGLU E., PA320, PA333, PA1041, PA1052
FELICIANO J., OA3749, OA3754
FELIX RODRIGUES M., PA1913
FELL A., PA2471
FELLOWS J., PA2542
FELTEN M., PA1307
FELTON I., OA3752
FENBY B., PA912
FENG C., OA1385
FENG J., PA2621
FENNICH S., PA1667
FENNICHE S., PA1928, PA2639
FERARA N., PA2130
FERENCIK S., PA1307
FERENCZ B., OA1383
FERGADIS E., PA303
FERGUSON T., PA1889
FERINI-STRAMBI L., PA4290
FERNANDES A., PA3386
FERNANDES G., PA2641, PA2699
FERNANDES G., PA513
FERNANDES J., PA963, PA3941
FERNANDES M., PA525, PA4228
FERNANDES N., PA4161
FERNANDES P., PA4142
FERNANDES R., PA4010
FERNANDES S., PA3487
FERNANDES T., OA3131, PA3456
FERNANDES DE CARVALHO C., PA324, OA808, PA1814
FERNANDES PINTO T., PA1047
FERNANDEZ E., OA786
FERNANDEZ F., PA2533
FERNÁNDEZ J., OA4392
FERNANDEZ K., OA1432, OA1433, OA1434, OA3108
FERNANDEZ L., PA1847, PA4266
FERNANDEZ M., PA1957
FERNÁNDEZ M., PA1958
FERNANDEZ M., PA270
FERNANDEZ O., PA3856, PA3867
FERNÁNDEZ ÁLVAREZ R., PA3518
FERNANDEZ ARIAS C., OA767
FERNANDEZ BARAT L., PA197, PA545, PA2798
FERNÁNDEZ BARAT* L., PA4013
FERNÁNDEZ CONCHA LLONA I., PA185
FERNÁNDEZ FERNÁNDEZ A., PA3518
FERNÁNDEZ FERNÁNDEZ E., PA1250
FERNÁNDEZ GARCÍA P., PA286
FERNÁNDEZ NAVARRO I., PA863, PA1674
FERNÁNDEZ ORMAECHEA I., OA2319
FERNÁNDEZ VELILLA-PEÑA M., PA2653
FERNÁNDEZ-BARAT L., PA334, PA2802, OA3797, PA4283, OA4406
FERNÁNDEZ-BARAT * L., PA3395
FERNÁNDEZ-BARAT* L., PA3531
FERNÁNDEZ-CONCHA LLONA I., PA1674
FERNÁNDEZ-CONDE JORDANA DE POZAS F., PA501
FERNÁNDEZ-FABRELLAS E., PA4024, PA4033
FERNANDEZ-LAZARO C., PA888
FERNÁNDEZ-LÓPEZ J., PA1275
FERNANDEZ-MONTERO A., OA1630
FERNÁNDEZ-SANMARTÍN M., PA4092
FERNANDO A., PA528, PA2422
FERNANDO A., PA3581
FERRA J., PA431
FERRAIOLO P., PA1685
FERRANTE G., PA1693, PA1753
FERRARA R., PA2044
FERRARI A., PA3969
FERRARI G., PA1197
FERRARI M., PA243
FERRARO F., PA4202
FERRARO G., PA3162
FERRARO M., PA189, PA3898
FERRARO P., PA1025
FERRARO V., PA3472
FERRARO V., PA1025
FERRAROTTI I., PA1278, PA2431, PA4248
FERRAZ DA SILVA L., PA4065
FERRAZ DA SILVA L., PA2797, PA4282
FERREIRA A., OA3765
FERREIRA D., PA396, PA1123
FERREIRA D., PA1657
FERREIRA E., PA520, PA538, PA3850
FERREIRA E., PA4222
FERREIRA J., PA202, PA410
FERREIRA J., PA357
FERREIRA L., PA3380, PA4156
FERREIRA L., PA2642
FERREIRA M., PA1817
FERREIRA P., OA807, PA1807, PA2641
FERREIRA R., PA273
FERREIRA S., PA357
FERREIRA S., PA1913
FERREIRA T., PA3487
FERREIRA ARAÚJO M., PA3386
FERREIRA PEREIRA L., PA1956, PA1966
FERREIRA SPINA LOMBARDI S., PA2797, PA4065, PA4282
FERREIRA-CARDOSO H., PA2737
FERREIRA-MAGALHÃES M., PA2737
FERREIRO L., PA3359
FERRER M., PA2798, PA4038
FERRER R., PA2802, PA4283
FERRER ESPINOSA S., PA567, PA568, PA1201
FERRER MARTÍ A., PA568
FERRER SANCHO J., PA3237
FERRER-LLUIS I., PA164
FERRERO S., OA3779
FERRI S., RCT2162
FERRIS P., PA2807
FERRUFINO RIVERA E., PA2591
FESENKO O., PA510, PA3469
FESHCHENKO Y., PA878
FESSATOU S., PA2431
FESSI I., PA3540
FETCO-MEREUTA D., PA4030
FETTES L., OA4364
FEUCHTINGER A., PA3245
FEZEU L., PA255, PA267
FICKER J., PA490
FICKER J., PA491, PA1669
FIDALGO T., PA963, PA3941
FIDLER K., OA2185
FIEBICH K., PA2414
FIELD S., PA182, PA899, PA900
FIEST K., PA557
FIEST K., RCT716
FIGUEIREDO A., PA1918
FIGUEIREDO C., PA876, PA3551
FIGUEIREDO R., PA885
FIGUEROA F., PA3998
FIGUEROA J., PA3952
FIGUEROA TURIENZO J., PA989
FIHN-WIKANDER T., OA128, PA3891
FIJALKOWSKA D., OA786
FIJOLEK J., OA4437
FIKKERS E., PA562
FILA L., PA1022
FILARECKA A., PA482
FILBY A., PA2557
FILES D., PA2767
FILGUEIRAS L., PA1814
FILHO L., PA2799
FILIPPI N., PA481
FILLINGER J., OA1383
FINADESIO M., PA3536
FINAMORE P., PA407, PA924, PA1213
FINCH S., OA3748
FINE-GOULDEN M., PA3968
FINLAYSON K., PA3581
FINN A., PA2452, PA2462
FIOCCHI A., OA2952, OA2955
FIOCCHI A., PA3996
FIORENCIS A., PA461
FIORENTINO G., PA2577
FIORENTÙ G., PA1970
FIORETTI F., PA868, PA1874
FIORI L., PA2508
FIRA-MLADINESCU O., PA3193
FIREMAN E., PA3513
FIRSCHING T., PA1307
FISCHER A., PA2668, PA3471
FISCHER O., PA4108
FISCHER P., OA2948
FISHCHUK L., PA2803
FISHER A., PA2557
FISHER H., OA1407
FISHER J., PA3423
FISHER J., PA3415
FISHMAN-JACOB T., PA1946
FISSER C., OA2315, PA2847
FITZGERALD D., PA1199
FITZGERALD G.,

PA2081
FITZGERALD M., OA3675
FITZGERALD T., OA121
FITZMAURICE T., PA1245, PA1246
FITZPATRICK L., PA1263
FIUZA P., OA2328
FJAELLEGAARD K., OA785, PA1087, OA2903
FKIH L., PA2637
FLACHER V., PA2060
FLAHERTY K., PA1933, PA1934
FLAHERTY K., RCT2887
FLAMARION A., OA1438
FLAMARION E., OA4435
FLAMENT T., PA1193
FLANDES ALDEYTURRIAGA J., PA4159
FLANNERY D., RCT2161
FLATSETØY H., PA224, PA1233
FLAVELL R., OA2935
FLAVIER J., PA2443
FLEISCH E., PA3382
FLEMING ., OA141
FLEMING L., PA2462
FLEMING L., PA980, PA985, PA987
FLEURISSON F., PA3406
FLIKWEERT A., OA1405, PA3328
FLINT J., PA402
FLØE A., PA3335
FLØE HVASS A., PA1101
FLOKSTRA - DE BLOK B., PA2387
FLORA S., PA325, PA1798, PA1801
FLÖRCHINGER B., PA4296
FLORE R., OA791
FLORENCE S., PA184
FLORES K., PA3149
FLORESCU A., PA612
FLOREZ GONZALEZ T., PA989
FLORIAN C., PA184
FLORIAN L., OA794
FLORIAN L., OA2936
FLORIN M., PA184
FLORMAN K., PA2851
FLOTO A., PA2616
FLOWERS R., PA3405
FODOR G., OA3110
FODOR G., PA1236, PA1241, PA3516, PA3522
FOGARTY A., OA798
FOIS A., PA948
FOISSET F., PA586, PA2060
FOKKENS W., PA3197
FOLARIN A., PA1955
FOLB J., PA396
FOLCHINI F., PA537, PA538
FOLEY F., PA2008
FOLGADO LÓPEZ C., PA379
FOLTAN M., OA2315
FOLTRAN G., PA2692
FOLZ R., RCT712
FOMIN I., PA3513
FOMINA D., PA2727, PA3153
FON A., PA4303
FONSECA C., PA272
FONSECA J., PA3912
FONSECA J., PA1679
FONSECA J., PA3503
FONSECA L., PA3945
FONSECA L., OA765
FONTANA G., PA905
FONTANELLA S., PA1306
FONTANILLES ARBONES E., PA3597
FOO Y., OA2250
FOONG R., OA146, RCT2165, PA3987
FOR THE PEARL GROUP .., PA3264
FORASTER M., OA2962
FORBES W., OA1395
FORCADELL-PERIS M., PA1121
FORCEN VICENTE DE VERA E., PA4159
FORD A., PA200
FORD P., OA1388, PA1931, PA1933
FOREL J., PA1248, PA1249
FORIS V., PA477, PA3462, PA4136
FORMICHI B., OA2272
FORNO E., PA876, PA938, PA3949
FORREST I., OA1407, PA1808
FORSBERG B., OA1415
FORSHAG M., PA3917
FÖRSTER R., PA1015
FÖRSTER S., PA2087
FORSYTH N., PA1082
FORTE M., PA1205
FORTES-GABRIEL E., PA2463
FORTIS S., PA2121
FORWARD C., PA2424
FOSCHINO BARBARO M., PA166, PA1196, PA4254
FOSGAARD M., PA246
FOSSALI T., PA4279
FOSSI A., PA3299, PA3300
FOSTER G., PA585
FOSTER J., OA779
FOSTER P., PA918, PA922
FOTH S., PA1015, PA3948
FOUADI M., PA2050, PA2084
FOUKA ., PA2431
FOUKA E., PA1840, PA2389
FOUQUENET D., PA1829
FOUR E., PA371
FOUREAU A., OA692
FOUZAS S., OA1447, PA1745, PA3277
FOWLER ., OA141
FOWLER M., OA2273
FOWLER S., PA889, PA1334, PA2033, PA2534, PA3179, PA3956
FOWLER S., PA892, OA1411
FOX L., PA428
FOX R., RCT711
FRA A., PA4248
FRACCALINI T., PA1997
FRAGNI D., PA3166
FRAGOPOULOS F., PA2431
FRAGOSO L., PA2533
FRANÇA A., PA324
FRANCESCA P., PA2136, PA4323
FRANCESCHI E., PA2550, PA2753
FRANCESCHINI C., PA3536
FRANCESQUI J., PA449
FRANCHETTI L., PA190, PA1318
FRANCIN-GALLEGO M., PA1813
FRANCIS S., OA1618, OA4367
FRANCK E., PA1223
FRANCO E., PA546, OA2323, OA2330, PA2375, PA2799
FRANCO I., PA2395
FRANCO S., PA2472
FRANCOEUR B., PA2123, PA2128, PA2129
FRANCZUK M., OA3790
FRANK D., OA4360
FRANK WJM S., PA184
FRANKE F., PA2063
FRANKE K., PA490, PA491
FRANKEMÖLLE B., PA3207
FRANKLIN K., PA231, PA4304
FRANKLIN K., PA4297
FRANKLIN P., OA146
FRANOVA S., PA4184, PA4188
FRANSÉN PETTERSON N., PA2077
FRANSÉN PETTERSSON N., PA605
FRANSISKUS XAVERIUS I., PA3560, OA3753
FRANSMAN R., PA2583
FRANSSEN F., PA1221, OA3113, PA3886
FRANSSEN F., PA1651, PA3349
FRANSSEN F., OA119, RCT710, PA1866, OA3117
FRANZEN D., OA772
FRANZEN K., OA681
FRANZÉN L., PA610
FRANZÉN S., PA229, PA912
FRANZOY J., PA1239
FRASER E., PA1886, PA2738, PA3433, PA4020
FRASSANITO A., PA1763, PA2450, PA2512
FRASSATI C., PA3306
FRATI C., PA2836
FRAUCHIGER B., PA2676
FRAZER D., PA922, PA1825
FRÉALLE E., PA3250, PA3954
FREDERICO FRIEDRICH F., PA297
FREDERIKSEN P., PA1945
FREE R., OA4407
FREEMAN A., PA1273, OA3109, OA3674
FREEMANTLE N., PA3202, PA3203
FREGONEZI G., PA1806, PA2529
FREI A., PA3364, PA3874, OA4363
FREIDKIN L., PA2651
FREIRE CORREIA R., PA3319
FREITAG N., PA2514, PA2515
FREITAS C., PA2641
FREITAS P., PA324, OA808
FRENKEL S., PA621
FRENT M., PA2560
FRENT S., PA4299
FRENT S., PA2560
FRERICHS I., PA3502
FRÉSARD I., OA790, OA792
FRESNEL E., PA559, PA3322
FRETHEIM H., PA472, PA1961
FRETWELL T., PA1097
FREUND O., PA454
FREUND P., PA185, PA1674
FREUNDT T., PA1649
FREY U., OA141, OA142, PA1002, PA1012, PA1340
FREYBERG J., PA4264
FRIAS B., PA3536
FRICK A., PA1021
FRICKE J., OA4360
FRICKE-GALINDO I., PA1836, PA2801
FRICKER M., PA927
FRIDÉN M., PA172
FRIDKIN L., PA3308
FRIEDMAN D., PA2536
FRIEDMAN REGEV I., PA454, PA3513
FRIEDRICH F., PA3970
FRIEMANN J., PA4277
FRIES A., PA395, PA1886
FRIEß W., PA2787
FRIGO A., PA268
FRIHA M., PA507, PA2096
FRIJA-MASSON J., PA1314, PA4120
FRIK M., PA1677
FRIKHA I., PA301, PA313, PA1102, PA1780, PA1922, OA2191
FRIKKE-SCHMIDT R., PA3182
FRILLE A., PA1135, OA1384, PA2646
FRISCH M., PA2746
FRISHBERG A., PA2812
FRITCHLEY S., OA1438
FRITH P., PA2482
FRITZ R., PA1255
FRITZSCHING B., PA3202, PA3203
FRIX A., PA2392
FRIX A., PA2397
FROGEL J., OA1436
FROHN L., PA3221
FROIDURE A., OA1455, PA1725
FRØKJÆR J., PA4056
FRØLUND J., PA2537
FROMELL K., PA928
FROMME M., PA1645, PA2429, PA2430
FRONEK F., PA2088
FROSSARD N., PA2060
FRØSSING L., PA1680, OA2201, PA3582
FROST A., PA2373, PA2376
FROST E., OA3752
FROST S., PA2370
FROST CLEMENTSEN P., PA1087, OA2903
FROUDARAKIS M., PA3461
FROUDRAKIS M., OA785
FRY S., PA3351
FRYATT G., PA2062
FRYE B., PA3442, OA3784
FRYER A., PA3901
FRYKHOLM E., OA3118
FU A., PA3307
FU P., PA1865, PA3430
FU Q., PA200
FUCCIA G., PA2391
FUCHS A., PA3245
FUCHS D., PA3897
FUCHS E., PA542
FUCHS F., OA2291
FUCHS O., OA142, PA1002, PA1012, OA2954
FUCILE S., OA3749, OA3754
FUENTES ALONSO M., PA2108
FUENTES-MORENO G., PA458
FUES WAHL H., PA942
FUGE J., PA463, PA1944, PA1975, PA1988, OA2271, PA4277
FUGGER S., PA1060
FUHOL K., PA3836
FUJII H., PA2632
FUJII H., OA3132
FUJII W., PA2812
FUJIMURA K., PA4123
FUJISAWA T., PA990, PA991
FUJITA K., PA1898
FUJITA N., PA917
FUJITA Y., PA2790
FUKUDA N., PA2632
FUKUDA Y., PA1844
FUKUTOMI Y., PA917
FUKUZAKI S., PA908
FULCHERI C., PA1260
FULD J., PA963, PA3941
FULLWOOD C., PA2486, PA3280
FULTON O., PA3207
FUMAGALLI C., PA2762
FUMAGALLI G., PA413
FUMAGALLI G., PA3969
FUNES MORENO C., PA4235
FUNES-MORENO C.,

PA4244
FUNK G., PA441
FUNKE F., PA488, PA2693, PA2701
FUNKE-CHAMBOUR M., PA597, PA1940, PA3346, OA3794
FURIAN M., PA360, OA1440, PA2048, PA2680, PA2681, PA2688, PA2689, PA2749, PA2750, PA2763, PA2860
FURIE N., OA1436, PA2696
FÜRLINGER U., PA1811
FURRER K., PA3455
FÜRSTOVA E., PA2854
FURTADO A., OA746
FURTADO S., PA169, PA526
FURUKAWA T., OA4410
FUSCHILLO S., PA361
FUSO P., PA1196
FUSTIER P., OA3796
FYLES F., PA396, PA965, PA1123, OA1404
FYSIKOPOULOS A., PA3568
FYTIANOS K., PA597, PA4271
FYTLOVICH S., PA1132

G

G ALMEIDA A., PA468
G BURCHARD E., PA876
G COSÍO B., OA752
G HEANEY L., PA1330, PA4323
G KIELY D., PA470
G PAPADOPOULOS N., PA2136
G RICHTER A., PA3227
G. COSIO B., PA187
G. COSIO M., PA259
G. FERREIRA P., OA806
G. NORDESTGAARD B., OA3740
G. OLIVER B., OA3750
G. PAPADOPOULOS N., PA4323
G. SILVA C., PA1801
G.COSIO B., PA4323
GABALDON T., OA689
GABALDÓN-FIGUEIRA J., OA1630
GABARRUS A., PA545, PA1847
GABBRIELLI L., PA2454
GABE R., OA2264, PA2659
GABITAN M., PA3534
GABOARDI P., PA413, PA4236
GABOR J., PA995
GABRIEL F., PA3301
GABRIEL Z., OA1403
GABRIELE M., PA4307
GABRIELIAN A., PA4086
GABRIELLI A., PA472, OA1453
GADALLAH M., PA1095, PA4154
GADER N., PA342, PA343
GADHIA S., PA1339
GADIROVA A., PA426
GAEDCKE S., PA934, PA1015, PA2816
GAGA M., PA341, PA2389, PA3369
GAGNADOUX F., OA134, OA2284, OA2288, PA2862
GAGNON P., OA2941, PA3583
GAGNON R., OA2955
GAHLEMANN M., RCT2887
GAIATO M., OA2330
GAIETTO K., PA3949
GAIHRE M., PA1709
GAIKWAD A., PA2793
GAIKWAD S., PA3233
GAILLARD E., PA981, PA982, PA983, PA984, PA986, PA993, PA1761
GAINE S., PA1986, PA2684
GAINNIER M., PA1248, PA1249
GAISL T., PA1031, PA2750, OA2918
GAITA L., PA4299
GAJENDRAN M., PA1638
GAJEWSKI A., PA1831
GAKI E., PA2389, PA3207
GALAL I., PA2601
GALAN P., PA255, PA267
GALANI A., PA1769, PA2511
GALANIS I., PA3539
GALARIS A., PA4129
GALATI D., PA2804
GALDEANO M., PA4245
GALDEANO LOZANO M., PA2773
GALEA COLON Y., PA533, PA551, PA1071
GALERNEAU L., PA1248, PA1249
GALFFY G., OA1383
GALGANI S., PA901
GALGANO G., PA461
GALICIA-AMOR S., PA1222, PA3837, PA4281
GALIE N., OA2276
GALINDO PEDRAZA J., PA2421
GALKIN D., PA228
GALL H., PA1988, OA2271, PA3454
GALL L., PA2847
GALL R., PA3212, OA3675
GALLACHER D., PA3279
GALLAGHER C., OA2919
GALLAGHER D., PA3434
GALLAGHER J., PA1157, PA3142
GALLAN F., PA543
GALLAND J., OA4435
GALLARDO ESTRELLA L., PA1671
GALLARDO-ESTRELLA L., PA2489
GALLEGO M., PA1652
GALLEGO RODRÍGUEZ B., PA4233, PA4235
GALLEGO-ORTEGA D., PA2812
GALLEGO-RODRÍGUEZ B., PA4244
GALLELLI L., OA751, PA4190
GALLEZOT J., PA3471
GALLO V., PA1197
GALLO GONZÁLEZ V., PA569
GALLOTTI L., PA411, PA3844
GALLOWAY A., PA2673
GALVAO I., PA1269, PA2812
GALVOSAS M., OA1630
GAMBARDELLA A., PA453, PA2817
GAMELL C., PA3432
GAN C., PA1032
GAN C., PA1011
GAN C., PA1773
GAN E., PA1773
GAN H., PA3138
GANA G., PA2739
GANAIE M., PA430, PA1212
GANANGAN S., PA3534
GANDHI H., PA3854
GANDHI H., PA218
GANDIAGA MANDIOLA A., PA1170
GANDJEVA A., PA4143
GANESAN N., PA1727
GANESH S., PA2056
GANESH V., PA4146
GANESHAN B., PA3425
GANGI S., PA3299, PA3300, PA4116
GANGULY K., PA3231
GANI M., OA1432, OA1433, OA1434, OA3108
GANNOUN N., PA3241
GANOVSKA M., PA4119
GANSLANDT C., OA1397, PA3377
GANTER C., PA1254
GANTER C., PA1167
GAO H., PA3471
GAO J., PA3249
GARAGULYA H., PA861
GARASTAZU R., PA1662
GARAY LLORENTE E., PA1310
GARCIA A., PA2686
GARCIA A., PA2761
GARCIA B., PA468, PA1980
GARCÍA C., PA1018
GARCÍA D., PA545
GARCÍA F., OA4392
GARCÍA J., PA449
GARCÍA S., OA4392
GARCIA T., PA1268
GARCÍA CASTELLANOS L., PA4054
GARCIA CASTILLO E., PA1705
GARCIA CASTILLO S., PA2691
GARCIA CASTRO C., PA3902
GARCÍA CASTRO G., PA1119, PA2018
GARCÍA CLEMENTE M., PA3518
GARCÍA CLEMENTE M., PA4033
GARCIA DE LAS PEÑAS S., PA3289
GARCIA DE PEDRO J., PA884, PA3152
GARCIA DELGADO E., PA3289
GARCIA ECHEBERRIA L., PA1910
GARCÍA ESTUDILLO D., PA486
GARCÍA FADUL C., PA1019
GARCIA FUERTES J., PA1910
GARCIA GARCIA B., PA1184
GARCÍA GARCÍA R., PA151, PA1639
GARCIA GIL E., PA1330
GARCIA GONZALEZ M., PA2452
GARCÍA HERNÁNDEZ O., PA4043
GARCÍA LÓPEZ J., PA487, PA2031
GARCÍA LOVERA P., PA564
GARCÍA MOGUEL I., PA2140
GARCÍA MORALES O., PA2421
GARCIA MOYANO M., PA1170
GARCIA OLIVÉ I., PA2423, PA2719
GARCIA PARDO M., PA3613
GARCÍA RIVERO J., PA2135
GARCÍA TAMAYO P., PA4022
GARCÍA VALENTÍN P., PA3876
GARCIA VALLEJO J., OA2313
GARCIA VAN DER WESTEN R., PA3505
GARCIA-AYMERICH J., PA1835, OA2962, PA3490, PA3874
GARCIA-BASTEIRO A., PA2798
GARCÍA-CASULLA D., PA4283
GARCÍA-COSÍO M., PA187
GARCÍA-COSÍO PIQUERAS F., PA1184
GARCÍA-ESTEBAN A., PA384
GARCIA-GARCIA M., OA144
GARCÍA-GASULLA D., PA2802
GARCIA-HERNANDEZ J., PA1222
GARCIA-HERNANDEZ J., PA3526, PA3837
GARCÍA-HIDALGO M., PA2802, PA4283
GARCÍA-LÓPEZ C., PA2717
GARCIA-OJALVO J., PA376
GARCÍA-OLIVÉ I., PA379, OA2262, PA2773
GARCÍA-ORTEGA A., PA1180, PA3298, PA4287
GARCÍA-PASCUAL ABAD D., OA3121
GARCÍA-PRIETO F., PA4244
GARCIA-REINA S., OA2262, PA3409
GARCÍA-TEJEDOR A., PA1992
GARDARSSON F., PA2838
GARDEV A., PA3613
GARDINER F., PA1344
GARDINER N., PA364, PA1867, PA2592, PA3355
GARDINER N., PA1228
GAREN T., PA1961
GARFOOT T., PA1939
GARG K., PA3260
GARG P., PA470, PA1971
GARGOURI F., PA2752, PA3510
GARGOURI N., PA2561
GARGOURI R., PA2096, PA2561, PA2564, PA2735
GARIAZZO C., PA2468, PA3216
GARIN M., PA173, PA177, PA178
GARINO S., PA2436
GARNELO L., PA3960
GARRATT L., PA1294
GARROTE E., PA1992
GARROUSTE-ORGEAS M., PA1248, PA1249
GARTNER S., OA2912
GARTZONIKA K., OA4408
GASA M., OA4437
GASCON V., OA682
GASCON CASAREDI I., PA2488
GASHI R., OA1386
GASHYNOVA K., PA156, PA167, PA186, PA346, PA862, PA3375, PA3388, PA3402
GASKELL R., PA3893
GASPAR L., OA3729
GATIUS S., PA4102
GATT D., PA1770
GATTI E., PA1997
GATTI M., PA4238
GATTINGER D., PA358
GATTO C., PA557
GATTO M., OA2330, PA2799
GATZOULIS M., PA476
GAUCHER G., PA1943
GAUDENZI C., OA2258
GAUDIO A., PA406
GAUGHAN E., PA3581
GAUPMANN R., PA3982
GAUQUELIN L., OA3679
GAUR V., PA3258
GAUTSCHI F., PA475, PA1031
GAUVREAU G., PA174, PA579, PA933, PA935, OA2203, PA3900
GAVALA M., PA3201
GAVARA N., PA592, PA595, PA2052, PA4101
GAVILÁN J., PA1255
GAVILÁN K., PA3225, PA3228, PA3310
GAVIOLI E., PA2596
GAVRYLOV A., PA2595
GAVRYSYUK V., PA3439

GAWĘDA S., PA548
GAWLEWICZ-MROCZKA A., OA1410
GAWLIK R., PA3613
GAWRYSIAK M., PA1831
GAYAN-RAMIREZ G., OA687, PA1286, OA3793, PA4265
GAYRETLI Z., PA296, PA2496, PA2500
GAYRETLI ATAN S., PA1796
GAYRETLI AYDIN Z., PA282
GAYTANT M., PA1091
GAZENGEL P., PA3301
GAZIC M., OA3731
GAZZANA M., PA4222
GAZZANA M., PA3509, PA3519
GAZZERIE S., PA4104
GE C., PA309
GEA J., PA164, PA1835
GEA GUIRAL J., PA196
GEALE K., PA942
GEBHARDT A., PA490, PA491
GEDIF K., OA3796
GEDIK O., PA289
GEELS C., PA3221
GEEURICKX K., OA3122
GEHRIG R., OA142
GEHRING U., PA1754
GEISER T., PA609, OA1453, PA3346
GELEFF S., PA1140
GELWICKS S., PA2110
GEMICIOGLU B., PA882, PA2397, OA3679, PA3994
GEMIGNANI A., PA2589
GENÇOĞLU M., PA296, PA1756, PA1759, PA2500, PA2501
GENECAND L., OA790, OA792
GENEIDY N., PA2755
GENER QUEROL B., PA1170
GENESCA J., PA2429, PA2430
GENEVSKIY V., PA1287
GENINATTI C., PA1197
GENRE F., PA2789, PA2795, PA2808
GENTILE F., OA3779
GENTILI F., PA3371
GENTINA T., PA2862
GENZOR S., OA2325
GEORGAKOPOULOU E., PA340
GEORGE J., RCT2883
GEORGE M., PA218
GEORGE P., OA1452, PA3421
GEORGE S., PA565
GEORGE T., PA4239
GEORGE T., PA4239
GEORGE V., PA441, OA782, PA1263
GEORGE B., OA797
GEORGELIS A., PA3231
GEORGELLIS A., OA2946
GEORGES G., PA228, OA748
GEORGET E., OA2904
GEORGIEV O., PA4292
GEORGIN LAVAILLE S., OA4435
GEORGIOPOULOS A., PA2536
GEORGIOPOULOU V., PA1128
GEORGIOU M., PA2054
GEORGOPOULOU A., PA626
GEPHINE S., OA133, PA3351
GERARD S., PA975
GERARDO R., PA544
GERBSHIAN J., PA382
GERCKENS M., PA598, PA599, PA2787
GERDAY S., PA1681
GERDE P., PA589
GERDIN S., OA140
GERGES C., PA3453
GERHARDSON I., PA380
GERI P., PA3458
GERLIS C., PA4206
GERLOFS-NIJLAND M., OA2964
GERNHOLD L., PA2612
GEROGIANNI I., PA2431
GERRETSEN E., PA2714
GERRY S., PA3421
GERSHMAN E., PA1138
GERSHMAN E., PA3513
GERT-JAN B., PA184
GERVÈS-PINQUIÉ C., OA2288
GESIERICH W., PA3239, PA3240
GESINE H., PA1015
GESSNER B., PA2452, PA2462
GESSNER C., RCT710, PA1329, PA2412, PA2413, PA3618, PA3859, PA3864, PA3865
GEUDENS V., PA603, OA686, PA1030, PA1286, OA3793, PA4265
GEVAERT K., OA786
GEVAERT P., PA3197
GEX G., OA790, OA792
GEYSEN H., PA2006
GEZER T., PA966, PA968, PA972
GHABI O., PA2782, PA2783
GHALEB N., PA628
GHANCHI N., PA1881
GHANEM M., OA664
GHANNOUCHI I., PA530
GHARBI D., PA2561
GHARRAF H., OA2909
GHARSALLAH I., PA1200
GHAYE B., OA1455
GHAZALI S., PA503
GHAZALY M., PA4148
GHAZWANI A., PA2770
GHEORGHE A., PA1111
GHERASIM A., PA3205, PA3206
GHEZZI M., PA2507, PA2508, PA2509
GHIANI A., PA2612, PA3239, PA3240
GHIGNA M., PA4145
GHIMIRE A., PA3258
GHIONZOLI N., OA3787
GHIRARDO S., PA3986
GHOFRANI H., PA1988, OA2271, PA3454
GHOFRANI H., OA2273
GHOLAMIAN OVEJERO S., PA4233, PA4235
GHOLAMIAN-OVEJERO S., PA4244
GHOLAMNEZHAD Z., PA3163
GHORANI V., PA2419
GHORPADE D., PA1716, PA3924
GHOSH P., PA380
GHOSH U., PA2598
GHOSN M., PA1143
GHRAB A., PA2848
GHRAIRI H., PA342, PA343, PA3590, PA4293
GHUWALEWALA S., PA3407
GIACOMIN L., PA403, PA2611
GIACON V., PA353
GIAM Y., RCT2883
GIAM Y., PA2610, OA3748, OA3798, PA4066, OA4404
GIAMELLO J., PA1258, PA1260, PA2472
GIANFRANCO P., PA1206
GIANIOU N., PA362, PA2522
GIANNAKAKI S., PA3369
GIANNOCCARO F., PA2436
GIANOLIO L., PA2508
GIBBONS D., OA3802
GIBBONS J., PA996, RCT2165
GIBBONS M., PA152, PA2654, PA3418, PA3488
GIBBS J., OA2273
GIBSON E., PA1209
GIBSON H., PA269
GIBSON P., PA578, OA2963
GIBSON P., PA3946
GIDDENS R., PA2481
GIE A., PA607
GIEZENDANNER S., PA344
GIGANDON A., PA3301
GIGANTE A., PA3482
GIGANTI G., PA166
GIGLIOTTI F., PA375
GIILCK S., OA2311
GIJS P., PA1940
GIJTENBEEK R., PA1930
GIL A., PA1648
GIL D., OA2262
GIL M., PA3214
GILARDI E., PA407, PA1060
GILBERG F., PA1936
GILBERT I., PA218, PA3854
GILL F., PA2726
GILL I., PA2481
GILLE J., PA295
GILLE T., PA524, PA2747, OA3786
GILLES T., PA3345
GILLICH A., PA2081
GILMOUR A., PA1823, PA1834, PA2610, RCT2883, OA2939, OA3798, PA4066, OA4404
GIL-PINTOR L., PA2011
GIMENEZ F., PA2460
GIMÉNEZ SAMBLÁS E., PA568
GIMÉNEZ-ARNAU A., PA3153
GIMÉNEZ-ARNAU A., PA2727
GIMENO DIAZ DE ATAURI A., OA4415
GIMENO-SANTOS E., PA334, PA1809, PA1835, OA3120
GINETTI B., PA1239
GING P., PA3309
GINI E., PA948, PA3851
GINIS A., PA2116, PA2120
GINOVSKA E., PA3973
GIOIA M., PA2577
GIOLLO A., PA472
GIORGINI J., PA3536
GIOULEKA P., PA894
GIOULVANIDOU M., PA1745, PA2495
GIOVANNIELLO D., PA312
GIOVANNINI-CHAMI L., PA3955
GIRALDO CADAVID L., PA3957
GIRALDO MONTOYA A., PA1119, PA2018
GIRARD N., PA4104
GIRAUD V., PA3345
GIRAUDO C., PA543, PA1164, PA1178, PA1970, PA3372, PA3472
GIRAULT C., PA559
GIREESH V., PA2724
GIRIT S., PA277, PA289, PA1756
GIRODET P., OA2936, PA3992, PA3993, PA4000
GIRÓN MATUTE W., PA1663, PA2031, PA3152, PA3876, PA3938
GIRÓN MORENO R., PA286, PA2569
GIRÓN RUIZ E., PA1231
GIROUX-LEPRIEUR E., PA3345
GÍSLASON Þ., PA231, PA2100, PA3221
GISLER A., OA142, PA1002, PA1012
GISSEL T., PA246, PA3335
GIUBERGIA V., PA3952
GIUGNO B., PA3371
GIULIANI A., PA166
GIULIANI F., PA2550
GIUNTOLI L., PA442, PA4232
GIUSTI I., PA438
GIVATY G., PA1132
GJERDEVIK M., PA1089
GJINOVSKA TASEVSKA E., PA1872
GKIOZOS I., PA1917
GKOGKA S., PA1068
GKREPI G., PA3435
GLADUN S., PA3972
GLANVILLE N., OA2200
GLÄSER A., PA1135, OA1384, PA2646
GLÄSER S., PA490, PA491, OA1454
GLASPOLE I., OA1449
GLASS D., PA1735
GLAYSHER S., PA428
GLEESON F., OA1403
GLEESON M., OA4441
GLENCROSS D., PA583, PA584
GLÉRANT J., PA2132
GLODIĆ G., PA2710, PA4170
GLOECKL R., PA1216, PA1811, PA1855, PA1861
GLORIE L., PA2518
GLYDE H., PA2728
GLYNOS K., PA2389, PA3161
GNASS M., PA482, PA483, PA2694
GNEMMI I., OA1414, PA3873
GNIADY P., PA482, PA483
GO N., PA4080
GOBBI A., PA237, PA1753, OA2304, OA3115, PA3186
GOBEL O., PA2576
GODA S., PA3305
GODBOLE G., PA3233
GODBOUT K., PA2385
GODDARD A., PA364
GODET J., PA263
GODIC I., OA3731
GODINAS L., PA1020
GODINO J., PA348, OA3776, PA4067, PA4068, PA4078
GODOY MAYORAL R., PA2691
GODSCHALX J., PA3360
GODSE K., PA2727
GODTFREDSEN N., PA319
GOEL A., OA759, PA4069
GOEMINNE P., PA1734, PA1842, OA3799
GOEMINNE P., OA3748
GOGALI A., PA3905
GOGOU E., PA2721
GOGTAY J., PA3258
GOH C., PA1330, PA2136, PA3267, PA4323
GOH N., PA163
GOH Z., PA470
GOHY S., PA1048, PA1286, PA4265
GOJEVIC T., PA3318
GOK M., OA1627
GÖKDEMIR Y., PA277, PA285, PA289, PA1756, PA2497, PA3985
GOKER-BAGCA B., PA2049
GOKHALE P., PA3904
GOKSEL O., PA1136, PA2049, OA2265, OA3679
GOKSEL T., PA1136, PA2049, OA2265
GOKSÖR E., PA943,

PA3925
GOLDBERG M., PA252, PA941, PA1314, PA3250
GOLDENSTEIN K., PA509
GOLDGRAN-TOLEDANO D., PA1248, PA1249
GOLDIN J., PA2670
GOLDKLANG M., PA3945
GOLDSOBEL A., PA177
GOLDSTEIN R., OA800, PA1034, PA2744, PA3498
GOLE B., PA2815
GOLEBSKI K., PA2815
GOLFE A., PA2691
GOLOBORODICO A., PA1267, PA2448, PA3972
GOMBERG-MAITLAND M., OA2273
GOMES C., PA1906
GOMES C., PA3225
GOMES D., PA1812
GOMES E., PA909
GOMES I., PA417
GOMES J., PA525, PA4228
GOMES M., PA3379
GOMES R., PA4160
GOMEZ C., PA187, PA1337, PA4131, PA4132
GOMEZ E., PA1317, PA3464, OA4437
GOMEZ H., PA918, PA922, PA1825, OA2963, PA3168, PA3897
GÓMEZ L., PA2100
GOMEZ N., PA3535
GÓMEZ S., PA2802
GÓMEZ BONILLA A., OA4409
GÓMEZ CARRERA L., PA863, PA1674, PA2653
GÓMEZ GARCÍA T., PA569, PA1325
GÓMEZ GIL M., PA1208, PA4043
GOMEZ LARRAURI A., PA1910
GÓMEZ MARTÍNEZ B., PA2141
GÓMEZ MUÑOZ A., PA4256
GÓMEZ OLLÉS C., PA337
GOMEZ OLLÉS S., OA4436
GOMEZ REAL F., PA944
GÓMEZ REBOLLO C., PA564
GOMEZ-ARROYO J., PA1979
GÓMEZ-BASTERO A., PA2124
GÓMEZ-GARRE D., PA2602
GÓMEZ-GORDO R., PA2602
GÓMEZ-NIÑO Á., OA4390
GÓMEZ-OLIVAS J., PA1180, PA4287
GOMEZ-OLLES S., OA689
GÓMEZ-PALAU R., PA467, PA1972, PA1984, PA1987
GÓMEZ-PUNTER R., PA4054
GOMPELMANN D., PA1140, PA3347
GON Y., PA1664
GONÇALVES A., PA1217
GONCALVES S., OA3796
GONÇALVES DOS SANTOS CARVALHO F., PA3403
GONÇALVES MENDES R., PA3327
GONÇALVES-CARVALHO F., PA387
GONDHALI G., PA2002, PA2587
GONDOUIN A., OA4438
GONEM S., OA3113
GÖNENLI M., OA3775
GONFIOTTI A., PA299
GONG Y., OA766
GOÑI ECHEVARRÍA C., PA206
GOÑI ECHEVERRÍA C., PA204, PA2105
GONIN-SPAHNI S., PA3364
GONNELLI F., OA785
GONONG J., PA2571
GONUGUNTLA H., PA1103
GONZALES A., PA4167
GONZALES L., PA1829
GONZALEZ A., PA3409
GONZALEZ C., PA2533
GONZALEZ H., PA1826, PA2843
GONZÁLEZ J., PA195, PA1846, PA2802, PA4283
GONZALEZ J., PA3350
GONZÁLEZ M., PA3586
GONZÁLEZ Y., PA1239
GONZÁLEZ ANGULO G., PA4250
GONZALEZ BARCALA F., PA2124, PA3960
GONZÁLEZ- BARCALA F., OA2202
GONZÁLEZ CARRACEDO M., PA3552
GONZALEZ CASTRO S., PA1179
GONZALEZ COLOM R., PA2741
GONZÁLEZ DÁVILA E., PA2813
GONZÁLEZ DUEÑAS J., OA4428
GONZALEZ ESTEBAN H., PA1832
GONZÁLEZ EXPÓSITO H., PA4043
GONZALEZ GARCIA J., PA1182
GONZALEZ GARCIA M., PA3931
GONZALEZ GUTIERREZ A., PA4094
GONZALEZ GUTIERREZ J., OA1437
GONZÁLEZ MUÑOZ I., PA1170, PA1309, PA1319
GONZÁLEZ QUERO B., PA1170, PA1309, PA1310, PA1319, PA2572, PA4039, OA4409
GONZALEZ RAMOS L., OA690, PA1016
GONZALEZ SANCHEZ B., PA4012, OA4425, OA4432
GONZÁLEZ-BARCALA F., PA2426
GONZÁLEZ-BARCALA F., PA876, PA1335, PA1686
GONZALEZ-BERMEJO J., OA134
GONZÁLEZ-CARRACEDO ., PA2426
GONZÁLEZ-COLOM R., OA4366
GONZÁLEZ-FERNÁNDEZ C., OA2202
GONZÁLEZ-FERNÁNDEZ J., PA1208
GONZÁLEZ-GARCÍA J., PA3871
GONZÁLEZ-GAY M., PA2789, PA2795, PA2808
GONZALEZ-GERMAN M., OA144
GONZÁLEZ-GUTIÉRREZ M., PA2138, PA4243
GONZALEZ-ISLAS D., PA864, PA1222, PA2042, PA3526, PA3837, PA4281
GONZÁLEZ-NAVARRO M., PA3843
GONZÁLEZ-PÉREZ R., PA876, PA2426, PA3552
GONZALEZ-PIÑEIRO A., PA187
GONZÁLVEZ REY J., PA501
GOOBIE G., PA1167
GOODFELLOW A., PA2092, PA2418
GOODIN C., PA570
GOODMAN J., PA1889
GOOPTU B., PA1965
GOOPTU B., PA2794
GOORSENBERG A., PA497
GOORSENBERG A., PA930
GOOS T., PA448, PA1286, OA1392, OA3793, PA4265
GOPALAKAJE S., PA560
GOPANI H., PA1995
GÖRANSSON M., PA3567
GÖRANSSON O., PA3260
GORDJANI O., PA474, PA1976
GORDJUSINA V., PA215, PA4042
GORDO J., PA1801
GORDON A., PA4273
GORDON S., PA1123
GORE R., PA2523
GORE R., PA890
GÖREK DILEKTASLI A., OA4361
GORENJAK M., PA876, PA3256, PA3268, PA3548
GÖRGES S., PA920
GORI A., OA3779
GORI L., PA442, PA2762, PA4232
GORJUP V., PA1981
GORLANOVA O., OA142, PA1002, PA1012
GOROVENKO N., PA2803
GÓRSKA K., PA2664
GORTER I., PA3164
GORT-PANIELLO C., OA1437, PA2802, PA4283
GOSENS R., PA601, PA2069, PA3158, PA3164, PA3558
GOSLING R., PA470
GOSS C., RCT2164
GOSSELINK R., OA3124, PA3318
GOSSET P., PA201
GOSSOT D., OA3762
GOTERA RIVERA C., OA2319, PA3410
GOTTLIEB J., PA1942, PA3470
GOTTLIEB R., PA1893
GOTTLIEB R., PA4037
GOTTSTEIN E., OA1456
GOULAOUIC H., PA3198, PA4262
GOULART C., PA3327
GOULART K., PA3509
GOULDEN N., PA1742
GOULIAEV A., PA3414
GOUNOPOULOS P., PA362, PA2522
GOURGOULIANIS K., PA434, PA435, OA780, PA2655, PA2721
GOURGOULIANIS K., PA437, PA1192
GOURIOU S., PA4145
GOURTI M., PA304
GOUTAKI M., PA298, PA1013, OA2306, PA3975, PA3977, PA3979, PA3980
GOUTHAM M., PA1979
GOUTORBE F., PA2862
GOUVEIA N., PA3222
GOUZI F., PA2480
GOVONI M., OA2258
GOWAI H., PA2513
GOWDA V., PA270
GOWERS W., PA3523
GOWLAND P., OA1618
GOYAL A., PA1312
GOYAL J., PA3272
GOYAL P., PA4272
GOYAL S., PA3407
GOZEN TAN E., PA289
GRABCZAK E., PA907
GRAÇA L., OA3765
GRACIA-LAVEDAN E., OA2282, OA2284, PA4102, OA4384
GRACO M., OA2911
GRAF L., PA2750
GRÄF S., PA4135
GRAFF S., PA886, PA1681, PA2392, OA3679
GRAFF JENSEN S., PA1647
GRAH C., PA490, PA491
GRAHAM B., PA3195
GRAHAM-BROWN M., PA4216
GRAMEGNA A., PA283, OA3753
GRANADOS ROSALES G., PA3237
GRANADOS SANTIAGO M., OA4428
GRANATO E., OA2257, PA3162
GRANDI T., PA1060
GRANDJEAN LAPIERRE S., OA1630
GRANELL R., PA876, OA2305
GRANHOLM A., PA557
GRANJEON-NORIOT S., PA4080
GRANSAR T., PA3465, PA4147
GRANUM B., OA140
GRAS E., PA2719
GRASEMANN H., OA1621, PA2487
GRASSELLI G., OA3779
GRATZIOU C., PA3926
GRAUMANN O., PA1194, PA1195
GRAVE A., PA4207
GRAVELEAU J., OA4435
GRAVIER F., PA359, PA1870
GRAY M., PA949
GRAY R., PA579
GRAY S., PA2452
GRAY-FFRENCH M., PA4010
GRAZIANI E., PA2398, PA3215, PA4320
GRAZIANO F., PA2538
GRDOSIC J., PA1738
GREALLY P., PA2856
GREB D., PA2637
GREB D., PA620, PA1105, PA2638
GREBENYUK A., RCT2881
GREBERG H., RCT4445
GRECO G., PA1258
GRECU V., PA1900
GREEN A., PA4273
GREENBERG M., PA1303
GREENBURY R., PA2715, PA2718
GREENE C., PA3580
GREENER V., PA881
GREENFIELD S., PA2021
GREENHAFF P., OA4367
GREENING N., OA3113
GREENING N., RCT4448
GREENOUGH A., PA3283, PA3284, PA3285, PA3291
GREENSLADE S., PA1237
GREGOR J., PA2661
GREGOR M., PA2787
GREGORY R., PA2373, PA2376, PA3155
GREGSON E., PA3274
GRENVILLE J., OA2305
GREULICH T., PA1278, PA1280, PA2412, PA2431, PA3886
GREUTMANN M., OA124
GREVESON E., PA3421
GREYLING M., PA607
GRIB L., PA4030
GRICKSCHAT V., PA2413
GRIESE M., RCT2887, OA4437
GRIFFIN H., OA3751
GRIFFIN M., PA873
GRIFFITH D., PA2767
GRIFFITHS C., OA2961
GRIFFITHS C., PA1000

GRIFFITHS C., OA3795
GRIFFITHS J., RCT4445
GRIFFITHS W., PA2430
GRIGG J., PA2478, PA2481
GRIGNOLA J., PA1161
GRIGOLETTO I., PA2527
GRIGORATOU T., PA3369
GRIGORIEVICH SHVARTS Y., PA4182
GRIGORIOU I., PA960
GRIGOROIU M., OA3762
GRIGOROV M., OA4433
GRILLET P., PA2480
GRILLO L., PA3401
GRIMA L., PA4042
GRIMALDI M., PA4284
GRIME C., PA280, OA1443
GRIMM M., OA1440, PA2048
GRINOVERO M., RCT2162
GRINSZTEJN B., RCT2882
GRISARIU S., PA3183
GRISLE I., PA882, PA2397, PA3207
GRISOSTOMI G., PA1164
GRISSA O., PA260, PA261, PA262, PA1732, PA2458, PA3241, PA3242
GRIST J., OA1403
GRIZE L., PA191, PA394, PA1318, OA9001
GROENEN M., PA1866
GROENENDAAL W., PA2047, PA3505
GROENIER M., PA2714
GROEPENHOFF H., PA4006
GROGAN R., PA4273
GROGONO D., PA2616
GROLLEAU E., PA3406
GRONGSTAD A., OA1607, PA1855
GROOT M., PA496, PA3478
GROOT W., PA1053
GROSBOIS J., OA133, PA3351
GROSHAENY L., PA1317
GROSLERONS S., OA4435
GROSS B., PA457
GROSS V., OA2948
GROSSE-ONNEBRINK J., PA291, OA4417
GROßE-ONNEBRINK J., PA3404
GROSSO A., PA948, PA3851
GROSS-SONDEJ I., OA1410
GROTE L., OA2286, OA2289, OA2290, PA3589, PA3593, PA3603, PA3605, PA4297
GROUTTEAU S., PA524
GROVES A., PA3425
GRUBER A., PA1307
GRUBER A., PA1830
GRUDZINSKA F., PA2825, OA3778, OA4411
GRUENIG E., OA2276
GRUND T., PA4189
GRUNDEVIK P., PA4310
GRÜNDING A., PA4113
GRÜNER S., PA3568
GRUNEWALD J., PA3436
GRÜNIG E., PA471, PA474, PA1976, PA2677, PA2682
GRÜNIG E., PA2673
GRUNSTEIN R., PA3600
GRUSS A., PA2460
GRUTTERS J., OA1393, PA3448
GRUTTERS J., PA1949
GRUTTERS J., PA3438, OA3789
GRUTTERS J., PA2657
GRYCHTOL R., PA934, PA988, PA1015, PA2816, PA3948
GRYNBLAT J., OA2278
GRYSZKO G., PA1920
GU Y., PA2805
GU Y., PA2765
GUADALUPE P., PA2571
GUALANO G., PA2609
GUALILLO O., PA2789, PA2795, PA2808
GUALTIEROTTI R., OA3779
GUARINO M., PA325
GUARISE R., OA1622
GUARIZE J., PA481
GUARNIERI G., PA536, PA543
GUASCH I., OA2262
GUASCH ARRIAGA I., OA767
GUASCONI A., PA228
GUDHANE S., PA3330
GUDJONSSON T., PA2838
GUDMUNDSDOTTIR H., OA140
GUDUMAC E., PA1267
GUDUMAC V., PA4030
GUEDES K., PA2733
GUEDIRI N., PA155, PA354, PA994, PA3344
GUEDON A., OA4435
GUEMRI M., PA390
GUENAT O., PA609, OA1386
GUENAT O., PA3172
GUENETTE J., PA531
GUENETTE J., PA3514
GUENZI E., PA4111
GUERDER A., PA3350
GUERFALLAH ., PA3362
GUERFALLAH M., PA2383
GUERFALLAH R., PA871
GUERIN P., PA3965
GUERRA AZEVEDO I., PA3225, PA3228, PA3310
GUERRERO JARAMILLO D., PA2532
GUERRERO-JARAMILLO D., PA2528
GUERRIERI G., PA4126
GUET-REVILLET H., OA2916
GUEVARA VELAZQUEZ V., PA4256
GUI B., PA4192
GUIBERT C., PA4142
GUIBERT N., OA772
GUIDA V., PA2512
GUIDO-GUERRA E., PA3843
GUIDUCCI S., OA1450, PA1952
GUIGNABERT C., PA1989
GUILBERT T., OA2955
GUILLAUMOT A., PA1317, PA1710, PA3464, PA3890, OA4438
GUILLEMINAULT L., PA517, PA905, PA3911, PA4309
GUILLÉN ORTEGA F., PA3381
GUILLEN-DEL-CASTILLO A., OA1454
GUILLON A., PA1829
GUILLOT L., OA3780
GUILLOTIN ., OA4435
GUIMARÃES A., PA311, PA1812
GUIMARÃES C., PA3487
GUIMARÃES S., PA3427, PA3428
GUIMARÃES T., PA468, PA1980
GUIMARAES ASSIS M., PA1156
GUIOT J., OA1402, OA1451, PA1660, PA1991, PA2009, PA4103, PA4232
GUISOT N., PA453
GUISSARD F., OA1413, PA1681, PA2392
GUL E., PA355, PA3148
GULBINS E., OA2920
GÜLDENRING S., PA3865
GULER R., PA1904
GULER S., PA1940
GULER S., OA1453
GULERIA R., PA1220, PA3170, PA3413
GULHAN B., PA1896
GULIEVA A., PA277, PA285, PA2497, PA3985
GULIYEVA A., PA289
GULMANS V., OA1617
GULMANS V., PA295
GULSVIK A., PA1698
GÜLTEKIN Ö., PA446, PA447, PA3244
GUMENIUK G., PA878, PA3439
GUMMADI M., OA2275
GUMUS Z., PA3985
GUNASEKARA A., PA2600
GÜNAY UÇURUM S., PA329, PA330
GUNAYDIN O., OA2306, PA3980
GUNDOGDU D., PA1840
GUNDUZ C., PA1136
GUNEL I., PA2502
GUNER M., PA966, PA968, PA972
GUNER ZIRIH N., PA3244
GÜNES GÜNSEL G., OA662, PA3174
GUNTHER G., PA1904
GÜNTHER S., PA524, PA3345
GUO J., PA911, PA975
GUO R., RCT2881
GUO Y., PA578, PA918, PA922, PA923, OA1411
GUO Y., PA2085
GUO-PARKE H., PA1104
GUPTA A., PA3274
GUPTA A., OA4367
GUPTA G., PA3421
GUPTA L., PA987
GUPTA N., PA4272
GUPTA R., OA793, PA4239
GUPTA R., PA1893, PA4037
GUPTA S., PA2662
GUPTA S., PA2736, PA2742
GUR I., PA542
GURDAIN S., PA1690
GÜRDENIZ G., OA2189
GURGEL COSME DO NASCIMENTO E., PA3541
GURNELL M., PA914, PA3212
GURSOY A., OA2265
GURUN KAYA A., PA1065, PA1251, OA1627, PA2731, PA2743, PA3190
GURYEV V., PA3562
GURYEV V., PA1271, PA1276
GÜRZING S., PA183
GUSHKEN F., PA963, PA3941
GUSTAFSSON T., PA2020
GUSTO G., OA3129
GUT GOBERT C., PA3491
GUTBERLET M., PA3470
GUTBIER B., PA2082
GUTIERREZ M., PA2558
GUTIERREZ M., PA458, PA1951
GUTIÉRREZ M., PA2558
GUTIÉRREZ FERNÁNDEZ J., PA3340
GUTIÉRREZ PÉREZ I., PA1292
GUTIÉRREZ-LARRAYA SÁNCHEZ-ANDRADE R., PA1019, PA1029, PA3297
GUTIÉRREZ-RODRÍGUEZ Y., PA2666
GUTZLER C., PA3442
GUTZWILLER F., PA3260
GUVENDIK O., OA1627
GUY T., PA2862
GUYARD A., PA2786, PA4111
GUYATT A., PA3235, OA3737, PA4247
GÜZELKAŞ I., PA1771, PA2853, OA4420
GUZMÁN ANSADO E., PA339
GUZMÁN-GUZMÁN I., PA1292, PA1836
GWINI S., PA1735
GYAWALI S., PA239
GYERTSON K., OA676
GYFTOPOULOS S., PA3926
GYRID FREIM WAHL S., PA4249
GYSAN M., PA3347
GYSELINCK I., OA750, PA1286, PA2006, OA3793, PA3885, PA3886, PA4265
GYSIN C., PA1320

H

H MOHAMED A., PA3483
H NORDENMARK L., RCT4445
H. CHOTIRMALL S., OA3747, OA3750
H. FODOR G., PA2759
H. MAYER C., PA1833
H. S. PALMEIRA V., OA4362
H. T. BATES J., PA877
HAAKANSSON K., OA3677
HAARMAN E., PA381, OA2306
HAARMAN E., PA3980
HAAS M., PA4123
HAAS S., PA3364
HABA-RUBIO J., OA2287, PA3601
HABENER A., PA934
HABERSATTER F., PA360
HABIB G., PA2740, PA4208
HABIB M., PA158
HABIB M., PA1716, PA3366, PA4198, PA4199
HABIB S., PA3411
HABIBECH S., PA489, PA507, PA3374
HABIBIE H., PA594
HABOURIA C., PA1667, PA2639
HABOURUIA C., PA1928
HABR B., PA1143
HABRE W., PA556, OA3110
HABSHYDZE N., PA510
HACCURIA A., PA3194
HACHEM M., OA664
HACHULLA E., PA472, OA1450, PA1952
HACKETT T., PA2793, PA3459
HACKETT T., PA2050, PA2075, PA2084
HÄCKL S., OA753
HACKNER K., PA3453
HACKSHAW A., OA676
HADAWAY V., PA3947, PA3964
HADCHOUEL A., OA4437
HADCHOUEL-DUVERGÉ A., PA452, PA517, PA2844
HADDA V., PA1220, PA1285, PA2806, OA2902
HADDAR Y., PA1055
HADDEN R., PA1141
HADFIELD R., PA2420
HADIAN K., PA2787
HADIDENE Y., PA2637
HADJ DAHMEN M., PA1794

HADJ DAHMEN M., PA1783
HADJI MITROVA M., PA2389
HAEFNER V., OA2966, PA3245, PA3247
HAENEBALCKE C., OA3113
HAEUSLER K., OA4360
HÄFLIGER A., PA2749
HAGAN G., PA1905
HAGE R., PA1031
HAGEDOORN P., PA3606
HAGFELDT S., PA1218
HAGMAN C., PA2751
HAGNER M., PA1937, PA3568
HAIDER Y., PA3494
HAIDICH A., OA677
HAIFA Z., PA1090
HAINE L., PA606
HAINES M., OA4365
HAINSWORTH J., PA3434
HAISHENG H., PA1654
HAITCHI H., PA3204, PA3207, OA3674
HAJER R., PA507
HAJI K., PA2791
HAJIAN B., PA1035, PA3349
HAJIGHASEMI F., PA3211
HAJIYEVA K., PA945
HAJIZADEH N., PA904, PA906
HAJKOVA M., PA2661, PA4119
HÅKANSSON K., PA2394
HÅKANSSON K., OA3745, PA3910, PA3951
HAKIM A., PA4314
HALANK M., PA1990
HALBERSMA N., PA3609
HALEWOOD J., PA2384
HALILOGLU M., PA2502
HALILOVIC A., PA456
HALKET J., PA579
HALL A., PA1000
HALL A., PA4073
HALL G., OA146, PA1738
HALL H., OA676
HALL I., OA1618, PA2483, OA4367
HALL I., PA3235, OA3737, PA4247
HALL I., PA4308
HALL J., PA1666
HALL R., OA671, PA2483
HALLBERG C., PA2535
HALLBERG J., PA1754
HALLE O., PA2816
HALLER JR H., PA1936
HALLGREN O., PA600, OA1379, OA2267
HALLIFAX R., OA782
HALLIFAX R., PA441
HALLOULI S., PA2372
HALLOUMI O., PA946, PA3940
HALNER A., PA3886
HALOUANI N., PA625
HALPIN D., PA515
HALPIN D., OA3672
HALPIN D., PA2420
HALSTON R., PA2825
HALVARSSON A., PA1797
HALVEY E., PA4157
HALVORSEN T., PA1676, PA1741, PA2034, PA2760, PA3137, PA3144
HALYTSKA V., PA212
HAMAD S., PA287
HAMADA K., PA4180
HAMADA Y., PA917
HAMAGUCHI M., OA1394
HÄMÄLÄINEN N., PA1649
HAMDI A., PA266
HAMDI A., PA1996
HAMDI B., PA168, PA1177, PA1851
HAMDI M., PA1177
HAMDI S., PA1779
HAMEED A., PA462, OA2277, PA3467
HAMEED H., PA1162
HAMELMANN E., PA1682, PA1683
HAMELMANN E., PA1678
HAMESCH K., PA2430
HAMID Q., PA2827
HAMIGI I., PA3594
HAMILTON G., PA1688, PA1699
HAMILTON H., PA4115
HAMILTON J., PA4115
HAMILTON N., OA2277, PA3467
HAMM G., PA610
HAMMACHE N., PA238
HAMMERICH R., PA1668
HAMMERSLEY V., OA4379
HAMMOND-PEARS S., OA798
HAMOUDI M., PA1100
HAMOUDI R., PA2827
HAMZAOUI A., PA168, PA1177, PA1851
HAN B., PA4075
HAN B., PA555, PA1262
HAN I., PA1297
HAN J., PA3197
HAN K., OA755
HAN L., OA2966, PA3245, PA3247
HAN M., PA2104, PA2121, PA4252
HAN M., RCT712, PA911
HAN S., OA2316
HAN W., PA1927
HAN W., OA1431
HAN X., PA200
HAN Y., PA938
HANA B., PA2007, PA3385
HANA M., PA1311
HANAFI N., PA1716, PA3366, PA3497, PA4208
HANAFI N., PA503, PA504
HANAFI N., OA684, OA685, PA3307
HANAFIN J., OA678, OA680, PA970, PA3932, PA3933, PA3942
HANAOKA M., PA1168
HANCCO I., PA2763
HANCI P., PA4242
HANCOCK N., OA2264
HANDA H., PA1118
HANDA T., PA1168, PA4123
HÄNDLER K., PA2812
HANGÜL M., PA282, PA296, PA2496, PA2500, OA4416
HANGÜN S., PA1810
HANIF H., PA4196
HANIFA R., PA2449
HANIGAN I., PA3946
HANNAN L., OA2911, OA2914
HANNAN M., PA3309
HANNAN N., PA515
HANNAN N., PA3565
HANNAN N., PA2788
HANNAN T., PA2643
HANNECHI H., PA3383
HANNEMAN A., PA3892
HANNEMANN J., PA2063
HÄNNINEN S., OA670
HANON S., PA1225, PA3207
HANS MICHAEL H., PA184
HANSBAUER E., PA1937, PA3568
HANSBRO P., PA1821
HANSBRO P., PA2812
HANSBRO P., PA578, PA918, PA922, PA1269, PA1825, PA2074, PA3168
HANSBRO P., PA3897
HANSBRO P., PA3561
HANSEL N., RCT712
HANSEN C., PA3326
HANSEN C., PA3874
HANSEN G., PA876, PA934, PA988, PA2816, OA2954, PA3257, PA3948
HANSEN H., PA319
HANSEN J., PA319
HANSEN M., PA2612
HANSEN S., PA942, PA2136, PA2394, OA3677, PA4323
HANSEN T., PA4105
HANSON J., OA1635
HANTOS Z., PA1744, OA3112, PA3307, PA3423
HANTOUS S., PA1782, PA1792
HANUSSE P., PA3992, PA3993, PA4000
HAOUARI W., PA1122
HAPPAERTS S., OA3113
HAPPLE C., PA934, PA2816, OA2954
HAQ A., PA2416, PA2417
HAQUE A., OA2277, PA3467
HARA Y., PA2632
HARASHCHENKO T., PA1760
HARAZIM GASPARI C., PA3319
HARDAKER L., OA128, PA3891
HARDAVELLA G., PA340, PA401, PA1139, OA1380, PA1849, PA1921, PA1998, PA2563, PA2604, PA4014
HARDCASTLE S., PA2684
HARDELID P., PA1764
HARDER E., PA3460
HARDIE J., PA2032
HARDIN M., OA2950, OA2952, OA2955, PA3209, PA3210
HÅRDSTEDT M., PA211, PA2016
HARDY T., OA135
HAREL S., PA4262
HARIS F., PA3408
HARIS M., PA1212
HARITOU A., PA2431
HARIZI C., PA1257, PA3939
HARKI O., OA4383
HARLANDER M., PA1981
HARLEY J., PA1691, PA2674
HARMANCI K., PA282, PA296, PA2496, PA2500
HARMOUCHE C., PA1143
HARNER S., PA3256, PA3268, PA3548
HARNETT M., PA1933
HARPER L., PA460
HARRIES A., PA4167
HARRIES C., PA476
HARRIS A., OA2306, PA3980
HARRIS C., PA3291
HARRIS D., PA160
HARRIS J., PA1789
HARRIS M., PA4086
HARRISON M., PA2424
HARRISON T., PA2369, PA2438
HARRISON T., PA4003
HARRUN N., PA503, PA3497
HARSTON G., PA3421
HART K., PA1740, PA1742, PA1744, OA2300, PA3278, PA4215
HART N., PA1088, PA1655, PA3320
HART N., PA2029
HART R., OA146
HART S., PA2654
HART S., PA1157, PA3142
HARTL S., OA119, PA237, PA1661, PA1700, OA2304, PA2442, OA3115, PA3136, PA3146, PA3903, PA3990, PA4053
HARTMAN J., OA136, PA1271, PA2444
HARTMAN J., PA4172
HARTMAN J., PA492, PA495
HARTMANN J., PA4221
HARUKI K., PA4176
HARUTYUNOVA S., PA474, PA1976, PA2677
HARUTYUNOVA S., PA2673
HARVEY J., OA132, PA1858, PA1868
HARVEY J., OA787
HARVEY L., PA173
HARVEY M., PA1943
HARZHEIM D., PA3239, PA3240
HASALA H., PA3422
HASAN R., PA1881
HASAN T., PA2111
HASCELIK G., PA1771
HASEGAWA T., PA4079
HASENAUER J., PA2812
HASGÜL M., PA1810
HASHEMI-BAJGANI S., PA859
HASHIM H., PA1313
HASHIMOTO ., OA141
HASHIMOTO M., PA2709
HASHIMOTO S., PA184, PA876, PA882, PA2402, OA2949, PA3207, PA3256, PA3268, PA3548, PA3551, OA3679
HASHMI-GREENWOOD M., PA1243
HASLAM M., RCT2164
HASLER E., PA2680
HASS N., OA682
HASSAN M., PA1095, OA2909, PA4154
HASSAN M., OA3749, OA3754
HASSAN N., PA549
HASSAN W., PA3172
HASSANIN E., PA560
HASSEN H., PA620, PA2638
HASSENE H., PA1105
HASSIBI S., PA3584
HASTIE A., OA1416
HATAJI O., PA3496
HATT H., PA3577
HATTOTUWA K., PA388
HATZ R., PA593, PA598, PA599, OA668, PA4121
HATZIAGOROU E., PA2495, PA2506
HATZOGLOU C., PA434, PA435, OA780
HAUBRICH R., PA1893
HAUCK A., OA681
HAUCK S., PA2787
HAUCK S., PA4121
HAUG G., PA2793, PA3549
HAURAT J., PA423
HAUSS P., PA957
HÄUSSERMANN S., PA2746
HAUTZEL H., PA2382, PA2701
HAVEL L., PA4108
HAVELOCK T., OA3109
HAVERICH A., PA1942, PA4277
HAVSTAD CLEMM H., PA3137, PA3144
HAW T., OA2963
HAWCUTT D., PA1768, PA3908, PA3913
HAWCUTT D., PA876
HAWKES D., PA2008
HAWKES S., PA1245, PA1246
HAWKINS D., PA974
HAWKINS G., PA876
HAWRYLOWICZ C., PA583, PA584
HAWTHORNE G., PA4216

HAY KRAGHOLM K., PA3914
HAYAI S., PA2644
HAYAKAWA E., PA2656
HAYASHI M., OA3125
HAYDEN M., PA2593, PA3239, PA3240
HAYES G., PA3499
HAYOUNI A., PA264
HAYTER M., PA4017
HAYTON C., PA1939, PA4018
HAZELDINE J., OA3778
HAZENBERG P., PA396
HE P., PA2073
HEALY F., PA2856
HEALY J., PA2765
HEALY L., PA2486, PA3179, PA3956
HEANEY L., PA890, PA2387, RCT4446
HEANEY L., PA2397, OA3800
HEANEY L., PA914, PA1344
HEARN A., PA3204, PA3333, OA3773
HEARSON G., PA4003
HEBISAWA A., PA1168
HEBLIG M., OA4435
HECHING M., PA3308
HECHINGER C., PA3568
HEĆIMOVIĆ A., PA2710, PA3447
HECK S., PA936
HEDDEBAUT N., OA692
HEDHLI A., PA424, PA534, PA1675, PA2785, PA4300
HEDHLI EP CHERNI A., PA424, PA1675, PA4300
HEDIA G., PA4040
HEDLIN ., OA141
HEDLIN G., OA140
HEDLIN H., PA1974
HEDLUND M., PA335
HEDMAN A., PA3268
HEDMAN L., PA937, PA940, PA950, PA953, PA1704, PA1708, PA2446, OA3736
HEDNER J., OA2289, PA3603, PA3605, PA4297
HEDNER J., OA2286
HEDRICH C., PA2810
HEDSUND C., PA561
HEENAN K., PA1209
HEFFLER E., PA1338, PA3209, OA3679
HEGARZY F., PA2443
HEGELUND M., PA4028, OA4413
HEGEWALD M., PA4225
HEGGE J., PA4115
HEIBATI B., PA258
HEIDER A., OA2204
HEIER M., PA3245
HEIGHTMAN M., PA2523
HEIGL T., OA686
HEIJENBROK-KAL M., PA2447
HEIJENBROK-KAL M., PA2456
HEIJINK H., PA3562
HEIJINK I., PA1271, OA2199, PA3609
HEIJINK I., PA2075, PA4262
HEIJNEN M., PA295
HEILI FRADES S., OA2319
HEIN G., OA4360
HEINDL S., PA888
HEINE A., OA2276
HEINEMANN A., PA4149, PA4318
HEINIG K., PA3568
HEINIJOKI J., PA3317
HEINRICH J., PA3221
HEINSON A., PA1273
HEINZELMANN K., PA2787
HEINZER R., OA2284, OA2287, PA2846, PA3601
HEIß-NEUMANN M., PA1109
HEJDUK K., PA3412, PA3845
HELBO SKAARUP S., OA2901
HELENA K., PA3354
HELENE F., PA402
HELFER H., OA3130
HELL T., PA1014
HELLEDAY T., PA2833
HELLEMONS M., PA2447
HELLEMONS M., PA2456
HELLEMONS M., OA688
HELLINGS P., PA3197
HELLQVIST Å., OA2251, OA3670, OA3678, RCT4445
HELLYER T., PA3529
HELMECZI W., OA2311
HELMERSEN D., PA460
HELMS S., OA4417
HEMSHEKHAR M., PA581
HEMY N., PA1738, PA1743
HENDERSON A., PA1742, OA2300
HENDERSON B., PA269
HENDERSON J., PA4082
HENDERSON L., PA4183
HENDRIKS R., OA2206, PA3896
HENG S., PA3352
HENKET M., PA886, OA1451, PA1660, PA1681, PA1991, PA4103
HENLEY W., OA748, PA2136, PA4323
HENNAYAKE C., PA1834
HENNEBERGER P., PA2471
HENNESSEY S., PA175
HENNETON P., OA4435
HENNING GRØNBEREG B., PA1137
HENRIKSEN D., PA3868
HENRIQUES A., PA2754
HENRIQUEZ SALAZAR M., PA3536
HENROT P., OA2936
HENRY M., PA1967, PA2702
HENRY P., PA1967
HENRY T., PA4211
HENTATI A., PA301, PA313, PA1102, PA1780, PA1922
HEO E., PA3887
HEO J., OA2316
HEO Y., OA2316
HEPKAYA E., PA277
HERATH D., OA663
HERAUD N., PA366, PA371, PA4197, PA4211
HERCBERG S., PA255, PA267
HEREDIA CIURÓ A., PA1924, PA2526, OA4428
HERKENRATH S., PA623, OA2276
HERMANN E., PA975
HERMANN KARLSEN J., PA3914
HERMANS F., PA326, PA1038, PA1039, OA3122
HERMANS G., RCT2881, OA3124
HERMANS R., PA228
HERMES A., OA4360
HERMIDA-VALVERDE T., PA2134
HERMOSO DE MENDOZA S., PA1184
HERNANDEZ A., PA2773
HERNÁNDEZ C., OA3726, OA3727
HERNANDEZ C., PA3998
HERNÁNDEZ D., PA2683
HERNÁNDEZ E., PA3871
HERNANDEZ F., PA449, PA2792, PA4127
HERNANDEZ G., PA558
HERNANDEZ P., PA182, PA899, PA900
HERNÁNDEZ ARGUDO M., PA2585
HERNANDEZ BIETTE A., PA2719
HERNÁNDEZ GARCÍA V., PA4043
HERNANDEZ GIL M., PA3289
HERNÁNDEZ MILLÁN B., PA286
HERNANDEZ NUÑEZ J., PA1115, PA4233, PA4235
HERNÁNDEZ VÁZQUEZ J., PA3876
HERNÁNDEZ ZENTENO R., PA1274
HERNANDEZ-LOPEZ S., PA1222, PA2042
HERNANDEZ-MEZQUITA M., PA2011
HERNÁNDEZ-NÚÑEZ J., PA4244
HERNANDEZ-PACHECO N., PA876, OA2946
HERNÁNDEZ-PÉREZ J., PA876, PA3552
HERNÁNDEZ-PÉREZ J., PA2426
HERNÁNDEZ-PÍRIZ A., PA4244
HERNANDEZ-URQUIETA L., PA3526, PA3837
HERNANDEZ-ZENTENO R., PA864, PA1292
HERNÁNDEZ-ZENTENO R., PA1275, PA1283, PA1284, PA1836, PA2801
HERR C., PA4062
HERRANZ C., PA2741
HERRANZ BLASCO A., PA1182, PA1715
HERRERA I., PA4047
HERRERA R., PA904, PA906
HERRERA LUIS E., PA876
HERRERA MONGE P., PA3289
HERRERA-LUIS E., PA3548, PA3554
HERRERA-ZAMORA J., PA3843
HERRERO CORTINA B., PA384, PA1813
HERRERO HUERTAS J., PA2015, PA4033
HERRERO-CORTINA B., PA334
HERRMANN K., PA2382
HERRMANN M., PA477
HERRMANN M., PA1318, PA4034, OA9001
HERRMANN M., PA394
HERSCU P., PA1893
HERTH F., OA771, OA2269
HERTH F., OA772
HERTH F., PA2645
HERTH F., PA3239
HERTH F., PA3240, PA3573, PA3880, PA3881
HERTZ F., PA1111
HERVE P., OA2276
HERY-ARNAUD G., PA4145
HESLOP-MARSHALL K., OA3726, OA3727, OA3728
HESPANHOL V., PA2641
HESS J., PA4121
HESSE C., PA1816
HESSE S., PA2646
HESSELBERG L., PA992
HESSELBERG L., OA145
HESSELMAR B., PA2464
HESSLINGER C., OA1396
HEUBEL A., PA323, PA1040
HEUDE B., OA2288
HEUMOS L., PA598, PA1827, PA1833
HEUNKS L., OA1435, OA1438, PA1885, RCT2881
HEUNKS L., OA2313
HEUSCHMANN P., OA4360
HEUSEL M., PA2833
HEUSSEL C., PA2645
HEUVELMANS M., PA1186
HEUZÉ-VOURC'H N., PA1817
HEVIA MENÉNDEZ M., PA4054
HEW M., PA4323
HEWITT L., PA3201
HEYDARI G., PA959, PA962
HEYEER B., PA2499
HEYER C., PA2053
HICKS A., PA428, RCT2883
HIDALGO G., PA356
HIDALGO HERRANZ Á., PA339
HIDALGO-SIERRA V., PA2011
HIDRI R., PA2782, PA2783
HIEMSTRA P., OA667, PA1279
HIEMSTRA P., PA582, PA1291, OA3661, PA4262, PA4276
HIGANO N., PA3474
HIGAZI M., PA4294
HIGGINS M., OA1616
HIGGINS R., OA809
HIGGINSON I., OA4364
HIGGS V., PA2443
HIGHAM A., PA3575, PA3894
HIGHLAND K., OA1454
HIKMET ÖZHAN M., PA1191
HILARY G., RCT2886
HILBERG O., PA1117, PA1706, PA2394, PA2537, PA3223, PA3251, PA3255, OA3677, OA3745, PA3915, PA4055, PA4105, PA4203
HILDEBRAND C., PA1297, PA2071, PA2839
HILGENDORFF A., PA593, OA668, PA2787
HILL A., PA4263
HILL C., PA464, PA2858
HILL H., PA1123
HILL M., PA4179
HILL T., PA3492, PA3493
HILLAS G., PA377, PA378, PA1114, PA2613, PA2697
HILLAS J., OA2943
HILLMAN T., PA2523
HILLSON K., PA3151
HILTERMANN T., PA1032
HILTY M., PA1012
HILVERING B., OA3671
HINCHY E., OA2254
HINCKLEY STUKOVSKY K., PA2489
HIND D., PA3323
HIND M., OA3743
HINE C., PA2516
HINKS T., PA1815, PA2706, PA2818, PA3899
HINKS T., PA1295, OA1409
HINOSTROZA LOGROÑO R., PA3153
HINRICHS J., PA1942
HINTERTHANER M., PA490, PA491
HINTRINGER S., OA682
HIPÓLITO N., PA325, PA1798, PA1801
HIPPENSTIEL S., PA1830
HIRAI K., PA929, PA1664

HIRAI K., OA673, PA1844
HIRAI T., PA4123
HIRAMATSU T., PA3145
HIRANI N., PA460
HIRANI N., PA3524, PA4117
HIRANI N., PA1932
HIRANO T., PA4180
HIRATA K., OA3132
HIRDMAN G., OA1379, OA2267
HIRONS B., PA179, PA1151
HIROTSU C., OA2284
HIRSCH F., OA1383
HIRSCH H., PA394, PA4034
HIRSCH J., PA248
HIRSCH M., PA2071
HIRSCHI S., OA692, OA4438
HITZL W., PA1861
HIZAL M., PA1756, PA1771, PA2025, PA2502
HJEIJ R., PA2845
HJORTH P., PA2539
HLAPČIĆ I., PA1026
HO A., PA1306
HO B., PA503, PA3497
HO L., OA1449
HO L., OA2326, PA2738, PA3433, PA4020
HO S., PA2769
HO S., PA2475
HO T., PA373, PA523
HO V., PA2058
HOAD C., OA1618
HOANG M., PA3208
HOANG T., OA1430
HOANG T., PA1335
HOARE J., PA2554
HOARE Z., PA1742
HOBART K., PA4303
HOBBS B., PA4263
HOBBS F., PA2565
HOBI N., PA3172
HOCHBERGER B., PA2595
HOCHMAIR M., PA358
HOCKE A., PA1830
HODA M., PA1140, OA1383
HODGSON U., PA1950
HODIATSKA K., PA1765
HODZHEV Y., PA4255
HODZIC A., OA3731
HOEBEN P., PA2006
HOEFEL G., PA922
HOEK R., OA688
HOEPER M., OA2273
HOEPER M., PA1254, PA1975
HOEPER M., PA463, PA1942, PA1988, OA2271, PA4277
HOET P., PA1727
HOET P., PA1734
HOETZENECKER K., PA1140, OA1383, PA3571, PA4136, PA4149
HOFF E., OA2286, PA3605
HOFFFMANN B., PA2484
HOFFMAN E., PA975
HOFFMAN E., PA248, PA911
HOFFMANN H., PA880, PA1684, PA3189, PA3335
HOFFMANN H., PA927
HOFFMANN-VOLD A., OA1450, PA1952, PA1961
HOFFMANN-VOLD A., PA472, OA1453
HOFFMEYER F., PA1736, PA1737
HOFMANN A., PA4296
HOFMANN L., OA1384, PA2646
HOFMÄNNER D., PA1254
HOFSTEE H., PA2402, OA3679
HOGG C., PA1823, OA3751
HOGG J., PA3459
HOGGARD S., PA2557
HÖGMAN M., PA194, PA211, PA2016, PA2102
HOGNON L., PA4211
HOHEISEL A., PA4034
HOHENSTEIN S., OA2312
HOHLFELD J., PA172
HÖHNE K., PA3442
HOJO M., PA2709
HOLBROOK T., PA200
HOLDEN D., PA3471
HOLDEN L., PA395
HOLDSTOCK L., PA2682
HOLGATE S., RCT2884
HOLIDAY E., OA2963
HOLK T., PA2548
HOLLAND A., PA490, PA491
HOLLAND A., PA1044
HOLLAND C., OA1407
HOLLAND L., PA2121
HOLLAND N., PA932
HOLLEMEERSCH S., PA1893
HOLLINGSWORTH K., OA1407
HOLLINS C., OA2254
HOLLMANN M., PA1925
HOLM A., OA3107, OA3801
HOLM A., PA1083
HOLM M., PA231, OA1415, PA3221
HOLMAN N., PA2543
HOLMES J., PA2387
HOLMES L., PA892
HOLMES S., PA511
HOLMES T., OA2184, PA3578
HOLMSTRAND L., PA3614
HOLT G., PA3405
HOLT H., PA1116, PA2455, PA3220, PA3227, OA3795
HOLTDIRK A., PA1678
HÖLTERS J., OA769
HOLTFRETER S., PA920
HÖLTTÄ P., PA257
HOLTZ-THORHAUGE K., PA2430
HOLUB S., PA2012
HOLZ O., PA172
HOMAIRA N., PA949
HOMMA T., PA611, OA673, PA1844
HOMOLKA P., PA306, OA3758
HONDA K., OA1394
HONDA N., PA4176
HONG A., PA2121
HONG A., PA364
HONG S., PA1027
HONG TUAN HA V., PA1248, PA1249
HONORÉ I., PA3345
HOOFT L., OA1631
HOOSHIAR KASHANI B., PA598, PA599
HOPFF S., OA4360
HOPKINS C., PA3197
HOPKINS M., PA160
HOPKINS P., PA163, PA1730
HOPKINSON N., OA675, RCT2161
HOPKINSON N., OA135, RCT4448
HOPPE B., PA1078
HORACKOVA M., PA3841
HORE-LACY F., PA1735
HORIE S., PA2843
HORISBERGER T., PA3455
HORITA N., PA2632
HORN A., OA4360
HORN M., PA3346
HORN P., PA2078
HORN P., OA2920
HORNBERG J., PA610
HORNDAHL J., OA2939
HORNE A., PA2812
HORNER D., OA145
HORNUS P., PA1326
HORSLEY A., OA2326
HORSLEY A., PA2486, OA2922, PA3280
HORST C., OA676
HORTELANO S., PA1174
HORTON K., PA1295
HORVAT J., PA578, PA918, PA922, PA1821, PA1825, PA2074, OA2963, PA3897
HORVATH G., PA443, PA2576
HORVATH I., OA1411
HORVATH P., PA976
HORVATOVICH P., PA1276
HORVATOVICS P., OA1383
HOSBAY Z., PA1224
HOSE A., PA3948
HOSE A., PA3257
HOSEIN K., PA3424
HOSOGI S., PA2067
HOSOUME L., OA2330
HOSP-COVID COLLABORATIVE GROUP P., OA131
HOSSEINIB M., PA859
HOSSEN S., OA2960
HOSTETTLER K., PA1175, PA1940
HOTH K., OA682
HOU J., PA2051
HOUBEN-WILKE S., PA1651, PA3349
HOUCHEN-WOLLOFF L., PA2584, PA3365, PA4193, PA4206
HOUDA S., PA2007
HOUDOIN V., PA3955
HOUDOUIN V., PA3958
HOUGH A., PA3594
HOUSLAY K., OA2254, OA2940
HOUSLEY K., RCT4448
HOVARDOVSKA O., PA2622
HOW O., PA1819
HOWARD D., PA3419
HOWARD J., PA4134
HOWARD L., PA4138
HOWARD M., OA2911, OA2914
HOWARTH P., PA223, PA1344, OA1409, PA2437, PA3207, PA3560, OA3679, PA4186
HOWARTH P., OA1411
HOWE C., PA2763
HOWELL T., PA1141
HOWIE K., PA3900
HOWIE K., PA174
HOWLETT-FOSTER M., OA127
HOXHALLARI A., PA166
HOY L., PA3425
HOY R., PA1735
HOYEK K., PA349, PA2579, OA4358
HOYER A., OA140
HOYER N., PA561, PA1945, PA2658, PA2667, PA3431
HOYLER K., PA1013
HOYLER K., PA1005
HOYLES R., PA2738, PA3433, PA4020
HOYLES R., OA1449
HOYTE F., PA1330, PA3492, PA3493, PA4323
HRISTOVA D., PA3200
HRNCIARIK M., PA4108
HROMIŠ S., PA3207
HRYCAICZUK J., PA1914
HSANEN E., RCT715
HSI A., PA1974
HSIAO C., PA4088, OA4387, OA4389
HSIEH A., PA2050
HSIEH M., PA3399
HSINET J., PA260, PA261, PA262, PA1732, PA3241, PA3242
HSSINET J., PA2458
HSU A., PA1821, PA1825
HSU P., PA2621
HSU P., OA4387, OA4389
HSU S., OA2276
HSU Y., PA4109, PA4257
HU H., PA4041
HU N., PA949
HU S., PA915
HU Y., PA300, PA1927
HU Y., OA1400, PA2008
HUA-HUY T., PA524
HUAN M., PA2475
HUANG C., PA4041
HUANG C., PA4152
HUANG C., OA756
HUANG C., PA523, PA1296, PA3173, OA3673
HUANG H., PA3471
HUANG H., PA3399
HUANG H., PA4087
HUANG J., PA1823, OA3748
HUANG J., PA3399
HUANG J., PA1948
HUANG M., OA2204
HUANG S., PA1304
HUANG X., PA1304
HUANG Y., PA192
HUANG Y., PA565
HUANG Y., PA1916, PA4257
HUARD G., PA1025
HUBA Y., PA351, PA1837, PA3378, PA3481
HUBA Y., PA861
HUBLER R., PA2452
HÜBNER R., PA490, PA491, PA1668
HUDSON P., PA1864
HUE L., PA3405
HUE S., PA1697
HUERTA A., PA197
HUFF R., PA2086
HUFF R., PA3248
HUGENHOLTZ P., PA3168
HUGG T., PA2476
HUGHES A., OA3728
HUGHES C., PA2610, RCT2883, OA3798, PA4066, OA4404
HUGHES D., PA4322
HUGHES M., OA3778
HUGHES P., OA1403, PA3891
HUGHES P., OA128
HUGHES R., OA128, PA229, PA912, PA3891
HUGHES R., PA1805
HUH J., PA1158
HUHN M., PA1273
HUI I., PA2730, PA2740
HULL J., PA173, PA3523
HULL J., PA179
HULL R., OA3798, OA4404
HULL R., PA2610, PA4066
HULL R., RCT2883
HUMBERT M., PA1332, PA1989, OA2273, OA2274, OA2276, OA2280, PA2387, PA2676, PA3461, OA3672, PA4145
HUMBERT M., PA2449
HUMBERT S., OA4435
HUMBLES A., OA2938
HUME E., PA367, PA1863
HUMMERSGAARD HANSEN A., PA2080, PA4124
HUMPHRIES B., PA3159, PA3167
HUNG J., PA2621
HUNTER B., PA2557
HUNTER G., OA3678, PA4313, PA4315
HUNTER K., PA3225, PA3228, PA3310
HUNTER K., OA1404
HUNTLEY C., PA251,

PA3997
HUNTLEY C., PA1163, PA1733
HUNZIKER M., PA344
HUR G., PA3971
HURDALKOVA K., PA4108
HURLEY K., PA2059, PA2061, PA3419, PA3580
HURLEY M., OA1442, PA2373, PA2376, PA3155
HÜRSOY N., PA446, PA447
HURST J., PA1799, PA2008, PA2104, PA3435, PA3625, OA3800
HURST J., OA1400, PA1955, PA2415
HURT D., PA4086
HURTADO FUENTES A., PA2691
HUSEBØ G., PA3229
HUSEBØ G., PA1300, PA4251
HUSEYNOVA Ç., PA945
HUSEYNOVA K., PA3244
HUSSAIN A., OA2902
HUSSAIN I., PA3995
HUSSAIN M., PA1085
HUSSAIN N., PA440, PA4168
HUSSAIN S., PA2738, PA4020
HUSSAINI S., PA2103
HUSSEIN H., PA2542
HUSSEIN N., PA503, PA504, PA1716, PA3366, PA3497
HUSTACHE-CASTAING R., OA2936
HUSZTI E., OA685
HUTCHINSON A., PA1642, PA4059
HUTCHINSON F., PA200
HUWENDIEK S., PA2711
HUYNH L., PA236, PA3920
HVIDTFELDT M., OA2201, OA2253, PA3582
HWANG K., PA3611
HWEE E., PA1819
HWEE J., PA236, PA3920
HYAMS C., PA2452, PA2462
HYDER-WRIGHT A., PA1123
HYLAND M., PA3207
HYLAND M., PA222
HYLANDER MØLLER M., PA557
HYLDGAARD C., PA1706, PA3335
HYLKEMA M., PA4262
HYLKEMA M., PA2069
HYNDS R., PA1290
HYNES G., PA2818
HYRKÄS-PALMU H., PA2470
HYUN D., PA1142

I

I DRAUTZ-MOSES D., OA3750
I.PAPAIOANNOU A., PA1330
IACCARINO L., PA1178, OA1457, PA1970
IADAROLA P., PA4279
IADEVAIA C., PA872
IAGNEMMA J., PA3949
IALONGO S., PA2450
IANNUZZI L., PA2131
IBÁÑEZ A., PA608
IBAÑEZ R., PA2571
IBÁÑEZ FONSECA A., PA600, PA4133
IBÁÑEZ-FONSECA A., PA4133, PA4269
IBBETSON A., PA2584, PA3365
IBRAHIM H., PA2704
IBRAHIM M., PA2601
IBRAHIM M., PA519, PA549, PA1219
IBRAHIM N., PA2573
IBRAHIM P., PA459
IBRAHIM W., PA986
IBSEN R., PA3223, PA3251, PA3255, OA3745, OA4373
ICHIHARA N., OA1394
IDÄNPÄÄN-HEIKKILÄ J., PA1347
IDES K., PA1223, PA1234, PA2588
IDONE F., OA4406
IDREES S., PA1269, PA3897
IDRIS E., PA890
IDROSE S., PA1688, PA2482
IDZKO M., PA1140, PA1678, PA1682, PA1683, PA2139, PA2404, PA3347, PA3903
IEPSEN U., PA4221
IEVIŅA M., PA215
IFTIKHAR S., PA1212
IGBINADOLOR A., OA3796
IGLESIAS A., PA187, OA752, OA3660, OA3662
IGLESIAS COMA A., PA4106
IGLESIAS HERAS M., PA4256
IGLESIAS-SERRANO I., PA2515, OA2912
IGNATIEVA V., PA878
IGNJATOVIĆ A., PA450, PA1852, PA3376
IHALAINEN J., PA1242, PA2035
IIKURA M., PA2709
IKAN A., PA1138
IKE D., PA909
IKEDA H., PA611, OA673, PA1844
IKEZOE K., PA3459
ILARIA P., PA4209
ILARIA FERRAROTTI I., PA1280
ILGAR C., PA446, PA447, OA1628, PA3244, PA3848
ILGIN C., PA1058
ILHAN M., PA271
ILIC D., OA2963
ILIĆ M., PA418, PA421, PA1152, PA3334
ILIEVSKI V., PA974
ILIOPOULOU P., PA3277
ILLIGENS B., PA4080
ILLINI O., PA358
ILMARINEN P., PA1347
IM Y., PA1148
IMAI R., PA3440
IMAKITA T., PA1898
IMAKURA T., PA2791
IMBULPITIYA ., PA3542
IMBULPITIYA B., PA3543
IMEN C., PA4040
IMEN G., PA4090
IMEN T., PA2623
IMENE G., PA203, PA205
IMERI G., PA553
IMKAMP K., PA3609
IMMING L., PA2402
IMPELLIZZERI P., PA4324
IMPERATO J., PA228
IMRAN YILMAZ A., PA282, PA1756
IMZIL A., PA1126, PA3332
IN 'T VEEN J., PA213, OA2206, PA3896
IN 'T VEEN J., PA2583
IN 'T ZANDT R., PA2077
INAL V., PA4242
INAL INCE D., OA4361
INAM M., PA2716, PA3846
INCE E., PA1237
INCI D., OA2947
INCI I., PA3455
INES B., PA2098
INETA G., PA184
INFANTINO R., PA3178
INGEBRIGTSEN T., PA2394, PA2415, OA3677
INGELSTEN M., OA2939, PA3567
INGLÉS AZORÍN M., PA4287
INGLIS S., OA2185, PA2610, PA4066
INOMATA M., OA1394
INOUE H., PA611, OA673, PA1844
INOUE T., PA1118
INOUE Y., PA171, PA1153
INSTALLÉ S., PA278
INTIGLIETTA P., PA3178
INTRIAGO B., PA2727, PA3153
IOAKIM K., PA293
IOAN A., OA2319
IOAN I., PA1335
IOAN I., PA1750
IOAN ANTON A., PA425
IOANNIDOU A., PA943, PA3925
IONESCU A., PA4167
IONUT VALENTIN S., PA425
IORILLO I., PA159, PA2131, OA2329, PA4284
IOSIFIDIS T., OA2943
IOSSIFIDIS E., PA1890
IOVINE E., PA2450
IOVINE P., PA3844
IQBAL B., PA433, PA441
IQBAL H., PA460, PA4134
IQBAL N., PA505
IQBAL T., PA2024
IQBAL MALIK M., PA219
IRAMPAYE A., PA1240
IRAOLA V., PA2460
IRFAN M., PA161, PA386, PA505, PA1881, PA1884, PA4089
IRIAS J., PA2674
IRMAK I., PA282, PA296, PA2496, PA2500
IRMLER M., PA2787, PA3245
IRSHAD S., PA1905
IRVING L., OA2269
ISA S., PA503
ISAAC B., OA793, PA1845, PA1968, PA2570, PA4091, PA4239
ISAAC R., PA1716, PA2028, OA4380
ISABELLE V., PA184
ISACHSEN M., PA224, PA1233
ISAEVA E., OA1440
ISAKSSON J., OA2290
ISCAR URRUTIA M., PA3518
ISCHAKI E., PA3539
ISENSEE F., PA3477
ISHAQUE N., PA1305
ISHCHENKO O., PA284
ISHIDA A., PA2709
ISHIDA A., PA1118
ISHIDA H., PA1120
ISHIDA T., PA1962
ISHIGAKI H., PA1120
ISHIGURO T., PA2790
ISHII H., PA1168
ISHII S., PA2709
ISHII T., PA3496
ISHIKAWA N., OA1394
ISHIMATSU A., PA1665
ISHIMOTO L., PA546
ISHIZAKI T., PA537, PA538
ISHIZAWA K., PA2791
ISHRAT R., PA4196
ISIK O., PA153, OA1627, PA2731
ISLAM M., PA1716
IŞLEKEL G., PA254
ISMAIL I., PA2458
ISMAIL N., PA1011
ISMAIL S., PA260, PA262, PA1732, PA3241, PA3242
ISMAÏL S., PA261
ISMAIL KOCH H., PA3980
ISMAILA A., PA200, OA747, PA2109, PA2110, PA2118, PA2119, PA3619
ISMAIL-KOCH H., OA2306
ISRAËL BIET D., OA2314
ISRAËL-BIET D., OA4443
ISRAËLS J., PA381
ISSITT T., PA4076
ITENOV T., PA3182
ITO J., OA2205
ITO R., PA3566
ITO Y., PA1898
ITOH K., PA929
ITOH Y., PA1120
ITURBE FERNÁNDEZ D., OA690, PA1016
ITURBE-FERNÁNDEZ D., PA2789, PA2795, PA2808
ITURRA S., PA1255
ITURRICASTILLO GUTIÉRREZ G., PA2569, PA4054
IUS F., PA1942
IVAN Č., PA184
IVAN F., PA1113, PA1819, OA2958
IVANCEVICH J., PA2727
IVANKOVSKA S., PA857
IVANOVA D., PA3572
IVANOVA S., PA4255
IVANOVA V., PA4301
IWAKURA Y., OA2937
IWAMOTO K., PA917
IWANAGA N., PA4079
IWANAGA T., PA1330, PA2136
IWANGA T., PA4323
IWASAWA T., PA1168, OA1394
IWATA M., PA917
IYADURAI R., PA4239
IYER S., PA3393
IZAWA A., PA2632
IZBICKI G., PA506
IZQUEIRDO A., OA3737
IZQUIERDO A., PA4247
IZUHARA K., PA3566
IZUMI S., OA1394, PA2709

J

J BOSSLEY C., PA980
J CALHOUN W., PA1876
J DICKER A., OA3750
J LANG N., PA3174
J PINTO F., PA468
J ROWE P., PA3191
J SWIFT A., PA470
J. A. DA SILVA F., PA908
J. CEULEMANS L., OA3793
J. DICKER A., OA3747
J. M. BENSEÑOR I., PA908
J. THEIS F., PA1833
J.K. JAAKKOLA J., PA258
JAAKKOLA J., PA952
JAAKKOLA J., PA2470, PA2476
JAAKKOLA M., PA952
JAAKKOLA M., PA2470, PA2476
JABBAL S., PA3866
JABBARZADEH S., OA2960
JABEEN K., PA1879, PA1881, PA1884
JABEEN M., OA1409
JABER C., PA1786, PA1794, PA2631
JABRI H., PA2372, PA2439, PA3397, PA4260
JACINTO T., PA1679
JACKSON A., PA3523
JACKSON C., PA1295, PA2062
JACKSON D., OA2952
JACKSON D., OA2955, PA3210

JACKSON D., OA4374
JACKSON D., PA890, PA2026, PA3204, PA3333, OA3773
JACKSON D., PA617, OA1389, PA4187
JACKSON K., PA1074, PA1076, PA2643
JACKSON K., OA785
JACKSON K., PA3834
JACKSON N., OA1417, PA3520, PA3617
JACKSON S., PA610
JACKSON S., PA2706
JACKSON T., PA513, PA4208
JACKSON W., PA1157, PA3142
JACOB J., OA1400, PA1955, PA2008
JACOB-NARA J., PA3197
JACOB-NARA J., OA2950, OA2952, PA3191, PA3212, OA3672, PA4321
JACOB-NARA J., PA2390, PA3198, PA3209, PA3210, OA3675
JACOBSEN J., PA3577
JACOBSEN P., PA3914
JACOBSEN P., PA1651
JACOBSEN BERTELSEN R., PA944, PA2100
JACOBSON P., PA207
JACOBY D., PA3901
JÁCOME C., PA318, PA1813
JACQUEMIN B., PA941, PA2484
JACQUERIE P., OA1451
JADDOE V., PA3959
JADEJA K., PA1655
JAFFAR J., PA2793, PA3432
JAFFE A., PA949
JÄGER B., OA2944
JAGER M., PA594
JAGERSCHMIDT A., OA3675
JAGGI T., OA3747, OA3750
JAGGI T., PA1113, PA1819, PA1878
JAGIELSKA-LEN H., PA2664
JAGIRDAR R., PA434, PA435
JAHAJ E., PA3528
JAHAN I., OA3777
JAHN A., OA3660, OA3662
JAHN K., PA394, PA4034, OA9001
JAHNZ- RÓŻYK K., PA1134
JAHNZ-ROZYK K., OA3783
JAILLET M., OA664, PA4120
JAIN D., PA4069
JAIN K., PA1767
JAIN M., PA2595
JAIN N., OA2950
JAIS X., PA1989, OA2274, OA2280, PA3461
JAISHANKAR N., PA925
JAISWAL A., PA4272
JAJAH E., PA4082
JAK P., OA1609
JAKES R., PA236, OA3679
JAKES R., PA3920
JAKES R., PA4186
JAKJOVSKA T., PA1872
JAKOB J., OA142, PA997
JAKOBS B., PA295
JAKOBS N., PA1015
JAKOBSEN A., PA4105
JAKOBSSON J., PA335
JAKOET-BASSIER F., PA1904
JAKOPOVIĆ M., OA3731
JAKOVSKA T., PA3973
JAKSCH P., PA3571
JAKUBEC P., OA2325
JAKUBOWSKA L., PA1079
JÁKY-KOVÁTS Z., PA3295
JAKYMELEN D., OA128
JAKYMELEN D., PA3891
JALASTO J., PA1720
JALEL K., PA2098
JALLOUL D., PA2007
JALOTA S., PA2384
JALUSIC GLUNCIC T., PA2586
JAMAL JAMEEL K., PA931, PA3577
JAMELEDDINE S., OA795, PA2383, PA3362
JAMES A., PA1699
JAMES A., PA1337
JAMES M., PA2037, PA2715, PA2718, PA4224, PA4229
JAMES M., PA4218
JAMES M., PA1232, PA2037, PA2039, PA3514, PA4230, PA4231
JAMET N., PA1891
JAMILLOUX Y., OA4435
JAMIR L., PA963, PA3941
JAMISON J., PA1209
JAMOUSSI A., PA2780, PA2781
JAMSHIDI E., PA1129
JANCIAUSKIENE S., PA1277, PA1645, PA1816, PA2430, PA4113
JANDAROV R., PA1327
JANDL K., PA4149
JANDL M., PA1682
JANDROT-PERRUS M., OA2310
JANÉ R., PA164, PA2047
JANES S., OA676
JANG S., PA3889
JANG Y., PA1142
JANI B., PA4220
JANIA C., PA588
JANKOVIC J., PA1110
JANKOVIĆ MAKEK M., PA1875, PA2710, PA3447, PA4170
JANKOWSKI M., OA674
JANNER J., PA3182
JANOLS H., PA1218
JANSA P., PA1990
JANSEN Y., PA3613
JANSON C., PA1679
JANSON C., PA194, PA211, PA229, PA231, PA912, PA942, OA1412, OA1415, PA1701, PA2016, PA2102, OA2946, PA3221, PA3246, PA4297, OA4376
JANSRUD HAMMER I., PA3137, PA3144
JANSSEN D., PA3360
JANSSEN D., PA3349
JANSSEN D., OA3117
JANSSEN J., OA785
JANSSENS A., PA1929
JANSSENS E., OA781, PA1069
JANSSENS H., OA2951
JANSSENS L., PA3318
JANSSENS W., OA120, PA456, OA687, OA750, OA804, OA805, PA1038, PA1039, PA1286, PA1973, PA2006, PA2518, PA2540, PA2548, OA3113, PA3318, OA3793, PA3885, PA3886, PA4265
JANUÁRIO F., PA357
JANUSKEVICIUS A., PA2820, PA2821, PA2822, PA2823, PA2824
JAQUIN D., PA3568
JAQUIN T., PA1937, PA3568
JARA CHINARRO B., PA1029, PA3297
JARA PALOMARES L., PA1179
JARDIM V., PA617, OA1389
JARDIM CRIADO R., PA2727
JARENBÄCK L., PA210
JARJOUI A., PA506, PA1303
JARKOVSKY J., PA3841, PA3845
JARLØV J., PA2415
JAROLÍMEK I., PA1850
JAROSCH I., PA1216, PA1811, PA1861
JAROSIŃSKA A., PA995
JARRAYA F., PA2780, PA2781
JARRETT J., PA1893, PA4037
JARVIS F., PA4162
JASCHINSKI U., RCT2881
JASPER A., PA2825, OA3778
JASSEM E., PA2664
JAUERNIG J., PA2414
JAUMONT X., PA1876, PA2414, PA3853, PA3859
JAUN F., PA344, OA3679
JAUREGUI URIBE A., PA2449
JAUREGUIZAR A., OA4392
JAUS M., PA312
JAVADPOUR S., PA2856
JAVAHERI S., PA3453
JAVED H., PA2712
JAVED H., PA902
JAVIER BARTOLOMÉ F., OA1630
JAVORAC J., PA418, PA421, PA1152, PA3334
JAYAMAHA A., PA2422
JAYARATHNA R., PA987
JAYASEKARA R., PA528
JAYASEKERA G., OA779
JAYASINGHE P., OA4377
JAYASOORIA S., PA2420
JEANOTTE L., PA2844
JEANPETIT F., PA3506
JEBALI A., PA1054, PA3342
JEBALI M., PA3343
JEBALI R., PA534, OA795, PA1675, PA2785, PA3392
JEBARAJ P., PA2028, PA4208, OA4380
JÉBRAK G., PA3890
JEBRI S., OA2959
JEDRZEJEK M., PA548
JEENA P., PA1003, OA2308, PA3963
JEEVAJOTHI NATHAN J., PA3366
JEFFERS H., RCT711
JEHANZEB K., PA276, PA2516
JEILANI M., PA1890
JELASSI W., PA342, PA343, PA4293
JELAVIĆ I., PA2130
JEMINA F., OA794
JENDLI W., PA1782
JENKINS A., PA875
JENKINS A., PA1742
JENKINS C., PA2022, PA2103, PA3143
JENKINS D., PA3457
JENKINS E., PA1947
JENKINS G., OA1403, OA1452, PA2654, PA3494
JENKINS T., PA1858, PA1868
JENSEN A., PA1111, PA4028
JENSEN D., PA1035, PA4231
JENSEN G., PA1814
JENSEN J., PA561
JENSEN J., PA240
JENSEN J., PA1647, PA3612, PA3839
JENSEN J., PA1695, PA2415, PA3182, PA3232
JENSEN K., OA691
JENSEN M., PA891, OA2963
JENSEN O., OA2922
JENSEN P., PA1111
JENSEN R., OA1615, PA2494
JENSEN S., PA3182
JENSEN S., OA145
JENSEN T., OA1399
JENSEN-FANGEL S., PA3335
JENY F., OA3786
JEONG J., PA1165
JEPPESEN E., PA1194
JERBI S., PA1787
JEREZ F., PA1723
JERIĆ M., PA3624
JERIDI A., OA662, PA3174
JERJIR N., PA1734
JESPERSEN A., PA4191
JESSEN H., PA1945
JESTIN-GUYON N., PA1001, PA3944
JESUS F., PA3380
JESÚS CRUZ M., PA2426
JETTKANT B., PA1736, PA1737
JEVNIKAR M., PA1989, OA2274, OA2280, PA3461
JEVNIKAR Z., PA3567
JEYABALAN A., PA2650
JEYAKUMAR S., PA4037
JI J., PA589
JI W., PA1142
JI Z., PA1181, PA1663, PA2031, PA3876
JIA L., PA2409, OA3661
JIA N., PA198
JIA X., PA1871
JIANG A., PA3515
JIANG E., PA974
JIANG R., PA2678
JIBUAKU C., PA1062, PA1063, PA1064
JIHEN A., PA2098
JIMÉNEZ A., PA2798
JIMENEZ E., PA3201
JIMENEZ CARRO M., PA1985
JIMÉNEZ CASTRO D., PA1179
JIMÉNEZ GARCÍA R., PA1181
JIMÉNEZ GÓMEZ M., PA151, PA1639
JIMÉNEZ GONZÁLEZ M., PA863
JIMÉNEZ LÓPEZ J., PA2691
JIMENEZ RODRIGUEZ B., PA3340
JIMÉNEZ-FUENTES M., PA4092
JIMÉNEZ-GÁLVEZ G., PA2399, PA4243
JIMÉNEZ-MORALES A., PA2138, PA2399
JIMENEZ-VALENTIN A., PA864, PA2042
JIMENO B., PA348, PA4067, PA4068, PA4078
JIMENO BELTRAN B., OA3776
JIN M., PA1876
JIN Z., PA555, PA1262
JINDAL A., PA3305
JINGUSHI Y., PA1665
JINTA T., PA3440, PA4027
JIRMO A., PA2816
JIROUSKOVA M., PA2787
JISON M., PA3610
JLASSI W., PA2094
JO ., PA180
JO E., PA180
JO H., PA3889
JO H., PA4035
JO K., PA1027, PA1158
JO Y., PA913, PA2453, PA3611
JOÃO C., PA2737
JOÃO R., PA1234

JOCHEN R., PA184
JOCHMANN A., PA1005, PA1013
JOERG L., PA184
JÖGI N., OA1415, PA2100
JÕGI O., PA3906
JÕGI R., OA1415, PA3221
JOGLEKAR M., PA3576
JOHANNESSEN A., PA231, PA956, OA1415, PA1698, PA3221
JOHANNSON K., PA3415
JOHANSEN M., PA4262
JOHANSSON H., PA1043
JOHANSSON S., PA246
JOHANSSON S., PA2394, PA2415, OA3677
JOHARI B., PA1219
JOHKOH T., PA1168
JOHN C., PA3235
JOHN C., PA4007
JOHN F., PA1845, PA2570
JOHN M., PA3505
JOHN N., PA3462
JOHN T., PA2598
JOHNS C., PA1971
JOHNSEN C., PA2394
JOHNSEN C., OA3677
JOHNSON A., PA1717
JOHNSON C., PA3995
JOHNSON D., PA502
JOHNSON K., PA1256
JOHNSON M., RCT2882
JOHNSON M., PA1948
JOHNSON M., PA1982, PA4220
JOHNSON M., PA1215, PA1657
JOHNSTON J., RCT4445
JOHNSTON K., OA4377
JOHNSTON S., OA2204, PA3204
JOHNSTON S., OA2200
JOHNSTON S., PA2384
JOHNSTONE D., PA922
JOHNSTONE E., PA3321
JOHNSTONE S., PA432, PA4166
JOHNSTONE Z., PA3983
JOHRI S., OA2279
JOIE J., PA3992, PA3993, PA4000
JOKOH T., OA1394
JOLAINE V., PA3955
JOLITA P., PA184
JOLLEY C., PA179, PA192, PA3508
JOLLIFFE D., PA1116, OA3795
JOLLIFFE D., PA2455, PA3220, PA3227
JOLLIVE M., PA4211
JOLY O., PA3421
JONASSEN C., OA140
JONCKHEERE A., OA2937
JOŃCZYK POTOCZNA K., PA294
JOŃCZYK-POTOCZNA K., PA3555
JONEK P., PA550
JONES A., PA373
JONES A., OA130
JONES A., PA4216
JONES A., PA3398, OA3752
JONES B., PA2449
JONES B., PA3484, PA4240
JONES G., PA965, PA2386, PA2396
JONES J., PA2767
JONES K., PA2106, PA4058
JONES M., PA3970
JONES M., PA585, PA587
JONES N., PA4183
JONES P., PA915, PA3496
JONES P., PA2643
JONES R., PA222
JONES S., PA1858
JONES S., PA2654
JONES T., PA223, PA2437
JONIGK D., PA1175, PA4122
JONIGK D., PA1942, PA4277
JONKERS R., OA769
JONKMAN A., OA1435
JÖNSSON J., PA2797, OA2938, PA4065, PA4282
JÖNSSON M., PA4310
JOO H., PA1342, PA2841
JOOS G., OA2199
JOOSSENS L., PA962
JOOSTEN R., OA785
JOPLIN H., PA2386, PA2396
JOPPA P., PA550
JORDAN A., PA3234, PA3612
JORDAN A., PA246, PA1695
JORDAN R., PA2021
JORDAN S., RCT4448
JORDANA-LLUCH E., OA752
JORDE I., PA1297
JORDON L., PA3425
JORENS P., RCT2881
JORGE DA PONTE A., PA152, PA3418, PA3488
JORGENSEN A., PA876
JØRGENSEN E., PA4174
JÖRRES R., OA122
JÖRRES R., PA4062
JÖRRES R., PA1669, PA3239, PA3240
JOSA A., OA2962
JOSE A., PA1979
JOSE R., PA3393, PA3398, PA3400, OA3752
JOSHI A., PA3367
JOSHI A., PA1312
JOSHI I., PA1330
JOSHI S., PA2027
JOSHI V., PA1155
JOSSERAN A., PA1326
JOULEH B., PA2809
JOUNEAU S., OA4437
JOURAVLEVA K., PA1804
JOUVENOT M., OA2288
JOVANOVIC A., PA2616
JOVANOVIC D., PA2661
JOVES B., PA3239
JOYCE M., PA1250
JOYEUX FAURE M., PA1315
JOYEUX-FAURE M., PA3592
JRIBI B., PA2785
JU X., PA3900
JUAN C., OA752
JUAREZ CAMPO M., PA204, PA206, PA2105
JUDITH J., OA756
JUEHLING F., OA2944
JUEN H., PA2851
JUFFERMANS N., OA1438
JUGE P., PA2127
JUHL P., PA1945, PA2834, PA4278
JULIÁ-ALVAREZ C., PA2011
JULIANDRI M., OA2914
JUMABHOY R., PA1321
JUN X., PA1820
JUNG B., PA2669
JUNG C., OA2904, PA3345
JUNG J., PA977, PA978
JUNG J., PA4325
JUNG J., PA3883
JUNG K., PA913, PA1342
JUNG K., PA3611
JUNG N., PA1894
JUNG S., OA757
JUNG W., PA539
JUNGBLUTH H., PA270
JUNGO S., PA2463
JUNIOR C., PA4101
JÚNIOR R., PA544
JUNKER K., PA4277
JURADO HERNÁNDEZ J., PA3957
JURAK L., PA4179
JURCA M., PA1007
JÜRGENSEN L., PA1014
JURISEVIC M., PA4303
JURKA N., PA215, PA4042
JURKEVICIUTE E., PA2821, PA2822, PA2823, PA2824
JURKOJC MOHREMBERGER G., PA4243
JUSTEAU G., PA590, PA2072, PA2837
JUSTET A., PA402, OA664
JUUL A., OA770
JUURLINK I., OA798
JUUSELA M., PA860
JUVEKAR S., PA513, PA1716, PA1722
JUVET S., PA3579

K

K A., PA199
K C B., PA2483
K. BASOGLU O., PA2093, OA2289, OA4391
K. LAJUNEN T., PA258
K. M. BEZERRA S., PA908
KAABI C., PA2782, PA2783
KAABI L., PA390, PA1054, OA1604, PA3342, PA3343
KAAGAARD M., PA1083
KAARTEENAHO R., PA1950, PA3422, PA3574
KAASGAARD M., PA4203
KABANOV D., PA4319
KABBACH E., PA1040
KABBACH E., PA323
KABESCH M., PA876, PA2815, OA2949, PA3256, PA3268, PA3548
KABIL A., PA2784
KABRA S., PA1883
KACEM A., PA2777, PA2782, PA2783, PA3383
KACEM I., PA264
KACHKOVSKA V., PA2107, OA2321, PA3547
KACMAZ BASOGLU O., PA1191, PA1323
KACZKA D., PA975
KADDOUR M., PA1057, PA3540
KADDOUR AYADI ., PA1785
KADIR M., PA1202
KADOYA K., PA2656
KADWANI O., PA2625
KAENMUANG P., PA2640, OA4440
KAES J., PA603, OA686, OA687, PA1030, PA1286, OA3793, PA4265
KAESERMANN F., PA597, PA4271
KAESLIN J., OA1446, OA2947
KAESTNER F., PA3239, PA3240
KÄFER K., PA3519
KAGAJO M., OA1394
KAGAWA K., PA2791
KAHL K., PA463, PA1988
KAHLMANN V., OA3789
KAHN N., PA1167, PA2645
KAHNERT K., PA1669, PA2567
KAHOUL R., PA4080
KAHRAMAN B., OA4361
KAILASAM P., PA1773
KAINZ K., OA2948
KAIREIT T., PA3470
KAKAVAS S., PA958
KAKKOURA M., PA1004
KALABUS J., PA3615
KALAIARASAN G., PA2565
KALAITZOPOULOU I., PA2495
KALAK G., PA506, PA1303
KALAMARA E., PA626
KALAMARAS G., PA622
KALANANTHAN T., PA2809
KALAUNI B., PA1709
KALBOUSSI H., PA264
KALBOUSSI S., PA1072
KALBOUSSI S., PA994, PA3344
KALDENBACH M., PA4006
KALDERÉN C., PA2833
KALE N., PA3924
KALHAUGE A., PA3341
KALINAUSKAITE-ZUKAUSKE V., OA3679
KALINOVA M., PA4064
KALK N., PA3508
KALLEL N., PA625
KALLEL N., PA1100, PA2368, PA2735
KALLEL N., PA2564
KALLIANOS A., PA3587
KALLIERI M., PA894, PA2389, PA2431, OA4437
KALMANOVA L., PA4184
KALOMENIDIS I., PA350
KALPAKAM H., PA1880
KALSI H., PA245
KALSI H., OA2961, PA4314
KALSI H., PA1000
KALTSAKAS G., PA1655, PA2029, PA3320
KALTSOGIANNI O., PA3284, PA3285, PA3291
KALVERDA K., OA769
KALYONCU A., PA945
KALYONCU M., PA277, PA285, PA289, PA2497, PA3985
KAMACI C., PA931
KAMAL M., PA1773
KAMAR A., PA1008
KAMARUDIN M., PA519
KAMIDE Y., PA917
KAMIL H., PA1994, PA1999
KAMILOĞLU B., PA1125
KAMILOĞLU E., PA1133, PA2562
KAMIMAKI C., PA2632
KAMINSKA T., PA1760
KAMINSKI N., PA4265
KAMINSKY L., PA4219
KAMINSKY L., PA3327
KAMINUMA O., PA917
KAMMOUH H., PA287
KAMMOUN H., PA620, PA2638
KAMMOUN I., PA226, PA2752, PA3510
KAMMOUN R., PA226, PA1244, PA2089, PA2752, PA3510
KAMMOUN S., PA2368
KAMMOUN S., PA625, PA1100, PA2089, PA2561, PA2564, PA2735, PA2848
KAMOUN H., PA1105, PA1782, PA1792, PA2637
KAMP J., PA1975
KAMP J., PA463, PA1988, OA2271
KAMP J., PA1942, PA4277
KAMPOLIS C., PA1068
KAMSTRUP P., PA240
KAN P., PA4144
KANABAR-RAIVADERA V., OA3773

KANAI O., PA1898
KANAKA-GANTENBEIN C., OA4437
KANAPPE O., PA3506
KANAVAKI I., PA2431
KANAVATI F., PA3434
KANCHONGKITTIPHON W., RCT2164
KANEKO A., PA2632
KANEKO T., PA2632
KANELLAKIS N., PA441
KANER R., RCT712
KANG C., PA3592
KANG D., PA1923
KANG H., OA755
KANG N., PA180
KANG R., PA1046, PA2503, PA2504
KANG S., PA305
KANG S., PA1714
KANG S., PA4035
KANG S., PA180
KANG Y., PA3883
KANIA A., PA2664
KANIK YÜKSEK S., PA1896
KANJANAUMPORN J., PA3208
KANKAANRANTA H., PA247, PA942, PA943, PA1062, PA1063, PA1064, PA1347, PA1704, PA1720, PA3331, PA3925
KANNER R., RCT712
KANNIESS F., PA888
KANO R., OA4410
KANSRA S., PA3274
KANT M., OA769
KANT S., PA416, PA1711, OA3777
KAPELLOS T., PA2812
KAPETANAKIS S., PA1088
KAPINOS M., PA3471
KAPLAN A., PA182, PA515, PA899, PA900
KAPOOR R., PA3407
KAPUS K., PA1236
KAPUSTNYK V., PA4051
KAR S., PA416
KARA K., PA2045, PA3244
KARA KAYA B., PA1224
KARABATIC S., OA3731
KARABELA S., PA340
KARABORNI B., PA1072
KARABULUT S., PA3985
KARACA U., PA4288
KARAD A., PA2027
KARADAG B., PA277, PA285, PA289, PA1756, OA2306, PA2497, PA3980, PA3985
KARADAG O., PA154
KARADENIZ GÜVEN D., PA3244, PA3537
KARADOGAN D., PA446, PA447, PA964, PA969, PA3244
KARADZINSKA-BISLIMOVSKA J., PA1721
KARAGIANNI A., OA2186
KARAGIANNIDIS I., OA677
KARAHALIOS A., PA2767
KARAHAN S., PA2025, OA3127
KARAHAN Z., OA1627
KARAKAS F., PA3244
KARAKATSANI A., OA4437
KARAKAYA B., PA3448
KARAKOC F., PA277, PA285, PA289, PA2497
KARAKONTAKI F., PA2519
KARAKURT S., PA336, PA1058, PA2365, PA2607
KARAKUŞ H., OA2265
KARAM E., PA1143
KARAMAOUN C., PA3176
KARAMARKOVIĆ LAZARUŠIĆ N., PA3624
KARAMI ROBATI F., PA4274
KARAMOLEGKOU A., OA3763
KARAMPELA I., PA1264, OA2317
KARAMPINIS I., PA340, PA401, PA1139, OA1380, PA1849, PA1921, PA1998, PA2604, PA4014
KARAMPITSAKOS T., PA1098, PA1128, PA2655, PA2697, PA4129
KARAOGLANOGLU S., PA3244
KARASU N., PA289
KARCIOĞLU O., PA439, PA2379, PA2568
KARDOS P., PA509
KAREN N., PA184
KARIMEH W., PA2550
KARIMI A., PA258
KARIMI R., PA1146, PA3574
KARIMOV Z., PA1191
KARJALAINEN J., PA942
KÄRKKÄINEN M., PA3422
KARKOULI G., PA2511
KARL S., OA3109
KARLÓCAI K., PA479
KARLSEN C., OA1607
KARLSSON Å., RCT2160
KARLSSON C., PA2833
KARLSSON L., PA589
KARLSSON SUNDBAUM J., PA2446
KARMAUS W., PA3946
KAROSHI A., PA2851
KARP T., PA3562
KARPF-WISSEL R., PA488
KARPF-WISSEL R., PA2701
KARRASCH S., PA3239, PA3240
KARRAY M., PA2735
KARSANJI U., OA131, PA2013, PA2580, PA3355
KARSDAL M., PA1945, PA3182
KARSDAL M., PA4124
KARSDAL M., PA2080
KARTAL ÖZTÜRK G., PA296, PA1756
KARTHISANKAR P., PA2722
KARTSIOUNI E., PA2511
KARUNANAYAKE R., PA528
KARUNASAAGARAR K., PA1971
KARUNATILLAKE R., PA2422
KARWAL R., PA395
KARWOSKI R., PA2008
KASACKA I., PA2690
KASDAGLI M., PA947
KASEMSIRI P., PA3208
KASETTY G., PA4310
KASHIVA R., PA3377
KASHYAP S., PA3170, PA3413
KASIITA R., PA4209
KASIKCI M., PA1771
KASPEROWICZ K., OA2276
KASPERSKA-ZAJĄC A., PA2727, PA3153
KASSI T., PA350
KASSIF Y., OA1436
KASSIM A., PA1011, PA1773
KASTELEYN M., PA2583
KASTELIJN L., OA2266
KASTNER M., PA2063
KATAGIRA W., PA4209
KATAHIRA K., PA1665
KATAOKA K., PA2644
KATELARIS C., OA2955
KATHURIA S., PA3407
KATIAL R., PA2136, PA2400, PA4187, PA4323
KATO M., OA1394, PA2656
KATOTO P., PA1904
KATOTO P., PA1729
KATSAOUNOU P., PA362, OA679, PA2517, PA2522, PA3926, PA4082
KATSARAS M., PA1098, PA1128, PA2655, PA4129
KATSAROU K., PA1818
KATSIPOULAKIS A., PA1139, OA1380
KATSOULIS K., PA2389, PA3207
KATSOULOTOS G., PA2136
KATSUNO T., PA2709
KATTAN J., PA1143
KATZENSTEIN T., PA3341
KAUCZOR H., PA3888, PA4062
KAUFMAN D., PA963, PA3941
KAUFMAN J., PA248
KAUFMANN S., PA3454
KAUL S., PA4073
KAUPPI P., PA1720
KAUPPI P., PA942
KAUR C., OA3777
KAUR H., OA762, PA1895, PA1908
KAUR SEKHON J., PA3366
KAUR-GILL N., RCT2161
KAUSHAL N., PA2851
KAUX J., PA886
KAVANAGH G., PA2702
KAVANAGH K., PA233
KAVATHA D., PA1840
KAWABATA Y., PA1168, PA2790
KAWAKAMI D., PA1040
KAWAKAMI D., PA323
KAWAMURA K., OA1394
KAWAMURA T., OA1394
KAWANO H., PA2791
KAWANO M., PA604
KAY D., PA1979
KAY R., PA276
KAYA A., PA1065, PA1251, OA1627, PA2731, PA2743, PA3190
KAYA E., OA3127
KAYA I., PA446, PA447, PA3244
KAYA S., OA3759, OA3766
KAYACAN O., PA1065
KAYALAR Ö., OA3775
KAYANIYIL S., PA2123, PA2128, PA2129, PA4187
KAYE L., PA973, PA1658, PA1659, PA3862
KAYEMBE KITENGE T., PA1729
KAYEMBE NTUMBA J., PA1725
KAYHAN G., OA2188, PA2510
KAYI CANGIR A., PA2731
KAYIKCIOGLU M., OA4391
KAYMAZ D., OA4361
KAYSER M., PA1687
KAZANTZI M., PA3539
KAZMERSKI T., PA3949
KAZUTO Y., PA4079
KE C., PA1820
KE W., PA915
KEANE M., OA4442
KEARNEY S., OA3728
KEATING T., OA1635
KEBEDE MERID S., OA2946
KECHAOU K., OA126, PA4002
KECHRIS K., PA4263
KECSKÉS A., PA2427
KECSKÉS S., PA3516
KEELAN J., OA146
KEEN C., PA1243
KEEN C., PA912
KEENAN J., PA3904
KEFALA A., PA1707, PA1713
KEFALA K., PA3965
KEHOE B., PA2684
KEIDAN N., PA3368
KEIL T., OA4360
KEILHACK H., PA4192
KEIR G., OA3128
KEIR H., PA2610, OA2939, OA3748, PA4066, OA4404
KEIR H., PA1834, RCT2883
KEIR H., OA3798
KEIRSBILCK S., PA1734
KEITH B., PA610
KELL C., PA3201
KELLEHER M., PA3508
KELLER R., PA328
KELLY C., OA3726, OA3727, OA3734
KELLY J., PA1892
KELLY P., OA1444
KELLY R., OA2190
KELLY R., PA1209
KELLY S., PA1287
KEMP S., RCT2161
KEMP S., OA772, RCT4448
KEMPA A., PA3239, PA3240
KEMPENEERS C., PA290, OA1413, PA1824, OA2306, PA3980
KEMPNY A., PA476, OA2275, PA2672
KENDIRLI T., PA3290
KENDZIA B., PA1736, PA1737
KENIA P., PA275, PA276, PA279, PA281, PA1046, PA2503, PA2504, PA2516
KENN K., PA1861
KENNEDY B., PA1757
KENNEDY G., PA1948
KENNEDY M., PA2702, PA2704
KENNEDY M., PA2703, PA2725
KENNEDY M., OA2264, PA2659
KENT B., PA617, OA1389
KENT BRAMER J., PA874, PA3338
KENTGENS A., PA997, OA1447
KEOGH A., PA3874
KEOGH S., PA2856
KERAMIDA E., PA340, PA401, PA1849, PA1998, PA2563, PA2604, PA4014
KERBAT S., OA2288
KERCKHOF P., PA4265
KEREM L., PA1766
KERFOURN A., PA559, PA3322
KERGET B., OA1605
KERKHOFF J., OA785
KERKHOFF T., PA1135, PA2646
KERKS J., PA1692
KERMANI N., PA578, PA922
KERN I., OA1383
KERPEL-FRONIUS A., PA2427
KERR K., OA783, PA1263
KERR K., OA3131, PA3456
KERR S., PA3208
KERRY G., PA3179, PA3956
KERSSEMAKERS N., PA3548
KERSTJENS H., PA3562
KERSTJENS H., OA136, OA745, PA951, PA1271, PA1279, PA3606, PA3609, PA4262

KERSTJENS H., PA3853
KERSTJENS H., OA748, PA3858
KERZEL S., OA2948
KESAVAN H., PA179, PA1151
KESIM S., PA2607
KESKIN ., PA2500
KESKIN B., PA2525
KESKIN H., PA446, PA447
KESKIN Ö., PA282, PA296, PA2496
KESKIN Y., PA2524
KESSELS R., PA3336
KEßLER C., PA3404
KESSLER R., PA4150
KETATA I., PA234, PA345, PA1189, PA1703, PA1839, PA1841, PA1843, PA1993
KETTUNEN H., PA3422
KEWALRAMANI N., PA597
KHACHATRYAN A., OA3129
KHAFAGY P., OA3786, OA4443
KHAIRUDDIN A., PA549
KHALAFALLAH M., PA4171
KHALED B., PA4040
KHALFALLAH I., PA1177
KHALFALLAH N., PA1090, PA1176, PA2575, PA3936
KHALFALLAH T., PA266
KHALIFA A., PA2663
KHALIL H., PA1768
KHALIL N., PA3415
KHALLOUFI F., PA221
KHALSI F., PA3966
KHAMIS W., PA524
KHAN A., PA3197
KHAN A., PA2390, PA3209
KHAN B., PA2715, PA2718
KHAN F., OA3798
KHAN G., PA1890
KHAN I., OA785
KHAN K., PA1210
KHAN L., PA267
KHAN M., PA1202
KHAN M., PA616
KHAN M., PA1716
KHAN P., PA1175
KHAN Q., PA3594
KHAN R., PA389
KHAN S., PA3384
KHAN S., PA1717
KHAN S., PA1212
KHAN T., PA3393
KHANAL A., PA236, PA3920
KHANDAKR P., PA2740
KHANNA N., PA4034
KHANNA V., PA902
KHANNOUS A., PA398, PA3238, PA3950
KHANNOUS O., OA689
KHAOULA H., PA3590
KHARAT A., PA3407
KHARRAT I., PA2777, PA2782, PA2783
KHARRAT K., PA3383
KHARRAT M., PA1057, PA2780, PA3540
KHATAVKAR P., PA3233
KHATTAB A., PA1652, PA2374
KHATTAB A., PA3390, PA4052
KHAWLA B., PA1928
KHAYAT G., PA349, PA1143, PA2579, OA4358
KHAYATH N., PA188, PA1653
KHEDOE P., OA3661
KHEIRODDIN P., PA3256
KHELIFI T., PA1214, PA4217
KHEMAKHEM R., PA2368, PA2735
KHEMAKHEM R., PA2564
KHÉZAMI N., PA1928, PA2639
KHEZEMI N., PA1667
KHILZI ALVAREZ K., PA1182
KHO S., PA1073
KHOENKHOEN S., OA667
KHOKHAR F., OA2955
KHOKHER W., PA4234
KHOLIEF K., PA2601
KHOMA M., PA1776
KHOMA O., PA1776, PA3141, PA3479
KHOMENKO V., PA1760
KHOO E., PA503, PA504, PA1716, PA3261, PA3366, PA3497, PA4208
KHOOSHEMEHRI P., OA3773
KHOR Y., PA1656, PA3415
KHORAKI Y., PA1796
KHOSHKHUI M., PA2727
KHOUAJA I., PA3390, PA4052
KHOUANI H., PA994
KHOUJA N., PA2458
KHOUJA N., PA260, PA261, PA262, PA1732, PA3241, PA3242
KHOURY J., PA3468
KHREIS H., PA2484
KHUNG S., PA1656
KHUNTI K., PA2013
KHUSHI S., PA4273
KIAKOUAMA L., PA1919
KIAROSTAMI K., OA4406
KIBBLER J., PA1643
KICHENIN C., PA3154
KICIC A., OA147, PA1294, OA2943
KIDA H., PA1118
KIDDLE S., PA3394
KIDNEY J., PA1104
KIEFER F., PA2676
KIELY D., PA464, PA1243, OA2277, PA2676, PA2682, PA3467
KIELY D., PA462
KIELY D., PA1971
KIENINGER E., OA1623
KIENS O., PA4301
KIKKERT M., PA4276
KIKNADZE T., PA303
KILDUFF J., PA3401
KILIÇ B., PA1796
KILIÇ L., OA4361
KILIÇ M., PA282, PA296, PA2496, PA2500
KILIÇ Y., PA1251
KILIC BASKAN A., PA277, PA1756
KILINÇ A., PA2496
KILINC SAKALLI A., PA289
KILINTZIS V., PA3502
KILK K., PA4301
KILLIAN K., PA174, PA896, PA898
KILLIAN K., PA4213
KILLICK H., OA2940, PA3201
KILLINGLEY B., PA4064
KILPELÄINEN M., PA942
KIM A., PA1941
KIM B., PA3254
KIM B., PA4325
KIM C., PA3254
KIM C., OA2917
KIM D., PA2003
KIM D., PA3611, PA3887
KIM D., PA1027
KIM D., OA2316
KIM E., PA391
KIM G., PA2670
KIM G., PA3426
KIM H., PA977, PA978
KIM H., PA182, PA899, PA900
KIM H., PA1027
KIM H., PA1923
KIM H., PA1027
KIM H., PA1341
KIM H., OA757
KIM H., PA4325
KIM J., PA539
KIM J., PA1941
KIM J., PA1894
KIM J., PA2841
KIM J., PA977, PA978
KIM J., PA3471
KIM J., OA757
KIM K., PA977, PA978
KIM M., OA2190
KIM M., PA977, PA978
KIM M., PA180, PA4325
KIM M., PA2669
KIM N., PA2675, OA3131
KIM N., PA3457
KIM N., PA3456
KIM O., PA220
KIM R., PA578, PA918, PA922, PA1269, PA1825
KIM R., PA2812
KIM S., PA180, PA4325
KIM S., OA755
KIM S., PA180, PA1341, PA1342, PA3611
KIM S., PA1142
KIM S., PA3883
KIM S., PA391
KIM S., PA4173
KIM S., PA977, PA978
KIM S., OA2306, PA3980
KIM S., PA4295
KIM S., PA539
KIM S., PA4325
KIM S., PA1894
KIM S., PA391, OA757
KIM T., PA4325
KIM T., PA3889
KIM V., PA2121
KIM W., OA2316
KIM W., PA1142
KIM Y., OA2316
KIM Y., PA977, PA978
KIM Y., PA3254
KIM Y., PA3883
KIMURA H., PA4298
KIMURA I., PA4298
KIMURA T., PA3517
KIMURA T., PA2644
KIMURA T., PA1844
KINAUPENNE M., PA1037
KINDLER B., PA360
KING A., OA4385
KING J., PA2452, PA2462
KING J., PA175, PA901
KING J., OA3728
KING J., PA3286
KINGHORN B., OA2307
KINGSHOTT R., PA2858
KINGSLEY J., OA3796
KINLEY E., OA4375
KINNEY G., OA3755
KINNEY J., PA2452
KINNI P., PA1004
KINOSHITA K., PA1118
KINOSHITA M., PA3496
KINSELLA B., PA4140
KIOUMIS I., PA626
KIPER N., PA282, PA296, PA1771, PA2025, PA2496, PA2500, PA2502, PA2853, OA4420
KIPOUROU M., PA2389
KIPPELEN P., PA3523
KIRAKLI C., PA332
KIRBY M., PA3136, PA3146
KIRCHGÄSSLER K., PA1936, PA3416
KIRENGA B., PA2136, PA4323
KIRENGA B., PA4209
KIRGOU P., PA2655
KIRIA N., PA2620, PA2624
KIRIA N., PA2620, PA2624
KIRIEIEVA T., PA4049
KIRK A., OA772
KIRK A., RCT4448
KIRKEGAARD H., OA2901
KIRKEGAARD VAARST J., PA1101
KIRKWOOD R., PA373
KIROV K., PA1931, PA3434
KIRSCHBAUM A., PA490, PA491
KIRSCHNER M., PA3451
KIRSCHNER M., PA3455
KIRSTEN A., PA3573, PA3880, PA3881
KIRSTEN A., PA2663
KIRSTEN D., PA2663
KIRTANA J., OA759
KIRTSREESAKUL V., PA3208
KIRUI B., PA1644
KIRVASSILIS F., PA2506
KISA E., PA1224
KISEL J., PA1088
KISH M., PA2660
KISHIMOTO Y., PA1902
KISIEL M., PA231, PA1218
KISS H., OA1383
KISTEMAKER L., PA3164
KITABA N., PA956
KITAGAWA N., PA1120
KITAZAWA H., PA1028, PA3515
KITROU M., PA2431
KITTAS C., OA4408
KIUDMA T., PA1677
KIYMAÇ SARI M., OA3730
KIZILIRMAK D., OA4361
KJAER T., PA3341
KJÆR KRISTENSEN A., PA3839
KJÆRSGAARD KLEIN D., OA2201
KJARSGAARD M., PA523, PA1296, PA3173, OA3673
KJELDGAARD JENSEN S., OA143
KJELLBERG S., OA3107, OA3801
KJER HEERFORDT C., PA2415
KLAMENAKOU C., PA3587
KLATT M., PA2629
KLEIN D., OA2253, PA3582
KLEIN D., PA4191
KLEIN M., OA2941
KLEINEROVA J., PA3309
KLEINERT M., PA3536
KLEINHENDLER E., PA454, PA3513
KLEMMEIER T., PA3606
KLENERMAN P., OA1409, PA3899
KLEPAKER G., PA2471
KLEPETKO W., PA1990
KLEUSER B., OA2920
KLEVEBRO S., OA2946
KLIGERMAN S., OA3131
KLIJN P., PA1221, PA2581
KLIKOVITS T., OA1383
KLIMEK L., PA509
KLIMES F., PA3470
KLIMOVIC S., PA4319
KLITGAARD A., PA4055
KLOOSTER K., PA492, PA494, PA495, PA1271, PA2004, PA2075, PA4172
KLOP C., PA1078
KLOS K., PA865, OA3772
KLUCKOVA K., PA4119
KLUG D., PA2058
KLUGE F., PA3874

KLUSZCZYK P., PA548
KMITA K., OA2251, OA3676
KNANI J., PA1996, PA2623, PA3842
KNARBORG M., PA1706
KNEE A., PA588
KNEIDINGER N., PA1687, PA2567, PA2787
KNELLER L., PA2082
KNENI J., PA266
KNEUSSL M., PA3453
KNIBBS L., PA2482
KNIGHT F., PA372
KNOBLOCH J., PA931
KNOBLOCH J., PA3577
KNORR B., RCT710
KNOSALLA C., PA3465, PA4147
KNOWLMAN T., PA1187
KNOX-BROWN B., OA127, OA3738
KNUDSEN K., PA4251
KNUDSEN L., PA1175
KNUDSEN T., PA956
KNÜPPEL L., PA4121
KNUTSEN K., PA3229
KNUTSON C., OA3796
KO F., PA1878
KO J., PA2662
KOBAYASHI K., PA604
KOBAYASHI K., OA1394
KOBAYASHI N., PA2632
KOBLIZEK V., PA1850, PA2012, PA2515, PA3412, PA3835, PA3841, PA3845, PA3849
KOBOR M., PA2483
KOBORI T., PA990, PA991
KOCAKAYA D., PA336, PA618, PA619, PA2365
KOCH A., OA753
KOCH M., PA4123
KOCH S., OA2940
KOCHAN D., PA1303
KOCHERBITOV V., PA1287
KOCHOVSKA KAMCHEVSKA N., PA2111
KOCIANOVA J., PA2012
KOCIC D., PA2630
KOCKS J., PA2387, PA3606, PA3609, PA3613
KOCOURKOVÁ L., PA3445
KOÇYIĞIT A., PA1224
KOCZULLA A., PA2432, PA2435
KOCZULLA A., PA1216, PA1861
KOCZULLA R., PA623, PA1329, PA1811, PA2430
KOCZURKIEWICZ-ADAMCZYK P., PA3158
KODDE C., OA2312
KODOM M., PA3550
KOEFOD PETERSEN J., PA1087, OA2903
KOEFOED H., PA1754
KOEGELENBERG C., OA785
KOENIG J., PA2845
KOENIG S., OA1455
KOERNER-RETTBERG C., PA1682, PA2053, OA4417, OA4418
KOFOED P., PA1014
KOFTERIDIS D., PA4082
KOGAN A., OA1436
KOGIAS C., PA1745, PA2495
KÖGLER M., PA471
KOH M., PA1819, PA1878, PA3192
KOH SIYUE M., PA1330, PA4323
KOHEEALLEE R., PA3324
KOHLBRENNER D., PA3150
KOHLER M., PA3604
KÖHLER T., OA3784
KOHLS M., OA4360
KOICHI H., PA4123
KOKELJ S., PA903, PA928
KOKKORIS S., PA3539
KOKOSI M., PA1261, OA1452
KOKSAL D., PA154, OA3127
KOKUBO K., PA604
KOKUTO H., PA4298
KOLANOWSKI M., PA2387
KOLB M., PA3415, PA4122
KOLBECK R., OA2938
KOLDITZ M., OA753
KOLE T., PA1271, PA2075, PA2444
KOLEKAR S., PA2415
KOLETSI P., PA1758
KOLEV V., PA3833
KOLEVA MANDADZHIEVA S., PA998
KOLFOORT-OTTE A., PA4288
KOLH P., PA2009
KOLILEKAS L., PA341, PA2431, PA3369, OA4437
KOLKHIR P., PA2727, PA3153
KOLLERT F., OA1453
KOLLMEIER J., PA1925
KOLMERT J., PA1337
KOŁODZIEJSKI P., PA580, PA3557
KOLOGLU M., PA3290
KOLOKO NGASSIE M., PA3576
KOLPEN M., PA1111
KOLTOWSKI L., PA1033
KOMAI A., PA3605
KOMATSU ., PA1168
KÖMÜRCÜOĞLU B., PA329, PA330
KON O., PA4096
KON S., PA1858
KONDOH Y., OA1394, PA2644
KONDRATAVICIENE L., PA3591, OA4386
KONDRO D., PA2051
KONG C., OA3109
KONG S., PA1923
KONGERUD J., PA2471, PA3525
KÖNIG I., PA934
KÖNIGSHOFF M., OA662, PA2787, OA3656
KONING F., OA3661
KONITSIOTIS A., PA1937
KONOPKINA L., PA867
KONOPKINA L., OA138, PA351, PA1226, PA1837, PA3378, PA3481
KONRADSEN J., PA2464
KONSTANDINIDIS E., PA967
KONSTANTINIDIS A., PA4025, OA4408
KONSTANTINIDIS M., OA679
KONSTANTINOS G., OA797
KONSTANTINOS K., OA797
KONSTANTINOS K., PA184
KONSTANTINOS K., PA184
KONSTANTINOS T., OA797
KONSTANTYNOVSKA O., PA422
KONSTANTYNOVYCH T., PA3840
KONTAKIOTIS T., OA4437
KONTOGIANNI C., PA3369
KONYALIHATIPOĞLU E., PA3244
KONYALILAR N., OA3775
KOOBLALL M., PA2606
KOOISTRA W., PA1276, PA1282
KOOK RHEE C., PA4323
KOOPMANS M., OA1438
KOPAČ P., OA3679, OA4424
KOPEC G., PA1990
KOPECKÝ M., PA1850, PA3835, PA3841, PA3849
KOPITOVIC I., PA1110
KOPP M., PA934
KOPP M., PA1015, PA3257, PA3948
KOPP M., PA876, PA988, OA2954
KOPPELMAN G., PA3558
KOPPELMAN G., PA1754, PA3268, PA3546
KÖPRÜLÜOGLU M., PA320, PA333, PA1041, PA1052
KOPYTOVA T., PA3888
KORAKAKIS D., PA350
KORANTENG J., PA2819, PA3563
KORBA K., PA1136
KORBILA I., PA2431
KORDY K., PA3260
KORETSKAIA I., PA1331
KOREVAAR D., PA2694
KOREVAAR D., OA769
KORF I., PA1830
KORKMAZ C., OA4361
KORKMAZ EKREN P., PA282, PA296, PA1191, PA2496, PA2500
KORKONTZELOU A., PA3926
KORKUNÇ S., OA3775
KORN S., PA888, PA1678, PA1682, PA1683, PA1687, PA2397, PA3210, PA4189, PA4312, PA4321, OA9002
KORS J., PA230
KORŠIĆ M., PA2586, PA2710, PA4170
KORT S., OA2266
KORTA J., OA2949, PA3268
KORTA MURUA J., PA3548
KORTA-MURUA J., PA876, PA3256, PA3552
KORTEN I., PA1002, PA1012
KORTIANOU E., PA2517
KORZ C., PA3470
KORZH G., PA2115
KORZH N., PA2115, PA2803
KOS R., PA381
KOSCHEL D., PA936
KÖSE M., PA282, PA296, PA2496, OA4416
KOSE N., PA446, PA447, PA3244
KOSHTIKOVA K., PA3833
KOSKAS M., PA1748, PA1749
KOSKELA H., PA3422
KOSKINEN J., PA860
KOSKINEN J., PA860
KOSNIK M., PA2727
KOSSAREV A., PA2449
KOSSYVAKI V., PA4025, OA4408
KOSTADINOV D., PA4255
KOSTARIDOU S., PA1758
KOSTER T., PA492, PA494, PA495
KOSTERELI E., PA277
KOSTI C., PA377, PA378, PA1114, PA2613
KOSTIANEV S., PA998
KOSTIKAS K., PA191, PA515, PA1840, PA2136, PA2389, PA3207, PA3905, PA4323
KOSTINA E., PA3291
KOSTINE M., OA4435
KOSTMINDER O., OA4435
KOSTOPANAGIOTOU K., PA1781
KOSTRZEWSKI T., PA4322
KOSUTOVA P., OA2318
KOTALIK A., PA4312
KOTAN A., PA446, PA447, PA3244
KOTANIDOU A., PA362, PA2522, PA3528, PA4082
KOTE A., PA1854
KOTECHA E., PA3278
KOTECHA S., PA996, PA1739, PA1740, PA1742, PA1744, OA2300, PA3278, PA3279, PA4215
KOTECHA S., PA996, PA1739, PA1740, OA2300, PA3278, PA4215
KOTHRA A., PA3267
KOTORTSI I., PA3574
KOTOULAS S., PA622, PA960
KOTS M., OA748
KOTSIOU O., PA434, PA435, PA1192, PA2721
KOTTEAS E., PA1917
KOTTI A., PA625, PA2089, PA2848
KÖTZ K., PA2515
KOTZE T., PA1904
KOTZIA D., PA274
KOUBKOVA L., PA4108
KOUCHAKJI E., PA2609
KOUCKY V., OA2183, PA2854
KOUDELKOVÁ M., PA3412
KOUIS P., PA293, PA1004
KOUKAKI E., PA1869
KOUKAKI E., PA1882, PA1917, PA2036
KOUKIDOU S., PA377, PA378, PA1114, PA2389, PA2613, PA2697
KOULOURIS N., PA1869, PA2036, PA2038, PA2431, PA2519
KOULOUSOUSA E., PA1128
KOURANOS V., OA1452
KOURIE H., PA1143
KOUTRAKIS P., PA1004
KOUTSOUKOU A., PA1869, PA1882, PA2036, PA2038, PA2519
KOUYAMA S., PA917
KOVAČEVIĆ D., PA418, PA421, PA3334
KOVACEVIC I., PA170, PA400
KOVACEVIC M., OA1383
KOVACEVIC T., OA2263, PA4008
KOVACS G., PA477, OA2276, PA3462, PA4136
KOVAL D., PA866, PA870, PA4046, PA4049, PA4057
KOVAL O., PA3840
KOVALENKO O., PA186, PA4048
KOVALENKO O., PA156
KOVALENKO O., PA156
KOVALOVA Y., PA4153
KOVATS Z., PA2576
KOVCHUN A., PA2107, OA2321, PA3547
KOWAL-BIELECKA O., OA1450, PA1952
KOYAMA K., PA2791
KOZIAR VAŠÁKOVÁ M., PA2661, PA3412
KOZŁOWSKA H., PA2690
KOZŁOWSKI M., PA548
KRABBENDAM L., OA2206, PA3896
KRACH F., OA119
KRAFT M., PA3562

KRAG A., PA2430
KRAGH K., PA1111
KRAGHOLM K., PA3922
KRAGHOLM K., PA1651
KRAGSTRUP T., PA3431
KRAMER M., PA1138, PA1946, PA2651, PA2661, PA3308
KRÄMER S., OA1384, PA2646
KRAMER T., OA766, PA2694
KRANEVELD A., OA141, OA2949, PA3256, PA3268, PA3548
KRASIMIROVA D., PA4292
KRASNODEMBSKAYA A., OA3658
KRASOWSKA D., PA2727
KRAUS D., PA490, PA491
KRAVCHENKO N., PA4049, PA4057
KRAWCZAK M., OA4360
KREBS T., PA3172
KREFTING D., OA4360
KREJCI J., PA4108
KREMER F., PA3491
KREMER R., OA1436
KREMSNER P., PA4100
KRENKE K., PA3294
KRENKE R., PA907, PA2664
KRENZ H., PA3404
KREUTER M., PA457, PA1153, PA1154, PA1167, OA1390, OA1449, PA3239, PA3240, PA3416
KRICHEN E., OA2191
KRICHEN H., PA2089
KRICKER J., PA2838
KRIEGOVA E., OA2325
KRIEGSMANN K., PA1167
KRISHNA T., PA1692
KRISHNA V., PA4073
KRISHNAMOORTHY G., PA1307
KRISHNAN A., PA563
KRISHNAN J., RCT712
KRISHNAN J., PA911
KRISHNARAJ V., PA2467
KRIST L., OA4360
KRISTENSEN L., PA3335
KRISTENSEN P., PA4028
KRISTINA B., PA184
KRITIKAKI E., PA2041
KRITIKOU M., PA3267
KRIVEC U., OA1620, PA3962
KROES H., PA2388
KROES J., PA2402, OA3679, PA4177
KROES J., PA882
KROESEN B., PA3609
KROFT L., PA1078
KROGH-MADSEN R., PA4028, OA4413
KROMANN LUND T., PA3341
KRONIG F., PA2056
KRONMAL R., PA2489
KRONSBEIN J., PA931, PA3577
KRONTSI A., PA2511
KRONTSI A., PA1769
KROP J., PA1933
KROPPEN D., PA2758
KRUGER A., PA989
KRÜGER M., PA490, PA491
KRUISSELBRINK R., PA373
KRULJAC C., PA298
KRÜLL M., PA521
KRYKHTINA M., PA867, PA1977, PA4070
KRZYŻEWSKA A., PA2690
KSOURI C., PA162, PA871, PA3362
KUBIAK J., PA865
KÜBLER W., PA1307
KUBO S., PA2632
KUBOTA M., PA604
KUCHERENKO ., PA3465
KUCHERENKO M., PA4147
KUCKREJA S., PA2771, PA2772, PA2776
KUCUK H., PA277
KUDELKA M., OA2325
KUEBECK R., PA2846
KUEBLER W., PA2082
KUEBLER W., PA3465, PA4147
KUEH K., PA514, PA3861
KUEHNEL M., PA1175
KUEHNEL M., PA1942, PA4277
KUEHNI C., PA999
KUEHNI C., PA298, PA1005, PA1006, PA1013, PA3975, PA3979
KUENG E., PA3281
KUHLEN R., OA2312
KUHN A., PA1005
KUHN B., PA3615
KÜHN C., PA1254
KUHN H., PA1135, OA1384, PA2646
KUHN M., PA3150
KUIJVENHOVEN J., PA2694
KUINT R., PA3183
KUKAVICA D., PA421
KUKLINSKI C., RCT2164
KULARATNE M., PA460
KULENDRAJAH B., OA782
KULESZA A., PA1894
KULESZA A., PA4080
KULKARNI A., PA3288
KULKARNI H., PA2513
KULKARNI T., PA2662
KULKARNI V., PA3407
KULL I., PA1754, OA2946, PA3231
KULNIK S., PA3324
KULOGLU Z., PA3290
KULYNYCH-MISKIV M., PA2115
KUM E., PA182, PA899, PA900
KUMAL GOTHWAL S., PA4123
KUMAR A., PA404
KUMAR A., OA2946
KUMAR D., PA1696
KUMAR M., PA2376
KUMAR P., PA963, PA3941
KUMAR P., PA3477
KUMAR P., PA2565
KUMAR P., PA3272
KUMAR R., OA766
KUMAR R., PA1103
KUMAR S., PA4239
KUMAR S., PA1220
KUMAR V., OA1610
KUMAR V., PA2074, PA3897
KUMAR NEGI A., PA397
KUMARASAMY N., OA3796
KUMARI R., PA2772, PA2776
KUNA P., PA882, PA1330, PA1338, PA2397
KUNASEELAN S., PA1011
KUNII K., PA4192
KÜNSTLE N., PA1002, PA1012
KUNTZ K., PA4192
KUNZ R., OA4363
KUNZELMANN K., PA297
KUO C., PA3511
KUO C., PA3866
KUPLAST-BARR K., PA4192
KURD R., PA1303
KURMI O., PA896, PA898
KURONEN I., PA1242, PA2035, PA3317
KUROWSKA-STOLARSKA M., PA2794
KURTH F., PA1305
KURUKULAARATCHY R., PA3207, OA3674
KURUKULARAARATCHY R., PA3204
KURVER L., PA4083
KUS J., OA3790
KUSABA Y., PA2709
KUSHNAREV V., PA2408
KUSTER S., PA4034
KUSUMOTO S., PA1844
KUSUNOSE M., PA4063
KUTSCHKE D., PA3245, PA3247, PA3477
KÜTÜKÇÜ E., OA4361
KUWAL A., PA338, PA4085
KUWANO K., PA2790
KUYPERS D., PA1020
KUZHKO M., PA4086
KVIDALAND H., PA2032, PA2034
KVIDALAND H., PA1676
KWAKKEL-VAN ERP J., PA1069
KWAN K., PA3424
KWAPISZEWSKA G., PA574, PA4136, PA4149
KWAS H., PA234, PA383, PA3937
KWASS H., PA345, PA1189, PA1703, PA1839, PA1841, PA1843, PA1993
KWIATEK J., PA4187
KWIATEK S., PA548
KWIECIEN I., PA1134, OA3772, OA3783, PA4107
KWON H., PA4325
KWON J., PA4325
KWON N., PA236, OA3679, PA3920
KWONG H., PA2851
KYAW K., PA158
KYLE A., PA514
KYRIAKOPOULOS C., PA1840
KYVSGAARD J., OA145, PA992

L

L Y CHAN L., OA3750
L. M. BOUROTTE C., PA908
L. MAROTT J., OA3740
LA GRUTTA S., PA2469
LA GRUTTA S., PA1693, PA2468, PA3898
LA REGINA D., PA2512
LA REGINA D., PA1763, PA2450
LA ROCCA M., PA1748, PA1749
LA ROSA C., PA4182
LA ROSA H., PA524
LA SALA C., PA2440
LAADHAR L., PA2458
LAATAR A., PA1054, PA3342
LABADESSA I., PA256
LABAKI W., PA4252
LABAKI W., PA911
LABANI A., PA4150
LABATE L., PA3178
LABIDI A., PA317, PA1791
LABOR M., PA1644
LABRADOR M., PA2133
LACASSE Y., PA3620
LACEDONIA D., PA166, PA1196, PA4254
LACIN F., PA1748, PA1749
LACOMA A., PA4074
LACOMBE V., OA4435
LACOSTE V., PA3406
LADHARI N., PA265, PA1067, PA1122, PA1124
LAENGER F., PA1942, PA4277
LAFETA M., PA520, PA3850
LAFETÁ LIMA M., OA3123
LAFFEY J., PA1826, PA1832, PA2843
LAGADINOU M., PA1098
LAGES M., PA325
LAGHI F., PA2046
LAGIOU P., PA947, PA4082
LAGRAFEUILLE R., PA4145
LAGRASTA C., PA2836
LAHNSTEINER E., RCT2883
LAHOUSSE L., PA3384, PA4308, OA4378
LAHOZ R., PA348, PA4067, PA4068, PA4078
LAHOZ ALONSO R., OA3776
LAIMAN V., PA2083
LAINE A., PA975
LAINE-CARMELLI J., PA1002
LAING I., OA147
LAING S., PA4183
LAIRD P., PA2726, PA3987
LAISAAR K., PA1677
LAISAAR T., PA1677
LAITANO R., PA2122
LAJER C., PA2394
LAJOINIE A., PA1332
LAJUNEN T., PA952
LAKE P., OA1613
LAKHDIR M., PA1202
LAKLAAI Z., PA1108, PA2617, PA3480
LAKOMSKI N., PA4115
LAKSHMI V., PA3902
LAL A., PA3484, PA4240
LAL A., PA1145
LALANI M., PA3302
LALIC CICKOVIC I., OA3731
LAM J., PA1746
LAM J., PA617, OA1389
LAM Y., OA2306, PA3977, PA3979, PA3980
LAMA A., PA3359
LAMB G., PA3400
LAMBERTI R., PA2507
LAMBIRI E., OA3774
LAMBRECHTS A., PA2449
LAMKADDAM# H., PA976
LAMOTE K., OA781, OA786, PA1069
LAMOTTE F., PA957
LAMPALO M., PA2130
LAMPRON N., PA3583
LAMPROU K., PA2099
LANARIO J., PA152
LANARIO J., PA222
LANCASTER B., PA2123, PA2128, PA2129
LANCASTER L., PA1934, PA1948
LANCE F., PA3506
LANCIA A., PA2636
LANCIA L., PA4017
LANCLUS M., PA2588
LANDERS D., PA2704
LANDETE P., PA1203, PA4244
LANDETE RODRÍGUEZ P., PA1115, PA4233, PA4235
LANDI C., OA2256
LANDLES R., PA3260
LANDO V., PA243
LANDONI G., PA2596
LANDRY TRUCHON K., PA2844
LANDSMAN J., PA2387
LANDT E., PA249
LANDT E., PA897, PA4264
LANE N., PA566
LANE S., PA2606
LANFRANCHI F., PA2692

LANG C., OA1383
LANG I., PA1981, PA1990
LANG I., PA3457
LANG I., PA3453
LANG N., PA599
LANG N., OA662
LANG N., PA598
LANG S., PA2826
LANGAN D., PA2424
LANGE C., PA888
LANGE C., PA1669
LANGE J., PA3294
LANGE L., PA4263
LANGE P., PA897, PA3251, PA3255, OA3740, PA3921, OA4373
LANGEDIJK A., OA4422
LANGELAND N., PA944
LANGER D., PA2037, OA3124, PA3318
LANGEREIS S., OA765
LANGEVELD B., PA2402
LANGFORD-WILEY B., RCT711
LANGFORT R., PA4112
LANGHAMMER A., PA1720, PA3253
LANGLANDS L., PA1808
LANGLEY R., PA269, PA2858
LANGTON D., PA4321
LANGWIŃSKI W., PA294, PA580, PA2828, PA3555, PA3557
LANKE K., PA4083
LANONE S., PA590, PA2479, PA2837, OA2921
LANOUETTE S., PA173, PA177, PA178
LANSPA M., PA160
LANTOS A., OA1383
LANTSCHSNER R., PA2533
LANZ M., PA3854
LANZA A., PA4236
LANZA F., PA1044, PA1045
LANZA MARTÍNEZ Á., PA3518
LANZILLO A., PA361
LAORDEN ESCUDERO D., PA185, PA863, PA1115, PA1674, PA4233, PA4235, PA4244
LAOUALI N., PA3230
LAPADULA G., OA2913
LAPAQUE N., PA4145
LAPI F., PA3855, PA3869
LAPINEL N., OA3749, OA3754
LAPORTA R., PA1018
LAPORTA HERNÁNDEZ R., PA1019, PA1029, PA3297
LAPORTE F., PA359
LAPPERRE T., PA3182
LAPPERRE T., PA1069
LAPPI-BLANCO E., PA3574
LAPRISE C., PA3583
LAPSHYN V., PA1760
LARBIG M., PA2597
LARBY J., PA2793, PA3549
LARENAS LINNEMANN D., PA2727, PA4323
LARENAS-LINNEMANN D., PA1330, PA2136, PA3153
LARGE D., OA1443
LAROMAINE A., PA596
LAROUMAGNE S., PA1193
LARRATEGUY S., PA1809, PA2533
LARROSA JIMÉNEZ R., PA4250, PA4253, PA4258
LARS A., PA184
LARSEN J., PA3202, PA3203
LARSEN J., OA770
LARSEN T., PA942
LARSSON C., PA3895
LARSSON P., OA3801
LARSSON CALLERFELT A., PA600
LARYSA B., PA1977
LASCARROU J., RCT2881
LASHERMES A., PA4145
LASIERRA A., PA348, PA4067, PA4068, PA4078
LASIERRA MONCLUS A., OA3776
LASKOWSKI U., PA490, PA491
LASKY-SU J., OA2190
LASO DEL HIERRO F., PA3410
LASSEN C., PA2676
LASSEN M., PA1695
LASSEN M., OA2901
LASSENIUS M., PA247
LASSEUR M., PA3958
LAST R., PA511
LASTORIA C., PA868, PA1874
LASZLO V., OA1383
LATHAM S., PA1123
LATHEEF M., PA3946
LATIF Y., PA1747
LATIF ESSA A., PA4233
LATIF ESSA A., PA4235
LATIF-ESSA A., PA4244
LATIMER L., RCT4448
LATORRE I., PA4074, PA4092
LATRASSE M., PA524
LATZIN P., OA142, PA997, PA999, PA1002, PA1007, PA1012, PA1013, OA1447, OA1623, OA2306, PA2492, PA3569, PA3980
LAU K., OA765, OA768, RCT4448
LAU L., OA1409
LAUBHAHN K., PA988
LAUCIRICA D., PA1294
LAUDI S., PA1305
LAUDIEN M., OA4360
LAUFER J., PA1946
LAUKS S., OA3673
LAUNOIS C., PA2862
LAURENT C., PA4140
LAURENT G., OA687
LAURIA G., PA1258, PA1260, PA2472
LAURIA V., PA2733
LAURIKKA J., PA3422
LAURINO L., PA2692
LAURITS T., PA4301
LAURSEN C., PA1194, PA1195, OA2901, OA2907
LAURSEN C., OA770
LAURSEN C., PA2415
LAUWERS E., PA1223, PA1234, PA2588
LAUZIER F., RCT716
LAVAUD F., PA3965
LAVAULT S., PA3350
LAVENEZIANA P., PA3992, PA3993, PA4000
LAVERGNE F., PA1326
LAVERTY A., PA2857
LAVERTY A., RCT2161
LAVIGNE N., PA1296, OA3673
LAVIOLETTE M., PA3583
LAVIS P., PA4275
LAVIZZARI A., PA3282
LAVOIE K., PA531
LAVORINI F., PA442, PA2762, PA3613, PA4232
LAW Z., PA1023
LAWRENCE B., PA4007
LAWRENCE D., PA3853, PA3859, PA3864
LAWRENCE P., OA1443, PA2490
LAWRIE A., PA470
LAWS E., OA2950, OA2952, OA2955
LAWSON C., PA2013
LAWSON K., OA9002
LAWSON R., OA1403, OA1407, RCT4448
LAWTON E., PA4303
LAXE S., OA4366
LAYA S., PA559
LÁZÁR Z., PA479
LAZARATOU A., PA2431
LAZAREWICZ S., PA1876
LAZARINIS N., PA380
LAZARO E., OA4435
LÁZARO M., PA1018
LÁZARO FERREIRA L., PA4161
LÁZARO MIGUEL-SIN T., PA863
LÁZARO SERRANO M., PA1170
LAZARO SIERRA J., PA4159
LAZARUS R., PA1914
LAZARUS S., RCT712
LAZIC Z., PA882, PA2397, PA3207
LAZO J., PA2842
LAZO PRADOS A., PA1924
LE H., OA1430
LE T., PA2400
LE BER C., PA328
LE BRUN M., PA1193
LE FLOCH A., PA4268
LE FLOCH H., PA957
LE GOFFIC R., PA1829
LE GUILLOU F., PA3944
LE HELLO C., OA3130
LE MAO R., OA2288, PA3491
LE MÉE A., PA3954
LE MOUAL N., PA252, PA253, PA255, PA267, PA3250
LE PAVEC J., OA692
LE ROUZIC O., OA133, PA3890
LE THI N., OA1430
LE TURNIER P., PA2608
LEA S., OA749, PA3893
LEAHY T., PA1261
LEAKER B., PA4183
LEAL M., PA885
LEAL ARRANZ M., PA1910
LEAN M., PA2418
LEAPER C., RCT2882
LEATHER D., PA200
LEAVY O., OA2326, PA2794
LEBECH A., PA3341
LEBLANC M., OA140
LEBORGNE A., PA3301
LEBRUN M., PA2127
LEBUS J., PA2533
LECCA L., OA756
LECCI A., OA791
LECCISO G., PA3601
LECCISOTTI R., PA4254
LECHARTIER B., OA2274
LECHOWICZ U., PA1277, PA4112
LECIEJEWSKA N., PA580, PA3557
LECOURS R., PA3620
LEDERER D., OA2952
LEDERER D., OA2950
LEDERER D., OA2955, PA3198, PA3209, PA4262
LEDERMUELLER R., PA3265
LEDESMA C., PA2544, PA2547
LEDESMA RUÍZ C., PA2549, PA2551, PA2552
LEDESMA-RUÍZ C., PA2544, PA2545, PA2546
LE-DONG N., OA2283
LEDOT S., PA1261
LEDOUX S., PA3459
LEDUC D., PA1227, RCT4451
LEE A., PA1768, PA3908, PA3913, PA4007
LEE A., PA1104, OA1616
LEE B., PA1775, PA3263, PA3270
LEE B., PA4121
LEE B., PA180
LEE C., PA4088
LEE C., PA4261
LEE D., PA1142
LEE D., PA1165
LEE E., PA621
LEE E., PA1893
LEE F., PA3141
LEE G., PA1923
LEE G., PA1027
LEE H., PA4109, PA4257
LEE H., PA3887
LEE H., OA755, PA1341, PA2453
LEE H., OA2207
LEE H., PA3887
LEE J., PA1142
LEE J., PA2669
LEE J., PA2123, PA2128, PA2129
LEE J., PA180, PA1341, PA4325
LEE J., PA2768
LEE J., PA3416
LEE J., PA3887
LEE K., PA2475
LEE K., OA757
LEE K., OA2207
LEE L., PA1691
LEE P., PA503, PA504, PA3497
LEE R., PA3285, PA3291
LEE R., PA245
LEE S., PA4325
LEE S., PA180
LEE S., PA4237
LEE S., PA3197
LEE S., PA3971
LEE S., PA3506
LEE T., PA4325
LEE W., PA913
LEE Y., PA1199
LEE Y., PA1894
LEE Y., PA977
LEE Y., PA539, PA2768, PA3971
LEE B., PA4325
LEEM A., PA3883
LEEMING D., PA1945, PA4124
LEEMING D., PA2080, PA2834, PA3182, PA4278
LEENTJENS J., PA1188
LEFÈBVRE P., PA1824
LEFÈVRE G., PA352
LEGENDRE M., OA4438
LEGENNE P., OA3796
LEHALLE C., PA2060
LEHMANN A., PA3347
LEHMANN F., PA2838
LEHMANN I., PA1305
LEHMANN M., OA3656
LEHMANN S., PA942, PA1676, PA3229
LEHNER P., PA602
LEHOCZKI A., PA1130, PA1229
LEHR L., PA4080
LEHTIMÄKI L., PA247, PA942, PA1330, PA1347, PA2397
LEI P., PA4075
LEICK E., OA2255
LEIDINGER M., PA1861
LEIGH M., OA2307
LEIJS A., PA1291
LEILA B., PA2098
LEITL D., PA623, PA1216, PA1811, PA1861
LEJEUNE S., PA3954, PA3955
LEKSA V., PA4119
LELL B., PA4100
LELLOUCHE F., PA3530
LEMARIÉ E., OA4383

LEMAY A., PA1025
LEMES CASTELLANO A., PA2813
LEMIERE C., PA2729, PA2734
LEMIRE P., PA253
LEMMEL S., OA2954
LEMOUAL N., PA3230
LENDERS V., PA607
LENFERINK A., PA3500, PA4205, PA4210
LENGA P., PA490, PA491
LENOIR M., PA3554
LENTA E., OA3659
LEONARD C., PA1939
LEONARDI A., PA3873
LEONARDI N., PA1040
LEONARDI N., PA323
LEONARDI S., PA1763
LEONCINI F., PA2695
LEONG S., PA1023
LEPEJ D., OA1620, PA3962
LEPENNEC V., PA402
LEPETYUKH M., PA1339
LEPORE G., PA1196
LEPORE R., OA666
LEPORINI M., PA2398, PA3215, PA4320
LERA-GÓMEZ L., PA2789, PA2808
LERANG K., PA1961
LEROY S., OA4438
LERTMEMONGKOLCHAI G., PA583, PA584
LESAGA LÓPEZ E., PA564
LESAGE F., OA670
LESCANO PONCE M., PA414, PA1059
LESNIC E., PA2634, PA3226
LESTAN D., PA1981
LETELLIER A., PA352
LETH S., PA3335
LETHEM R., PA876
LE-THI-MINH H., PA3266
LETIERCE A., OA134, PA957
LETSIU E., PA1307
LETTIERI S., PA1953, PA2636, OA3659, PA4279, PA4280, OA4437
LEUNG A., OA2192
LEUPPI J., PA2397
LEUPPI J., PA344
LEVANTNO G., PA2589
LEVENGOOD A., PA177
LEVI C., PA1132
LEVI G., OA772, PA1211, OA2906
LEVIN K., PA3373
LEVING M., PA2387, PA3613
LEVOUNETS A., PA341, PA3369
LEVY A., PA2126
LEVY D., PA3370
LEVY L., PA1024, OA1436, PA2696
LEVY M., OA2278
LEW J., PA2769
LEWANDOWSKA A., PA2629
LEWANDOWSKA K., PA1079, PA2661, PA2664
LEWANDOWSKA K., PA2629, OA3790
LEWIS A., OA135, RCT4448
LEWIS G., OA2276
LEWIS K., PA557, RCT716
LEWIS L., PA305
LEWIS R., OA2277
LEWIS R., PA462, PA464, PA3467
LEWIS S., PA3263, PA3270
LEWKO A., PA3324
LEWTHWAITE H., PA242
LEX C., OA2948
LEYAH H., OA3798
LEYNAERT B., PA252, PA941, OA2302, PA3230, PA3250
LEYRE SERRANO FERNANDEZ L., PA2572
LEZMI G., PA3955
L'HER P., PA1001
LHUILLIER M., PA2844
LI A., OA2192
LI C., PA1731, OA2957, OA2965
LI C., PA3574
LI C., OA1632
LI D., PA432, PA4166
LI D., PA3473
LI F., PA4117
LI H., PA2805
LI H., PA2409
LI H., PA4032
LI J., PA1307, OA2940
LI J., OA2252
LI L., PA2805
LI L., OA3750
LI M., OA1450, PA1952
LI N., OA3661
LI N., OA2955, PA4041
LI P., PA1035
LI Q., PA4004
LI Q., PA1871
LI Q., PA3465
LI S., PA2085
LI T., PA3493
LI T., PA2085
LI W., PA4138
LI X., PA2805
LI X., PA2409
LI X., PA2371
LI X., PA915
LI Y., PA1289
LI BASSI G., OA4406
LIADOVA T., PA422
LIAM C., PA2573
LIAM H., PA184
LIANG W., PA3249
LIAO S., OA3750
LIAO W., OA2250
LIAO Y., PA1246
LIAPIKOU A., PA1854
LIAPIKOU A., PA4025, OA4408
LIATSIKOS K., PA1123
LIBAKOVA I., PA550
LIBERGE R., PA2608
LIBRETTI L., OA784
LICAJ I., PA3610
LICARI A., PA1693, PA1763
LICHT J., OA1621
LICHTBLAU M., PA475, PA2680, PA2681, PA2688, PA2689, PA2749, PA2750
LIE A., OA140
LIEB W., OA4360
LIENAU J., PA1307, PA1830
LIENDO MARTÍNEZ K., PA569
LIENDO MARTÍNEZ K., PA2031
LIENDO MARTINEZ K., PA884, PA1325, PA3152
LIETMAN C., PA4121
LIEVENS D., PA1149, PA1153
LIEW F., PA1306
LIEW S., PA1716
LIEW† S., PA3261
LIISTRO G., PA1238, PA3325
LIJNEN L., PA2047
LILOS C., PA2506
LIM E., RCT2881
LIM J., PA305
LIM J., PA241, PA955
LIM K., PA602
LIM R., RCT716
LIM S., PA3611
LIM S., OA1388
LIM W., PA4268
LIM Y., PA241
LIM Y., PA955
LIM Y., PA2484
LIM YICK HOU A., OA3747, OA3750
LIMA B., PA2375
LIMA K., PA1083
LIMA R., PA2395
LIMA SOUZA SALDANHA M., OA3123
LIMBACH M., PA2593
LIN D., PA2483
LIN H., PA1871, PA4015
LIN H., PA3399
LIN M., PA4088, OA4387, OA4389
LIN M., PA4032
LIN P., PA182, PA899, PA900
LIN R., PA4041
LIN S., PA473
LIN T., PA3875
LIN X., PA384
LIN Y., PA2851
LIN Y., OA2965
LINACRE V., PA1017
LIND L., PA1701
LIND L., PA207
LINDBERG A., PA953
LINDBERG A., PA244, PA937, PA1704, PA2446, PA2464, PA3614, OA3736
LINDBERG E., PA231, PA1701, PA4297, PA4304
LINDBERG S., OA750
LINDBERG S., PA1708
LINDEGAARD B., PA1111, PA4028, OA4413
LINDEN D., PA1104
LINDÉN S., PA3574
LINDER N., PA1135, PA2646
LINDGREN J., PA610, PA3567
LINDH M., PA2016
LINDHARDT TOENNESEN L., PA1647
LINDHARDT TØNNESEN L., PA246, PA3234
LINDLEY M., OA130, PA1860
LINDMARK B., PA1932
LINDNER J., PA1990
LINDNER M., PA593, PA2787
LINDNER R., PA936
LINDÖ C., PA2797, OA2938, PA4065, PA4282
LINDQVIST A., PA1720
LINDSLEY A., OA2251
LINDSTEDT S., OA1379, OA2267, OA2938
LINDSTRÖM I., PA257, PA263
LINE K., PA2007, PA3385
LINES O., PA3946
LINES S., PA152, PA3418, PA3488
LINGAM R., PA949
LINGMAN K., PA194
LINGNAU A., PA2727
LININGER N., PA1901
LINNANE S., PA2591
LINNARSSON D., PA589
LINZ D., PA2847
LINZENBOLD W., PA2645
LIO' P., PA4135
LIONELLO F., PA536, PA543
LIONETTI A., PA1205
LIONTOS A., OA4408
LIOUMPAS D., PA310
LIOUMPAS D., PA303
LIPPIETT K., OA3734
LIPS C., PA1925
LIPWORTH B., OA1418, PA3511, PA3512, PA3866
LISCHKE R., PA1022
LISIK D., PA943, PA1062, PA1063, PA1064, PA3331, PA3925
LISSPERS K., PA194, PA211, PA1701, PA2016, PA2102
LITING W., PA1654
LITKOWSKI E., PA4263
LITTLEMORE H., PA1858, PA1868
LITVINYUK O., PA235
LIU A., PA1232, PA2039
LIU B., PA1015, PA2816
LIU C., PA916
LIU F., OA1385
LIU G., PA2416, PA2417
LIU H., OA686
LIU J., PA605, PA2077
LIU J., PA919
LIU J., PA2371
LIU J., PA460
LIU L., PA1916
LIU M., PA4186
LIU M., OA1616
LIU M., PA4041
LIU Q., PA4183
LIU Q., PA1731, OA2957, OA2965, OA2966, PA3477
LIU S., PA3465
LIU S., OA2192, OA3781
LIU S., PA2484
LIU S., PA4276
LIU W., PA300, PA1927
LIU W., PA1871
LIU X., PA2805
LIU Y., PA2136, PA4323
LIU Y., PA1262
LIU Y., OA1385
LIU Y., PA2615
LIU Z., OA761
LIU Z., PA473
LIU Z., PA309
LIV P., RCT2160, PA3923
LIVERAKOU E., PA3539
LIVERKO I., PA209
LIVESEY A., PA1964
LIVI V., PA1211, PA2695
LIVIERO F., PA268
LIVINGSTON R., PA2523
LIVIU P., OA2905
LIVNAT G., PA508
LIYANAGE P., PA3542, PA3543
LJUBAS A., OA3731
LJUBICIC Đ., PA170, PA400, PA4072
LJUBICIC L., PA1875
LJUJIC M., PA2076
LJUNGBERG H., PA224
LJUNGGREN M., OA2290, PA3589, PA3593, PA4297
LJUNGGREN M., PA4304
LJUNGMAN P., PA3231
LLACA DÍAZ J., PA4094
LLAGUNO O., PA2717
LLANCALEO C., PA3225, PA3228, PA3310
LLANOS A., PA392, OA2916
LLANOS GONZALEZ A., PA1208, PA4043
LLANOS JIMÉNEZ L., OA2319
LLANOS-ACKERT J., OA3670
LLANOS-ACKERT J., OA3676, PA4312, PA4315
LLATJÓS R., PA2666
LLOYD C., PA579
LLOYD-EVANS P., PA364
LLUNELL CASANOVES A., PA3403
LO BUE A., PA4290
LO MUZIO G., OA791, PA2398, PA3215, PA4320
LOAEZA-ROMAN A., PA3526, PA4281
LOBATO ASTIÁRRAGA I., PA2140
LOBBES H., OA4435
LOBO R., PA3487

LOBO BERISTAIN J., PA1179
LOCATELLI F., PA3216
LOCHENIE C., PA3581
LOCOCO S., PA536, PA543
LOCONSOLE D., PA1066
LOCOROTONDO C., PA159, OA2329, PA4284
LODGE C., PA1688, PA1699, PA2482, PA3906
LOEBELENZ L., PA997
LOEBINGER M., PA3393, PA3400, OA3752
LOEBINGER M., PA3398
LOEBINGER M., OA3751
LOEPER N., PA3865
LOEW S., OA790, OA792
LOEW W., PA3474
LOEWENTHAL L., PA890
LOFARO L., PA1948
LÖFDAHL A., PA4133
LOFFLER K., OA2291, PA3600
LOFITOU N., PA276
LOFTUS D., PA589
LOGAN D., PA1104
LOGAN N., PA3361
LOGES N., PA3404
LOH T., PA2573
LOHINAI Z., OA1383
LOIACONO N., PA974
LOIODICE C., PA1315
LOKE T., PA1237
LØKKE A., PA216, PA1706, PA2537, PA2539, PA3223, PA3251, PA3255, OA3745, PA3915, PA4055, PA4203, OA4373, OA4426
LØKKE A., PA1117
LOLOCI G., PA1165
LOMBARD C., PA2431
LOMBARDI C., PA2804
LOMBARDI C., OA2289
LOMBARDI D., PA2599
LOMBARDINI M., PA1345
LOMMATZSCH M., PA888, PA925, PA1682, PA4189
LONDHE J., PA3233, PA3924
LONDON S., OA3737, PA4247
LONDOÑO A., PA467, PA1972, PA1984, PA1987
LONDT B., PA4064
LONG K., PA4183
LONG M., PA2610, OA2939, OA4404
LONG M., RCT2883
LONG M., PA4066
LONG M., OA3798
LONG M., PA2772, PA2776
LONG X., OA3750
LONG Y., PA3899
LONGCHAMPT E., OA692
LONGO C., PA2614
LONGOBARDI S., PA4236
LÖNNROTH K., OA763
LOOI K., OA147
LOOR K., OA689
LOPES E., PA538
LOPES F., OA2205
LOPES F., PA3222
LOPES F., PA2737
LOPES TEIXEIRA ARRAIS M., PA2463
LOPEZ A., PA449
LÓPEZ C., OA752
LÓPEZ C., PA2590
LOPEZ I., PA2558
LOPEZ J., PA1959
LOPEZ J., PA2685, OA3133
LÓPEZ J., PA2683
LÓPEZ L., PA348, PA4068
LÓPEZ M., OA4415
LÓPEZ R., PA3531
LÓPEZ ALADID R., PA4013
LÓPEZ CERVANTES J., PA239
LÓPEZ CHANG C., PA2015, OA2319
LÓPEZ DE ANDRÉS A., PA1181
LÓPEZ LISBONA R., PA499
LOPEZ LOPEZ L., PA2526
LÓPEZ LÓPEZ P., PA4009
LÓPEZ MARTÍN S., PA569
LOPEZ MESEGUER M., PA478, PA2686
LÓPEZ MIGUEL C., PA2691
LÓPEZ NEYRA A., PA286
LÓPEZ PADILLA D., PA569
LOPEZ PANDO M., PA3297
LOPEZ RAMON R., PA2706
LOPEZ SANCHEZ E., PA3289
LÓPEZ SÁNCHEZ M., PA2434
LOPEZ VARELA M., PA2460
LOPEZ VERGARA L., OA3776, PA4067, PA4078
LOPEZ VILARO L., PA187
LÓPEZ ZUBIZARRETA M., PA4256
LÓPEZ-ALADID R., PA197, PA2798, PA3395
LÓPEZ-CAMPOS J., PA196
LÓPEZ-CERVANTES J., PA944, PA1723
LÓPEZ-FLORES C., PA3843
LÓPEZ-GAVIN À., PA2798
LOPEZ-GIRALDO A., OA666
LÓPEZ-MEJÍAS R., PA2789, PA2795, PA2808
LOPEZ-MESEGUER M., OA689
LÓPEZ-MESSEGUER M., PA1161
LÓPEZ-PADILLA D., PA1325
LÓPEZ-REYES R., PA1180
LOPEZ-RINCON A., PA3256
LÓPEZ-SAIZ G., PA4127
LÓPEZ-SEGUÍ F., PA3409
LÓPEZ-SILVARREY A., PA3960
LOPEZ-VASQUEZ I., PA1222
LOPEZ-VAZQUEZ I., PA864, PA2042, PA3526, PA3837, PA4281
LOPMERI M., PA4226
LOPOMO N., OA137
LORBLANCHES R., PA3147
LORD J., OA4367
LORDAN J., PA1023
LORENT N., OA2306, PA2518, PA2811, PA3980
LORENTE M., PA1203
LORENTE GONZÁLEZ M., PA1115, PA2859, PA4233, PA4235
LORENTE-GONZÁLEZ M., PA4244
LORENZ H., PA474, PA1976
LORENZI-FILHO G., PA321, PA322
LORENZO MARTINEZ C., PA339
LORENZO-DIAZ F., PA876, PA3552
LORILLON G., OA4439
LORINCZI L., PA3236, PA3243
LORINI F., PA553
LORIOD S., OA3656
LOROFF N., PA557
LOSADA-OLIVA P., PA558
LOSANTOS GARCÍA I., PA185, PA1674
LOSCANO J., PA3615
LOSCERTALES-VACAS G., PA384
LOSKE J., PA1305
LOSTY P., PA305
LOTAY H., PA963, PA3941
LOTUFO P., PA3222
LOUA HENRIKSEN S., PA4021
LOUGHEED M., PA2734
LOUGHEED M., PA2742
LOUGHEED M., PA2729
LOUGHEEED M., PA2736
LOUGHRAN K., PA1804
LOUHAICHI S., PA168, PA1177, PA1851
LOUIS R., PA290, PA886, PA1338, OA1413, OA1451, PA1660, PA1661, PA1681, PA1824, PA1991, PA2009, PA2392, PA2397, PA3990
LOUIS S., PA886
LOUIS S., PA2051
LOUKIDES S., PA894, PA947, PA1840, PA2389, OA4437
LOUKIDES S., PA2431
LOUKIL M., PA342, PA4293
LOUKIL BEN ALI M., PA343, PA3590
LOUKOPOULOU P., PA2431
LOUND A., OA135
LOUREIRO A., PA2707, PA4163, OA4431
LOUREIRO C., OA3679
LOUREIRO M., PA4001
LOURENÇO A., PA2754
LOURENÇO J., PA3386
LOURENÇO J., OA2255
LOURIDO T., PA3359
LOUSADA N., PA1980
LOUTSIDI N., PA350
LOUVARIS Z., PA3318
LOUW S., PA1657
LOUZIR B., PA390, PA1054, OA1604, PA2007, PA3342, PA3343, PA3385
LOVATI F., PA536
LOVERDOS K., PA3369
LOW A., OA787
LOW N., PA245
LOWE A., PA1688, PA1699
LOWE C., OA1404, PA2396
LOWE D., PA2381, PA3489, PA4060
LOWE D., PA3435
LOXHAM M., PA585, PA587, OA2964
LOZANO C., PA392, OA2916
LOZANO M., PA2798
LOZANO- GARCÍA M., PA3508
LOZANO-GARCÍA M., PA164
LOZANO-GARCÍA M., PA2047
LOZANO-ROJAS D., OA4407
LOZAR KRIVEC J., OA1620
LOZOYA GARCÍA V., OA3679
LU A., PA4192
LU D., PA1974
LU P., PA4087
LU S., PA4182
LU W., PA2793, PA3549
LÜ Y., PA4075
LU Y., PA2110
LU Y., PA3471
LU Y., PA2475
LU Z., PA2479
LUA S., PA1982, PA4220
LUBNOW M., OA2315
LUBREE H., PA513
LUBURICH P., PA2666
LUC M., OA4443
LUCAS J., PA3979
LUCAS J., PA298, PA1295, PA2062, OA3751, PA3975
LUCAS J., PA3977
LUCCA F., OA1622
LUCCHI M., PA299, OA3764
LUCIDI V., PA283
LUCIJANIC M., PA400
LÜCKE E., PA920, PA1297
LÜCKE T., OA4418
LUDLOW S., PA1334, PA2033, PA2534
LÚÐVÍKSDÓTTIR D., PA942, PA2397
LUECKE E., PA2852
LUEF S., OA770
LUETH C., PA3888
LUGATO F., PA543
LUGG S., PA1795, OA3778
LUGOGO N., PA2387, PA3854
LUI M., OA2291
LUI S., PA1011, PA1773
LUIJK B., PA3609
LUIK A., OA4378
LUÍS F., PA3380
LUIZ J., PA4273
LUIZ R., PA909
LUKASSEN S., PA1305
LULAJ E., PA159, PA2131
LUMBIERRES M., PA1181
LUMERTZ M., PA3970
LUNA C., PA1061
LUNA M., OA4415
LUNA CRUZ M., PA3225, PA3228, PA3310
LUNA LOPEZ R., PA466
LUNA PARDO C., PA493
LUNA RODRIGUEZ G., PA2544, PA2545, PA2549, PA2551, PA2552
LUNARDI A., PA324
LUNA-RODRÍGUEZ L., PA2547
LUND K., PA280
LUND M., PA3525
LUND T., OA691, OA1399
LUND KROGSGAARD CHAWES B., OA143
LUNDELL S., PA1797, PA1800
LUNDIN S., PA4133
LUNDKVIST JOSENBY A., PA3326
LUNDQUIST A., OA3736
LUNDQVIST A., PA172
LUO G., PA1247
LUO W., PA1694, PA3918
LUO Z., PA2449
LUPIA D., PA3986
LUPORINI SARAIVA G., PA3610
LUPSA S., PA427
LUQMANI R., PA4020
LUQUE A., PA1174
LUQUE N., PA1183
LUQUE PAZ D., PA352
LUSIGNANI M., PA4017
LUTAS A., PA526
LÜTHI-CORRIDORI G., PA344
LUTTER R., PA930, OA2313, OA2938
LUUKKONEN R., PA1720
LUX A., PA2852
LUZARDO-GONZÁLEZ A., PA2585
LUZÓN ALONSO E., PA2126
LUZZI L., PA3299,

PA3300
LUZZI V., PA442, PA2628, PA4232
LV Q., PA1671, PA2489, OA2951
LY L., PA1864
LY N., PA1291
LYBEROPOULOS P., PA2389, PA2431
LYELL P., PA621
LYKKEGAARD J., PA3251
LYNCH B., PA3309
LYNCH D., PA1247
LYNCH N., PA1768
LYNCH P., PA1965
LYNCH-WILSON J., PA2654
LYNN E., OA4442
LYONS A., PA3934
LYRONI K., PA3588
LYSAK Y., PA862
LYTHGOE C., PA412
LYTTLE M., PA1764
LYU J., PA1330, PA2136, PA4323
LYUDMILA K., PA1977
Ł
ŁYŻWA E., PA1079
M
M .ALI Y., PA3483
M ABDULLAH N., PA858
M CONLON T., PA3174
M HIGAZI M., PA858
M M ABDULLAH N., PA3483
M NOLAN C., OA132
M SMALL P., OA1630
M WILD J., PA470
M. K., PA3407
M. S., PA3407
M. CARVALHO-PINTO R., PA1047
M. JOHNSON J., PA601
M. KEEN E., OA1630
M. PORSBJERG C., PA2136, PA4323
M. PRADO C., PA908
M. SANTOS T., PA908
M. SARAIVA-ROMANHOLO B., PA908
M. SIMON L., PA1833
M. VAN DER DOES A., PA601
M. VANAUDENAERDE B., OA3793
M. VERLEDEN G., OA3793
M.R. GAMA J., PA2463
MA H., PA2787
MA J., PA1871
MA L., PA2409
MA Q., PA915
MA W., OA1385
MAALEJ M., OA126, PA4002
MAALEJ S., PA3390, PA4052
MAATALLA A., PA3383
MAAYAN S., PA1132
MAAZAOUI S., PA489, PA3374
MAC AOGÁIN M., OA3750, OA3753
MAC GIOLLA EAIN M., PA1250
MAC KINNON A., PA1932
MACANSH S., PA163, PA1730
MACDONALD C., PA3230
MACÉ MATTHEW S., OA2918
MACEDO F., OA3729
MACEDO J., PA3325
MACEVICIUTE K., OA768
MACFADYAN S., PA1642, PA4059
MACHADO A., PA318
MACHADO D., PA2395
MACHADO E., PA2799
MACHADO F., PA1221
MACHADO F., OA802
MACHADO L., PA546, OA2323, OA2330, PA2799
MACHADO L., PA2375
MACHADO P., PA1798
MACHADO FERREIRA E., PA2375
MACHAHUA C., PA597
MACHAHUA HUAMANI C., PA3346
MACHAIRAS - SALLAS I., PA341
MACHALE E., RCT4446
MACHURON T., OA3130
MACIEL A., PA3310
MACIEL A., PA3228
MACIS G., OA1411
MACISAAC J., PA2483
MACKAY A., PA1273
MACKINNON M., PA2736
MACLELLAN A., PA1982, PA4220
MACLENNAN G., PA2610, RCT2883, PA4066
MACLEOD J., OA1606, PA3524
MACLEOD K., PA1051
MACLOUGHLIN R., PA1250, PA1832
MADAJA O., PA215
MADAN K., PA1220, OA2902, PA3170
MADANI M., OA3131, PA3456
MADANI M., PA3457
MADANI Y., PA395
MADAS S., PA1722, PA2027, PA3233, PA3924
MADDEH S., PA1787, PA3374
MADDIPATI V., RCT712
MADDOCKS M., OA4364
MADDOX A., PA440, PA1144
MADEMILOV M., OA1440, PA2048, PA2749
MADGE S., OA3752
MADHAV B., PA2559
MADHI F., OA2904
MADI W., PA234, PA1703, PA1839, PA1841, PA1843, PA1993
MADSEN C., OA1399
MADSEN E., PA4124
MADSEN H., PA1333, PA3868
MADY A., PA4294
MADZORERA T., PA2739
MÆLAND S., PA2032
MAENEN M., PA3892
MAES J., OA120, PA456
MAES K., OA687, PA1286, PA4265
MAES N., PA1660
MAES T., OA2199, PA2814
MAESTRELLI P., PA263, PA268
MAETZLER C., OA4360
MAETZLER W., PA3874, OA4360
MAGALHÃES A., PA2641, PA2699
MAGDIEVA K., OA1440
MAGDIEVA K., PA2048
MAGEE N., OA783
MAGGI L., PA4232
MAGIORKINIS G., PA4082
MAGKOU C., PA3161
MAGLAVERAS N., PA3502
MAGNET F., PA2758
MAGNET F., PA518
MAGNI E., PA413
MAGNINI D., PA2695
MAGNUSSEN H., OA122
MAGNUSSON M., PA2826
MAGOIS E., OA2288
MAGONI O., PA3507
MAGOULIOTIS D., OA3763
MAGRI R., OA2906
MAGRINA P., PA366
MAGRONE P., RCT714
MAGROUN I., PA1724, PA2713
MAGY N., OA4435
MAH J., OA2311
MAHABEE-GITTENS E., PA1327
MAHADEVA R., OA127, PA3615
MAHADEVAPPA H., PA591
MAHALINGAM N., PA2769
MAHAPATRA P., PA2483
MAHARANI HASSAN T., OA3750
MAHASHUR A., PA3185
MAHAVEER A., PA3280
MAHBOUB B., PA2136, PA2827, PA4323
MAHBUB R., PA3546, PA4262
MAHDAVIAN M., PA2123, PA2128, PA2129
MAHDI M., RCT711
MAHDI N., PA3425, PA3452
MAHÉ I., OA3129, OA3130
MAHER M., PA1967
MAHER R., OA2187
MAHER T., OA1393
MAHER T., PA617, OA1389, OA1396, OA1397, PA1932, PA1933, PA3989
MAHER T., PA1153, OA1449, PA3416, PA3567
MAHER T., OA1395
MAHEVAS M., OA4443
MAHIDA R., PA1795
MAHJOUB L., PA264
MAHLER D., PA3882
MAHMOOD H., PA2740
MAHMOUD K., PA2614
MAHMUDOVA B., PA945
MAHMUTOVIC PERSSON I., PA605, PA2077, PA3157
MAHOMED A., PA4076, PA4148
MAHRAOUI C., PA3269, PA3271
MAHUT B., PA517
MAI E., PA1979
MAIA L., PA2799
MAIDI E., PA304
MAIDMENT-FULLARD E., PA2534
MAIER C., OA4418
MAIER L., PA4296
MAIER W., PA1154, OA1390
MAIEREAN A., PA2014, PA4302
MAIEREAN A., PA3852
MAIER-HEIN K., PA3888
MAILLEUX A., OA664, PA2786, PA4111, PA4120
MAINCENT C., PA957
MAINGOT-SANDU L., PA1748, PA1749
MAINZER R., OA121
MAIO R., PA169
MAIO S., PA2468, PA2469, PA3216
MAIORANA A., OA809
MAIQUES J., PA387
MAIRINGER T., PA1925
MAIROVITZ A., PA957
MAIRS R., PA392
MAISON N., PA1015, PA3948
MAITLAND K., PA965
MAITLAND VAN DER ZEE A., OA2949
MAITLAND VAN DER ZEE A., PA882
MAITLAND- VAN DER ZEE A., PA2388
MAITLAND-VAN DER ZEE ., OA141
MAITLAND-VAN DER ZEE A., PA3551
MAITLAND-VAN DER ZEE A., PA381, PA876, PA2815
MAITLAND-VAN DER ZEE A., PA2402, PA3256, PA3268, PA3548
MAITLAND-VAN DER ZEE A., OA1411
MAITLAND-VAN DER ZEE A., PA2614, PA3560
MAITRA A., PA3984
MAITRE B., PA3345
MÁIZ CARRO ., PA376
MÁIZ CARRO L., PA1107, PA1346
MAJDANDZIC I., PA1875
MAJDOUB S., PA383, PA3937
MAJDOUB FEHRI S., PA345, PA1189, PA1703, PA1839, PA1841, PA1843, PA1993
MÁJEK O., PA3412, PA3845
MAJEK P., OA674
MAJER C., PA4192
MAJERIC M., OA3731
MAJEWSKI S., PA2664
MAJID H., PA1202
MAJO J., PA2557
MAJORSKI D., PA2758
MAJORSKI D., PA518
MAK S., OA2276
MAKARIOU I., PA270, PA980, PA985
MAKHDOOMI A., PA344
MAKHLOUF H., PA2601
MAKHLOUF N., PA2601
MAKHOUL R., PA1013
MAKKE V., PA1677
MAKLOUL M., PA304
MAKRIS M., PA2389
MAKSIMOVIC J., OA1624
MAKSIMOVIĆ S., PA3334
MAKVANDI-NEJAD S., PA944, PA1723
MAL H., PA4120
MALAISE M., OA1451, PA1660
MALAKAUSKAITE P., PA2824
MALAKAUSKAS K., PA2820, PA2821, PA2822, PA2823, PA2824
MALAKOUNIDOU E., PA1128
MALANDAIN N., PA596
MALANDRINO L., PA553, PA554, PA2778
MALBY SCHOOS A., OA143
MALEKZADEH MILANI S., OA2278
MALERBA G., PA243
MALERBA M., PA399, OA1411
MALET RUIZ J., PA1957
MALFERTHEINER M., OA2315
MALHAS S., PA4234
MALHOTRA A., PA973, PA1316, PA1326
MALIC A., PA2634, PA3226
MALIK J., PA404
MALIK M., PA219
MALIK M., PA4241
MALIK M., PA2000
MALIKA G., PA2007
MALIN J., PA4037
MALINOVSCHI A., PA194, PA211, PA231, PA956, PA1043, PA1218, OA1415, PA1679, PA1701, PA2016, PA2100, PA2102, PA3194, PA3608, PA3923, PA4297
MALINSKY D., PA248
MALIPEDDI P., PA241, PA955, PA3553
MALIZIA V., PA1693, PA2469

MALL M., PA2807, OA4417
MALL M., PA393
MALL M., PA1112, PA1672, PA2056
MALLET J., PA2862
MALLET M., PA2123, PA2128, PA2129
MALLET M., PA1006
MALLET M., PA1005, PA1007, PA1013
MALLI F., PA1192
MALLINSON J., OA4367
MALLIO C., PA1060
MALLMIN E., PA1043
MALMSTRÖM J., PA2833
MALONEY J., OA2955
MALOYAN A., PA3901
MALPASS A., PA2387
MALTAIS F., OA3118, PA3620
MALU K., PA3185
MALVESTITI F., OA3779
MAMALAKIS M., PA464, PA1971
MAMCHUR M., PA2460
MAMILLA R., PA3305
MAMMADOV E., PA945
MAMMADOV K., PA945
MAN I., PA3236, PA3243
MAN W., PA1858, PA1859, PA1868, PA3989
MAN W., OA131
MAN W., PA2580
MANALI E., PA1840, PA2655, PA4129
MANALI E., PA2431, OA4437
MANASA BHAMIDIMARRI P., PA2827
MANCINI G., PA375
MANCINI R., PA4126
MANCINO E., PA1763, PA2450, PA2512
MANCINO L., PA2692
MANCUSO G., PA3435
MANCUZO DE FREITAS T., PA1156
MANDAL A., PA416, PA1711
MANDAL S., PA2851
MANDELBERG A., PA1008
MANDIZHA J., PA152, PA3418, PA3488
MANDOLI G., OA3787
MANDORFER M., PA2429, PA2430
MANDURINO MIRIZZI F., PA2391, PA2550
MANEL L., PA4040
MANFREDI C., PA406
MANFREDINI G., PA2454
MANGAL D., OA793
MANGIAPAN G., PA517, PA1193
MANGSETH H., PA3525
MANIATI M., PA2431
MANICHAIKUL A., PA248, PA4263
MANIFIELD J., PA2043
MANIMARAN S., OA2273
MANINTVELD O., OA688
MANISCALCO M., PA361, PA369, OA1414, PA3873
MANKOWSKI M., RCT2884
MANLEY C., OA766
MANN A., PA4064
MANN B., RCT2882
MANN W., OA3113
MANNENT L., OA2952
MANNENT L., OA2955
MANNERS H., PA3434
MANNEVILLE F., PA1710
MANNICHANH C., OA689
MANNINI A., PA375
MANNINO D., OA682, PA1901, OA3739
MANOV E., PA3833
MANOYLOV D., PA1650
MANRIQUEZ J., OA789
MANSELL A., PA3581
MANSELL S., PA2851
MANSFIELD D., PA1321
MANSOUR S., PA2850
MANSOURI N., PA1129
MANSUR A., PA1692, PA2106, PA2403, PA2542, PA4058
MANSUR A., PA879
MANTE S., PA2627
MANTE S., PA3533
MANTELLI F., PA2596
MANTHE M., PA2381
MANTI S., PA1763
MANTOVANI S., PA312
MANTSO T., PA4082
MANUEL A., PA3393
MANZANARES CAVI G., PA1663, PA2108
MANZANARES CAVIN G., PA3938
MANZANO C., PA195
MANZETTI G., PA529, PA3424
MAO X., OA2952
MAOUA M., PA264
MAPAKO T., PA2739
MARAIN F., PA4137
MARAIS B., PA423, PA2630
MARÃO A., PA272
MARASOVIC I., PA170, PA400
MARATHE M., PA3594
MARATTA E., PA2391
MARC M., OA2905
MARCAIDA BENITO G., PA4024
MARCENAC A., PA4211
MARCHAL E., PA2449
MARCHAND-ADAM S., OA4438
MARCHANT A., PA4275
MARCHANT D., PA606, PA4130
MARCHANT J., PA1752, OA4421
MARCHESE V., OA763
MARCHESI G., PA2778
MARCHESI J., PA3279
MARCHETTI F., PA2766
MARCHETTI G., PA1211, PA2380, OA2906
MARCHETTI P., PA3216
MARCHI N., OA2287, PA3601
MARCHI N., OA2284
MARCHIONNI N., PA2762
MARCIANI L., OA1618
MARCINIAK S., PA602
MARCINIAK S., PA4152
MARC-MALOVRH M., OA785
MARÇÔA A., PA3482
MARCON A., PA2468, PA3216
MARCONDES V., OA2323
MARCONI E., PA3855, PA3869
MARCOS C., PA2569, PA4054
MARCOS P., PA2114
MARCOS RAMIRO B., PA921
MARCOT C., PA188, PA1653
MARCOUX V., PA3415
MARCQ E., OA781
MARCZAK H., PA3294
MAREK E., PA1736, PA1737
MARENGHI G., PA1345
MAREQUE M., PA2137
MARES J., PA3835
MARGAROLI C., PA1294
MARGHLI A., PA314, PA316, OA1604, PA1782, PA1783, PA1784, PA1785, PA1786, PA1788, PA1790, PA1792, PA1793, PA1794, PA2626, PA2631
MARGIOTTA D., PA1060
MARGIOTTA D., PA407
MARGOLINE E., PA3351
MARGUET C., PA3955
MARHUENDA E., PA592, PA595, PA3450
MARIA DE CARVALHO- PINTO R., PA321
MARIA DE CARVALHO-PINTO R., PA322
MARIA LEONE P., PA2609
MARIANI A., OA1619
MARIANI F., PA2636, OA4437
MARIANI T., OA669
MARICAL AGUILAR P., PA1674
MARICOTO T., PA3613, OA4429
MARIEM M., PA424, PA4300
MARIJIC P., PA1154, OA1390
MARILLIER M., PA2030, PA2763, PA4218
MARIM F., PA446, PA447, PA3244
MARIN A., PA387, OA2962, PA4074
MARIN A., PA2773
MARIN J., PA2813
MARIN L., PA2520
MARÍN T., PA4245
MARIN ANDREU A., PA469, PA2095
MARÍN ARGUEDAS A., PA3909
MARIN CORRAL J., PA3538
MARÍN MUÑIZ A., PA499, PA2434
MARIN TAPIA A., PA3403
MARINA N., PA2135
MARINA P., PA184
MARINA MALANDA N., PA2140
MARINATO M., PA442
MARIN-CORRAL J., PA2114
MARINKOVIC M., PA1852, PA3376
MARINO P., PA1088, PA1655
MARINO P., PA3320
MARINOU I., PA340, PA1264, OA2317
MARINOV B., PA998
MARIOLO A., OA3762
MARISA BERGSØE C., PA1647
MARISCAL AGUILAR P., PA863, PA2653, PA4233, PA4235
MARISCAL-AGUILAR P., PA4244
MARITANO S., OA2301
MARK E., PA4056
MARKATIS E., PA437, PA2613
MARKATOS M., PA2389
MARKELIĆ I., PA1026
MARKEVYCH I., PA3221
MARKLUND S., OA803, PA1800, OA3118
MARKOPOULOU K., PA2389
MARKOU T., PA3567
MARKO-VARGA G., OA1383
MARKOVIC D., PA2121
MARKS G., PA3143
MARKS M., OA2326
MARKUS Z., PA2054
MARLOW R., PA1764
MARON B., OA2276
MARQUES A., PA318, OA746, OA802, OA807, PA1034, PA1281, PA1801, PA1807, PA1855, OA3117, OA3119, OA3121, PA4207
MARQUES I., PA1171, PA2754
MARQUES S., PA4207
MARQUES BAIDA L., PA2465
MARQUES BARRETO B., PA1913
MARQUES GRAFINO M., PA526
MARQUES-VIDAL P., OA2284
MARQUEZ-CORDERO C., PA864
MARQUEZ-CORDERO J., PA1222, PA2042, PA3526, PA3837, PA4281
MARRA A., PA471, PA474, PA1976
MARRA R., PA868, PA1874
MARRIOTT D., PA2630
MARRONE O., PA1092
MARSDEN P., PA175, PA901
MARSEGLIA G., PA1763
MARSH J., PA1692, PA2403, PA2542
MARSH L., PA574, PA4149
MARSH L., PA4136
MARSH V., PA511, OA4379
MARSHALL A., PA4117
MARSHALL C., PA581
MARSHALL H., OA128, OA1403, PA3891
MARSHALL J., PA2706
MARSHALL T., OA762, PA1895
MARSICO A., PA876
MARSICO S., PA385
MARSIGLIA C., PA2596
MARSOLAIS D., PA3530
MARSON F., PA403
MARTEL S., PA3583, RCT4449
MARTELL N., PA2602
MARTELO-VIDAL L., PA1686, OA2202
MARTEN A., PA1002, PA1012
MARTENS D., PA1842, OA3799
MARTH K., PA2139, PA2404
MARTHAN R., PA4142
MARTI T., OA1386
MARTÍN A., PA2773, PA4245
MARTIN A., PA4106
MARTIN A., PA2022
MARTIN C., PA1978
MARTIN G., OA779
MARTIN G., PA4150
MARTIN J., PA187
MARTIN J., PA4135
MARTIN M., PA2369, PA2438
MARTIN M., PA4003
MARTIN M., PA472
MARTIN N., PA2136, OA3676, OA3678, PA4312, PA4313, PA4315, PA4323
MARTIN U., PA3610
MARTIN CARPI M., PA2097
MARTÍN CARPI T., PA2849
MARTÍN DE LEÓN R., PA564
MARTÍN GONZÁLEZ E., PA2426
MARTÍN HERNÁNDEZ A., PA4054
MARTÍN HERNÁNDEZ S., PA286
MARTÍN LANA M., PA384
MARTÍN MEDINA A., OA3660, PA4131
MARTIN NGUYEN A., PA4182
MARTÍN NÚÑEZ J., PA1924, PA2526, PA3356, PA3358, PA4009
MARTIN ONTIYUELO C., PA2686
MARTIN PENA M.,

PA1184
MARTIN-ALMEIDA M., PA3548, PA3554
MARTINEAU A., PA1116, PA3227, OA3795
MARTINEAU A., PA3220
MARTINELLI L., PA948
MARTINELLO S., PA484
MARTÍNEZ D., OA2282, OA4384
MARTÍNEZ E., PA4106
MARTINEZ F., PA2558
MARTINEZ F., RCT712
MARTINEZ F., PA2104
MARTINEZ F., RCT710, PA911, PA2121
MARTÍNEZ BESTEIRO E., PA1938, PA4054
MARTÍNEZ BESTEIROS E., PA1705
MARTÍNEZ LÓPEZ I., PA3451
MARTINEZ MEÑACA A., PA466
MARTÍNEZ MENÉNDEZ J., PA1184
MARTÍNEZ NÚÑEZ F., PA1170
MARTINEZ NUNEZ R., OA3773
MARTÍNEZ TOMÁS R., PA493
MARTÍNEZ VÁZQUEZ M., PA500, PA501
MARTÍNEZ VEGA L., PA3518
MARTÍNEZ-ALEJOS R., PA4244
MARTÍNEZ-CAPOCCIONI G., PA1686
MARTÍNEZ-GARCÍA M., PA1180, OA2291, PA4287
MARTÍNEZ-GÓMEZ M., PA1275
MARTÍNEZ-LLORENS J., PA3871
MARTÍNEZ-MORAGÓN E., PA2133, PA2135, PA2137
MARTÍNEZ-MORALES A., PA1836
MARTÍNEZ-PALLÍ G., OA4366
MARTÍNEZ-RIVERA C., PA2426
MARTÍN-GONZÁLEZ E., PA876, PA3552
MARTINI G., PA1258, PA1260
MARTINI M., PA1329
MARTINIUC C., PA2377, PA2687
MARTIN-LOECHES I., PA3527
MARTÍN-MEDINA A., OA3662, PA4132
MARTINO D., PA956
MARTINOT J., OA2283
MARTINOTTI C., PA1338
MARTINOVIC J., PA617, OA1389, PA3333
MARTINS A., PA1980
MARTINS B., PA444, PA1969
MARTINS M., PA444, PA2641
MARTINS M., PA2799
MARTINS N., OA2255
MARTINS S., PA3219
MARTINS V., PA318, OA802
MARTIN-TORRES J., PA4244
MARTINU T., PA3579
MARTINU V., PA2854
MARTINUS M., PA1282
MARTÍ-ROMEU J., PA334
MARTOS RUIZ D., PA3876
MARTUSEWICZ-BOROS M., PA532, PA2541, PA2664, PA3838
MARTY P., PA4099
MARTYNOVA A., PA2459
MARUNKEVYCH M., PA3840
MARUSHKO Y., PA1760
MARVEL J., PA3260
MARWA B., OA795
MARX G., RCT2881
MARZETTI MORO F., PA2589
MARZOUKI S., PA168, PA1907, PA2458
MASA J., OA4388
MASCARENHAS D., PA1103
MASCARENHAS H., PA1812
MASCART F., PA4275
MASCHIO DE CENSO C., PA321, PA322, PA1047
MASCIALINO B., PA1338
MASCLANS J., PA3538
MASDEU M., OA4388
MASEKELA R., OA2308, PA2478, PA3953
MASELLI D., OA3755
MASELLI L., PA2131
MASHINYIRA A., PA1904
MASIH I., PA1209
MASIP BRUIN X., OA3120
MASKELL N., PA429, PA1099, PA1789
MASKELL N., OA785, OA787
MASKEY-WARZĘCHOWSKA M., PA2664
MASKOS U., PA201
MASLOVA E., PA914, PA2026, PA2400, PA3246
MASMOUDI K., PA226, PA1244, PA2752, PA3510
MASOLI M., PA222, OA3679
MASON P., PA263, PA268
MASON T., PA1666
MASONOU T., PA1290
MASPERO J., PA1330, PA2136, OA2952, PA4323
MASPERO J., OA3672
MASPERO J., OA2955, PA3210
MASPERO J., OA2950, OA3672
MASS R., OA1436, PA2696
MASSARWEH A., PA2651
MASSEY L., PA200
MASSEY O., OA747, PA2109
MASSIMILIANO M., PA1206
MASSIP F., PA4262
MASTALERZ M., PA593
MASTAN A., PA1081
MASTERMAN B., PA2650
MASTERS I., PA1752, OA4421
MASTERSON C., PA1826, PA1832, PA2843
MASTIO R., PA2079
MASTORA Z., PA3539
MASTORIDIS P., PA515, PA3862, PA3863
MASTRODEMOU S., OA3774
MASUCCI A., PA438
MATCOVSCHI C., PA2377, PA2687
MATCOVSCHI S., PA2377, PA2687, PA4030
MATE J., OA2262
MATEER E., PA4192
MATELSKI J., OA684
MATERA L., PA1763, PA2450
MATESANZ RUIZ C., PA3876
MATÉU L., PA2585
MATEUS L., PA415, PA431
MATHES T., PA518, PA2758
MATHIAN A., OA4435
MATHIESEN I., PA1111
MATHIOUDAKIS A., PA1707, PA1713, PA2103, PA3182, PA3264, PA3267
MATHIOUDAKIS A., PA2415
MATHOT B., OA688
MATLLO J., PA4074
MATOS L., PA1083
MATOS P., PA4156
MATOS S., PA2754
MATSCHINER G., PA1937, PA3568
MATSIOULAS A., PA1128
MATSOUKI N., OA679, PA967
MATSUBARA H., PA3457
MATSUDA T., PA2644
MATSUI S., PA1168
MATSUKI T., PA3496
MATSUMOTO H., PA2632
MATSUMURA U., PA1862
MATSUNAGA K., PA4180
MATSUNAGA T., PA1887
MATSUSHIMA H., OA1394
MATSUZAWA S., PA1118
MATTA J., PA1314
MATTA S., PA241, PA955
MATTARUCCO W., PA1652, PA2374
MATTEELI A., OA763
MATTEI A., PA573
MATTEI F., PA2817
MATTER A., PA3455
MATTES J., PA3946
MATTHAIOU A., PA293
MATTHAIOU A., PA2393, PA2401
MATTHES S., PA623
MATTHEW M., PA184
MATTHEWS A., RCT712
MATTHEWS J., OA1407
MATTHIEU T., OA2936
MATTILA T., PA4226
MATTIUCCI-GUEHLKE M., PA3623
MATUCCI CERINIC M., PA472, PA4232
MATUCCI-CERINIC M., OA1453
MATURU V., PA2698, PA4158
MAUAD T., PA2797, PA3222, PA4065, PA4282
MAU-ASAM P., PA2402
MAUFROY E., PA3608
MAULE M., OA2301
MAUNTANA S., PA1638
MAURAT E., OA2936
MAURER B., OA1453
MAURER M., PA2727, PA3153
MAUROY B., PA1106, PA3176
MAURY E., PA1690
MAUS R., PA1818
MAUS U., PA1818, PA4122
MAVREA S., PA340
MAVRONASOU A., PA362, PA2517, PA2522
MAVROUDI E., PA3588, PA4291
MAVROUDIS P., PA2431
MAWER A., PA2706
MAXWELL-HODKINSON A., PA1764
MAY J., OA1635
MAYA R., PA3513
MAYALL J., PA578, PA918, PA922, PA1821, PA1825
MAYELL S., PA2490
MAYER E., PA3457
MAYER J., PA3568
MAYER L., PA2048, PA2688, PA2689
MAYER L., PA2749
MAYERS I., OA4377
MAYHEW A., PA896, PA898
MAYORCA-GUILIANI A., OA1399
MAYR C., PA1827
MAYR C., PA598, PA599, OA668, OA3656
MAYR C., OA2966
MAZARAKIS S., PA2604
MAZARAKIS S., PA2563
MAZARAKIS S., PA340
MAŽERIK J., PA4188
MAZMANYAN P., PA3293
MAZUR A., PA306, OA3758
MAZZA U., PA1160
MAZZAROPPI S., PA1060
MAZZEO G., PA872
MAZZOCCA A., PA3844
MAZZUCA C., PA924
MAZZUCCO G., PA1809, PA2529, PA2533
MBUAGBAW L., PA2123, PA2128, PA2129
MBUTHINI L., OA758
MBWASI R., PA2478
MC AULEY D., OA3658
MC CLINTON C., PA1932
MC KEOWN C., OA2919
MC KINNON E., PA2726, PA3987
MC KONE E., OA2919
MCADAM J., PA2648
MCALEESE ESER F., PA4123
MCALLISTER W., PA2712
MCANULTY A., OA801, PA1802
MCARDLE C., PA275, PA276, PA2499
MCARTHUR S., OA1606
MCAULEY D., PA2807
MCAULEY D., PA1104
MCAULEY H., OA131, PA2580
MCAULEY H., OA2326
MCBRIDE A., PA460
MCCABE C., PA476, OA2275, OA2276, PA2672, OA3128, PA4138
MCCABE J., OA676
MCCAFFREY N., PA2684
MCCANN G., PA4216
MCCANN W., PA218
MCCARREN A., PA2684
MCCARTHY C., OA4437, OA4441, OA4442
MCCARTHY K., OA1613
MCCARTHY S., PA1826, PA1832, PA2843
MCCASKILL T., OA125
MCCLATCHEY K., PA511, PA516, OA4375, OA4379
MCCLINTOCK C., OA3658
MCCOLLUM E., PA1774
MCCOMBIE L., PA2418
MCCONNELL W., PA1316
MCCORMACK C., PA2684
MCCRACKEN D., OA783
MCCRACKEN J., OA2960
MCCRAE C., PA3894
MCCULLAGH B., PA1986, PA2684
MCDILL H., PA429
MCDONALD L., PA2767
MCDONALD V., OA2963
MCDONOUGH J.,

OA687
MCDONOUGH J., PA1286, PA4265
MCDOWELL G., PA2381
MCDOWELL R., PA890
MCEACHERN K., PA4192
MCELREA M., PA1752, OA4421
MCELROY A., OA1438
MCELVANEY N., PA1278, PA1280
MCELVANEY N., PA4248
MCEVOY C., RCT712
MCEWAN A., OA4407
MCGARRY E., PA3373
MCGARRY L., PA2765
MCGARVEY L., PA173, PA177, PA178, PA905, PA4182
MCGETTRICK M., PA4220
MCGING J., OA4367
MCGINNESS P., PA3489, PA4060
MCGLOTHLIN D., OA2279
MCGOVERN J., PA2858
MCGOWN A., PA372
MCHUGH D., OA772
MCHUGH J., PA3361
MCHUGH T., PA1290
MCINNIS M., OA3112, PA3423
MCINTYRE C., PA1199
MCINTYRE R., PA3475
MCISAAC H., PA4230
MCKEEVER T., PA875, OA4367
MCKELVEY M., PA1104
MCKENNA J., PA4194
MCKENZIE G., PA3434
MCKEOUGH Z., OA801
MCKINSTRY B., PA2730
MCLANE I., PA1234
MCLAREN-NEIL F., RCT2883
MCLAUGHLIN J., PA2452
MCLAUGHLIN J., PA2462
MCLAUGHLIN V., OA2273, PA2675, PA2676
MCLEAN S., PA1294
MCLELLAN T., PA3434
MCLENGHAN D., PA1123
MCMILLAN L., PA3432
MCMURRAY A., PA1051, PA2370
MCNAMARA P., OA2187, PA2473, PA2810
MCNAMARA S., PA4117
MCNARRY N., PA2373, PA2376
MCNARRY S., PA3501
MCNEILLIE L., PA1863
MCNIVEN R., PA476
MCPHERSON J., PA4157
MCRAE C., PA1273
MCREA L., PA2449
MCSHANE D., PA274
MCSHANE H., PA2706
MCSHARRY C., PA1965, PA2794
MCVEY S., OA135
MEACHERY G., PA1023
MEADE M., RCT716
MEADOWS J., PA1010
MEAH S., PA2407, PA4314
MEBROUK N., PA3269, PA3271
MECHAAL B., PA4040
MECHERGUI N., PA265, PA1067, PA1122, PA1124
MECUGNI D., PA4017
MEDEIROS BEZERRA C., PA3541
MEDEROS-LUIS E., PA2426, PA3552
MEDI W., PA345, PA383, PA1189
MEDIANO O., OA4388
MEDING J., PA574
MEDINO P., PA283
MEDJAHDI N., PA1748, PA1749
MÉDRINAL C., PA359, PA1870
MEDVEDIEVA N., PA2803
MEENA V., PA1883
MEFTEH S., PA3383
MEGARITIS D., PA367, PA1863, PA2043
MEGDICH M., PA620, PA2638
MEGDICHE M., PA1105, PA2637
MEGHJI J., OA760
MEGVINET-CHUCESOV D., PA2854
MEGYESFALVI Z., OA1383
MEHIĆ J., PA2756
MEHIRI N., PA390, OA1604, PA3342, PA3343, PA3385
MEHTA N., PA540
MEHTA R., PA1880
MEHTÄLÄ J., PA1347
MEI F., OA785
MEIJBOOM L., PA1983
MEIJBOOM L., OA2313
MEIJER J., PA2387, PA3613
MEILHOC A., OA2310
MEILINGER M., OA771
MEINI S., PA2589
MEIRELES P., PA3487
MEIRING J., OA1403
MEJDOUB FEHRI S., PA234
MEJÍA M., PA1963
MEJÍAS L., PA187
MEJRI I., PA354, PA1055, PA1856
MEJRI EP AJILI I., PA1200, PA2094
MEJRI LAJILI I., PA155
MEKEBEB-REUTER M., OA3796
MEKHAEL E., PA349, PA2579, OA4358
MEKHAEL O., PA3579
MEKHAIMAR A., PA1190
MEKINIAN A., OA4435, OA4443
MEKSERIWATTANA W., PA3570
MELANDER O., PA1701
MELATI S., PA4222
MELCHIO R., PA1260, PA2472
MELDAU R., OA758
MELDRUM C., RCT712
MELDRUM O., PA1113
MELE C., PA868, PA1874
MELÉN E., PA876, PA1754, PA2815, OA2946, PA3231
MELENEVYCH A., PA1670
MELGAARD M., OA145
MELGERT B., PA594
MELGERT B., PA3576
MELHORN J., PA1886
MELHUS H., PA2102
MELI A., OA4406
MELINTE O., PA3928, PA3935
MELIS E., PA3175, PA4307
MELO N., PA444, PA1960, PA1969, PA3427, PA3428, OA3791
MELO-DIAS S., OA746
MELONI F., PA1953, PA3571, OA3659, PA4279, PA4280
MELTENDORF T., PA463, PA1988
MEMIKOĞLU K., PA1065
MEMON A., OA2185
MENCARINI J., PA2628
MENDES A., OA746, PA1281
MENDES F., PA324
MENDES M., PA318, OA807, PA1807
MENDES M., OA806, PA4207
MENDES R., PA323, PA1040, PA3327
MENDES-FERREIRA P., PA4140
MÉNDEZ A., PA356
MÉNDEZ C., PA4025, OA4408
MENDEZ R., PA4038
MÉNDEZ GONZÁLEZ L., PA202, PA410
MÉNDEZ MANGAS L., PA499, PA2434
MENDEZ-BREA P., PA1335, PA1686, OA2202
MENDILUCE L., PA2773, PA4245
MENDOZA G., OA789
MENDOZA N., PA1268, PA2792
MENDOZA ALARCÓN M., PA564
MENDOZA BARCO N., PA4127
MENDRONI JÚNIOR A., PA2797, PA4065, PA4282
MENDU M., PA3479
MENEGAS D., PA4025, OA4408
MENÉNDEZ R., PA376, PA2802, PA4038, PA4283
MENÉNDEZ LOBO A., PA3180, PA3252
MENÉNDEZ-LOBO A., PA2138, PA2399, PA3919, PA4243
MENEZES D., OA763
MENEZES T., PA520, PA3850
MENG F., PA3943
MENOTTI J., PA3301
MENTASTI O., PA887
MENTZER A., PA1886
MENZEL M., PA926, OA2253, PA3157
MENZIES GOW A., PA1330
MENZIES-GOW A., PA890, PA914, OA2251, PA3209, PA3212, OA3670, OA3676, OA9002
MEOT M., OA2278
MERAI S., PA534, PA1675, PA2785
MERAL O., PA289
MERCADE J., PA2832
MERCADER-BARCELÓ J., OA3660, PA4131, PA4132
MERCADO SÁNCHEZ A., PA4094
MERCANCI Z., PA2365
MERCIER L., OA3794
MEREDITH O., PA269
MERENKOVA I., PA3439
MERGET R., PA263
MERGHALI A., PA1724
MERGHLI A., PA317
MERHABENE T., PA1057, PA3540
MERIANOS A., PA1327
MERIEM M., PA534, PA1907
MERIKALLIO H., PA3574
MERKL S., PA2593
MERLO C., PA2765
MERL-PHAM J., PA2787, PA4121
MERMIRI D., PA1758
MERRILL C., PA3529
MERSNI M., PA265, PA1067, PA1124
MERTA Z., PA306, OA3758
MERTSCH P., PA2567
MERZOUGUI L., PA3383
MESA LEÓON N., PA4043
MESCHEDE W., OA3784
MESE M., PA3311
MESLIER N., OA2288
MESQUITA R., PA2527
MESSAH A., PA1888
MESSEKHER M., PA4309
MESSER B., PA566
MESSIKA J., OA692
MESSINA E., OA791, PA4005
MESSINGSCHLAGER M., PA1305
MESTIRI T., OA1604, PA1782, PA1792
MESZAROS M., PA3604
METALLIDIS S., PA626
METAN G., PA3537
METAXAS E., PA303, PA310
METE V., PA291
METERAN H., PA3234, PA3612
METERSKY M., OA3749, OA3754
METHERALL P., PA1971
METIN A., PA2501
METIN AKCAN Ö., PA1756
METTANANDA C., PA2600
METTING E., OA1631
METWALLY A., PA2755
METZ B., PA2387, PA3613
MEUNIER P., PA1991, PA2009
MEURICE J., PA2862, OA4443
MEURLING J., PA3333
MEUWISSEN R., PA2055
MEUWLY C., PA3506
MEYER A., OA4443
MEYER A., OA4435
MEYER J., OA1384, PA2646
MEYER M., PA3205
MEYER M., PA1015
MEYER-BAHLBURG A., PA934
MEYER-DUDERSTAEDT T., PA1329
MEYERS D., PA876
MEYS R., PA1221
MEYSMAN M., PA1225
MEZNI F., PA1788
MEZZI K., PA515, PA2414, PA3853, PA3858, PA3859, PA3862, PA3863, PA3864
MHAMDI S., PA155, PA1055, PA1200, PA2094
M'HAMDI S., PA354
MHANNA M., PA4234
MHIRI F., PA1724, PA2713
MHIRI R., OA2191
MIAN A., PA3959
MICELI M., OA2279
MICHAEL H., PA184
MICHAELCHUK W., PA1034, PA3498
MICHAELOUDES C., PA3563
MICHALIKOVÁ B., PA4133
MICHALSEN A., PA509
MICHANIKOU A., PA293, PA1004
MICHEL S., PA3556
MICHEL V., PA4142
MICHEL DE LA ROSA J., PA2140
MICHELI M., PA2454
MICHELIS S., PA303
MICHELLE F., PA184
MICHELLE M., PA3354
MICHELS I., PA1673
MICHELS I., PA1673
MICHIELETTO L., PA2692
MICHILS A., PA3194, PA3608
MICHOS E., PA975
MICIC S., OA1446, OA2947
MICIC# S., PA976
MICIONI L., PA1933
MICKOVSKI I., PA2111
MIDDLETON S., PA875
MIDODZI W., PA2117, PA2411

MIDTVEDT Ø., PA472, PA1961
MIDULLA F., PA1763, PA2450, PA2512
MIEDE C., PA1149, PA1153, OA1449
MIEDEMA J., OA769
MIELNICZUK L., PA4134
MIGHRI I., PA2777, PA2782, PA2783
MIGLIETTA D., PA895, PA3166
MIGLIORI G., PA217, PA887
MIGUEL A., PA544
MIGUEL A., PA2463
MIGUÉNS-SUÁREZ P., PA1686, OA2202
MIGUERES N., PA188, PA263, PA1653
MIHAI A., PA1900, PA3329
MIHAI C., OA1450, PA1952
MIHAICUTA S., PA4299
MIHALTAN F., PA882, PA2397, PA2727, PA3153, PA3207
MIHALTAN F., PA612
MIHELČIĆ D., PA2710
MIHELČIĆ KORTE D., PA3447
MIJAKOSKI D., PA1721
MIKOLKA P., OA2318
MIKOV I., PA4008
MIKUNI H., PA1844
MILADI S., PA1054, PA3342
MILANESE M., PA2017
MILANI G., PA943, PA3925
MILANI L., PA2391
MILANOV V., PA4255
MILARA J., PA4141
MILDE N., PA474, PA1976
MILENKOVIĆ A., PA418, PA421, PA1152, PA3334
MILENKOVIĆ B., PA1110
MILEO V., PA3166
MILGER K., PA936, PA1683, PA1687
MILGER-KNEIDINGER K., PA1678, PA1682, PA2567
MILIAUSKAS S., PA480, PA2618, PA3591, OA4386
MILICEVIC J., OA3731
MILIONIS H., PA4025, OA4408
MILLA C., OA2184, PA3578
MILLÁN P., PA1174
MILLÁN PONS A., PA1184
MILLAN-BILLI P., OA1456
MILLER B., PA1322
MILLER P., PA3246
MILLER R., PA540
MILLQVIST E., PA905
MILLS G., OA1403
MILLS G., PA364
MILMONT C., PA2595
MILNE A., PA1099
MILNE K., PA531
MILNE K., PA4218
MILON A., PA4071
MILONE F., PA1092
MILOTA T., PA2367
MILROSS L., PA2557
MILUTINOV ILIC S., PA1110
MILWARD E., PA922, PA1825
MIN J., OA757
MIN K., PA913, PA3971
MINELLI C., OA3743
MINESHITA M., PA1118
MINGOTE A., PA558
MÍNGUEZ O., OA2282, OA4388
MINIATI M., PA2589
MINISSALE E., PA4192
MINNELLA E., PA2596
MINOV J., PA1721, PA2111
MIO T., PA1898
MIOTTI J., PA3216
MIR M., PA2712
MIRA PADILLA E., PA564
MIRACCO BERLINGIERI G., PA353
MIRANDA M., PA1857
MIRANDA R., PA3912
MIRANDA VALLADARES S., PA4012, OA4425, OA4432
MIRAVITLLES M., PA1278, PA1280, PA2429, PA2430, PA3182
MIRDAMADI M., PA4061
MÍRKA H., PA3412
MIRRA D., OA751, PA4190
MIRZA F., PA4208
MIRZA M., PA1905
MIRZALIEVA G., OA1440, PA2048
MIRZOYAN E., PA3293
MISAWA S., OA4410
MISCETTI F., PA536
MISCH D., PA1925
MISKOWIAK K., PA4191
MISMETTI V., OA3130
MISTIAEN G., PA1842, OA3799
MITAKOS V., OA797
MITAS L., PA306, OA3758
MITCHELL A., PA1757
MITCHELL D., PA1777
MITCHELL L., PA2675
MITCHELL M., OA785
MITCHELL P., PA873
MITCHISON H., OA3751
MITKU A., PA3963
MITRA P., PA1163
MITROU S., PA3539
MITROVIC S., PA1110
MITSI E., PA1123
MITSUHASHI A., PA157
MITTAINE M., OA2916
MITTAK M., OA1383
MITTAL M., PA445
MITTAL S., PA4272
MITTAL S., PA1220, PA2806, OA2902
MITTON C., PA2706
MIULESCU (POPA) A., PA1900
MIURA M., PA3496
MIWA K., OA3132
MIYAMOTO A., PA1168
MIYAMOTO Y., PA4079
MIYASHITA L., PA2481
MIYATA Y., PA1844
MIYAZAKI Y., PA1168
MIZERA J., OA2325
MIZI E., PA3161
MIŽÍKOVÁ I., OA670
MIZOO A., PA3496
MJID M., PA2785
MJID M., PA534, PA1675, PA2458, PA2785, PA3966
MK ROTHMAN A., PA470
MKADDEM S., PA2383, PA3362
MLAKAR P., PA1981
MLIKA ., PA316
MLIKA M., PA1784
MLODAWSKA K., PA1768
MMBAGA B., PA2478
MO J., PA4192
MOATAMERI Z., PA155
MOATEMRI Z., PA1200, PA1856, PA2094
MOCHIZUKI K., OA673, PA1844
MOČNIK T., OA4424
MODENA B., PA2390
MODI M., PA3233, PA3363
MODINA D., PA2380
MODREGO J., PA2602
MODUGNO A., PA1164
MOELLER A., PA1005, PA1013
MOELLER S., OA1446
MOERMANS C., PA886, OA1413, OA1451, PA1681
MOES-SOSNOWSKA J., PA4112
MOETEMRI Z., PA354, PA1055
MOGAL R., PA440, PA1144, PA4168
MOGENSEN I., OA2946
MOGHADAM H., PA944
MOGULKOC N., OA1400, PA2008
MOGULKOC BISHOP N., PA2661
MOHAMAD ISA S., PA3497
MOHAMADY Y., PA1286, PA4265
MOHAMED-HUSSEIN A., PA2601
MOHAMMAD A., PA4294
MOHAMMAD N., PA1011, PA1773
MOHAMMED A., PA1085
MOHAMMED A., PA1190
MOHAMMED E., PA382
MOHAMMED I., PA1081
MOHAN A., PA1220, PA2806, OA2902, PA3170, PA3413
MOHAN RAO N., PA275, PA281, PA979
MOHANTY A., PA338, PA4085
MOHANTY T., PA2833
MOHD HAIRI F., PA1773
MOHD RAZALI M., PA549
MOHEIMANI F., PA1293
MOHMMED IBRAHIM T., PA3153
MOINARD J., PA3944
MOINE E., PA366
MOIRANO G., OA2301
MOISES J., OA3113
MOISIDIS I., PA1328
MOJOLI F., PA1205
MOKADDEM MOHSEN S., OA126, PA4002, PA4217
MOKGOKONG R., OA3129
MOKKADEM S., OA795
MOKRA D., OA2318
MOLA AUSIRÓ A., PA533, PA1071
MOLBERG Ø., PA1961
MOLDOVAN D., PA3532
MOLDVAY J., OA1383
MOLENA B., PA536, PA543
MOLFINO N., PA4313
MOLGAT-SEON Y., PA1232, PA2039
MOLIMARD M., PA1332, PA3944
MOLINA J., PA1648
MOLINA J., PA4192
MOLINA M., PA449, PA1835
MOLINA FERRAGUT L., PA1182
MOLINA MOLINA M., OA1456
MOLINA-MOLINA M., PA1944, PA2585, PA2666, PA2832, OA3660, OA4437
MOLINA-MOLINA* M., PA1147
MOLINA-MOYA B., PA4074
MOLINARI N., PA3147
MOLINERO M., PA4283
MOLINERO GARCÍA M., PA2802
MOLINIER O., PA957
MOLINIER V., PA366, PA371, PA4197, PA4211
MOLINO A., PA361, PA411, PA1954
MOLITORISOVA M., PA4184
MOLLA KAFI H., PA289
MÖLLER A., PA976, PA999, OA1446, OA2947
MØLLER J., OA2907
MØLLER J., PA3441
MØLLER M., RCT716
MØLLER WEINREICH U., PA1641, PA3914, PA3922
MOLLICA J., OA135
MOLONEY E., PA2606
MOLONEY M., PA2736, PA2742
MØLSTED S., PA319
MOLYNEAUX P., OA1393
MOLYNEAUX P., PA3434
MOLYNEAUX P., PA617, OA1389, OA1452, PA1931, OA2942, PA3989
MOLYNEAUX P., PA3416, PA3567
MOLYNEUX P., PA1261
MOMCHILOVIKJ S., PA1872
MOMOSE M., PA1962
MONAGHAN M., PA873
MONASTERIO C., PA3586, PA3597
MONASTERIO* C., PA1147
MONCUNILL G., PA2798
MONCUSÍ A., PA195
MONCUSÍ-MOIX A., OA1437, PA2802, PA4283
MONDESHKI T., PA4292
MONFORTE V., OA689
MONFORTE TORRES V., PA478
MONGODI S., PA1205
MONIAKI V., PA3588, PA4291
MONIOT A., OA3129
MONIZ A., PA2737
MONK P., RCT2884
MONKLEY S., OA2942
MONKS P., PA986
MONNA F., PA1315
MONOGAROVA N., PA3449
MONONEN M., PA3422
MONREAL M., PA1180, PA1181
MONSCH G., PA315
MONSÓ E., PA196
MONTAGNA I., PA3195
MONTALBANO L., PA1693, PA2469
MONTANÉ-MUNTANÉ M., OA4366
MONTANI D., PA524, PA1989, OA2274, OA2280, PA3461, PA4150
MONTANINI B., PA2836
MONTAZERI GHAHJAVERESTAN N., PA877
MONTEAGUDO M., OA2962
MONTEIRO C., PA4207
MONTEIRO J., PA2816
MONTEIRO L., PA3487
MONTEIRO R., PA3487
MONTEIRO CANHOTO D., PA225
MONTEIRO PENAS A., PA3487
MONTELEONE S., PA375
MONTELLANO F., OA4360
MONTERO P., PA4141
MONTERO-ARIAS F., PA2026
MONTES A., OA3660
MONTES DE OCA M., PA2420
MONTES WORBOYS A., PA2832
MONTES-WORBOYS A., PA2666

MONTGOMERY B., PA2670
MONTGOMERY S., OA147
MONTI S., OA2272
MONTIEL PETRY L., PA297, PA3970
MONTÓN SOLER C., PA3403
MONTORO BALLESTEROS F., PA2095
MONTSERRAT M., PA3586
MONTUSCHI P., OA1411
MOODLEY Y., PA163, PA1730
MOOG M., PA4122
MOOIJ - KALVERDA K., PA496
MOOKHERJEE N., PA581, PA591
MOON D., OA2316
MOON J., PA220
MOON J., PA1000
MOON J., PA4325
MOON K., PA2669
MOON S., PA3445
MOOR C., PA1949
MOOR C., OA3789
MOOR C., OA1391
MOOR K., PA3417
MOORE J., PA1889
MOORE N., PA1967
MOORE S., PA4152
MOORE T., PA1889
MOORE T., PA4165
MOORE V., PA251, PA3997
MOOREN K., PA3360
MOR MARTINEZ M., PA2108
MORA R., PA541
MORA ACOSTA S., PA533, PA1071
MORA CUESTA V., PA466, OA690, PA1016
MORA-CUESTA V., PA2789, PA2795, PA2808
MORAES-FERREIRA R., PA2578, OA4362
MORAIS A., PA444, PA1960, PA1969, PA3427, PA3428, OA3791
MORAIS D., PA3487
MORAIS N., PA3541
MORAIS N., PA1801
MORAIS-ALMEIDA M., PA2754
MORALES L., PA3527
MORALES CHACON B., PA4159
MORALES GARCÍA C., PA3340
MORALES GONZALEZ M., PA469
MORALES-GARCÍA C., PA2138, PA2399, PA4243
MORALES-QUINTEROS L., OA3663, PA4266
MORAN E., PA2599
MORAN ARRIBAS S., PA3289
MORAN MACDONALD A., PA2660
MORAN MENDOZA O., PA2660
MORANI C., OA3657
MORAN-MACDONALD A., PA3459
MORAN-MENDOZA O., PA1717, PA2030, PA4218
MORANTE R., OA4415
MORARASU B., PA2606
MORAY A., OA4361
MORBACH C., OA4360
MORBINI P., OA3761
MORCONE M., PA536
MORDACQ C., PA3954
MORDANT P., PA2786, PA4111, PA4120
MORDUE P., PA1804
MORECCHIATO F., PA4232
MOREIRA M., PA3884
MOREIRA T., PA3222
MOREIRA SOUSA D., PA451
MOREL J., PA2393
MORELL GARCIA D., PA1184
MORELLI N., PA2581
MORELOT-PANZINI C., PA3345, PA3350
MORENO A., PA524
MORENO H., PA1259
MORENO T., PA273
MORENO FERNÁNDEZ A., PA863
MORENO MESONES C., PA2466
MORENO-GALDÓ A., OA2912
MORER L., PA2127
MORETTA A., PA4126
MORETTA P., PA361
MORETTINI A., PA4232
MORGAN C., PA1261, OA4437
MORGAN G., PA3946
MORGAN L., OA682
MORGAN M., PA2543
MORGAN S., PA1815, PA2818, PA3899
MORGAN T., OA4424
MORGENSTERN J., PA1937
MORI A., PA917
MORI M., PA4063
MORIANO C., PA1763
MORIARTY E., OA2275
MORICE A., PA905
MORICE A., PA1157, PA3142
MORICE A., PA173, PA177, PA178
MORIKAWA K., PA1118
MORIKI D., PA1769
MORILLO GUERRERO R., PA527, PA1179, PA1346
MORILLO-SORIANO M., OA2912
MORIN L., PA3322
MORIN-THIBAULT L., PA498
MORIO F., PA3301
MORIONDO G., PA4254
MORISHITA M., PA2709
MORISSET J., PA1025, PA3415
MORITA C., PA2709
MORITA S., OA1394
MORIWAKI A., PA1665
MORJARIA J., PA4073
MØRKEBERG NILSSON P., PA561
MORKEM R., PA2742
MORLA O., PA2608
MORLACCHI L., OA3779
MORLEY A., PA1099, PA2452
MORLEY A., OA787
MORLING J., OA798
MORMILE I., PA1954
MORNEX J., OA692, PA2431, PA3406
MORO SIBILOT D., PA4104
MORO-SIBILOT D., PA1926
MOROSINI M., PA3571, PA4279
MOROZ L., PA3840
MOROZUMI N., PA3517
MORRA A., PA2729, PA2734, PA2736, PA2742
MORRA F., PA1258
MORRA S., PA4275
MORRELL N., PA4152
MORRELL N., PA4135
MORRIE E., PA1948
MORRIS A., OA3737, PA4247
MORRIS D., PA4175
MORRIS E., OA2275
MORRIS H., PA1939, PA4018
MORRIS K., RCT2161
MORRIS L., PA281
MORRIS N., OA3106
MORRIS P., PA2767
MORRIS S., PA242
MORRIS T., PA1642, OA3741, PA4059
MORRISON H., PA2706
MORRISON H., PA373
MORRIS-ROSENDAHL ., OA3751
MORROW J., OA4442
MORTAZAVI D., OA3775
MORTENSEN J., PA3341
MORTENSEN M., OA141
MORTENSEN S., PA4221
MORTIMER* K., PA2420
MORTON B., PA1123
MOSCA F., PA3282
MOSCARIELLO M., PA1205
MOSCHOS S., PA4082
MOSCOSO ALTAMIRA G., PA1857
MOSEBACH T., PA1937
MOSER D., PA4075
MOSES R., PA3834
MOSHKELGOSHA S., PA3579
MOSKALENKO S., PA878
MOSLEH B., PA1140
MOSLER G., PA2478
MOSNAIM G., PA3492, PA3493
MOSQUERA R., PA1231
MOSS M., PA2767
MOSSER L., PA957
MOSSEVELD M., PA3855, PA3869
MOSTACCI N., PA1012
MOSTAFA D., PA581
MOSTARD R., OA3789
MOSTEIRO M., PA187
MOSTEIRO-AÑÓN M., PA1686
MOSTOVOY Y., PA2112, PA2113, PA3621, PA3622, PA3907, PA3916, PA4044, PA4045
MOTA G., OA2330, PA2799
MOTA L., PA1166
MOTA P., PA3427, OA3791
MOTAHARI A., PA975
MOTH L., PA3354
MOTOMURA H., PA2656
MOTOS A., PA545, PA2798, PA2802, PA3531
MOTOS A., PA1847, PA4283, OA4406
MOTOS GALERA A., OA3797
MOTTA P., PA4017
MOTTOLA R., PA353
MOTTRAM C., OA125
MOUA T., PA1149
MOUADIL A., PA402
MOUBACHIR H., PA398, PA946, PA1126, PA2556, PA3238, PA3332, PA3940, PA3950
MOUDGIL H., PA2648
MOUHTAR D., PA1938
MOUI A., PA2608
MOULINET T., OA4435
MOUNIÉ M., PA3911
MOURA C., PA3427
MOURA G., PA1281
MOURA M., PA4207
MOURÃO A., PA3487
MOURE A., PA2125
MOURIÑO R., PA3409
MOURVILLIER B., RCT2881
MOUSA M., PA3189
MOUSA M., PA1684
MOUSA N., PA3189
MOUSA N., PA1684
MOUSSA A., PA264
MOUSSA C., PA3390, PA4052
MOUSSA I., PA162, OA795, PA2383, PA2631, PA3362, PA3392
MOUSSA N., PA2735
MOUSSA N., PA2564
MOUTHON L., OA2959
MOVAHEDINIA S., PA859, PA4274
MOVÉRARE R., PA990, PA991
MOXHAM J., PA3508
MOYA CARMONA I., PA2126
MOYA TORRES B., PA1857
MOYNA N., PA2684
MOYSES H., PA3204
MOZÓ M., OA789
MOZUN R., PA999, PA1007
MPHAHLELE R., PA3953
MPOUGA ., PA1098
MRASSI H., OA1604, PA2639
MRAZ T., OA119, PA3990
MRIZAK N., PA264
MSAAD S., PA625, PA2089, PA2096, PA2564, PA2848
MSIHID J., PA3197, PA3209
MSIKA S., PA2439
MUCKENTHALER M., PA471
MUDEDLA R., PA3394
MUDERS M., PA2087
MUDLIAR K., PA3233
MUDWAY I., PA583, PA584
MUDWAY I., PA1000
MUELLER H., PA1935
MUELLER J., PA2048
MUELLER S., PA2088
MUGHAL A., PA1733
MUGINO M., PA1776
MUHAMMAD N., PA1073
MÜHLFELD C., PA2071, PA2839
MUILWIJK D., OA1617
MUIR J., PA359, PA1870
MUISER S., PA3609
MUJAKOVIĆ A., PA2756
MUKASA S., PA1904, PA2088
MUKHERJEE M., PA523, PA1296, OA2201, PA3173, OA3673
MUKHERJEE R., PA563, PA2106, PA4058
MUKHOPADHYAY A., PA3258
MUKHOPADHYAY S., PA876, OA2185
MUKTHAPURAM S., PA3474
MULDERS-MANDERS K., PA4083
MULET ARABI A., PA1201
MULEY M., PA407
MULHOLLAND J., PA388
MULJUKOV O., OA4360
MULLER F., PA4103
MÜLLER J., PA475, PA2680, PA2681, PA2688, PA2689
MÜLLER K., PA1230, PA2582
MÜLLER L., PA1002, PA3569
MULLER Q., PA2060
MÜLLER T., OA2315
MULLER V., PA443, PA479, PA2576, PA2652, PA2661, PA3295, PA3429
MÜLLER-LADNER U., PA472, OA1453
MÜLLEROVÁ H., PA229, PA912, OA1412, PA1642, PA3607, OA3741, PA4059
MULLERPATTAN J., PA3185, PA4095
MÜLLER-QUERNEHIM J., PA3442, OA3784
MÜLLER-REDETZKY H., PA1307
MULLIN A., OA676
MULLOL J., PA2426
MULLOY A., PA531

MULRYAN H., PA2424
MULTANEN J., PA1242, PA2035
MULVANEY E., PA4140
MULVANNY A., PA4317
MULVANY F., PA2647
MUMBY S., PA922
MÜMMLER C., PA1678, PA1687
MUNAWWARAH S., PA4114
MUNCH G., PA4221
MUNCK S., PA4137
MUNDADA V., PA1093
MUNIDASA S., OA1615, PA3473
MUNNÉ M., PA3409
MUNNINGS A., PA2099
MUÑOZ A., PA449
MUÑOZ X., PA263, PA337, PA1718, PA1835, PA2426
MUÑOZ CASTRO G., PA3403
MUÑOZ CORROTO C., PA564
MUÑOZ GALL X., PA250, PA2466
MUÑOZ MÉNDEZ J., PA2859
MUÑOZ RAMIREZ I., PA469, PA2095
MUÑOZ-ESQUERRE M., PA2141
MUÑOZ-PINDADO C., PA3930
MUÑOZ-PINDADO C., PA3930
MUNRO R., OA128, OA1403, PA3891
MUNSHI L., RCT716
MUNSIF M., PA1321
MUNT O., PA2846
MUNTEANU O., PA1267, PA2448, PA3389
MUNTONI F., PA270
MUNUSAMY ., PA2573
MUPAKURA H., PA2739
MURA M., PA3424
MURAKAMI K., PA2791
MURAKAMI M., PA4027
MURALITHARAN P., PA3137, PA3144
MURAOKA H., PA1118
MURATA Y., PA4180
MURGIA N., PA243, PA948, PA3216
MURNANE D., PA2407
MURPHY A., PA4268
MURPHY B., PA3471
MURPHY C., PA3581
MURPHY D., OA2285, OA4441, OA4442
MURPHY D., RCT4446
MURPHY K., PA218
MURPHY P., PA1088, PA1252, PA1655, PA3320, PA3322
MURPHY P., PA2029
MURPHY V., PA891, OA2963, PA3946
MURRAY ., OA141
MURRAY B., PA1150, OA3726, OA3727, OA3733
MURRAY C., PA3274
MURRAY C., PA2486, PA3179, PA3280, PA3956
MURRAY C., PA1738
MURRAY D., PA3182
MURRAY L., OA2942
MURRAY M., OA756, OA1632
MURRAY M., PA3304, PA3309
MURRAY R., PA1330
MURRAY S., PA4252
MURRIS-ESPIN M., OA2916
MURSALOĞLU H., PA2497
MURSIC D., PA2586
MURTHY A., PA2081
MURTHY R., PA408
MURTON M., PA1892
MURUGANANDAN S., PA1199
MUSA A., PA1773
MUSA OBADIA P., PA1725, PA1729
MUSCARÀ M., OA2257
MUSCOGIURI E., OA1401, PA3476
MUSELLA S., PA2577
MUSER J., PA344
MUSGRAVE K., PA3529
MUSHARRAF M., PA386
MUSOVIC S., PA3605
MUSTAFA G., PA3275
MUSTAFA T., PA239, PA1903
MUSTANG A., PA4114
MUSTEIKIENE G., PA2618
MUSTFA N., PA3995
MUTGAN A., PA4149
MUTHAS D., PA1273
MUTHREJA D., PA1995, PA3387
MUTHUKUMAR A., PA2765
MUTTALIF A., PA1219
MUTTOO S., PA1003
MUZYAMBA M., OA763
MWITA I., PA869
MYALL K., PA617, OA1389, PA3333
MYERS J., PA3327, PA4219
MYERSCOUGH C., PA1123
MYERSON J., PA2775
MYKHAILOV V., PA3375
MYRBERG T., PA937
MYRDAL O., PA3525
MYRONENKO O., PA510, PA3836
MYRONENKO O., PA861
N
N TRAN T., PA1330, PA2136
N. CAMARGO L., PA908
N.TRAN T., PA4323
NAAROURA A., PA534, PA2101
NABNEY I., PA2728
NABULSI N., PA3471
NACASCH N., PA1131, PA3339
NACHEGA J., OA2308
NACHTIGALL I., OA2312
NACHUM E., OA1436
NACKAERTS K., OA781
NADA G., PA4040
NADARAJAN P., PA2647
NADEEM I., PA3425, PA3452
NADIA K., PA2098
NADIA M., PA2007
NADIF R., PA252, PA941, OA2302
NADIF* R., PA3250
NAESSÉN T., PA4304
NAFTI S., PA238
NAGAKUMAR P., PA979, PA1046, PA2370, PA2499, PA2516
NAGAO M., PA990, PA991
NAGASE H., PA1344
NAGASHIMA K., PA4268
NAGAYAMA K., PA917
NAGEL C., PA474, PA1976
NAGEL M., PA2023
NAGI S., PA2715, PA2718
NAGPAL P., PA975
NAGTEGAAL M., PA1078
NAGY A., PA2652, PA3295, PA3429
NAGY T., PA443, PA2652, PA3429
NAHAR K., PA4198, PA4199
NAHMIAS D., PA3536
NAHUM U., PA1002, PA1012
NAIA J., PA2642
NAIDOO N., PA1003, PA3963
NAIDU B., PA1795
NAIK S., PA2771, PA2772
NAIK S., PA4095
NAIK V., PA2027
NAIR A., PA1023
NAIR A., PA4239
NAIR H., PA1774
NAIR J., PA2627
NAIR J., PA3533
NAIR P., PA523, PA1296, OA2201, PA3173, OA3673, PA4187
NAIR R., PA199
NAISH J., PA3486
NAITO N., PA2791
NAJAFZADEH S., PA3471
NAKA G., PA2709
NAKAD J., PA1143
NAKAMURA S., PA2067
NAKAMURA Y., PA917
NAKAYAMA M., PA1120
NAKAZAWA S., PA2656
NAKHLI R., PA1067
NAKSHBANDI G., PA1949, PA3417
NALBANT E., PA3150
NAM H., PA4295
NAM J., PA1941
NAM Y., PA4325
NAMBIAR VEETIL N., PA3465, PA4147
NANDI M., PA192
NANGLE L., PA2087
NANÌ M., PA3162
NANJUNDAPPA M., PA3283
NANNINI L., PA3856, PA3867
NANOU V., PA958
NANRI Y., PA3566
NANTANDA R., PA2420
NANZER A., PA3499
NAOUM I., PA3468
NAPOLITANO F., PA4017
NAQIBULLAH M., PA1647
NARAYAN O., PA1093
NARAYANA J., PA1113, PA1878, OA3753
NARAYANAN M., PA1046, PA2503, PA2504
NARCISO M., PA592, PA2052, PA4101
NARCISO M., PA595
NARDELLI P., PA4252
NARDI C., PA442, PA4232
NARDINI S., PA939
NARINE N., PA2700
NARJES A., PA4040
NAROŻNA B., PA294, PA2828, PA3555
NARSAVAGE G., OA3726, OA3727, OA3731
NARUKE M., PA308
NARULA A., PA3924
NARWADE G., PA2002, PA2587
NASARUDDIN M., PA1073
NASCIMENTO K., PA1044
NASCIMENTO SALDIVA P., PA2797, PA4065, PA4282
NASER A., PA3217
NASER A., PA460
NASER J., PA4148
NASEVA E., PA1650
NASH S., PA3197
NASIR B., PA1025
NASIR N., PA1881
NASKA A., PA947
NASR A., PA210
NASR E., PA1210, PA2700
NASR F., PA1143
NASRALLAH N., PA382
NASRI A., PA586, PA2060
NASRI M., PA1780
NASSER M., PA2132, PA2747
NASSERDDINE H., PA1143
NASSIM N., PA349, PA2579, OA4358
NASTASIJEVIĆ BOROVAC D., PA450, PA3376
NASTASTIJEVIC BOROVAC D., PA1852
NATAL R., PA3380, PA4156
NATALIA N., PA184
NATALIJA E., PA184
NATARAJAN S., OA1442
NATARAJAN S., PA2574
NATH S., PA1220
NATHAN N., OA4438
NATHAN S., PA1934, OA2279
NATHAN S., PA1936
NATHWANI V., PA2738, PA4020
NATIONAL COHORT STUDY OF IDIOPATHIC AND HERITABLE PAH ., PA4135
NAUJOKS C., PA3260
NAVA F., PA4236
NAVA G., PA1099, PA2462
NAVA QUIROZ K., PA1963
NAVAJAS D., PA2052, PA4101
NAVARIN S., PA1060
NAVARRA A., PA440, PA1144, PA4168
NAVARRETE ROUCO M., PA2133, PA3871
NAVARRO N., PA1315
NAVARRO CASADO R., PA4235
NAVARRO RODRÍGUEZ M., PA2434
NAVARRO ROLON A., PA3403
NAVARRO-CASADO R., PA4244
NAVAS ACIEN A., PA974
NAVAS OTERO A., PA3356, PA4009
NAVASAKULPONG A., PA2640, OA4440
NAVEED S., PA158
NAWEL C., PA507
NAWIJN M., PA3562
NAWIJN M., PA3561, PA4262
NAWROT T., PA1842, OA3799
NAYA PRIETO A., OA2319
NAYDENSKA S., PA4292
NAYIR BÜYÜKŞAHIN H., PA1771, PA2853, OA4420
NAZ I., PA320, PA329, PA330, PA332, PA333, PA1041, PA1052
NAZ S., PA2024
NAZ ERTÜRK E., PA3437
NAZARETH D., OA2917
NAZARI M., PA2503, PA2504
NAZIR S., PA3408
NAZMUL S., PA898
NAZZAL S., PA3466
NAZZARI E., PA283, OA1619
NDAGIRE P., PA4209
NDALA NYONGONYI A., PA1729
NEAL J., PA511
NEAL M., OA1407
NEDER J., PA2037
NEDER J., PA2030, PA3514, PA4218, PA4224, PA4229, PA4231
NEDER J., PA3313

NEDER J., PA3509, PA3519
NEDERBY L., PA4105
NEDERBY ÖHD J., OA763
NEDESKA MINOVA N., PA2111
NEDOGIBCHENKO N., PA1331
NEEDHAM R., PA2438
NEELAND M., OA1624
NEERINCX A., PA381
NEERINCX A., OA141, OA2949, PA3256, PA3268, PA3548
NEGRI V., OA2940
NEGRU A., PA4299
NEGRU I., PA3972
NEHRIG J., PA172
NEIENS V., PA1937
NEISINGER S., PA2727, PA3153
NEJI H., PA1788
NEJI S., PA4052
NELLGÅRD B., OA3801
NELSON K., RCT716
NEMERY B., PA1725, PA1729, PA1734
NEMETH J., PA2616
NEMSI E., PA3374
NENA E., PA614
NENASHEVA N., PA2397, PA3207
NENNA R., PA1763, PA2450, PA2512
NERI T., OA3657
NERIA F., PA4244
NERPIN E., OA1415
NERPIN E., PA1701
NERY L., PA520, PA3313
NERY T., PA3219
NESCI C., OA121
NESHOVSKA R., PA2111
NESME-MEYER P., PA3890
NESS A., PA2651
NESTOROV H., PA3973
NETEA M., PA4083
NETHERCOTT S., PA274, PA1978
NETO L., PA2463
NETO S., PA1281
NETO GENEROSO L., PA1156
NETWORK INVESTIGATORS T., RCT2886
NEUBERT L., PA1942, PA4277
NEUKIRCH C., PA517
NEUKIRCHEN D., RCT2881
NEUMANN K., PA1818
NEUMANNOVA K., PA3444
NEUMAYER N., PA3867
NEUROHR C., PA936, PA2612, PA3239, PA3240
NEUSTRUP L., PA216
NEVES Â., PA3487
NEVES I., PA3386
NEVES S., PA1171
NEVES V., PA1281
NEVORANEK L., PA3841, PA3849
NEVRLKA J., PA2378
NEVRLKOVA Z., PA2378
NEW B., PA4066
NEW B., PA2610
NEW B., RCT2883
NEWBY C., PA1000
NEWELL JR J., RCT4445
NEWMAN K., PA1939
NEWMAN T., OA1403
NEWNHAM M., PA3917
NEWTON C., PA2662
NEYMEYER M., PA521
NEYRINCK A., PA1020
NEYRINCK A., OA687, PA1021, PA1030
NG C., OA1618
NG E., PA1773
NG J., PA241, PA955
NG K., OA2958
NG K., PA423, OA761
NG W., PA3419
NG W., PA388
NG W., PA1773
NG Y., PA1656
NGO D., PA4263
NGO D., OA2963
NGO O., PA3412, PA3845
NGO T., PA3592
NGOCHO J., PA2478
NGUTUKA M., PA253
NGUYEN C., PA2765
NGUYEN H., OA2258
NGUYEN J., PA2462
NGUYEN L., PA3944
NGUYEN R., PA2103
NGUYEN T., OA2949
NGUYEN T., PA2599
NGUYEN T., PA3530
NGUYEN-BICH H., PA3266
NGUYEN-NGOC-QUYNH L., PA3266
NHEMACHENA M., PA2739
NIARRA R., PA1332
NIAZI M., PA3484
NIAZI M., PA1145
NIBHANI R., PA4135
NICASTRO C., PA2804
NICHOL K., PA1821, PA1825
NICHOLAS A., PA4115
NICHOLAS M., OA1432, OA1433, OA1434, OA3108
NICHOLAS R., OA4367
NICHOLAS V., PA1261
NICHOLSON B., PA2850
NICHOLSON D., PA2850
NICHOLSON T., OA2919
NICHSOLSON T., PA1141
NICKOL A., PA2099
NICKOL A., OA4365
NICOL L., PA4117
NICOLAOU L., OA2960
NICOLINI G., PA3562
NICOLIS M., PA243
NIE M., PA919
NIE S., PA198
NIE W., PA2615
NIE Z., PA3901
NIELSCH U., PA4123
NIELSEN A., PA3223
NIELSEN E., PA2102
NIELSEN K., OA4419
NIELSEN R., PA1089, PA1300, PA1698, PA2809, PA3229, PA4251
NIEMINEN K., PA247
NIEPEL M., PA4192
NIERI D., OA3657
NIETO A., PA1648
NIETO C., PA356
NIETO FONTARIGO J., PA3157
NIETO ROYO R., PA1107, PA1346
NIETO-FONTARIGO J., PA1686, OA2202, OA2253, PA3960
NIETO-FONTARIGO J., PA926
NIEUWENHUIJSEN M., PA2484
NIEVES SALCEDA J., PA3518
NIEZEN A., PA1185
NIGLAS M., PA2672
NIHR BIORESOURCE - RARE DISEASES ., PA4135
NIIMURA T., PA2791
NIJNATTEN J., PA2069
NIKA A., PA350
NIKOLAIDIS P., PA3587
NIKOLAOS L., PA184
NIKOLAY P., PA184
NIKOLIC M., PA1290
NIKOLOPOULOS G., PA293
NIKOLOPOULOS I., PA958
NIKOLOPOULOS P., PA958
NIKOLOUZAKIS T., PA4082
NIKOLOVA M., PA3200
NIKOLOVA S., PA4031
NIKOLOVA GLOGOVSKA P., PA857
NILIUS G., PA214
NILLIUS G., PA1287
NILSEN K., PA3475
NILSSON B., PA928
NILSSON G., PA919
NILSSON P., PA1701
NILSSON U., PA244, PA1708, OA3736
NILSSON EKDAHL K., PA928
NIMBALKAR N., PA1995
NINA L., PA2612
NINABER D., PA582, PA1291
NINABER M., PA2694
NINABER M., OA769
NION N., PA3350
NISHI T., PA3496
NISHIMURA K., PA4063
NISHINE H., PA1118
NISHIOKA Y., PA157, OA1394, PA2791
NISHIYAMA A., PA465
NISHIYAMA K., PA1118
NISHIYAMA V., PA2375
NISSANKA W., PA528
NISSENBAUM C., PA2486, PA3280
NISSEN-KRATZERT A., PA1012
NITHTHIYANANDAN D., PA2494
NITSCHE C., PA3948
NITU F., PA1900, PA3329
NIVEN D., PA557
NIVEN D., RCT716
NIVENS C., PA4262
NIVENS M., PA3198
NIXON A., OA4367
NIXON J., PA1081
NIXON J., PA2648
NIYOMTHONG P., OA2268
NJOCK M., OA1451
NKOMO S., PA2739
NOBLE P., PA1933
NOCENT C., PA3944
NODA K., PA4079
NOËL F., PA1106
NOEL S., PA1227
NOËL-SAVINA E., PA1193
NOGA O., PA521
NOGUCHI Y., PA2644
NOGUEIRA C., PA1171
NOGUEIRA F., PA1061
NOGUEIRA I., OA2262
NOGUEIRA P., PA2461
NOHRA C., OA685, OA3112, PA3423, PA3515
NOKIHARA H., PA157
NOKIN M., PA575
NOLAN C., PA1858, PA1859, PA1868, PA3989
NOLASCO S., PA4324
NOLDEN M., PA3888
NOORDUYN S., OA4377
NOORDUYN S., PA2123, PA2128, PA2129
NOORT B., OA1631
NORAJITRA T., PA3888
NORDANG L., PA1043
NORDESTGAARD B., PA249, PA897
NORDESTGAARD B., PA3921, PA4264
NORDLIN A., PA1803
NORDLUND B., OA140, OA141, PA224, PA1233
NORDON C., PA229, OA3741
NORDON-CRAFT A., PA2767
NORDQUIST T., PA1218
NORET C., PA3301
NØRHOLM V., OA4427
NORIYAMA K., PA2067
NORMAN P., PA2729, PA2734
NORMAND K., PA2757
NOROC E., PA4093
NORQUAY G., OA128, OA1403, PA3891
NORRIE J., PA2028, OA4380
NORTHEY S., PA2810
NOSETTI L., PA1763
NOSOTTI M., OA3779
NOSSENT E., OA2313
NOUAILLES G., PA1830
NOUIRA I., PA2383
NOUIRA I., PA1909, PA1912
NOUIRA M., PA2575
NOULIN N., PA4064
NOVAIS BASTOS H., OA3791
NOVAIS E BASTOS H., PA2699
NOVAIS-BASTOS H., PA444, PA1960, PA1969, PA2641, PA3428
NOVÁK Z., PA1236, PA1241
NOVAKOV I., PA1084
NOVAKOVA P., PA1084, PA1343
NOVAKOVA S., PA1343
NOVALI M., OA2906
NOVELLI F., PA1206
NOVELLI L., PA553, PA554, PA2778
NOVIKOVA M., PA3174
NOVO T., PA325
NOWAK A., PA2541
NOWAK B., PA3158
NOWAK D., PA2593
NOWAKOWSKA J., PA580, PA3557
NOWÉ V., PA1734
NOWICKI M., PA1894
NOWOSINSKA E., PA302
NOYA R., PA2707, PA4163
NOZZOLI C., PA4232
NTAKOULA M., PA2389
NTONTSI P., PA3369
NUCERA F., OA1414, PA3873
NUDO E., OA748, PA3855
NUDO E., PA3869
NUESSLEIN T., OA4417
NUKIWA T., OA1394
NUMBERE B., PA200, PA2110
NUNES A., PA415, PA431, PA615
NUNES H., PA524, OA1454, OA2314, PA2747, OA2959, OA3786, OA4438, OA4443
NUNES I., PA2754
NUNES DUARTE NETO A., PA2797, PA4065, PA4282
NUNES SILVA C., PA3379
NUÑEZ A., PA3409
NUNEZ C., PA973
NUNEZ C., PA1658, PA1659
NÚÑEZ I., OA666
NUÑEZ M., PA2460
NUÑEZ ARES A., PA2691, PA4159
NÚÑEZ GARCÍA L., PA2015
NUÑEZ OLLERO M., PA4022
NUÑEZ PALOMO S., PA501
NUÑEZ ROBAINAS A., PA385
NÚÑEZ SÁNCHEZ B., PA1184
NUNOMURA S.,

PA3566
NURMI H., PA3422
NUTTALL A., PA2396
NUTTALL A., PA2386
NWARU B., PA953, PA1063
NWARU B., PA1062, PA1064, PA3331
NWARU B., PA943, PA3925
NWOKORO C., PA3151, PA3287
NWOSU N., PA365, PA3357
NWOZOR K., PA2075
NYASSI S., PA943, PA3925
NYBERG A., PA335, OA803, PA1800, RCT2160, OA3118
NYBERG F., PA1644, PA3614
NYGREN-BONNIER M., PA2535
NYMAND S., PA4221
NYONGONI A., PA1725
NYONI E., PA2739
NYRÉN S., PA1146
NYS J., OA2938, PA4310
NYUNOYA T., RCT712
O
O BRIEN H., PA3309
O. ABDEL AZIZ M., PA858
O'BYRNE P., PA935
O'NEAL W., PA911
OAG S., PA610
OANCEA C., PA3193
OBAN N., PA3151
OBATA R., PA1256
O'BEIRNE S., PA1215
OBERG L., PA1273
OBERNDORFER F., OA1383
OBESO A., OA4390
OBMINSKI C., PA174
OBRADOR A., PA4106
OBYRNE P., PA174
O'BYRNE P., PA3900
O'BYRNE P., PA579, PA896, PA898, PA933, OA2203, OA3673
OCAK E., PA282, PA1756, PA1759, PA2501
ÖCAL DEMIR S., PA1756
OCALAN M., PA577, OA2188
OCALLAGHAN M., OA4442
O'CALLAGHAN M., OA4441
O'CALLAGHAN M., PA3286
O'CARROLL O., OA2919
OCCHIPINTI M., OA1402
OCHI Y., PA2656
OCHMAN M., PA1033
OCHOA-GONDAR O., PA1121, PA2366, PA2457
OCHOA-GUTIERREZ D., PA1335
OCHOA-RUIZ A., PA339
O'CONNELL F., PA2647
O'CONNELL M., PA896
O'CONNOR A., PA873
O'CONNOR O., PA1967
O'CONNOR R., PA3581
O'CONNOR-MCCOURT M., PA4146
O'DAY J., PA621
O'DEA K., PA4273
ODOBASIC PALKOVIC T., OA3731
O'DONNELL C., OA2285, OA4385
O'DONNELL D., PA2037
O'DONNELL D., PA1232, PA2030, PA2039, PA3514, PA4218, PA4224, PA4229, PA4230, PA4231
O'DONNELL S., PA4077
O'DONNELL S., PA2550, PA2753
ODOU M., PA1278, PA1280
ODQVIST L., OA3655
OELSNER E., PA974
OESLNER E., PA248
OESTREICH M., OA1447, PA2492
OEZKAN F., PA2701
O'FARRELL R., PA3419
OFENHEIMER A., OA119, PA237, PA1661, PA1700, OA2304, PA2442, PA3990, PA4053
OFFER E., PA453
OFIR N., PA3513
OGAN N., OA1628, PA3848
OGASAWARA K., PA1120
OGATA H., PA1665
OGAWA H., PA2791
OGAWA T., PA3560
OGGER P., PA579
OGINO H., PA157
OGLESBY I., PA2059, PA2061
OGURA T., OA1394
OGURA T., PA1168
OGUZ B., PA2502, OA4420
OĞUZ G., OA3730
OH D., PA1027
OH J., PA3971
OH J., PA3426
OHANA M., PA188
OHAR J., PA2121
O'HARA G., PA1209
OHKUBO H., OA1394
OHNE Y., OA2940
OHTA S., PA611, OA673, PA1844, PA1887
OHTOMO T., PA917
OHTOMO-ABE A., PA917
OHUE R., PA4298
OHURA N., PA3517
OI H., PA2644
OI I., PA1898
OIKAWA S., PA4298
OISHI K., PA4180
OJANGUREN Í., PA250, PA1718
OJEDA CASTILLEJO E., PA569
OJUAWO O., PA1905
OKAMOTO H., PA4027
OKAMOTO M., PA1149, OA1454
O'KANE C., OA3658
OKAYA T., PA465
OKAZAKI T., PA1844
OKOH M., PA389
OKORIE M., PA2775
OKOSHI M., OA2330
OKOYE G., PA3283
OKTABIANNOBEL J., PA1888
OKTAVIAN T., PA1070
OKTEM S., PA277, PA1756
OKUDA R., OA1394
OLAF B., OA794
OLAGUIBEL J., PA876, PA2426
OLANIYI J., PA873
OLAVE M., PA3536
OLAYINKA-AMAO O., PA3260
OLBRICH H., PA2053, PA2845, PA3404
OLCAY S., OA4361
OLDHAM J., PA3416
OLDMEADOW C., PA3946
OLEA E., OA4390
OLEJNICKA B., PA1645
OLGUN Ş., PA619
OLGUN YILDIZELI Ş., PA336, PA618, PA2365, PA3545
OLHA S., PA1977
OLIN A., PA903, PA928, OA1415, OA3107, OA3801
OLISLAGERS V., PA4275
OLIVA A., PA1197
OLIVA F., PA217, PA887
OLIVA J., PA1648
OLIVA J., OA3780
OLIVA RAMOS A., PA1663
OLIVARES Á., PA3998
OLIVEIRA A., OA800, PA1034, PA2744, PA4161
OLIVEIRA A., PA3912
OLIVEIRA C., PA1980
OLIVEIRA K., OA2323
OLIVEIRA L., OA2330
OLIVEIRA L., OA2205
OLIVEIRA L., PA3222
OLIVEIRA R., OA2276
OLIVEIRA R., PA3487
OLIVEIRA T., PA525
OLIVEIRA JÁCOME C., PA2737, PA3487, PA3503
OLIVEIRA LIMA P., PA2465
OLIVEIRA PINTO M., PA3296
OLIVER A., OA752
OLIVER B., PA1279, PA2073, PA4246
OLIVER J., PA2452, PA2462
OLIVER K., OA794
OLIVER N., PA366
OLIVIA F., PA184
OLIVIERI M., PA243
OLIVIERO G., PA2635
OLIVOTTO I., PA2762
OLLER H., PA1002
OLLERSTAM A., PA610
OLM F., OA1379, OA2267
OLMER R., OA667
OLMOS A., PA3536
O'LOGHLIN R., PA2424
OLOO M., PA2088
OLSCHEWSKI A., PA4149
OLSCHEWSKI H., PA477, OA2276, PA3462, PA4136
OLSON L., OA3758
OLSSON H., PA928
OLSSON K., PA1975
OLSSON K., PA463, PA1988, OA2271
OLSSON L., PA605, PA2077
OLSSON LINDVALL M., PA610
OLVERA N., PA1268
OLVERA LLERA P., PA486
OLVERA OCAÑA N., OA666
OLWILL S., PA1937
OLWILL S., PA3568
O'MAHONY A., PA1967
O'MAHONY A., OA2285
OMAIR A., PA616
OMAR ABDELAZIZ A., PA858
OMARJEE A., PA3154
OMARJEE B., PA2010, PA3154
OMLOR A., PA4062
OMONY J., PA988, PA3948
OMRAN H., PA291, PA2053, PA2845, PA3404, OA4417
OMRANE A., PA266
OMRANE L., PA2785
ÖMÜR C., PA336
ON BEHALF OF GLIMP INVESTIGATORS .., PA2114
ON BEHALF OF LEUVEN PULMONARY REHABILITATION TEAM UZ LEUVEN .., OA804
ON BEHALF OF THE EARLYFOOD COLLABORATIVE GROUP .., PA2469
ON BEHALF OF THE PHOSP CONSORTIUM +., PA2580
ON BEHALF OF THE RESPIRE COLLABORATORS R., PA503
ON BEHALF OF THE U-BIOPRED STUDY GROUP ,., OA1411
ON BEHALF OF THE U-BIOPRED STUDY GROUP) (., PA1337
ÖNAL P., PA1756
ONAY H., PA2093
ONAY Z., PA277
ONCHIRI F., OA2307
ÖNDER R., PA2047
ÖNDER S., PA439
ONEA L., PA3389
O'NEAL W., PA4263
O'NEILL L., PA578
O'NEILL R., PA3484, PA4240
ÖNEŞ T., PA2607
ONETA O., OA3761
ONG K., PA3192
ONG R., PA2675, PA2676
ONG V., OA1452
ONG Y., PA874, PA3338
ONG-CABRERA G., PA541, PA4200
ONGENA K., PA2449
ONG-SALVADOR R., OA1609
ONN A., OA1436, PA2696
ONNIS C., RCT2162
ONURSAL C., PA4121
OOI N., PA2573
OOMMEN R., PA2833
OOSTERHOFF L., PA2057
OOSTERHOLT S., PA4185
OPENSHAW P., PA1306
OPIMAKH S., PA878
OPITZ I., PA315, PA1781, PA3451, PA3455
OPLETALOVA I., PA3841
OPPELT T., PA1893
OPPENHEIMER J., PA1344
ORA J., PA529, PA2044, PA2122, PA3175, PA4307
ORABI M., PA3217
ORACH J., PA591
ORACZEWSKA A., PA548
ORANGER M., OA663, PA1317
ORBAN N., PA3287
ÖRBOM A., PA2077
ORDEN M., PA541
ORDIN B., OA2265
ORDOÑEZ SAEZ O., PA3289
OREA TEJADA A., PA2549
OREA TEJEDA A., PA2551, PA2552
OREA-TEJEDA A., PA864, PA1222, PA2042, PA2544, PA2546, PA2547, PA3526, PA3837, PA4281
O'REILLY E., PA2704
O'REILLY E., PA2703
O'REILLY R., PA2856
OREJAS J., OA3755
ORENGO J., PA2797, PA4065, PA4268, PA4282
ORFANOS S., PA3528
ORHU-MELANDER M., PA1701
ORINI M., PA1955
O'RIORDAN F., PA1692
O'RIORDRAN F., PA2403
ORLANDI R., OA784
ORLANDO A., PA1205
ORLITOVA M., PA1021, OA3793
ORLOWSKI T., PA1920, PA4112
ORME M., PA1804, PA2422
ORME M., PA3363
ORME M., PA4209
ORNOWSKA M., OA1432, OA1433, OA1434, OA3108
OROZCO L., PA2532
OROZCO MEJIA L., PA1231, PA4212

OROZCO-BERSOZA L., PA2046
OROZCO-GUTIERREZ J., PA864
OROZCO-LEVI M., PA467, PA1972, PA1984, PA1987, PA2674
OROZCO-LEVY M., PA1266
ORPHEU G., PA2440
ORR M., PA1889
ORRILLO V., OA1630
ORRIOLS R., PA1183
ORRIOLS MARTÍNEZ R., PA414, PA1059
ORRIOLS TORRAS G., PA1278, PA1280
ORRU H., PA3221
ORRÙ M., PA1060
ORSI F., PA255
ORSI L., PA253
ORSI* L., PA3250
ORTE CANO C., PA4275
ORTEGA D., PA1269
ORTEGA V., PA4263
ORTEGA V., PA2121
ORTEGA FRAILE M., PA1115, PA4233, PA4235
ORTEGA-FRAILE M., PA4244
ORTEGA-HERNÁNDEZ A., PA2602
ORTEGA-MARTÍNEZ A., PA1284
ORTEMENKA Y., PA3273
ORTIZ I., PA2590
ORTIZ DE URBINA B., PA1910
ORTIZ LAZA N., PA1319, PA1910
ORTIZ RUBIO A., PA1924, PA3358
ORTIZ-SANTAMARIA V., OA1453
ORTMANNS G., PA1031
ORTON C., PA869, PA2066, OA2322, RCT2882, PA4172
Ø
ØRTS L., PA3255, OA4373
O
ORUC Y., PA289
OSADNIK C., PA1213
OSAROGUE A., PA3926
OSCANOA P., PA3395
OSCANOA HUAMÁN P., PA4013
OSCULLO G., PA1180
OSCULLO YEPEZ G., PA4287
OSEI E., PA2050, PA2084
O'SHEA D., OA2285
OSHLACK A., OA1624
OSIPOV T., PA2634, PA3226
OSMAN L., PA3320
OSMONBEKOVA N., OA1440
OSORIO CHÁVEZ J., OA690, PA1016
OSSANDON E., PA1255
OSTER J., PA1335
Ø
ØSTERGAARD E., PA216
O
OSTERMANN L., PA1818
ÖSTGREN C., PA3923
ÖSTLING J., PA903, PA928
OSTOLIN T., PA2733
OSTRIDGE K., PA1273, OA2939, OA3109
OSTROVSKA K., PA2115
OSTROVSKYY M., PA2115, PA2803
O'SULLIVAN C., PA3475
O'SULLIVAN G., PA1150
OTA H., PA3515
OTA-ARAKAKI J., PA520
OTAHAL P., PA163, PA1730
OTAKI H., PA929
OTERO J., PA592, PA596, PA608
OTERO J., PA595, PA3395, PA4101
OTERO GONZALEZ I., PA2686
OTHAYAMOORTHY T., PA1011
O'TOOLE D., PA1826, PA1832, PA2843
O'TOOLE D., OA4441
OTRANTO A., PA3300
OTSUKA K., PA157
OTTAS A., PA4301
OTTAVIANI S., PA1278, PA1280, PA2431, PA4248
OTTENHEIJM C., PA1091, PA1198
OTTEWILL C., PA2647
OTTO K., PA2670
OTTOSSON T., OA2940, PA3567
OUAALAYA E., PA1001, PA3890, PA3944
OUAHCHI Y., PA424, PA534, PA1675, PA2785
OUALI S., PA390, PA3385
OUCHEN F., PA304
OUD K., PA2402
OUDE NIJEWEME -
D'HOLLOSY W., PA2553
OUDIN A., PA956, OA1415, PA3221
OUDKERK M., PA1186
OUERGHI ., PA1785
OUERGHI S., PA314, PA316, PA1783, PA1784, PA1788, PA1794
OUERTANI H., PA1105
OULAHBIB A., PA2556
OUTH R., OA4435
OVADIA D., PA1024
OVCHARENKO I., PA2622
OVERED-SAYER C., OA2942, PA3585
OVERHEUL G., PA4083
OVERTON C., PA2584, PA3365
OVESEN S., OA2901
OVESNA P., PA2661
OWEN R., PA4202
OWENS L., PA949
OWLES H., OA135
OYAGÜEZ I., PA2137
OYAMA S., OA4410
OYAMADA Y., OA1394
OYARZÚN AGUIRRE I., PA1857
OYET A., PA2117
OYHAMBURU P., PA1239
ÖZ M., PA1065, PA1251, PA3190
OZAKI M., PA2061
OZAKI R., PA157
OZBAYOGLU A., PA2731
ÖZCAN ., PA2500
OZCAN B., OA4385
ÖZCAN G., PA282, PA296, PA2496, PA3290, PA3521, PA3929
OZCAN KAHRAMAN B., PA3311
ÖZÇELIK N., PA446, PA447, PA3244
ÖZÇELIK U., PA282, PA296, PA1771, PA2025, OA2306, PA2496, PA2500, PA2502, PA2853, PA3980, OA4420
ÖZDEMIR A., PA282, PA296, PA2496, PA2500
OZDEMIR KUMBASAR O., PA153, PA1065, OA1627, PA2731
OZDEN SERTCELIK U., PA154, PA3244
ÖZDOĞAN Ş., PA282, PA296, PA2496, PA2500
OZEN H., PA3290
ÖZER KAYA D., PA329, PA330
OZGEN C., PA3315
ÖZGÜR S., OA2265
OZIER A., PA3944
ÖZKAN TABAKÇI S., PA1756, PA1759, PA2496, PA2501
OZKAYA PARLAKAY A., PA1896
OZKINAY F., PA2093
OZKUL A., PA2716, PA3846
ÖZMEN I., OA4361
OZMEN K., OA1605
OZMERT E., PA2025
OZOH O., PA2420
OZONOVA A., PA2048
OZSANCAK A., PA3148
OZSANCAK UGURLU A., PA2716, PA3846
OZSEZEN B., PA1771, OA4420
ÖZTAŞ R., PA3153
ÖZTAŞ KARA R., PA2727
ÖZTÜRK G., PA282, PA2496, PA2500
OZTURK G., PA3985
OZTURK N., PA289
P
P. VIEIRA R., PA1288
P.C. KEMNER - VAN DE CORPUT M., PA1671
PA M., PA4036
PAABY J., OA770
PABARY R., OA4437
PABLOS J., OA4415
PABÓN A., PA1266, PA1984
PACCAGNELLA E., PA268
PACE E., PA189, PA438, PA2840, PA3898
PACHECO E., PA2460
PACHECO M., PA467, PA1972, PA1984, PA1987
PACHÉCO Y., PA3446
PACHECO DA SILVA E., PA252, PA253, PA255
PACHECO GALLEGO M., PA2374
PACHECO PEREIRA M., PA3595, PA4214
PAČIĆ A., PA4072
PACIÊNCIA I., PA258, PA2476
PACIOREK M., PA532, PA3838
PACKER R., OA3737, PA4247
PADASHETTI V., PA4036
PADAWER D., PA1127
PADEN H., PA1933
PADGET K., PA2041
PADILHA J., OA3727
PADILHA M., OA3726, OA4429, OA4431
PADILLA A., PA2137
PADILLA GALO A., PA2126, PA2140
PADILLA-GALO A., PA4187
PADÍN PICO G., PA1019, PA1029, PA3297
PADLEY S., PA1261
PADMANABAN V., OA135, PA3354
PADMANABHAN N., PA1085
PADMINDRA P., PA4155
PADOVANI R., PA2733
PADRA M., PA3574
PADRÃO E., PA2642
PADRIN Y., PA2814
PADRONES SÁNCHEZ S., PA2434
PAEPS F., PA2449
PAES D' ASSUMPÇÃO VITAL I., PA3319
PAFF T., PA381
PAGAN L., OA2330, PA2799
PAGANI M., PA4280
PAGE C., PA2838, PA4178
PAGET C., PA1817, PA1829
PAGKRATIS K., PA437, PA2613
PAGLIARA F., OA4406
PAGLIARO M., PA2840
PAGLOU M., OA682
PAGNINI F., PA2538
PAGNUCCI N., PA4017
PAGNUCO T., OA135
PAILLASSEUR J., PA3890
PAINE R., PA2121
PAINE III R., PA911
PAIOLI D., PA1211
PAIVA R., PA1009
PAIVA R., PA3502
PAIXÃO C., OA807, PA1807
PAKHARE A., PA1312
PAKU S., OA1383
PAKZAD A., OA1400, PA2008
PALACIONYTE J., PA2820, PA2821, PA2822, PA2823, PA2824, PA3207
PALACIOS-GOMEZ L., OA1415
PALAÇIOS-RODRÍGUEZ Y., PA2801
PALADINI P., PA299, PA3299, PA3300
PALAGA T., PA583, PA584
PALANGE P., OA791, PA2398, PA3149, PA3215, PA4005, PA4320
PALANISAMI T., OA2963
PALANIYAPPAN N., OA1618
PALAS E., PA565
PALENCAROVA J., PA4184
PALIĆ R., OA3731
PALII I., PA3972
PALLESCHI A., OA3779
PALM A., PA211, PA2016, OA2290, PA3589, PA3593
PALM J., PA509
PALM Ø., PA1961
PALMA L., PA1066
PALMBERG L., PA589, OA2946, PA3231
PALMER A., PA163, PA1730
PALMER C., OA2185
PALMER C., PA876
PALMER E., PA3429
PALMER E., PA1808
PALMER O., OA2315
PALMER SANCHO J., PA1184
PALMIERI F., PA2609
PALMIOTTO G., OA2906
PALOMARES T., PA1992
PALOMARES GRACIA O., PA921
PALOMEQUE A., PA545, PA1847, PA3395
PALOMEQUE A., PA2798
PALOMEQUE C., PA3381
PALOMEQUE FLORES A., PA3531, PA4013
PALOMO M., OA3120
PALOU J., PA2719
PALS G., PA381
PALUCH J., PA995
PALUCH-STACHOWICZ A., PA482
PALUMBO M., PA1196
PAN S., PA2621
PANAGIOTIDOU E., PA626
PANAGIOTOU P., OA4437
PANAIOTOV S., PA4255
PANAIT E., PA2589
PANCANI R., PA2454
PANCERA S., OA137
PANCHAL R., PA432, PA4166
PANCHANA LASCANO M., PA2727
PANCHEVA R., PA3833
PANCINI L., PA413
PANDEY A., PA1711
PANDI A., PA2613

PANDIT-ABID N., PA3210, PA3212, OA3672, OA3675, PA4321
PANDOLFI L., PA3571, OA3659, PA4279
PANDYA H., PA3201
PANEBIANCO V., OA791, PA4005
PANEPINTO D., PA1702
PANERONI M., PA331, PA369, PA370, OA4359
PANG Y., OA671, PA3499
PANG Y., PA1716, PA3366
PANG Y., PA2573, PA3366
PANGENI R., PA3258
PANICKER P., PA4073
PANKOW J., PA248
PANKOW J., PA975
PANNETIER C., PA2711
PANOU V., OA770, PA2036
PANT P., PA3367
PANT R., PA3407
PANTAVOU K., PA293
PANTEA V., PA4030
PANTELI L., PA1328
PANTIN T., PA890, PA1334, PA2033
PANWAR S., PA2740
PANZA L., OA791
PAO C., PA3151, PA3287
PAOLA S., OA794
PAPA A., PA361
PAPACHATZOPOULOU E., PA894
PAPADAKI G., PA894, PA2431
PAPADEMETRIOU D., PA1256
PAPADOPOULOS N., PA1707, PA1713, PA3264
PAPADOPOULOS N., PA3267
PAPADOPOULOU A., PA1758
PAPADOPOULOU E., PA2116, PA2120
PAPAEVANGELOU V., PA2431, OA4437
PAPAGEORGIOU L., OA4408
PAPAGIANNIS D., PA1192
PAPAGIANNOPOULOS C., PA227
PAPAIOANNOU A., PA894, PA1840
PAPAIOANNOU A., PA2431, OA4437
PAPAIOANNOU A., PA2389
PAPAIOANNOU I., OA797
PAPAIOANNOU N., PA2604
PAPAIOANNOU O., PA1098, PA1128, PA2655, PA4129
PAPAKONSTANTINOU E., PA191, PA1299, PA1301, OA9001
PAPAKONSTANTINOU M., PA1769, PA2511
PAPAKOSTA D., PA2389, PA2431
PAPALEXATOS D., PA1128, PA2655
PAPAMATHEAKIS D., OA3131, PA3456
PAPANICOLAOU M., PA2073
PAPANIKOLAOU I., PA2431, PA2613, PA2655
PAPANIKOLAOU I., PA437
PAPANIKOLAOU I., PA2389
PAPAPETROPOULOS A., PA3161
PAPAPORFYRIOU A., PA894, PA2389
PAPAPORPHYRIOU A., PA2697
PAPAPOSTOLOU G., PA210
PAPASOTIROPOULOS T., PA3451
PAPATHANASIOU I., PA1192
PAPATHEODOROU S., PA1004
PAPAYIANNI E., OA797
PAPE T., PA2078
PAPI A., PA3562
PAPI A., RCT714, OA748, OA1412, PA2597, PA3210, PA3348, PA3607, PA4178, PA4321
PAPIRIS S., PA947
PAPIRIS S., PA2655, PA4129
PAPIRIS S., PA894, PA1840, PA2431, OA4437
PAPIRIS S., PA2389
PAPON J., OA2306, PA3980
PAPPA S., PA362, PA3926
PAPPACENA S., PA553, PA554, PA2778
PAPPAS A., PA350
PAPPE E., PA1668
PAPPISCH J., PA1135, PA2646
PAPY D., OA663
PARADIS B., PA3620
PARADISO R., PA3502
PARALES R., PA1259
PARAMEYONG A., PA2530
PARANICOVA I., PA550
PARASURAMAN S., PA4192
PARATI G., OA2291, PA2861
PARAZZINI E., PA2766
PARE G., PA1296
PAREDES R., PA4037
PAREDI P., PA4314
PAREKH D., PA1795, PA1947, PA2825, OA3778, OA4411
PARENT C., PA1817
PARHAR K., RCT716
PARHAR K., PA557
PARIS C., PA255, PA267
PARK C., PA1341, PA4325
PARK D., PA463, PA1975, PA1988, OA2271
PARK D., PA3889
PARK H., PA180, PA4325
PARK H., OA2207
PARK H., PA1923, PA3611
PARK H., PA4325
PARK J., PA3141
PARK M., PA1941
PARK M., PA4096
PARK M., PA977, PA978
PARK M., PA3883
PARK S., OA755
PARK S., PA1342
PARK S., OA1406
PARK S., PA913
PARK S., PA1027
PARK S., PA1341, PA1342
PARK S., PA1341, PA1342
PARK T., PA3887
PARK Y., PA3883
PARK S., PA4325
PARKER G., PA3486
PARKER R., PA3947, PA3964
PARKER R., PA1716
PARKIN J., OA2964
PARKIN J., PA585, PA587
PARLAK M., PA2716, PA3846
PARLIKAR R., RCT710
PARMAR K., PA3377
PARMENTIER M., PA4275
PARNES J., RCT4445
PARNHAM M., PA2838
PARÓCZAI D., PA3207
PARR D., PA1280
PARRA C., PA2707
PARRA P., PA1181
PARRA LEÓN V., PA487, PA2031, PA3938
PARRILLA F., PA3538
PARRIS W., RCT2161
PARROT A., PA352, PA4071
PARRY K., PA1768
PARRY R., PA230
PARSONAGE M., OA3728
PARSONS K., PA2738, PA4020
PARSONS N., PA2516
PARTHASARATHY P., PA432, PA4166
PARTUNO M., PA3178
PARVATHI S., PA4272
PASCARELLA M., OA9001
PASCHALINOS D., PA303
PASCHOAL I., PA3884, PA4139
PÁSCOA R., PA3487
PASCOAL I., PA2395
PASCUA J., PA1239
PASCUAL H., OA3120
PASCUAL L., OA2282, OA4384
PASCUAL GUARDIA S., PA2114
PASCUAL MARTINEZ N., PA564
PASCUAL.ERQUICIA S., PA2133
PASCUAL-GUARDIA S., PA196, PA3538
PASIN D., PA1164
PASINI V., PA442
PASKA C., PA193, PA2427
PASQUALI C., PA4080
PASQUESOONE M., PA402
PASSARI M., OA2258
PASSARIELLO M., PA1261
PASSOS N., OA808
PASTOR D., PA3298
PASTOR CAMPO A., PA4011
PASTORE M., OA3787
PASTRI P., OA3125
PATAKA A., PA622, PA626, OA677, PA960
PATALANO F., PA3260
PATBERG K., PA2402
PATCHETT B., PA3529
PATEL A., PA540
PATEL B., PA1261
PATEL D., PA1761
PATEL D., OA2200
PATEL D., PA1726
PATEL J., OA4411
PATEL J., PA368
PATEL J., OA3738
PATEL K., PA1733, PA4165
PATEL M., RCT2883, PA4186
PATEL M., PA2104, PA3625
PATEL M., PA890
PATEL N., PA3463
PATEL P., PA1261
PATEL P., PA881, PA4323
PATEL S., PA2673
PATEL S., OA1635
PATEL S., OA132, PA1858, PA1859, PA1868, PA3989
PATEL V., OA3802
PATHAKUMARI B., PA4099
PATHMANATHAN N., PA2062
PATIL R., PA2002, PA2587
PATIL R., PA3924
PATIL R., PA2740
PATIL S., PA2745
PATIL S., PA2002, PA2587
PATIL S., PA3407
PATOCKA K., PA2139, PA2404
PATOLE S., OA787, PA1099
PATOUT M., PA559, PA1870, PA3322, PA3345
PATRICK ENGKASAN J., PA3366
PATTEMORE P., PA3904
PATTERSON D., OA1613
PATTNAIK B., PA3413
PATTNAIK B., PA3170
PATTWELL C., PA4317
PAUDEL K., PA1709, PA3218
PAUDEL R., PA1709
PAUL B., PA1716, PA2028, OA4380
PAUL E., PA1322
PAULA REZELJ M., OA3679
PAULSSON T., PA1338
PAULUS M., OA2315
PAULUS V., PA1681, PA2392
PAVAN A., PA2692
PAVESE R., OA2257
PAVLICKOVA I., OA2272
PAVLIDOU M., PA1937
PAVLIŠA G., PA1875, PA3447, PA3624
PAVLOU E., PA1068
PAVLOV P., PA857
PAVLOVA M., PA1053
PAVLOVA O., PA2459
PAVÓN GUEDE J., PA185, PA863, PA1674, PA2653
PAVORD I., PA890, PA902, PA1344, PA1815, PA2818, OA2952, PA3191, PA4185
PAVORD I., OA1409, OA1412
PAVORD I., PA3209
PAVORD I., PA3210, OA3675
PAWAR A., PA2390
PAWAR B., PA3233
PAYNE E., PA3501
PAYSSE M., PA957
PAYTUVI-GALLART A., PA4251
PAZ B., PA187
PAZ S., PA2087
PAZZIANOTTO-FORTI E., PA1862
PEACH C., PA1336
PEAKE S., PA3398
PEARCE K., PA3946
PEARCE N., PA1934
PEAT R., PA1245
PECA M., PA2449
PECE U., PA968
PECE SONMEZ U., PA966, PA972
PECES BARBA G., OA2319
PECES-BARBA G., PA196
PECES-BARBA ROMERO G., PA3410
PECHÉ R., OA3113
PECHT T., PA2812
PECK A., PA3948
PECK M., PA3151
PECKHAM D., PA374, PA4194
PEDEN D., PA588
PEDERSEN B., PA4221
PEDERSEN C., PA1651
PEDERSEN E., PA1006, PA1013
PEDERSEN E., PA3979
PEDERSEN E., PA298, PA1005, PA3975
PEDERSEN F., PA934, PA3573
PEDERSEN L., PA3855, PA3869
PEDERSEN L., PA880, PA3189
PEDERSEN L., PA1684
PEDINI P., PA3306
PEDONE C., PA407, PA1213
PEDRO N., PA2463
PEDROSO M., PA2527
PEEL J., OA2960
PE'ER MOSCOVICH D., PA1762, PA3967

PEFTOULIDOU P., PA2495
PEGGS Z., OA1618
PEHLIVAN E., PA1796, PA4201
PEI T., PA4115
PEIKERT T., PA2008, PA4099
PEINADO V., PA3450
PEIRED A., PA442, PA4232
PEIRIS C., PA2600
PEJČIĆ T., PA450, PA1852, PA3376
PEJČIĆ V., PA450, PA1852, PA3376
PEJLER G., PA919, PA3165
PĘKALA E., PA3158
PEKCAN ., PA2500
PEKCAN S., PA282, PA296, PA1756, PA2496, OA4416
PEKDAS M., PA2524
PEKER Y., PA1308, PA4305
PELÁEZ A., PA1938
PELÁEZ G., PA3952
PELÁEZ HERNÁNDEZ V., PA2549, PA2551, PA2552
PELÁEZ LADERAS A., PA1705
PELÁEZ-HERNÁDEZ V., PA2545
PELÁEZ-HERNÁNDEZ V., PA2544, PA2546, PA2547
PELAIA G., PA4187
PELED M., PA1024, PA2696
PELGRIM G., PA2004
PELGRÖM A., OA3114
PELICARIC D., PA2586
PELIT F., PA1136, OA2265
PELIT L., PA1136, OA2265
PELIZZA F., PA2787
PELIZZO G., PA2509
PELLAN M., PA3955
PELLAS E., OA785
PELLEGRINO D., OA791, PA4005
PELLICORO A., PA3581
PELLING E., PA1151
PELLY M., RCT2882
PELOSI L., PA4077
PELTONEN V., OA1635
PEMBRIDGE T., PA2610, RCT2883, OA3798, PA4066, OA4404
PENA J., OA2273
PENCHEVA V., PA4292
PENCHEVA GENOVA V., PA3833
PENDALCHUK N., PA3439
PENEV A., PA2661
PENEVA P., PA4031
PENG J., PA2046
PENGO M., OA2291, PA2861
PENIDO F., PA520, PA3850
PENNATI F., PA1253, OA1619
PENNAZIO R., PA2017
PENNEKAMP P., PA3404
PENNINGS H., PA3991
PEÑUELAS Ó., PA2802, PA4283
PENZ E., PA2123, PA2128, PA2129
PEPE G., PA1172
PEPELS J., PA951, PA2474
PEPER-GABRIEL J., PA3568
PÉPIN J., PA1315, PA1316, OA2289, PA2862
PÉPIN J., PA1248, PA1249, PA1326, OA1633, OA2283, PA2846, PA3592, OA4383
PEPKE-ZABA J., PA1978, PA3457
PERA V., PA230
PERACAULA M., PA1183
PERALTA A., OA2323
PÉRAN L., PA328
PERCH M., OA691, PA2415
PERCHIAZZI G., PA1235, OA3111
PERDUNO A., PA4307
PEREA SORIANO L., OA3748
PEREIRA A., PA2737, PA3487, PA3503
PEREIRA C., PA1324
PEREIRA J., PA2642
PEREIRA J., PA3427, PA3428
PEREIRA M., PA526
PEREIRA M., PA1324, PA3884, PA4139
PEREIRA V., PA2430
PEREIRA BATTAGLIA C., PA1913
PEREIRA DA SILVA F., PA3380
PEREIRA DE MATOS CORDEIRO R., PA415
PERENDREU BUSQUETS L., PA414, PA1059
PERERA C., PA2422
PÉREZ J., PA2426
PÉREZ J., OA2319
PÉREZ N., PA2481
PÉREZ R., PA545
PÉREZ S., PA3586
PEREZ T., PA3890
PEREZ V., PA3225, PA3310
PEREZ BOGERD S., PA3194, PA3608
PÉREZ CALVO C., OA2319
PÉREZ DE ARMAS P., PA4043
PÉREZ DE LLANO L., PA2140, OA3679
PEREZ DE-LLANO L., PA2136
PÉREZ DIEGO M., PA921
PEREZ FERNANDEZ S., PA4039
PÉREZ FIGUERA A., PA527, PA1107
PEREZ FIGUERA A., PA1346
PÉREZ GONZÁLEZ P., PA1705
PEREZ MENDOZA G., PA1911
PÉREZ PEIRÓ M., PA385
PÉREZ PÉREZ J., PA3552
PÉREZ RAMOS J., PA1283
PÉREZ RAMOS S., PA1147
PEREZ REDONDO M., PA4012, OA4425, OA4432
PÉREZ RUBIO G., PA1274
PÉREZ SORIANO M., PA4258
PEREZ-CANO C., PA4074
PÉREZ-CASTRO T., PA3960
PEREZ-DE-LLANO L., PA1330, PA2400
PÉREZ-FERNÁNDEZ S., OA4409
PEREZ-GARCIA J., PA876, PA2426, OA2949, PA3548, PA3552, PA3554
PEREZ-GIL J., PA558
PÉREZ-MARMOLEJO T., PA3843
PÉREZ-PONS M., PA2802, PA4283
PÉREZ-RAMÍREZ C., PA2138, PA2399
PÉREZ-RAMOS J., PA1275
PEREZ-RODRIGUEZ J., PA2011
PÉREZ-RUBIO G., PA1275, PA1283, PA1284, PA1292, PA1836, PA1963, PA2801, PA4285
PÉREZ-SILVA M., PA1266
PÉREZ-TARAZONA S., PA2515
PERICAS J., PA1847, PA4038
PERIKLEOUS P., PA302
PERIS A., PA299
PERISSON C., PA517
PERISTERIS P., PA1854
PERKINS N., OA1446, OA2947
PERL N., PA4192
PERLEPE G., PA437
PERLIKOS F., PA3161
PERLUK T., PA454, PA3513
PERNA G., PA461
PERNG D., PA1330
PÉROL D., PA3406
PEROL M., PA1926
PERONA R., PA2666
PEROTIN J., PA201
PEROTTI C., PA3571
PEROTTO L., PA4238
PERPIÑAN M., PA4245
PERREM L., PA2487
PERRET J., PA1699, PA2482
PERRI D., RCT716
PERRIN C., PA2862
PERROT M., OA1455
PERROTTA F., PA872
PERSHAGEN G., PA3231
PERSICHINO J., PA2595
PERSSON H., PA207
PERSSON J., PA4310
PÉRTEGA S., PA3960
PERTICONE E., PA1061
PERTSEVA T., PA4057
PERTSEVA T., PA347, PA1226, PA1837, PA3378
PERTZOV B., PA1138, PA1946, PA2651, PA3308
PERUMBALATH J., PA2566
PERYIN-BIROULET L., PA1710
PESEK M., PA4108
PESENTI A., OA3779
PESL M., PA4319
PESQUÉ D., PA2727, PA3153
PESSOA E., PA2461
PETÁK F., PA556, PA1236, PA1241, PA2759, OA3110, PA3516, PA3522
PETAT A., PA2747
PETE K., PA2576
PETEL J., PA2635
PETER H., PA184
PETER HEUSSEL C., PA3888
PETERMAN J., PA4219
PETERS A., PA997
PETERS A., PA3245
PETERS J., PA522, PA2040
PETERS J., OA796, PA1188, PA3336, PA3337
PETERS K., OA665
PETERS M., OA665, PA3577
PETERS M., PA1330
PETERSEN J., OA785
PETERSEN J., PA2415
PETERSEN M., OA1384
PETERSEN S., PA880
PETERSEN T., PA1014
PETERSON L., PA1934
PETERSON S., OA1412
PETFORD N., PA2481
PETHERICK E., PA2013
PETIT B., OA3130
PETLICHKOVSKA S., PA3973
PETOUSI N., PA1886
PETR DOSTALOVA P., PA3841
PETRACCA J., PA597, PA4271
PETRARCA L., PA1763, PA2450, PA2512
PETRARULO S., PA1164, OA1457, PA3372
PETREK M., OA1393
PETREK M., PA3445
PETRONE A., PA406
PETROVA D., PA4292
PETROVIC M., PA358
PETT J., PA423
PETTI A., OA2257
PETTIGREW G., PA1746
PEUMANS P., PA2449
PEYRIN-BIROULET C., PA1710
PEYSAKHOVICH Y., PA3308
PEYVANDI F., OA3779
PFANNSCHMIDT J., PA490, PA491
PFEFFER P., PA890, OA3800
PFEIFER N., PA2599
PG A., PA4185
PHAM T., PA3894
PHANTHANOURAK A., PA2494
PHICHKHAIA G., PA2620, PA2624
PHILIP J., PA1864
PHILIP K., RCT2161
PHILIP K., OA135, OA675
PHILIPP A., OA2315
PHILIPPE C., PA2862
PHILLIP C., PA3354
PHILLIPS C., OA2291
PHILLIPS D., PA2037, PA4224, PA4229
PHILLIPS D., PA4218
PHILLIPS D., PA3514, PA4230, PA4231
PHILLIPS E., PA3901
PHILLIPS J., OA1406, PA4181
PHILLIPS-HOULBRACQ M., PA2127
PHIPATANAKUL W., PA3264
PHOTIADES A., PA3369
PHUNG D., PA1932
PIACENTINI G., PA1753
PIAGNERELLI M., RCT2881
PIAMONTI D., OA791
PIANIGIANI L., PA375
PIAZZA M., PA1753
PICARD C., PA3306
PICARD C., PA3301, OA4438
PICAUD M., PA957
PICCINNO S., PA1066, PA2131
PICCIONELLO I., PA3851
PICECI-SPARASCIO F., PA2512
PICH A., PA2839
PICHAMUTHU K., PA4239
PICHIERRI S., PA3458, OA3785
PICHON A., PA2763
PICHON R., PA1227
PICKERING C., PA1263
PICKWORTH T., OA4437
PICLIKNSKI I., PA1098
PICÓN A., PA1992
PIECYK A., OA122
PIEL S., PA3239, PA3240
PIENN M., PA3462
PIERA J., PA2741
PIERANGELI A., PA1763
PIEROLA J., OA3662
PIERONI L., PA352, PA4071
PIERRE DE OLIVEIRA E., PA2797, PA4065, PA4282
PIERRET T., PA1926
PIERUCCI P., PA159, PA1066, OA2329, PA4284
PIETA M., PA297, PA3970
PIETERSEN P., PA1194, PA1195
PIETRO G., PA184
PIGNATTI P., PA217, PA887
PIIRILÄ P., PA1720
PIJNENBURG M., PA3268

PIJUAN L., PA2666
PIKE K., OA1444
PILECKI G., PA1207
PILECKI Z., PA1207
PILEGAARD THOMSEN L., PA565
PILETTE C., OA692, PA1286, OA3793, PA4186, PA4265
PILLAI A., PA1979
PILLAR A., PA922, PA1825
PILLARISETTI A., OA2960
PILLAY A., OA2308
PILONI D., PA2636, PA4248
PILSWORTH S., PA1805
PILZ K., RCT2881
PIMENTA A., PA2707
PIMENTA D., PA2642
PIMENTA F., PA3487
PIMENTA ROCHA D., PA615
PIN I., PA253, PA3955
PINA I., PA2422, PA3363, PA4196
PINA MÁIQUEZ I., PA2859
PINCIKOVA T., PA3574
PINDOLIA D., PA3893
PINEDA J., PA1259
PINEDA T., PA2674
PINEDO C., PA2135
PIÑEIRO LOPEZ A., PA4011
PIÑEIRO RONCAL M., PA204, PA206, PA2105
PINELLI V., PA1206
PINETON DE CHAMBRUN M., OA2314, OA4443
PINGUEL J., OA2275, PA2672
PINHEIRO G., PA885
PINHEIRO M., PA1281
PINI L., OA2906
PINI S., PA2046, PA2753, PA4238
PINILLA L., PA4102, OA4388
PINILLOS ROBLES E., PA3410
PINKERTON J., PA578, PA918
PINKHAM M., PA3293
PINNOCK H., PA503, PA504, PA511, PA515, PA516, PA1716, PA2730, PA2740, PA3261, PA3366, PA3497, PA4198, PA4199, PA4208, OA4375, OA4379
PINNOCK H., PA2028
PINO-YANES M., PA876, PA2426, OA2949, PA3256, PA3268, PA3552, PA3554
PINTADO CORT B., PA527, PA1107, PA1346
PINTER R., PA2576
PINTO A., PA411
PINTO C., PA2707
PINTO F., PA1980
PINTO L., PA4095
PINTO L., PA297, PA3970
PINTO M., PA544
PINTO P., PA525, PA1324, PA4228
PINTO BLÁZQUEZ J., PA4256
PINTO-PLATA V., PA2813
PIOCH C., PA1112, PA3980
PIOCH C., PA393
PIOCH C., PA1672
PIOSELLI B., PA3166
PIOTKOVSKAYA K., PA1146
PIOTROWSKA-KOWNACKA D., PA3838
PIOTROWSKI W., PA2664
PIOTROWSKI W., OA4437
PIPAVAT S., PA4272
PIPER A., PA1252
PIPPARD B., OA1407
PIRACHA S., PA1905
PIRAINO A., OA1414
PIRAINO T., PA3312
PIRAUD M., PA3477
PIRES R., OA3125
PIRES DE DIAS MARQUES A., OA806, PA1036
PIRINA P., PA948, PA3216
PIRMOHAMED M., PA876
PIRONA F., PA2468, PA2469
PIRONDI S., PA228
PIROTTE M., PA290, OA1413
PIRSON J., PA290
PISANO A., PA3166
PISKAC ZIVKOVIC N., PA400
PISON C., PA3993
PISTELLI F., PA2454
PISTENMAA C., PA4252
PISTILLO A., OA2303
PISTOCCHINI E., PA3169
PITARAKI E., PA434, PA435
PITASI M., OA3779
PITIOT A., PA1817
PITOZZI V., PA2796, PA2836, PA3160
PITRE T., OA2311
PITREZ P., PA4185
PITREZ MOCELLIN L., PA2465
PITSIOS K., PA1004
PITSIOU G., PA626
PITTA F., PA1221
PITTELLI G., PA1302
PITTELLI M., PA2796, PA2836, PA3160
PITTMAN M., PA3411
PIZARRO C., PA1266
PIZARRO C., PA2812
PIZZATTI L., OA1383
PIZZICHINI E., PA1344
PIZZIMENTI S., PA2436
PIZZIRUSSO D., PA4126
PLACHI F., PA3509, PA3519, PA4224
PLACHI F., PA4229
PLACIDI F., PA4290
PLACIDO R., PA468, PA1980
PLAISANCE L., OA3130
PLANA PES M., PA499
PLANAS R., PA2585
PLANAS-CEREZALES L., PA2666
PLANCOULAINE S., OA2302
PLANÈS C., PA524, PA606
PLANT B., PA2702
PLANT R., PA3945
PLANTÉ-BORDENEUVE T., OA692
PLANTIER L., PA517
PLASENCIA I., PA3214
PLATE T., PA4189
PLATENBURG M., PA2657
PLATT A., PA1273
PLATT L., PA3946
PLATT R., PA3596
PLAXTON W., OA2311
PLAZA V., PA1648
PLAZA V., PA876, PA2426
PLAZA MORAL V., PA2423
PLAZA MORENO M., PA4235
PLAZA ZAMORA J., PA501
PLAZA-MORENO M., PA4244
PLAZZI G., PA4290
PLEKHANOVA O., PA3481
PLEKHANOVA O., PA861
PLÉTAN Y., OA2310
PLETTENBURG O., PA2787
PLEWKA-BARCIK K., PA865
PLIEKHANOVA O., PA3836
PLOWRIGHT M., OA1403
PLUMMERIDGE M., PA2650
PLUMPTRE C., OA130
PLUTECKA H., PA3158
PLUTINSKY M., PA3849
POACHANUKOON O., PA3208
POBEHA P., PA550
POBEREZHETS V., OA3113
POBEREZHETS V., PA2113
POCH D., OA3131, PA3456
POCHETTI P., PA399
POCIECHA K., PA3158
POČVAVŠEK I., OA4424
PODDIGHE D., OA3124
PODGERS D., PA2729, PA2734
PODLEKAVERA D., PA3341
POELARENDS G., PA594
POENOU G., OA3130
POESCHKE L., PA1287
POGGI A., PA1260
POGORELOVA O., PA2622
POH M., PA1878, PA2573
POHL W., PA2139, PA2404, PA3903, PA3990
POHUNEK P., OA2183, PA2854
POINASAMY K., OA3800
POIRAULT D., OA758
POIRIER C., PA1025
POIRRIER A., PA1824
POIRRIER A., OA2306, PA3980
POLA J., PA3381
POLANCO D., PA4102
POLASEK J., PA4303
POLAT D., PA446, PA447
POLETTI V., PA2538
POLETTI V., PA442, PA496, PA4232
POLGAR O., OA132, PA1859
POLHEMUS A., PA367, PA3874
POLIANSKA M., PA878
POLITOU M., PA350
POLIVKA L., PA443, PA3429
POLKE M., PA2645
POLKEY M., OA675, PA3393
POLLACK M., PA3854
POLLENUS E., OA686
POLLINI S., PA4232
POLVERINO E., PA3403, OA3748
POLVERINO F., OA751, PA2813, PA4190
POLVERINO M., OA751
POLYCHRONAKIS T., PA1747
POMARES AMIGÓ J., PA3403
POMPILIO P., OA3115
POMPILIO P., PA237, OA2304
POMPILIO P., PA1753, PA3186
PONCIN W., PA3325
PONDOFE K., PA1806
PONNARAMBIL S., OA3678, PA4312, PA4313, PA4315, OA9002
PONNUSWAMY A., PA1994, PA1999, PA2722
PONS M., PA2429, PA2430
PONS LLINARES J., PA1184
PONTES CLEMENTE I., PA961
PONTI L., RCT2162
PONTIER-MARCHANDISE S., OA134, PA2862
PONTIS S., PA1302, PA2796, PA2836, PA3160
PONTONI G., PA2044
PONTRE B., PA3475
PONZA T., PA2472
POOLA A., PA1677
POOLE L., PA2609
POOLE S., PA4020
POON V., PA4183
POOT B., OA3726, OA3727
POP L., PA2491, PA2493
POPENKO N., PA4029
POPHALE H., OA1397, PA1726, PA3233
POPIEL D., PA4112
POPIN D., PA2491, PA2493, OA2905
POPOV T., PA2727
POPOVA G., PA1872
POPOVA O., PA2803
POPOVIĆ F., PA2710, PA4170
POPOVIC M., OA2301
POPOVIĆ GRLE S., PA1026
POPOVIĆ-GRLE S., PA882, PA2130, PA2397, OA3679
POPOVICI A., PA2560
POPP E., PA3265
POPPER H., OA1383
PORCARELLI F., OA785
PORCEL J., OA785
PORCHER R., OA4439
POREBSKA K., PA865
PORPODIS K., PA2389
PORRAS-GONZALEZ D., PA598, PA599
PORSBJERG C., PA926, PA942, PA1338, PA1680, OA2201, OA2253, PA2394, PA3202, PA3203, PA3207, PA3582
PORSBJERG C., PA2397, PA4191
PORSBJERG C., OA3677
PORTA E., PA2798
PORTA R., OA137, PA375
PORTACCI A., PA159, OA2329, PA4284
PORTAL J., PA517
PORTAS L., OA3743
PORTELA J., PA4160
PORTELA FERREÑO M., PA4011
PORTELLI M., PA3565
PORTELLI M., OA671
PORTELLI M., PA2438
PORTER A., PA2565
PORTER J., PA3425
PORTER J., PA1955
PORTER P., OA1635
PORTILLA V., PA2789, PA2795, PA2808
PÖRTNER N., PA2811
PORWAL S., PA3394
POSE K., PA185, PA1674
POSKER J., PA3841
POSSO RIVERA M., PA1715
POST W., PA248
POSTH S., OA2901, OA2907
POSTHUMA R., PA3349
POSTMA F., PA2387
POSTMUS P., PA1078
POTAMIAN A., PA427
POTÉ N., PA2786, PA4111, PA4120
POTEIKO P., PA422
POTESTIO M., PA502
POTHAL S., PA3463
POTOČNIK U., PA876, PA2815, OA2949, PA3256, PA3268, PA3548
POTT H., PA3886
POTT N., PA2534
POTTECHER J., OA2310
POTTEGÅRD A., PA1333, PA3868
POTTINGER T., PA248
POUESSEL G., PA3954

POUJOL DE MOLLIENS M., PA4146
POULIAKIS A., PA350
POULOS L., PA3143
POULSEN H., PA2537
POULSEN I., OA4427
POULSEN M., OA2907
POULSEN R., PA880
POULTON K., OA3773
POURIKI S., PA958
POUSSEL M., PA1710
POUWELS S., PA1271, PA3576
POVOA P., PA3527
POWAR K., PA3233
POWER L., PA2606
POWER S., PA395, PA2003
POYATOS P., PA1183
POYO J., PA2717
POZA-GUEDES P., PA876, PA2426, PA3552
POZARICKIJ A., OA3737, PA4247
POZAS M., PA2679, PA2685, OA3133
POZNIAK A., RCT2882
POZNIAK J., PA1022
POZO F., OA144
POZO K., PA2527
POZZAN R., PA3458
POZZI S., PA1160
PRABHALA P., PA2826
PRADHAN A., PA2438
PRADHAN P., PA3218
PRADO C., OA2255
PRADO E., PA3586
PRADO O., PA3268
PRADO GALA E., PA1147, PA3597
PRADOS SÁNCHEZ C., PA863, PA1674, PA2653
PRÆST HOLM C., PA561
PRAESTGAARD A., PA3198
PRAKASH A., PA4272
PRAKASH V., PA1711
PRAPROTNIK M., OA1620, PA3962
PRASAD A., PA2705
PRASAD A., PA208
PRASAD K., PA3941
PRASAD K., PA963
PRASAD N., OA1388
PRASAD P., PA4158
PRASAD V., PA2698
PRASITTIVATECHAKOOL K., PA3208
PRASSE A., OA1393
PRASSE A., OA1452, PA1944, PA2078, OA2944
PRASSLER J., PA3568
PRAT C., PA4092
PRATIWI S., PA1070
PRATO D., PA1260
PRATTE K., PA4263
PRAYLE A., OA1442, OA1618, PA2373, PA2376
PREDA L., PA1205
PREDA UNGUREANU L., PA1184
PREDILETTO R., OA2272
PREMACHANDRA P., OA3752
PRENDECKI R., OA676
PRESOTTO M., PA3239, PA3240
PRESSLIE C., PA2858
PRESTON I., OA2273
PRESTWICH G., PA1914
PRETOLANI M., OA692
PRETORIUS V., OA3131, PA3456
PRÉVOT G., PA1989, OA4438
PRGOVA-VELJANOVA B., PA2111
PRIBYL J., PA4319
PRICE D., PA515, PA516, OA748, PA890, PA914, PA1330, OA1412, PA1652, PA1679, PA2026, PA2136, PA2374, PA2385, PA2400, PA3212, PA3267, PA3607, PA3613, PA4323
PRICE L., PA476, OA2275, PA2672, PA4138
PRICE N., PA1336
PRICE O., PA374, PA3523, PA4194
PRICE R., PA1344, PA4186
PRICE S., PA1261
PRIEFERT J., PA2847
PRIEL E., PA4213
PRIETO S., PA449
PRIETO ARROYO G., PA3289
PRIETO-ALHAMBRA D., PA3855, PA3869
PRIETO-LLORET J., OA4390
PRIETO-PENA D., PA2789, PA2808
PRIEUR G., PA359, PA1870
PRIFTIS K., PA3507
PRIGENT A., OA134, PA2862
PRIMICERI C., PA2636, OA3761
PRIMROSE D., PA989
PRINCE N., OA2190
PRINCIPE S., PA882, PA3851
PRINZ I., PA4122
PRINZIS T., PA2472
PRIOR H., PA1162
PRIOR T., PA1945, PA4124
PRIOR T., PA457, PA2080, PA2667, PA3431
PRIOU P., OA4443
PRISCIANDARO E., PA481, OA3764
PRISK G., PA589, PA3475
PRITCHARD J., RCT2162
PRIYA N., PA4239
PRIYA N., PA4091
PRNJAVORAC B., PA2756
PRNJAVORAC I., PA2756
PRNJAVORAC L., PA2756
PROBETS J., OA787
PRODINGER G., PA1272
PRODISTEANU A., PA3532
PROENÇA N., PA2733
PROKOP M., PA1188
PRONZATO C., PA3598, PA3599, PA4289
PROSCH H., PA1140, PA3347
PROTA R., PA1197
PROTERO DIAZ M., PA3289
PROVENCHER S., PA4134
PROVOSTE D., PA1017
PRUDENTE R., PA546, OA2323, OA2330, PA2375, PA2799
PRUDENTE R., PA613
PRUEKSASIT T., PA583, PA584
PRUIM J., PA494
PRÜLLER F., PA477
PRUNERA PARDELL M., PA4012, OA4425, OA4432
PRUSZYŃSKA-OSZMAŁEK E., PA580, PA3557
PRYSTUPA L., PA2107, OA2321, PA3547
PRZYBYLOWSKI P., PA1033
PRZYBYLSKI A., PA3524
PRZYBYSZOWSKI M., OA1410
PSALLIDAS I., PA3394, PA3610
PUAN Y., PA3192
PUCHHAMMER P., OA119, PA237, PA1661, PA1700, OA2304, PA2442, PA3903, PA3990, PA4053
PUENTE MAESTÚ L., PA487, PA569, PA884, PA1663, PA2031, PA2108, PA3152, PA3938
PUFULETE M., PA1789
PUGLISI S., PA442, PA484
PUHAN M., PA3364, PA3874
PUHAN M., OA4363
PUIPPE G., PA1781
PUJUGUET P., OA1388
PULIDO T., PA2674, PA2676, PA2679, PA2683, PA2685, OA3133
PULITO-CUETO V., PA2789, PA2795, PA2808
PULLAN A., PA1344
PULLE J., PA2557
PUN C., OA2192
PUOTI M., PA2596
PUPPALA S., PA2483
PUPP-HANSEN I., PA2751
PURCELL M., PA4165
PURDY K., OA1438
PURICELLI F., PA3969
PUROHIT G., PA338, PA4085
PUROKIVI M., PA1950, PA3422
PUSTERLA O., OA1623
PUTENSEN C., PA1254
PUTHUCHEARY Z., PA2767
PUTRUELE A., PA1061
PUXEDDU E., PA4128
PUZANOWSKA B., PA548
PYANA KITENGE J., PA1725, PA1729
PYE A., PA2433, OA3756
PYNN M., PA4167

Q

Q.S. LOPES F., OA2255
QAISER CHOUDHARY Y., OA3124
QASEM MORENO A., PA863
QDAH M., PA3468
QI Z., PA1307
QIAN C., OA4377
QIAN E., PA557
QIANG S., PA1820
QIN L., PA916
QIN L., PA387
QIN W., PA2805
QIN Z., PA1871, PA4015
QIU Y., PA2668
QU J., RCT714
QU J., OA3750
QUACH S., OA800, PA2744
QUADERY S., PA2598
QUADFLIEG K., OA809
QUADRI F., OA2906
QUAH W., PA3946
QUAIFE S., OA676
QUAN K., PA2008
QUARANTA A., PA3897
QUARANTA S., PA159, OA2329, PA4284
QUARATO C., PA1196
QUARCK R., PA1020, PA1973
QUARTIERI M., PA406
QUATTROCCHI C., PA1060
QUEEN E., PA2373
QUEENAN J., PA2736, PA2742
QUEIROGA H., PA2641
QUEIROZ D., PA4082
QUEIROZ RODRIGUES A., PA4163
QUEK M., PA1878
QUENTIN J., PA253
QUERO BLANCA S., PA3403
QUESADA QUESADA A., PA3180, PA3252
QUESADA-QUESADA A., PA3919
QUEZADA REYNOSO A., PA567, PA568
QUIBRERA P., OA1416
QUIGNOT N., OA3129
QUILITZ N., PA3568
QUILLOT D., PA1317
QUIN L., PA3403
QUINLAN G., PA4076, PA4148
QUINN A., OA2960
QUINN T., PA3581
QUINNEL T., OA2291
QUINNELL T., PA565
QUINT J., OA3113
QUINT J., OA3741, OA3744
QUINT J., PA2013, OA3800
QUINT J., PA1892
QUINTANA M., PA3225, PA3228, PA3310
QUINTERO N., PA1266
QUINTON A., PA2400
QUIRCE S., PA185, PA263, PA876, PA1674, PA2426
QUIROZ B., PA2533
QURAISHI E., PA1062, PA1063, PA1064
QURESHI A., PA1204, PA4089
QURESHI E., PA161
QURESHI T., PA889
QUTEINEH A., PA1303
QVIST E., PA860
QVIST T., PA1111

R

R K., PA199
R KEIR H., OA3750
R. BONSIGNORE M., OA2289
R. DA S. OLIMPIO F., PA1288
R. F. CARVALHO C., PA1047
R. FRISON C., PA2578, OA4362
R. KEIR H., OA3747
R. KONRADSEN J., PA2446
R. OLIVEIRA C., PA1288
R. OLIVO C., PA908
RAANNANI E., OA1436
RAASING L., PA3438
RÁBADE C., PA3359
RABE H., OA2185
RABE K., PA3562
RABE K., PA3191, PA3212
RABE K., PA876, PA934, PA1015, PA1669, OA2954, PA3198, PA3210, PA3239, PA3240, PA3257, PA3573, PA3880, PA3881, PA3948, OA4360
RABEC C., OA134
RABINOVICH R., PA4198, PA4199
RABINOVICH R., PA4208
RABUÑAL K., PA2460
RABY K., PA2819, PA3564
RACHDI E., PA2780, PA2781
RACIL H., PA489, PA3374
RACINEUX J., OA2288
RACITI M., OA2272
RADADIA N., PA523
RADEKA E., PA1146
RADER T., PA4134
RADFORD K., PA1296, PA3173, OA3673
RADICS B., PA1744
RADOJA S., PA3452
RADONIC T., PA3478
RADOVANOVIC D., PA2391, PA2550, PA2753, PA4077, PA4238
RADOVIĆ M., PA3376
RADTKE T., OA4363
RADWAN-ROHRENSCHEF P., OA3790
RADZIKOWSKA U., OA2204
RAE B., PA578
RAEVEN H., PA2057
RAFFERTY G., PA192, PA1240, PA2861

RAFFERTY G., PA3508
RAFFLENBEUL G., PA1925
RAFTOPOULOU S., PA958
RAGATHA R., PA2772, PA2776
RAGHU G., PA1948, RCT2886, PA4272
RAGHUPATHY A., PA3924
RAGNOLI B., PA399
RAGO G., PA406
RAGOZZINO S., PA4034
RAHAMAT-LANGENDOEN J., PA4083
RAHARIMANANA R., PA1001
RAHAT M., PA382
RAHERISON C., OA2302
RAHERISON-SEMJEN C., PA1001, PA3944
RAHMA B., PA203, PA205, PA4090
RAHMAN H., OA2186
RAHMAN H., PA2606
RAHMAN M., OA3674
RAHMAN N., PA433, OA782
RAHMAN N., PA441, OA785
RAHMATULLAH A., RCT716
RAHMO A., PA4316
RAHOELINA B., PA1001
RAHULAN V., PA3302
RAI D., PA3413
RAI H., PA1141
RAIA V., PA3495
RAIDT J., PA2845, PA3404
RAIF P., PA995
RAIMONDI F., PA553, PA554, PA2778
RAIMUNDO P., PA431
RAINA P., PA373, PA896, PA898
RAINA S., OA2269
RÄISÄNEN P., PA953
RAJ P., PA3407
RAJA A., PA219
RAJABI H., OA3775
RAJABI O., PA2419
RAJAGOPAL S., OA2279
RAJAGOPALAN R., PA459
RAJARAM S., OA128, PA464, OA1403, PA1971, PA3891
RAJAS NARANJO O., PA4159
RAJASEKAR P., OA671, PA2483
RAJKONDAWAR A., PA3377
RAJYAM S., PA3307
RAKHRA N., OA125
RAKKAR K., OA671, PA3565
RAKO Z., PA3454
RAKOTOMANGA J., PA1001
RAKOTOMIZAO J., PA1001
RAKOTOSON J., PA1001
RALISON A., PA1001
RAM S., PA2711
RAMA ESENDAGLI D., PA355, PA3148
RAMAKRISHNAN S., RCT711, PA3886
RAMAN B., PA1886, OA2326
RAMANATHAN K., OA3796
RAMASLI GURSOY T., PA271, PA2505, PA2510, PA3244, OA4416
RAMBALDI A., PA553
RAMDHARRY G., PA2523
RAMDZAN S., PA3261
RAMESH K., PA184
RAMESH W., PA2123, PA2128, PA2129
RAMIREZ A., PA2674
RAMÍREZ A., PA3450
RAMIREZ P., PA3527
RAMIREZ CISNEROS B., PA1985
RAMIREZ RODRIGUEZ G., PA3180, PA3252, PA3919
RAMÍREZ VENEGAS A., PA1274
RAMÍREZ-DÍAZ M., PA1275
RAMÍREZ-SARMIENTO A., PA467, PA1266, PA1972, PA1984, PA1987
RAMÍREZ-VENEGAS A., PA1275, PA1283, PA1284
RAMJUG S., PA1939, OA2277, PA3467
RAMLAU R., PA4259
RAMLI R., PA504
RAMÓN G., PA2727
RAMÓN G., PA3153
RAMON CLAR L., PA1184
RAMOND A., PA1891
RAMOS E., PA2527
RAMOS J., OA1613
RAMOS M., PA3912
RAMOS BARBÓN ., PA2423
RAMOS CASADO V., PA3289
RAMOS MARTINS M., PA417, PA1960, PA1969
RAMOS PEREIRA A., PA2650
RAMOS-BARBON D., PA1338, PA2397, OA3679
RAMSAY M., PA1655, PA2029, PA3320
RAMSENTHALER C., PA1215
RAMSEY K., PA2492
RAMU S., PA926
RANA D., PA2700
RANASINHA C., PA2600
RANČIĆ M., PA3376
RANCIONERO M., PA2133
RANDALL M., OA1388
RANDELL J., PA3422
RANDERATH W., PA623
RANDHAWA A., OA4377
RANDHAWA G., PA1000
RANGAMUWA K., PA1321, OA2269
RANGANATHAN S., OA121, OA1624
RANGELOV N., OA1629
RANGNAU I., OA2306
RANILOVIĆ D., PA170, PA400, PA4072
RANISZEWSKA A., PA1134, OA3772, OA3783, PA4107
RANJAN Y., PA1955
RANJBAR M., PA933, PA935, OA2203
RANQUE S., PA3301
RANSOME E., PA2565
RANTALA A., PA2476
RAO M., OA128, OA1403, PA3891
RAO N., PA279
RAO S., PA275, PA276, PA279, PA281, PA979
RAO Y., PA2682
RAOUF A., PA1979
RAPIN M., PA3502
RAPTI G., PA1192
RAPTIS D., PA1192
RÁROSI F., PA1236, PA1241
RASCHELLA F., PA2088
RASERO L., PA2762
RASHAD F., PA3452
RASHEED QURESHI A., PA161
RASIHA R., PA4114
RASKIN J., PA1929
RASMUSSEN H., PA4056
RASMUSSEN L., PA2394
RASMUSSEN L., OA3677
RASMUSSEN T., PA3414
RASOOL M., PA1169
RASSAM P., PA1862
RASSOULI F., PA3382
RASTODER E., PA3839
RASTOGI D., PA3951
RATH A., OA1610
RATH A., PA1254
RATHI S., PA3407
RATHINAM S., RCT4448
RATHNAPALA A., PA3542, PA3543
RATHNAYAKE S., PA1279, PA4246
RATJEN F., OA1615, OA1621, PA1770, PA2485, PA2487, PA2488, PA2489, PA2494, PA3473
RATKO D., PA184
RÄTSEP A., PA1677
RAUCH K., PA2087
RAUENSWINTER S., PA3949
RAUTELA L., OA2911
RAVAGLIA C., PA442, PA484, PA4232
RAVAHATRA K., PA1001
RAVASIN A., PA299
RAVEGLIA F., OA784
RAVENELLE F., PA1943
RAVENTÓS B., OA2303
RAVI A., PA601, OA667, PA930
RAVINA M., PA1702
RAVIPATI S., PA3302
RAVN P., PA1111
RAWAL A., PA1892
RAWAL B., PA1261
RAWANAN SHAH S., PA241, PA955
RAWLINS E., PA602
RAY A., OA759, PA1883, PA4069
RAY A., PA3568
RAYMENANTS J., PA2449
RAZAK H., PA1773
RAZAKAMANANTSOA L., PA559
RAZUMNYI R., PA4026
RE B., PA2766
REA G., PA1173
REAL F., PA3906
REBELLO PINHO J., PA4065
REBELLO PINHO J., PA2797, PA4282
REBELO P., PA1036, PA4207
REBER L., PA3911
RECCHIA G., RCT2162
RECHBERGER K., OA1386
RECIO MORENO B., PA1663, PA2031
RECKORDT M., PA2063
RED I., PA4318
REDDEL H., PA914, PA3143, PA3609
REDDEL H., PA912
REDDEMANN M., PA183
REDDIN C., PA3361
REDDY A., PA1978
REDDY D., PA2073
REDDY K., PA2073, PA4246
REDDY K., PA3546
REDDY S., PA1103
REDNIC S., OA1453
REECE J., PA3484, PA4240
REED L., PA2788
REED S., PA3287
REES D., OA2254, OA2940
REES S., PA565
REESE J., OA4360
REEVE N., PA3235
REFIN F., PA3373
REFOYO-MATELLÁN B., PA2011
REFSGAARD IVERSEN B., OA4426
REGA M., PA2472
REGA R., PA1954
REGADERA ANECHITA L., PA501
REGAMEY N., PA1005, PA1006, PA1013
REGIN Y., PA607
REGINALD K., PA241, PA955
REGISTRY MEMBERS J., OA1394
REGNIER C., PA1660
REGOJO ZAPATA R., PA2653
REHBERG M., PA1731, OA2957, OA2965, OA2966, PA3174, PA3477
REHBINDER E., OA140
REHMAN S., PA3897
REHMAN S., PA3168
REIBEL N., PA1317
REIBMAN J., PA218
REICH M., PA3492, PA3493
REICHAU K., PA2787
REICHERT M., PA2430
REID D., PA922, PA1825
REID F., PA3201
REID W., PA1862
REID W., PA3318
REIER-NILSEN T., PA224, PA1233
REIG MEZQUIDA J., PA3298
REIGNIER J., PA1248, PA1249
REIJNDERS T., PA2540
REIJNDERS T., OA2313
REIK C., PA4192
REILLY C., PA374, PA4194
REILLY C., PA879, PA2403
REIMBERG M., PA1045
REIMER J., OA770
REINARTZ S., PA2815
REINDERS L., OA765
REINDERS-LUINGE M., PA1276
REINDERS-LUINGE M., PA3576
REINHARDT J., PA911
REINKE L., OA4360
REINWEBER M., OA2948
REIS B., PA311
REIS B., PA3487
REIS N., OA2328
REIS R., PA2619
REISZ D., PA4299
REITER B., PA574
REIX P., PA3955
REJAB S., OA795
REJEB H., PA620, PA1105, PA2638
REJEB H., PA2637
REJEB J., PA2713
REJEB S., PA2575, PA3362, PA3392
REJNMARK L., PA3441
REKA A., PA1155
REKHA C., PA184
RELTON C., OA3795
REMACLE C., PA4103
REMMELE W., PA3874
REMMELINK M., PA4275, RCT4451
REMMINGTON C., PA1261
REMUZGO-MARTÍNEZ S., PA2789, PA2795, PA2808
REN F., PA2615
REN S., PA300, PA1927
REN Y., PA4192
RENAUD B., PA524
RENAUD-PICARD B., PA3579
RENDINA C., PA2472
RENDÓN A., PA4094
RENEL B., PA1710
RENESME L., OA670
RENNER A., PA2139, PA2404
RENNER S., PA3982
RENNISON-JONES C., PA3421

RENUY A., PA1314
RENWICK L., PA2543
RENWICK M., OA3734
RENYI-VAMOS F., OA1383
RENZ H., PA988, PA3948
RENZO F., PA4140
RENZONI E., OA1393
RENZONI E., OA1452
REQUENA G., PA2118, PA2119, PA3619, PA3920
RESGUARDO A., PA2533
RESHETNYAK E., OA3796
RESLER G., PA2126
RESNIK S., PA1061
RESQUETI V., PA1806
RESTREPO M., PA3538
RESTREPO M., PA2114
RESTUCCIA A., PA1893
RETA F., PA184
RETICA S., OA2911
REULA A., OA2306, PA3980
REUTEN R., OA1399
REUTER S., OA665, OA2920, PA3577
REVANDE D., PA2559
REVAT A., OA4433
REVEL M., OA2959
REVILLA LÓPEZ E., PA478
REVILLA LOPEZ E., OA4436
REVILLA-LOPEZ E., OA689
REXTIN A., PA2740
REY D., PA1266
REY MAULEÓN V., PA863
REYCHLER G., PA1048, PA2594, PA3325
REYES C., PA1266
REYES C., OA3802
REYES C., PA2558
REYES-LONG S., PA458
REYES-PULIDO M., PA1266
REYFMAN P., PA4182
REYNAUD M., OA4438
REYNAUD-GAUBERT M., OA692, PA3306
REYNOLDS S., OA3108
REYNOLDS S., OA1432, OA1433, OA1434
REZELI M., OA1383
REZELJ M., OA4424
REZENDE D., OA2330
REZENDE BATISTA D., PA613, PA2375
REZOLA CARASUSAN A., PA1910, PA2572, PA4039, OA4409
REZWAN F., PA956
RHAMIE S., PA985
RHATIGAN K., PA179, PA1151
RHEE C., PA913, PA1330, PA1342, PA2136
RHEE H., PA4183
RHIE S., PA4035
RHODES C., PA1989
RHODES C., PA4138
RHOMDHANI R., PA266
RHU J., PA3889
RIACHY A., PA349, PA2579, OA4358
RIACHY M., PA349, PA1143, PA2579, OA4358
RIBAS-SEGUÍ D., PA2457
RIBAS-SOLIS F., PA2717
RIBBERS G., PA2447
RIBBERS G., PA2456
RIBEIRINHO-SOARES P., PA1960
RIBEIRO B., PA590, PA2072
RIBEIRO C., PA3482, PA4161
RIBEIRO J., PA3380
RIBEIRO J., PA1801
RIBEIRO J., PA403, PA2611
RIBEIRO R., PA3595
RIBEIRO T., PA1806
RIBEIRO BAPTISTA B., PA2837
RIBEIRO CAMPOS D., OA3124
RIBEIRO-BAPTISTA B., PA3890
RIBERIO M., RCT2882
RIBET C., PA252, PA1314, PA3250
RIBOLLA F., PA573
RICARDO FERNANDES CARVALHO C., PA321, PA322
RICCABONI F., PA2507
RICCARDI D., PA3529
RICCARDI E., PA1197, PA2436
RICCI A., PA4126
RICCI P., PA4138
RICCIARDI S., PA312
RICCIARDOLO F., OA1414, PA3873
RICCIARDOLO F., PA883, PA893, PA895, PA2436, PA2440
RICCIERI V., OA1453
RICE T., PA557
RICH S., PA4263
RICH S., PA248
RICHARD P., PA1193
RICHARDS A., PA2416, PA2417
RICHARDS J., PA3204
RICHARDS L., PA882
RICHARDSON E., PA4322
RICHARDSON H., PA1834, RCT2883, OA3748, OA3798, OA4404
RICHARDSON M., PA986
RICHARDSON M., OA2326
RICHELDI L., PA1211, OA1396, PA2609, PA2695
RICHEUX J., PA402
RICHIARDI L., OA2301
RICHON V., PA4192
RICHTER A., PA1116
RICHTER A., PA2455
RICHTER M., OA2271
RICHTER M., PA3454
RICHTER M., PA463, PA1988
RICHTER M., PA1937
RICKARDS E., OA4381
RICKETTS C., PA3857
RICKETTS H., PA2092, PA2418
RIDDELL A., PA3167
RIDDELL P., PA3309
RIDER C., PA2086
RIDGE C., PA1261
RIDLEY R., OA2964
RIDLEY R., PA585, PA587
RIDSDALE H., PA1799
RIEDEMANN N., RCT2881
RIEMANN L., PA1015
RIEMEKASTEN G., PA472, OA1450, PA1952
RIENER R., PA3604
RIERA J., PA2802, PA4283
RIETSCHEL E., PA1015
RIFF T., PA3205, PA3206
RIFFLART C., PA263
RIGAULT A., PA1332
RIGHETTI R., OA2255, PA3222
RIGHINI P., PA1197
RIGOL M., OA4406
RIGOTTI C., PA3276
RIGUAL R., OA4390
RIGUEIRA J., PA468
RIJAL D., PA1709
RIJNBEEK P., PA230, PA3855, PA3869
RIJO A., PA4207
RIJO C., PA4001
RILEY J., PA3560
RILEY M., OA1444, OA1445
RILEY T., PA1294
RIMKUNAS A., PA2820, PA2821, PA2822, PA2823, PA2824
RINALDI P., PA2636, OA3761
RINALDO R., PA2766
RINAWAN F., PA2740
RINDER P., PA1326
RING A., OA4419
RINGHOLZ F., PA2856
RINGQVIST E., OA2935
RIO C., OA3660, OA3662, PA4131
RIOS R., PA876
RÍOS MARTÍN J., PA1147
RIOS-PEREDA A., PA864, PA1222, PA2042, PA3526, PA3837, PA4281
RÍOS-RODRÍGUEZ O., OA4390
RIOU M., PA4150
RIPLEY D., PA1643
RIPOLLONE J., PA3917
RIQUELME MARTINEZ V., PA2465
RISCO R., OA4366
RISI I., PA3599, PA4289
RISSO F., PA3986
RISTANOSKI G., OA2914
RISTIĆ L., PA3376
RITCHIE A., OA2322, PA3879
RITCHIE A., RCT2882
RITONDO B., PA3169, PA4307
RITTCHEN S., PA4149
RITZ C., OA4413
RITZ J., PA3882
RIVADENEIRA F., OA4378
RIVARD C., OA1383
RIVAS DOYAGUE F., PA499
RIVEIRO V., PA3359
RIVERA BALTANAS T., PA4011
RIVERA MOTTA J., PA2532
RIVERA MOTTA J., PA1231, PA4212
RIVERA-ORTEGA P., PA1939
RIVIERE J., PA4145
RIZZELLO L., PA369
RIZZI M., PA553
RJIMATI M., PA3485
RNJAK D., PA2130, PA3447
ROBACH P., PA2860
ROBBINS A., PA3333
ROBERTS G., OA141, OA1411
ROBERTS M., PA3434
ROBERTS N., OA3726, OA3727
ROBERTS N., PA3501, OA3734
ROBERTS T., PA3287
ROBERTSON A., PA251, PA3997
ROBERTSON A., PA578
ROBERTSON C., PA233
ROBERTSON L., PA1889
ROBERTSON N., PA363, PA4206
ROBERTUS J., PA4172
ROBIJN A., PA891
ROBILLARD P., PA4142
ROBINSON A., PA3248
ROBINSON E., PA1290
ROBINSON E., OA762, PA1895
ROBINSON F., PA276
ROBINSON G., PA372
ROBINSON L., OA2955
ROBINSON M., PA2405, PA2406
ROBINSON P., OA1615
ROBINSON P., OA2963
ROBINSON R., PA1123, OA1404
ROBLES-HERNANDEZ R., PA864, PA3837
ROBLES-VELASCO K., PA2727, PA3153
ROBSON A., PA3834
ROBU POPA D., PA3935
ROCA J., PA2741, OA4366
ROCA NOVAL A., PA151, PA1639
ROCCHETTI C., OA2906
ROCHA B., OA3729
ROCHA B., PA3502
ROCHA D., PA3482
ROCHA S., PA3487
ROCHA V., PA318, OA802, OA806
ROCHE A., PA1989
ROCHE N., PA252, PA515, OA748, PA3250, PA3345, PA3890
ROCHER A., OA4390
ROCHESTER L., PA3874
ROCHWERG B., RCT716
RÖCKEN J., PA1318
RODENBURG L., PA2057, PA3556
RODGERS J., OA1403
RODGERS O., OA1403, PA3891
RODGERS O., OA128
RODIONOVA V., PA346
RODIONOVA V., PA4048
RODIONOVA V., PA862
RODITIS L., PA3955
RODKJAER L., OA4426
RODMAN BERLOT J., OA1620, PA3962
RODO PIN A., PA1182
RODRIGEZ J., PA2590
RODRIGUES A., PA1862, PA3312, PA3318
RODRIGUES C., PA4095
RODRIGUES C., PA4207
RODRIGUES D., PA615, PA627, PA2642
RODRIGUES G., OA802, OA806, PA1281, PA4207
RODRIGUES J., PA3296
RODRIGUES L., PA4016
RODRIGUES L., PA4156
RODRIGUES N., PA3487
RODRIGUES P., PA965
RODRIGUES R., OA4431
RODRIGUES S., PA169
RODRIGUES T., PA1045
RODRIGUES FONSECA A., PA1913
RODRIGUES-SANTOS P., PA1918
RODRIGUEZ A., PA2114, PA3538
RODRÍGUEZ C., PA3359
RODRIGUEZ J., PA3536
RODRIGUEZ L., PA2081
RODRÍGUEZ M., PA187
RODRÍGUEZ M., OA3120
RODRIGUEZ M., PA2727
RODRÍGUEZ N., PA3359
RODRIGUEZ CHIARADÍA D., PA1182
RODRIGUEZ BUSTO C., PA4159
RODRÍGUEZ CALLE C., PA1179, PA4233, PA4235
RODRÍGUEZ DE RIVERA SOCORRO M., PA1911
RODRIGUEZ FLORES C., PA2460
RODRIGUEZ GALLEGO J., PA3931
RODRÍGUEZ GONZÁLEZ M., PA4256
RODRÍGUEZ GUZMÁN M., PA2015, PA3410
RODRÍGUEZ LÓPEZ A., PA3358
RODRIGUEZ MARTIN

A., PA3289
RODRÍGUEZ NIETO M., PA2015, OA2319, PA3410
RODRÍGUEZ PLAZA D., PA2141
RODRÍGUEZ PONS L., PA3403
RODRIGUEZ RIVAS C., PA3252
RODRIGUEZ RUIZ A., OA667
RODRIGUEZ SANZ J., PA2097, PA2849
RODRIGUEZ TORRES F., PA2421
RODRÍGUEZ-CALLE C., PA4244
RODRIGUEZ-CARRIO J., PA2808
RODRÍGUEZ-CASADO C., PA2366
RODRIGUEZ-COIRA J., OA2204
RODRÍGUEZ-FERNÁNDEZ J., PA339
RODRIGUEZ-FRIAS F., PA1278, PA1280
RODRÍGUEZ-HENRÍQUEZ P., PA1963
RODRÍGUEZ-JARA F., PA4283
RODRÍGUEZ-LOZANO D., PA2545
RODRÍGUEZ-MEDINA D., PA2545
RODRÍGUEZ-ROISIN R., OA2962
RODRIGUEZ-SANTANA J., PA876
RODRÍGUEZ-SEVILLA J., PA1182
ROEBUCK H., PA4237
ROEBUCK T., PA1322
ROEHMEL J., OA2306, PA3980, OA4417
ROEHMEL J., PA393
ROESER A., OA2959
ROESLER Z., PA3260
ROFFEL M., OA2199
ROGDE A., PA1676
ROGER I., PA4141
ROGER J., OA793, PA4239
ROGER Y., PA3450
ROGERS A., PA2066
ROGERS L., RCT712, PA3492, PA3493
ROGGENBUCK-WEDEMEYER ., OA141
ROGGERI A., PA3348
ROGGERI D., PA3348
ROGLIANI P., PA529, PA2044, PA2122, PA2410, PA3169, PA3175, PA3424, PA3616, PA4128, PA4307
ROGLIANI P., PA4178
ROH Y., PA977
ROH Y., PA978
ROHAN R., PA3363
ROHANI-MONTEZ C., PA2723
ROHDE C., PA1830
ROHDE G., OA753
ROHDE M., PA1830
ROHDE S., PA931
RÖHMEL J., PA1112, PA1672
ROHR K., PA1935
ROHRS E., OA1432, OA1433, OA1434, OA3108
ROIG A., PA596, PA3570
ROJAS L., OA2184, PA3578
ROJAS M., PA2792
ROJAS-SERRANO J., PA1963
ROJO-TOLOSA S., PA2138, PA2399, PA4243
ROKACH A., PA506, PA1303
ROKKA C., PA4082
RØKSUND O., PA1741
RØKSUND O., PA1676, PA2032
ROLA P., PA3530
ROLAND D., PA1761, PA1764, PA3263
ROLAND NICAISE P., PA3955
ROLANDSSON ENES S., PA608
ROLDÁN A., PA3570
ROLDAN N., PA3172
ROLLAND-DEBORD C., PA352, PA4071
RÔLO SILVESTRE C., PA169
ROMAGNOLI M., PA259
ROMAGNOLI S., PA299
ROMAN A., OA2324
ROMAN A., OA689
ROMÁN RODRÍGUEZ M., PA501, PA3613
ROMANO C., PA3495
ROMANO C., PA3260
ROMANOU V., PA1882
ROMBERG K., PA210, PA3582
ROMEI C., PA2454
RØMER V., PA246
ROMERO I., PA4092
ROMERO ÁNDUJAR F., PA286
ROMERO LINARES A., PA3180, PA3252
ROMERO MESONES C., PA1718
ROMERO ORTIZ A., PA3340
ROMERO PALACIOS P., PA3252
ROMERO PALACIOS P., PA3180
ROMERO RIBATE D., PA185, PA1674
ROMERO ROS X., OA2940
ROMERO-FERNANDEZ R., PA1335
ROMERO-LINARES A., PA3919
RØMHILD DAVIDSEN J., PA1706, PA2665
ROMIGI A., PA4290
ROMME E., PA2402
RÖNMARK E., PA937, PA940, PA950, PA953, PA1704, PA1708, PA1720, OA3736
RØNN C., PA3232
RØNNOW S., OA3109, PA3182
RÖNSHOLT F., PA3341
RONSMANS S., PA1727, PA1734
ROODENBURG S., PA492
RÖÖSLI M., PA1002, PA1003
ROPCHAN J., PA3471
ROQUE D., PA617, OA1389, PA3333
ROQUÉ G., OA3120
ROQUE M., PA989
ROQUILLY A., RCT2881
ROSA G., OA2960
ROSA G., PA3509
ROSA J., OA3796
ROSA DA SILVA A., PA3319
ROSALES FUENTES J., PA3998
ROSANI U., PA3873
ROSARIO N., PA2727, PA3153
ROSAS I., RCT2886
ROSAS TARACO A., PA4094
ROSAS TRUJILLO A., PA2549, PA2551, PA2552
ROSAS-TRUJILLO A., PA2544, PA2545, PA2546, PA2547
ROSAZZA C., PA283, OA1619
ROSCHE M., PA360
ROSE J., PA1339, PA3499
ROSE M., PA3491
ROSE M., PA1747
ROSELL A., PA2719, PA4074, PA4245
ROSELL GRATACÓS A., PA379, OA767, OA2262, PA2423, PA2708, PA3403, PA3409
ROSENBERGER C., PA1271
ROSENDAHL E., OA1397
ROSENDO I., PA3487
ROSENFELD M., OA2307, PA2489
ROSENFELD N., PA1008
ROSENGARTEN D., PA1138, PA3308
ROSENGREN S., OA2939
ROSENKRANZ S., OA2276
ROSENTHAL A., PA4086
ROSETI S., OA2251, OA3676
ROSI E., PA442
ROSMARK O., PA600
ROSS E., OA766
ROSSEL A., PA1252, PA2029
ROSSI A., PA3581
ROSSI A., PA3162
ROSSI F., PA1954
ROSSI I., PA4128
ROSSOKHA Z., PA2803
ROSSOLINI G., PA4232
ROSTRON A., PA3529
ROSZKOWSKI-ŚLIŻ K., PA1079
ROTARU-COJOCARI D., PA2448, PA3972
ROTEVATN A., PA1300
ROTH L., OA2948
ROTH M., OA2252, PA3171
ROTHE C., PA3568
ROTHFUSS K., PA2612
ROTHMAN A., OA2277, PA3467
ROTHMAN A., PA462
ROTHNIE K., PA200, PA227, OA747, PA2109, PA2110, PA2118, PA2119, PA3619, OA3744
ROTHNIE K., PA1691
ROTREKL V., PA4319
ROTTER J., PA4263
ROUABHIA M., OA2941
ROUATBI S., PA530
ROUHRAZI H., PA2055
ROUIS H., PA3390, PA4052
ROUKA E., PA434, PA435, OA780
ROUKAS K., PA1840
ROUKI V., PA3163
ROUMILA M., PA3345
ROUSSEL J., PA3954
ROUVINSKI A., PA1127
ROUX A., OA2314, OA4443
ROUX J., PA1175
ROUX M., PA366
ROUX P., PA1335
ROVERE L., PA413, PA1160, PA4236
ROVIEZZO F., OA2257, PA3162, PA4190
ROVINA N., PA1882
ROVINA N., PA2389, PA2431, PA3207
ROVIRA F., PA3856
ROVIRA N., PA3395, PA3531
ROVIRA-AMIGÓ S., OA2912
ROWE A., PA412
ROWE P., PA3197
ROWE P., OA2950, PA3212, OA3672, PA4321
ROWE P., PA3198, PA3209, PA3210, OA3675
ROY K., PA1642, PA3934, PA4059
ROYA-PABON C., OA756
ROYECA R., PA541
ROYUELA A., PA1018
ROZE K., PA2523
ROZENBERG D., PA1862
ROZMAN A., OA785
ROZO BEDOYA C., PA2674
ROZY A., PA1277, PA1278, PA1280, OA3790
ROZY A., PA4112
RUANO A., PA1723
RUARO B., OA2913, PA3458, OA3785
RUBAK S., PA2515
RUBBO B., PA3977
RUBIN A., PA1166
RUBIN J., PA2765
RUBINI P., PA1215
RUBINO A., OA3741
RUBINOS CUADRADO G., PA3518
RUBIO L., PA3586
RUCCI F., PA461
RUCHAUD-SPARAGANO M., PA3529
RUCKERBAUER L., RCT2881
RÜCKERT J., PA490, PA491
RÜCKINGER S., RCT2881
RUCKLY S., PA1248, PA1249
RUDAKOVA V., PA156, PA186, PA346, PA862, PA3375
RUDNICKA L., PA482, PA483
RUDOLF I., OA4417
RUDOLPH A., PA888
RUDOVA N., PA4086
RUDZINSKI P., PA4112
RUECROFT M., PA2855
RUEDLINGER B., PA2842
RUFFIN M., OA3780
RUFFLES T., OA2185
RUFO J., OA3791
RUGGERI J., PA375
RUGGERO L., PA399
RUGGIERO A., PA1931, PA3434
RUGGIERO C., PA2738, PA4020
RUICKBIE S., PA1336
RUITER G., PA498
RUIZ A., PA2801, PA4047
RUIZ E., PA449
RUIZ L., PA4038
RUIZ N., PA1959
RUIZ R., PA1958
RUIZ S., PA2375
RUIZ V., OA689
RUIZ DE COPEGUI P., PA4067, PA4078
RUIZ DE GOPEGUI P., PA348, OA3776, PA4068
RUIZ DE MIGUEL V., OA4436
RUIZ ITURRIAGA L., PA2572, PA4033, PA4039, OA4409
RUIZ NUÑEZ M., PA1662
RUIZ SERRANO DE LA ESPADA M., PA4022
RUIZ-ALZOLA J., PA1208
RUIZ-CANOVAS E., PA2832
RUIZ-GONZALEZ S., OA144
RUIZ-GROSSO P., PA1899
RUKHADZE M., PA2727
RULLANDER A., PA335
RUMORA L., PA1026
RUNOLD M., PA2535
RUPALI P., PA4239
RUPANI H., PA1339, PA3204, PA3207, PA3499, OA3674
RUPPEL R., PA2845
RUPPERT A., PA3345
RUSCITTI F., PA2796
RUSCONI F., PA887
RUSCONI F., OA2301
RUSSELL A., PA152, PA2654, PA3418, PA3488
RUSSELL N., OA782
RUSSELL P., PA4175
RUSSELL P., PA2771, PA2772, PA2776, RCT2883
RUSSELL R., PA902, PA1642, PA4059

RUSSELL R., RCT711
RUSSI E., PA3150
RUSSO E., PA573
RUSSO M., OA1619
RUSU D., PA3389
RUSU I., PA389
RUTA S., PA458
RUTHERFORD E., PA602
RUTHERFORD R., PA2424
RUTKOWSKA E., PA1134, OA3772, OA3783, PA4107
RUTTEN M., PA3504
RUTTENS D., OA809, PA2047
RUTTER M., OA127
RUTTING S., PA2073
RUWISCH J., OA2944
RYAN C., OA684, OA685, PA1028, OA3112, PA3423, PA3515
RYAN D., PA1967
RYAN J., PA3361
RYAN M., PA963, PA3941
RYAN S., OA2285, OA4385
RYBKA-FRĄCZEK A., PA907
RYDE M., PA576
RYDELL A., PA1701
RYDELL N., PA990, PA991
RYDWIK E., PA2535
RYERSON C., PA1948
RYERSON C., PA3415
RYERSON C., PA1167
RYFFEL B., OA2252
RYLANCE* S., PA2420
RYRSØ C., OA4413
RYRSØE C., PA4221
RYU K., PA917
RYU M., PA3248
RYYNÄNEN H., PA1242, PA2035
RZEPECKI P., PA1134, OA3772, OA3783, PA4107

S

S JOHNS C., PA470
S. HIEMSTRA P., PA601
S. INGEBRIGTSEN T., OA3740
S. JAAKKOLA M., PA258
S. PATHINAYAKE P., PA3549
S. S. HAMAGUCHI S., PA908
S. SEBASTIÃO C., PA2463
S. SILVA B., PA2619
SÀ SOUSA A., OA3679
SAAD A., PA1786, PA1794
SAAD M., PA2391, PA4077, PA4238
SAAD FARRAG N., PA856
SAADAOUI O., PA2782, PA2783
SAADAT S., PA3163, PA4311
SAARI E., PA3422
SAATHOFF M., PA4189
SABAH T., PA2727
SABATER TALAVERANO G., PA414, PA1059
SABATO R., PA4254
SABER CHERIF L., PA201
SABIL A., OA2288, PA3147
SABINA Š., PA184
SABINO-SILVA R., PA2799
SABOL I., PA2710
SABRI O., PA2646
SABRIÀ J., PA4092
SABRINA M., PA484
SABRY MOHAMED ., PA4286
SACCO A., PA353
SACCO T., PA4290
SACCOMANNO J., PA490, PA491, PA1668
SAC-EPÉE J., OA2936
SACKS M., PA3436
SACREAS A., OA686, OA687, OA3793
SADAF AFZAL A., PA4182
SADAFI H., PA1234, PA2408
SADAKA A., PA1095, PA4154
SADATSAFAVI M., PA229, PA1330, OA1412, PA2136, PA4323
SADEGHI H., PA4061
SADERI L., PA217
SADIQ M., PA172, PA3201
SADIQOVA G., PA945
SADUSHI-KOLICI R., PA1990
SAEED M., PA246, PA1695, PA3612
SAETTA M., PA259, PA2814, PA3372
SAEY D., OA3118
SAEZ B., OA4436
SÁEZ GIMENEZ B., PA478
SÁEZ LÓPEZ M., PA3237
SAEZ-GIMENEZ B., OA689
SAEZ-PEREZ J., PA1813
SAFDAR N., PA1903
SÄFHOLM J., PA919, PA3156
SAFIOTI G., PA3492, PA3493
SAFONT G., PA4092
SAFONT-GONZALEZ G., PA4074
SAGARA H., PA611, OA673, PA1844, PA1887
SAGE B., RCT2883
SAGE K., PA1243
SAGGAR R., PA2599
SAGHIR Z., PA1647
SAGLAM A., PA2812
SAGLAM L., OA1605
SAĞLAM M., OA4361
SAGLANI S., PA980, PA985, PA987
SAGLIA A., PA411
SAHA B., PA2598
SAHA S., OA2186
SAHA S., PA1716
SAHADEVAN A., PA2591
SAHAKIAN S., PA182, PA899, PA900
SAHASRABUDHE S., PA3363
ŞAHIN H., PA320, PA333, PA1041, PA1052
ŞAHIN Ü., PA964
ŞAHİN ERÖKSÜZ Z., PA3545
ŞAHINER H., PA1224
SAHLIN A., PA937
SAHLIN C., PA4297
SAHNOUN I., PA162, OA795, PA871, PA2383, PA3362, PA3392
SAHU D., OA1610
SAIANDA A., PA273
SAID B., PA2478
SAIDANI A., PA1177
SAIDANI W., PA1783, PA1790, PA2631
SAIGAL A., PA2851
SAIGÍ M., PA3409
SAILER E., PA2020
SAILS J., PA4194
SAINDOY E., PA524
SAINI G., PA3494
SAINI M., PA3407
SAINI R., PA404
SAINTOT P., PA4181
SAISSAC B., PA4118
SAIZ M., PA187
SAIZ LOU E., PA4233, PA4235
SAIZ LOU M., PA1115
SAIZ-LOU E., PA4244
ŠAJNIĆ A., OA3726, OA3727, OA3731
SAKA S., PA1810, PA2525
SAKAI F., OA1394
SAKANO E., PA403, PA2611
SAKAO S., PA465
SAKELLAROPOULOU A., PA378, PA1114
SAKKA D., PA2368
SALA LLINAS E., PA1184, OA3662
SALAFFI F., PA1951
SALA-LLINAS E., OA3660, PA4131, PA4132
SALAMEH L., PA2827
SALAMEH M., PA2380
SALAS C., PA558
SALAZAR A., PA449
SALCEDO LOBERA E., PA4250, PA4253
SALDANHA M., PA520, PA3850
SALE S., PA2804
SALEEM I., PA2772
SALEH-GUILLO H., PA1748, PA1749
SALEM M., OA2941, PA3583
SALEM Y., OA142, PA997, PA1002, PA1012, OA1447
SALGADO F., PA3960
SALGADO-BENVINDO C., PA1291
SALGADO-CASTRO F., PA1686, OA2202
SALGADO-FERNANDEZ M., PA864
SALGADO-FERNANDEZ M., PA2042
SALGE J., PA537, PA538
SALGUEIRO L., PA3487
SALHI B., OA3122
SALIM H., PA503, PA2740, PA3497
SALIMBENE I., PA1702
SALIMBENE O., PA1702
SALIMI A., PA988
SALINA A., OA9001
SALINAS M., PA1017, PA1959
SALINAS CASTILLO S., PA3297
SALLAMI R., PA1703
SALLEMI M., PA2458
SALLEMI S., PA226
SALLISALMI M., OA2315
SALMAN D., PA986
SALMANI H., PA3163
SALMON I., PA4275
SALOBIR B., PA1981, PA1990
SALOMIDOU M., PA340, PA2563, PA4014
SALONEN J., PA1950
SALORD N., PA1147, PA3597
SALORD OLEO N., PA3586
SALTAGIANNI V., PA3926
SALTER B., PA3900
SALTON F., PA3458, OA3785
SALVADO A., PA1239
SALVADORI L., PA312
SALVADOR-MAYA M., PA4244
SALVARIERRA-ESCOBAR M., PA2042
SALVATIERA-ESCOBAR M., PA864
SALVATIERRA-ESCOBAR M., PA1222, PA3526, PA3837, PA4281
SALVATORE AMORIM SORTINO J., PA3410
SALVE G., PA1205
SALVEMINI M., PA166
SALVI B., PA331, PA369, PA370, OA4359
SALVI S., PA1330, PA1716, PA2027, PA2136, PA2420, PA3233, PA3363, PA3924, PA4323
SALVI V., OA2258
SALVIONI E., PA3327
SALVITTI S., PA2520
SALVUCCI C., PA4126
SAMARA A., PA2662
SAMARA K., PA1936, PA2662
SAMARANAYAKE C., PA476, OA2275, PA2672, OA3128
SAMAREH FEKRI M., PA859, PA4274
SAMARZIJA M., PA1026, PA1875, PA2586, PA2710, PA3447, PA4170
SAMBUCO F., PA407, PA1060
SAMIOTIS I., PA303
SAMIRA M., PA424, PA1907, PA4300
SAMITAS K., PA2389, PA3369, OA3679
SAMPEDRO ., PA3960
SAMPOL SIRVENT J., PA3237
SAMPSONAS F., PA1098, PA1128, PA4129
SAMPSONAS F., PA2655
SAMSON A., RCT2882
SAMSON M., OA4435
SAMUEL E., PA4207
SAMUEL P., PA1845, PA4091
SAMUEL SANTOS E., OA806
SAMUELS M., OA1444, PA2857, PA2858
SAMUTHPONGTORN J., PA3208
SAN JOSÉ ESTÉPAR R., PA4252
SAN JOSÉ ESTÉPAR R., PA4252
SAN JOSÉ ESTÉPAR, R., OA3755
SAN MIGUEL-PAGOLA M., PA1813
SANA A., PA203, PA205, PA4090
SANA C., PA424, PA4300
SANABRIA S., PA1266
SANABRIAS R., PA1018
SANAK M., OA1411
SANASI G., PA1066
SANCA O., PA3841, PA3845
SANCHEZ B., OA4392
SÁNCHEZ G., PA2717
SANCHEZ L., PA1315
SANCHEZ M., PA449
SÁNCHEZ M., PA2717
SÁNCHEZ M., PA1183
SANCHEZ O., PA3345
SANCHEZ ANDIA A., PA3536
SÁNCHEZ ASIS S., PA1184
SÁNCHEZ CABRAL O., PA486
SÁNCHEZ CUELLAR S., PA527
SANCHEZ DE LA TORRE M., OA2282
SÁNCHEZ DÍEZ S., PA250, PA2466
SANCHEZ EZQUERRA E., PA3289
SÁNCHEZ FERNÁNDEZ C., PA2031, PA3938
SANCHEZ GUTIERREZ C., PA2108
SÁNCHEZ MELLADO D., PA3410
SÁNCHEZ ORTIZ D., PA558
SÁNCHEZ OTERO M., PA4094
SÁNCHEZ PERNAUTE O., OA1456, OA2319
SÁNCHEZ SANTOS A., PA2813
SÁNCHEZ TENA J., PA2126
SÁNCHEZ VÁZQUEZ E., PA3518
SANCHEZ-AZOFRA A., PA4244
SÁNCHEZ-COVISA HERNÁNDEZ J., PA204, PA206, PA2105
SÁNCHEZ-DE-LA-TORRE A., OA2282
SÁNCHEZ-DE-LA-TORRE M., OA2284, OA4388

SÁNCHEZ-DÍEZ S., PA337, PA1718
SÁNCHEZ-HERRERO M., PA2124, PA2125, PA2134, PA2135
SÁNCHEZ-LASTRES J., PA3960
SÁNCHEZ-MACHÍN I., PA2426, PA3552
SÁNCHEZ-MARTÍNEZ J., PA2138, PA2399, PA4243
SÁNCHEZ-MONTALVA A., PA4092
SANCHEZ-MORENO C., PA864, PA2042, PA3526, PA3837, PA4281
SANCHEZ-RAMIREZ D., PA2757, PA4195
SÀNCHEZ-RAMOS C., OA2262
SÁNCHEZ-VALLE J., OA666
SANCHO S., PA3538
SANCHO CHINESTA J., PA567, PA568, PA1201
SAND J., PA4124
SAND J., PA1945
SAND J., PA2080, PA2834, OA3109, PA3182, PA4278
SANDA R., PA4063
SANDAL A., PA3244
SANDAU BECH C., PA4021
SANDELOWSKY H., OA4376
SANDEN C., PA2797, OA2938, PA4065, PA4282
SANDÉN H., OA3107
SANDERS D., PA2487
SANDERSON N., OA1409
SANDHU S., PA1893
SANDIN P., PA942
SANDOR F., PA4119
SANDOVAL J., PA2679, PA2683, PA2685, OA3133
SANDUZZI A., PA3844
SANDUZZI ZAMPARELLI A., PA353, PA1173, PA2804
SANDVIK R., PA2809
SANG P., PA3465
SANGAPALAARACHCHI D., PA974
SANGUIGNOL F., PA3147
SANGUINETTI C., PA939
SANJA D., PA184
SANJA H., PA184
SAN-JOSÉ-GONZÁLEZ ., PA3960
SANNA A., OA791, PA2398, PA3215, PA4005, PA4320
SANNA C., PA1907
SANNA F., OA146
SANNA L., PA2676
SANNITI A., OA137
SANS PÉREZ S., PA339
SANSEVERINO W., PA4251
SANTA CRUZ B., PA2533
SANTAELLA F., OA2330
SANTAFLIOGLU B., PA1896
SANTAMARÍA VALENCIA C., PA1911
SANTAMARINA M., PA2558
SANTANA C., PA885
SANTANA M., PA3551
SANTERMANS E., PA1931
SANTIAGO A., OA689
SANTIBÁÑEZ-SALGADO J., PA3843
SANTILLÁN DÍAZ C., PA486
SANTILLÁN-DOHERTY P., PA3843
SANTILLI E., PA3536
SANTINI M., PA207
SANTIS M., PA4156
SANTISTEVE S., PA195, OA1437, PA4283
SANTOMASI C., PA2131
SANTORIELLO C., OA751
SANTORO C., PA1173
SANTORO M., PA1260
SANTOS A., PA544
SANTOS A., PA3296
SANTOS B., RCT2882
SANTOS C., PA3487
SANTOS C., PA4207
SANTOS I., PA3222
SANTOS J., PA1044
SANTOS K., PA272
SANTOS M., PA546, OA2323, PA2375
SANTOS M., PA1281
SANTOS M., PA3884
SANTOS N., PA3850
SANTOS P., PA2799
SANTOS R., PA357
SANTOS R., OA3791
SANTOS R., PA1217
SANTOS S., PA1147, PA2585, PA3597
SANTOS V., PA2641
SANTOS MARÇALO R., PA1281
SANTOS OVIEDO A., OA2319
SANTOS PÉREZ S., PA499, PA2141, PA2434
SANTOS VALENTE E., PA2815
SANTOS ZORROZUA B., PA1910
SANTOSO A., PA4114
SANTOS-PÉREZ S., PA2666
SANTOS-ROSA M., PA1918
SANTTIA F., PA1061
SANTUS P., PA2391, PA2550, PA2753, PA4077, PA4238
SANTYR G., OA1615, PA3473
SANZ F., PA2114
SANZ L., PA3359
SANZ HERRERO F., PA4024, PA4033
SANZ SANTIAGO V., PA286
SANZ-FRAILE H., PA596, PA3395
SAPAN N., PA282, PA296, PA2496, PA2500
SAPEY E., PA1947, PA2825, OA3778, OA3800, OA4411
SAQUE O., PA3536
SARA P., PA484
SARACINO L., PA2636, OA3659, OA3761, PA4280
SARAH E., PA3354
SARAIVA I., PA1804
SARAIVA-ROMANHOLO B., OA2255
SARANGI B., PA979
SARASA M., PA1648
SARASIN E., PA3364
SARASWATHY K., PA1285
SARBU A., OA1453
SARDELIS Z., PA2431
SARDELIS Z., PA3369
SARDINÉ A., PA3450
SARDON O., PA876, PA3552
SARDON PRADO O., OA2949
SARDON-PRADO O., PA3256, PA3548
SARENAS J., PA2761
SARFARAZ A., PA2606
SARI P., PA1888
SARI S., OA4361
SARINA S., PA4061
SARINC ULASLI S., PA2379, OA3127
SARIS A., OA2313
SARIS C., PA1198
SARMENTO A., PA3379
SARMENTO A., PA1806
SARMENTO H., OA2327
SARNA S., PA860
SARNO G., PA2468, PA2469
SARNOVA L., PA2787
SARRA M., PA507
SARRI A., PA3539
SARTORI G., PA536
SARTORI L., PA1000, OA2961
SARYAL S., PA1065
SARZI-PUTTINI P., PA4077
SASAKI S., PA2656
SASIKUMAR S., PA1086
SASSEK M., PA3557
SASSI O., PA313
SASSI S., PA2564
SASSMANN T., PA477, PA3462, PA4136
SASSO L., PA4017
SASTRE J., PA263, PA2426
SATAV A., PA2740
SATIA I., PA174, PA182, PA896, PA898, PA899, PA900, PA902, PA3900, PA4213
SATO A., PA4123
SATO K., OA4410
SATO M., OA2205
SATO N., PA1159
SATO S., PA2791
SATO V., OA2310
SATRAM S., OA3802
SATTA G., PA4096
SATUÉ-GRACIA E., PA1121, PA2366, PA2457
SAULEDA J., PA4106
SAULEDA ROIG J., PA1184
SAUNDERS L., OA1403
SAUNDERS M., PA3159, PA3167
SAUNDERS P., PA2738, PA3433, PA4020
SAUNDERS R., OA2326
SAURER P., PA1031
SAUTE M., OA1436
SAUTER A., PA2676
SAUTEUR L., PA2616
SAUVERE M., PA3954
SAVADKOUHI E., PA546, OA2323, PA2375
SAVALE L., PA524, PA1989, OA2274, OA2276, OA2280, PA3461, OA4443
SAVAS R., OA1400, PA2008
SAVAS S., PA3569
SAVCI S., PA3311, OA4361
SAVELIKHINA I., PA2115
SAVI D., PA3495
SAVIĆ N., PA418, PA421, PA1152, PA3334
SAVIC S., PA1175
SAVOLAINEN V., PA2565
SAVOURÉ M., PA941, PA3250
SAVVOPOULOU A., PA1769
SAWALHA S., PA1708, OA3736
SAXER S., PA475, OA2276, PA2680, PA2681, PA2688, PA2689
SAXON A., PA511
SAY Y., PA241
SAY Y., PA955
SAYA Y., PA4079
SAYEN D., PA1317
SAYERS I., OA671, PA2054, PA2438, PA2483, PA3235, PA3565
SAYERS R., PA152, PA222
SAYGILI E., PA2049
SAYIN GÜLENSOY E., OA1628, PA3848
SAYINER A., PA1191
SAZLINA S., PA3497
SCABELLO R., PA1166
SCAGNOLARI C., PA1763
SCALBERT M., PA3954
SCALCO R., PA1045
SCALES J., PA1000, OA2961
SCALFI L., PA353, PA3844
SCALICE M., PA597
SCARAMUZZA A., PA3969
SCARANO P., PA2398, PA3215, PA4320
SCARCI M., OA784
SCARLATA S., PA924, PA1213
SCARPELLI E., PA406
SCELSI L., PA461
SCHAAR A., PA1269
SCHABALLIE H., PA1037
SCHAEFFER M., PA531
SCHAERZ K., PA1320
SCHAFAUSER N., PA323, PA1040
SCHÄFFER L., PA4296
SCHAMBYE H., PA1932
SCHAMS A., OA4437
SCHANG G., PA4146
SCHAUB B., PA988, PA1002, OA2954, PA3948
SCHAUDIEN D., PA1816
SCHECHTMAN K., RCT2164
SCHEIBENBOGEN C., OA4360
SCHEIWILLER P., PA2048
SCHELCH K., OA1383
SCHELFHOUT J., PA4182
SCHELTEMA R., OA668
SCHENKEL L., PA4192
SCHERMULY R., PA4149
SCHEWE J., PA1254
SCHIAVONI G., PA2817
SCHIFFERS C., OA119, PA1661, PA1700, PA2442, PA3903, PA3990
SCHILLEBEECKX E., OA781, OA786
SCHILLER H., PA1827, PA1833, OA2966
SCHILLER H., PA598, OA662, OA668, OA3656
SCHIOPPA T., OA2258
SCHIPPERS D., PA1078
SCHIPPERS J., OA1438, PA1885
SCHITTNY D., PA2056
SCHITTNY J., PA2056
SCHIZA S., PA614
SCHIZA S., PA572, PA3588, PA4291
SCHLÄPFER F., PA3451
SCHLATMAN A., PA174
SCHLEGTENDAL A., OA4417, OA4418
SCHLEICH F., PA886, OA1413, PA1681, PA1690, PA2392, PA3207, OA3679
SCHLEMMER F., PA524, PA3345
SCHLEPUTZ C., PA2056
SCHLUNEGGER M., OA1629
SCHLÜNSSEN V., PA231, PA956, OA1415, PA3221
SCHMALSTIEG C., PA3404
SCHMID A., OA3749, OA3754
SCHMID C., PA4296
SCHMID J., PA880, PA942, PA2394, PA3189, OA3677
SCHMID J., PA927
SCHMID J., PA1684, PA3335
SCHMID O., OA2957, OA2965, PA3477
SCHMIDLI F., PA1320
SCHMIDT B., PA490, PA491
SCHMIDT J., PA2078
SCHMIDT O., PA888, PA936
SCHMIDT V., PA3236, PA3243
SCHMIDTHALER K., PA3982
SCHMIDT-HUTTEN L., PA2063

SCHMITZ F., PA1682
SCHNAPPER M., PA1008
SCHNEEBERGER T., PA1216, PA1811, PA1861
SCHNEER S., PA382
SCHNEIDER C., PA2430
SCHNEIDER C., PA2567
SCHNEIDER C., OA668
SCHNEIDER H., PA2088
SCHNEIDER M., PA2645
SCHNEIDER P., PA490, PA491
SCHNEIDER R., OA662
SCHNEIDER S., PA2048, PA2689
SCHNEIDER S., PA2680
SCHNEIDER S., PA475, PA2681
SCHNEIDER S., PA2688
SCHNIERING J., PA598, PA599, OA668
SCHNOEGL D., PA574
SCHOCH O., PA1320
SCHOELERMANN J., PA4146
SCHOEMANS H., OA687
SCHOEN C., PA1216
SCHOFIELD C., PA1294
SCHOFIELD D., OA2938
SCHOFIELD L., PA3323
SCHOINI P., PA1840
SCHOLAND M., PA1948
SCHOLS D., OA2937
SCHOLZ F., PA936
SCHÖN P., OA124
SCHÖNHOFER B., PA1649
SCHOOS A., OA148, PA1755
SCHORER M., PA597, PA4271
SCHORETSANITI S., PA3926
SCHORPP K., PA2787
SCHOUTEN J., PA4083
SCHOUWINK H., OA2266
SCHRAMEL F., PA1078
SCHRAMM D., PA2514, PA2515
SCHRANC Á., PA556, PA1241, PA2759, OA3110, PA3522
SCHRECK L., PA3975
SCHRECK L., PA298
SCHREIBER J., PA920, PA1297, PA2845, PA2852
SCHREIBER S., OA4360
SCHRIJVER J., PA4210
SCHRÖDER M., PA214, PA1287
SCHROEDER E., PA4222
SCHRUMPF J., PA582
SCHUCHARDT S., PA1944
SCHUEPBACH R., PA3455
SCHUETZENMEIER A., OA2948
SCHULER M., PA2593
SCHULTE J., PA609
SCHULTE R., PA3474
SCHULTE-SCHREPPING J., PA1269
SCHULTZ A., PA2726, PA3987
SCHULTZ A., PA1230
SCHULTZ H., OA691
SCHULTZ K., PA2593
SCHULTZ M., OA1438
SCHULTZ T., PA888
SCHULTZE J., PA1269
SCHULTZE J., PA2812
SCHULZ C., PA1683
SCHULZE S., PA2645
SCHULZKE S., PA1002, PA1012
SCHUMACHER F., OA2920
SCHUMANN D., PA190, PA191, PA4034
SCHUMANN D., PA394, PA1318
SCHUTTEL K., PA3613
SCHUURBIERS M., OA2266
SCHUURMAN A., OA2313
SCHUURMANS M., PA1031
SCHWANZER J., PA4318
SCHWARZ C., PA4025, OA4408
SCHWARZ E., OA2291, PA2689, PA3604
SCHWARZ E., PA360, PA475, PA2681
SCHWARZ R., PA4262
SCHWARZ S., PA2758
SCHWARZ S., PA518
SCHWARZKOPF D., PA4299
SCHWARZKOPF L., PA1154, OA1390
SCHWARZL G., PA2593
SCHWEBEL C., RCT2881
SCHWEIKERT A., PA2059, PA2061, PA3419
SCHWEIMER W., PA2533
SCHWENDENWEIN A., OA1383
SCHWERK N., RCT2887
SCHWETTMANN L., PA1154, OA1390
SCHWIENING M., PA4152
SCHWORER S., PA588
SCIALÒ F., PA872
SCIARRA T., PA2044
SCIARRABBA C., OA1619
SCIARRILLO E., PA2577
SCIARRONE F., PA573
SCIASCIA T., OA1395
SCICHILONE N., PA882, PA3851
SCIOLLA A., PA1260
SCIOLLA M., PA883, PA1997, PA2440
SCIOSCIA G., PA166, PA1196, PA4254
SCIRICA C., PA2765
SCIRIHA A., PA1049
SCIUCA S., PA1267, PA2448, PA3972
SCIURBA F., RCT712
SCODITTI E., PA413
SCOTNEY E., PA987
SCOTO M., PA270
SCOTT A., PA1795, PA1947, PA2825, OA3778, OA4411
SCOTT G., PA4268
SCOTT H., PA578, PA918
SCOTT I., OA2938
SCOTT I., PA3201
SCOTT I., OA2254, OA2940
SCOTT J., PA3529
SCOTT K., PA3373
SCOTTA M., PA3970
SCOTTON C., PA152, PA3418, PA3488
SCRIMGEOUR N., PA4249
SCRIVANO P., PA406
SCULLION T., PA1209
SCUREK M., PA4319
SCURRIA A., PA2840
SEABRA B., PA3386
SEAMAN S., PA2682
SEARLE B., OA4379
SEBBA J., PA2478
SEBIO GARCIA R., OA4366
SECHER T., PA1817
SECK F., OA1437
SEDDON P., OA2185
SEDEEK ., PA4294
SEDKI M., OA2302
SEDLÁČEK M., PA1850
SEDLÁK V., PA1850, PA2397, PA3835
SEE Y., PA2405, PA2406
SEEDAT A., PA3333
SEEGEBARTH A., PA1305
SEEGER R., PA2677
SEEGER W., PA3454
SEELIGER B., PA1254, OA1452, PA1818, PA1944, PA2078
SEEMAYER C., PA1931
SEERSHOLM N., PA249
SEETO R., PA2488
SEFTON K., PA1768
SEGALOTTI A., OA2913
SEGEL M., PA2696
SEGHAYE M., PA290, OA1413, PA1824
SEGHERS I., OA1388
SEGHERS L., OA688
SEGLIAS A., OA1440
SEGUENI N., OA2252
SEGUIN-GIVELET A., OA3762
SEGURA DE LA CAL T., PA466
SEHMI R., PA3900
SEHMI R., PA933, PA935, OA2203, OA3673
SEIÇA CARDOSO C., PA3487
SEIDEL A., PA1942
SEIDL E., OA1621
SEIF M., PA2109
SEIFERT B., PA3412
SEIGERS D., PA3609
SEILER F., PA4062
SEIXAS S., PA1278, PA1280
SEJDIC A., PA4028
SEKAR R., PA1845
SEKI K., PA2632
SEKIYA K., PA917
SELAMOGLU M., PA2019
SELANDER T., PA3422
SELBERG S., PA2446
SELBY A., PA2858
SELÇUK A., PA1058
SELCUK M., PA285, PA289, PA3985
SELÇUK Z., PA439
SELEVESTRU R., PA1267, PA2448, PA3972
SELIMOGLU I., PA446, PA447, PA3244
SELINGEROVA I., PA2378
SELLAMI R., PA234, PA345, PA1189, PA1839, PA1841, PA1843, PA1993
SELLAMI S., PA530, PA1244, PA2752, PA3510
SELLAOUTI S., PA2780
SELLARES J., PA449, PA2792, PA4127
SELLMER L., PA2567
SELMAN J., PA1044
SELMAN M., PA4047
SELTON-SUTY C., PA3464
SELUK L., OA1436
SELVADURAI H., PA1757
SELVADURI H., PA949
SELVAN M., PA4237
SELVARAJ J., PA2566
SEMBRANT J., PA2792
SEMEDO L., PA3296
SEMENDYAYEVA O., PA3449
SEMINARIO C., PA3394
SEN A., PA3479
ŞEN E., OA748
ŞEN F., PA2607
SEN S., PA901
ŞEN V., PA282, PA296, PA2496, PA2500
SEN TAN K., OA3750
SENARATNA C., PA2100
SENECHAL A., PA3301
SENER Y., OA3127
SENEVIRATNE A., PA2422
SENEVIRATNE S., PA3435
SENGUPTA A., PA609, PA2787, PA3172, PA3477, OA3656
SENKEEV R., PA1997
SENNI M., PA553
SENUSSI TESTA T., OA4406
SEOANE-PILLADO M., PA3960
SEOW D., PA1656
SEPE A., PA3495
SEPÚLVEDA C., PA1255
SEPÚLVEDA CÁCERES N., PA3998
SERCE UNAT D., PA1191
SERESIRIKACHORN K., PA3208
SERGEJEVA S., PA2397, PA3207
SERGIACOMI G., PA4128
SERGIO F., PA2596
SERGIO WIEDERKEHR R., PA2449
SERHANE H., PA398, PA946, PA1126, PA2556, PA3238, PA3332, PA3940, PA3950
SERHIIENKO A., PA3443
SERHIIENKO A., PA1207
SERINI T., OA1634
SERINO M., PA444, PA1969, PA2641
SERMET GAUDELUS I., PA2844
SERNA PASCUAL M., PA192, PA2861
SERNA VALVERDE A., PA2788
SERRA MITJA P., OA767, PA2423, PA2708, PA2719
SERRAJ M., PA3485
SERRANO L., PA4038
SERRANO T., PA403, PA2611
SERRANO FERNÁNDEZ L., PA4033, PA4039, OA4409
SERRANO-LLOP A., PA3288
SERRES S., OA4367
SERRESSE L., PA3350
SERVETTAZ A., OA4435
SESE L., PA524, OA2959
SESTINI P., PA3371
SETH J., PA3407
SETHI K., PA2543
SETHI P., PA1883
SETHI T., PA1932
ŠETINA ŠMID S., OA1620, PA3962
SETUBAL J., PA4065
SETUBAL J., PA2797, PA4282
SETYAWATI M., OA2958
SEVASTA K., PA1049
SÈVE P., PA3446
SEVERINO B., OA2257
SEVESTRE M., OA3130
SEVIK A., PA2048, PA2750
SEVILLA ORTEGA A., PA921
SEVINÇ C., PA3311, OA4361
SEWALD K., PA1816
SEYS S., OA2937
SFERRA E., PA361, PA411, PA1954
SFIKA M., PA947
SFIKAKIS P., OA1450, PA1952
SGALLA G., PA2609
SGARBOSA N., PA323
SGARBOSSA T., PA490, PA491, PA1668
SHABA E., OA2256
SHABYKEEVA S., PA2048
SHACHAF Y., PA3468
SHAFAHI A., PA4274
SHAFFER M., PA2670
SHAFFER M., PA1132
SHAFIEK H., PA187, OA752
SHAFRAN I., PA910, OA1436, PA2696
SHAH A., PA2851

SHAH A., PA3393, PA3400, OA3752
SHAH H., PA1097, PA2643
SHAH J., PA2740
SHAH M., PA4099
SHAH N., PA1655, PA3322
SHAH N., PA2029
SHAH P., PA2005
SHAH P., PA497, OA772, PA869, PA2066, OA2322, RCT2882, PA4172, RCT4448
SHAH P., PA930
SHAH R., PA3893
SHAH R., PA1722
SHAH S., PA975
SHAH S., PA4084
SHAH U., PA485
SHAH U., PA3302
SHAH GUPTA R., PA1892
SHAHDAB N., PA1293
SHAHEEN S., PA1116, PA3227, OA3795
SHAHEEN S., PA2455, PA3220, OA3743
SHAH-GUPTA R., PA1892
SHAHID S., PA386
SHAHIDI M., PA368
SHAHIN M., PA2784
SHAHIN Y., PA470
SHAIKH A., PA3882
SHAIKH H., PA2046
SHAJI S., PA1220
SHAKED Y., PA1946
SHAKER S., PA2658
SHAKER S., PA1945
SHAKER S., PA2667, PA3431
SHAKIEV N., PA2048
SHAKOOR M., PA1085
SHAMBHU L., PA3272
SHAMS-KHAN H., PA365, PA3357
SHANKAR D., PA1845, PA2570
SHANKAR M., PA1696
SHANNON H., PA3320
SHANTHIKUMAR S., OA1624
SHAPERA S., PA3423
SHARGILL N., OA772
SHARIBUDIN N., PA1773
SHARIFF GHAZALI S., PA504
SHARKEY M., PA464, PA470, PA1971
SHARLOW E., PA2842
SHARMA H., PA1901
SHARMA N., PA1237
SHARMA P., PA397
SHARMA R., PA200, OA747, PA2109, PA2110
SHARMA S., PA3305
SHARMA V., PA2092, PA2418
SHARPE H., PA502
SHARRACK B., PA3874
SHATTOCK E., PA3398
SHAUKAT M., PA471
SHAVIT A., PA4187, PA4189
SHAW D., OA1411, PA3499
SHAW D., OA671, OA798
SHAW D., OA141, PA2774
SHAW K., PA2438
SHAW M., OA1615, PA1770, PA2487, PA2488, PA2494
SHAWCROSS A., PA2486, PA3280
SHCHUDRO O., PA867
SHCHUDRO O., OA138, PA1226
SHEEHAN N., PA3235
SHEEHAN R., PA2534
SHEERAN I., PA3155
SHEERS N., OA2911, OA2914
SHEIKH A., PA504, OA3795, OA3800
SHEIKH FATHOLLAHI M., PA4061
SHELDON A., PA516
SHELEST B., PA4153
SHELTON D., PA1210
SHEMILT J., OA2922
SHEN D., PA555, PA1262
SHEN R., PA3477
SHENG CHENG H., OA3750
SHENOY A., PA3274
SHEPHARD W., PA1123
SHER M., PA178, PA4182
SHERALIEV U., PA2048
SHERER Y., PA1132
SHERIDAN L., PA3420
SHERIDAN S., PA2029, PA3320
SHERINGHAM J., OA4379
SHERRATT F., PA412
SHETTY R., PA408
SHETTY S., PA3288
SHEU C., PA4323
SHEVCHENKO D., PA3449
SHEVCHENKO O., PA2622
SHI Y., PA3561
SHIANG T., PA3482
SHIBATA Y., PA3496
SHIBLI M., PA4196
SHIBUYA J., PA1118
SHIGDEL R., PA239, PA2100
SHIGERU ., PA4123
SHIGETA A., PA465
SHIGETA M., PA2067
SHIH I., PA3382
SHIH V., PA4187
SHIHAM F., PA1123
SHIHAM F., OA1404
SHIM J., PA2768, PA3971
SHIM J., PA180
SHIM T., PA1027, PA1158
SHIM Y., PA1923
SHIMIZU Y., OA1394
SHIMIZU Y., PA2790
SHIN C., PA4295
SHIN D., OA755
SHIN S., PA1923
SHIN S., PA3611
SHIN T., PA3611
SHIN W., PA1941
SHINDE S., PA2858
SHINODA M., PA3496
SHINOZAKI Y., PA1118
SHIRAI T., PA929, PA1664, PA1902
SHIRATORI Y., OA4410
SHIRKAVAND A., PA3211
SHITENBERG D., PA3308
SHMUELI E., PA2651
SHOAIB J., PA1890
SHOEMARK A., PA1823, RCT2883, PA3391, OA3748, OA3751, OA3798, OA4404
SHORE P., PA2597
SHOSHKOV P., PA4292
SHOSTAK Y., PA2651, PA3308
SHREES C., PA3565
SHRESTHA S., PA3218
SHRIKRISHNA D., PA3321
SHRIMPTON S., PA1901
SHRINE N., PA3235, OA3737, PA4247
SHTEINBERG M., PA382, PA508, OA3748
SHTEPA O., PA3927
SHU C., PA1897, PA2621
SHUHUA C., PA1265
SHUKLA S., PA3168
SHUKLA S., PA3897
SHULIMZON T., PA2696
SHUM M., OA2904
SHUNE S., PA3875
SHUNMUGAM R., PA4208
SHUSTER G., PA910
SHUTTLEWORTH M., PA1823, OA3748
SHUTTLEWORTH R., PA152, PA3418, PA3488
SHVETS K., PA2115
SHVETS O., PA2622
SHYAMALI DHARMAGE S., PA956
SIA L., PA2573
SIABRO L., PA3469
SIACHPAZIDOU D., PA2721
SIAMI S., PA1248, PA1249
SIBANDA T., PA2739
SIBARITA J., OA2936
SIBILA O., PA449, PA1268, PA1835, PA2114, OA3748
SIBLEY S., PA2384, OA4381
SICKMANN A., PA2076
SICLARI F., PA3601
SICOLO E., PA299
SIDDALL J., PA2416, PA2417
SIDDHURAJ P., PA2797, OA2938, PA4065, PA4282
SIDDIQUI F., PA1180
SIDDIQUI S., PA3562
SIDDIQUI S., PA158, PA890, PA986, OA1411, OA3800
SIDDIQUI S., PA2390, OA2950, PA3197, PA3198, PA3209, PA3212, OA3672, OA3675, PA4321
SIDHOM K., PA523
SIDI OUMAR M., PA1909, PA1912
SIEBENEICHLER A., OA9001
SIEFKER D., PA2087
SIEGERT E., PA472
SIEMIŃSKA A., PA2664
SIENA L., PA4005
SIERRA-VARGAS M., PA4281
SIERRA-VARGAS M., PA3526
SIESTO LÓPEZ G., PA204, PA206, PA2105
SIEVI N., PA3150
SIGALA I., PA362, PA2522
SIGAUD F., PA1248, PA1249
SIGNES-COSTA J., PA567, PA568
SIGNES-COSTA MIÑANA J., PA1201
SIGNORELLO J., PA2391
SIGNORINI M., OA1622
SIGSGAARD T., OA1415, PA3221
SIKJÆR M., PA1117, PA3915
SIKKELAND L., PA3525
SIKOROVÁ K., PA3445
SILLEN M., PA1866
SILVA B., PA4228
SILVA C., PA2460
SILVA D., OA2323
SILVA E., PA3482
SILVA F., PA1801, PA4156
SILVA H., PA3551
SILVA H., PA1166
SILVA J., PA1798
SILVA J., PA2707, PA4163
SILVA J., OA3658
SILVA L., PA4016, OA4429
SILVA L., PA1045
SILVA M., PA2428, PA4156
SILVA M., PA2463
SILVA M., PA3427, PA3428
SILVA R., PA3327
SILVA R., PA324
SILVA R., OA3729
SILVA S., PA3487
SILVA T., PA2558
SILVA E COSTA DE CASTRO BARRETO I., PA1324
SILVA-REIS A., PA1288, PA2578, OA4362
SILVEIRA J., OA3125
SILVERA G., PA524
SILVERII M., PA2762
SILVÉRIO FARIA C., PA2797, PA4065, PA4282
SILVERIO-ANTONIO P., PA1980
SILVESTRE C., PA415, PA431
SILVESTRE O., PA1083
SIM J., PA539, PA3971
SIM M., PA1735
SIMANOVICH E., PA382
SIMAO P., PA318, OA802, PA1281, PA3386, PA3620
SIMEÓN-AZNAR C., PA472
SIMEONE J., PA1891
SIMEONOVA M., PA2111
SIMILOWSKI T., PA3350, PA3992, PA3993, PA4000
SIMKOVA I., PA1990
SIMKOVICH S., OA2960
SIMMINI S., PA2051
SIMMONDS M., OA798
SIMMONDS N., OA3752
SIMÕES A., PA4207
SIMOES D., PA2041
SIMÕES M., PA2733
SIMON D., PA184
SIMON L., PA1827
SIMONE F., PA166
SIMONE V., PA184
SIMONET P., OA2962
SIMONET AINETO P., PA501
SIMONETTI J., PA2695
SIMONI M., PA939
SIMONIČ A., OA4424
SIMONNEAU G., PA3457
SIMONOVSKA R., OA1454
SIMONS S., OA1626
SIMONS S., PA1651, PA1673, PA3349
SIMPSON A., OA1407
SIMPSON A., PA892
SIMPSON A., PA1215, OA1608, PA3523
SIMPSON A., PA3179, PA3956
SIMPSON A., PA179
SIMPSON J., PA4179
SIMPSON J., PA3529
SIMPSON J., PA1046
SIMPSON K., PA881
SIMPSON S., PA1738, PA1743, RCT2165, OA2943
SIMPSON S., PA996
SIMS D., OA2254
SIMS G., OA2940
SIMSEK KIPER P., PA2853
SIMSOLO C., PA3466
SINEL-BOUCHER P., PA1326
SINFONTES RODRÍGUEZ G., PA3957
SINGANAYAGAM A., OA2200
SINGER F., OA141, PA999, PA1005
SINGH A., PA1711
SINGH B., PA4239
SINGH B., PA1199
SINGH C., PA3330
SINGH D., PA3562
SINGH D., OA748, OA749, PA1104, OA1417, PA2104, PA2599, PA3187, PA3520, PA3575, PA3610, PA3617, PA3625, PA3893, PA3894, PA4183, PA4317
SINGH D., PA2414
SINGH G., PA1883
SINGH G., PA4069
SINGH K., PA512

SINGH K., PA3272
SINGH M., PA4272
SINGH M., PA512
SINGH P., PA4272
SINGH P., PA2441
SINGH R., PA2668
SINGH S., OA130, PA363, PA1867, PA2422, PA3323, PA3365, PA4196, PA4206
SINGH S., OA131, PA364, PA1228, PA2580, PA2584, PA3355, PA3363, PA4193
SINGH S., PA4209
SINGH S., PA1261
SINGH T., PA3407
SINGH U., PA1711
SINGH J S., PA2592
SINGH SOHAL S., PA3549
SINGHERA G., PA2793
SINGLA A., PA488, OA665, PA3847
SINGLE A., PA2831, PA2833
SINGURU S., PA227
SINHA A., OA1443
SINHA I., PA305, PA1764, PA1768, PA3908, PA3913, PA4007, PA4010
SINHA P., PA2598
SINHA S., PA1883
SINIGAGLIA P., PA2380
SINN K., PA1140
SINUES P., PA1002
SIO Y., PA241, PA876, PA955, PA1689, PA3559
SIOUSIOURA D., PA362, PA2522
SIPILÄ M., PA860
SIPKOVA M., PA3841
SIRAJ R., PA624
SIRBU I., PA2377, PA2687
SIRENA C., OA3679
SIRIANNI N., PA3282
SIRIBADDANA A., PA3543
SIRIBADDNA A., PA3542
SIRINE D., PA2007
SIRINO MONTEIRO J., PA2797, PA4065, PA4282
SIROUX V., PA253, PA3230
ŞIŞMANLAR EYÜBOĞLU ., PA2500
SISMANLAR EYUBOGLU T., PA271, PA282, PA1756, PA2496, PA2505, PA2510, PA3244, OA4416
SISÓ A., PA2741
SISODIA S., PA1761
SIT G., PA252, PA255
SI-TAHAR M., PA1829
SITAPARA R., PA4143
SITBON O., PA1989, OA2274, OA2280, PA3461
SITIA E., PA573
SIVAKUMAR D., PA3333
SIVAKUMAR P., PA2625
SIVAPALAN P., PA240, PA246, PA1647, PA1695, PA2415, PA3182, PA3232, PA3234, PA3612, PA3839
SIVARAMAKRISHNAN A., PA368
SIVARAMAN K., PA1816
SIYUE KOH M., OA3747, OA3750
SJÖGREN N., PA4174
SJÖLANDER A., PA990, PA991
SKAARUP K., PA1695, OA2901
SKAARUP S., OA2903
SKALA M., PA3835, PA3841
SKARDA J., OA1383
SKAVBERG ROALDSEN K., PA1797
SKEVAKI C., PA988, PA3902
SKEVIN S., OA2199
SKGRAT S., PA882
SKHIRI A., PA1257, PA3939
SKIADAS J., PA4025, OA4408
SKIDMORE N., PA1804
ŠKILJO H., PA2756
SKINNER D., PA515, OA748, PA3607
SKJERVEN H., OA140
SKJODT N., PA3596
SKJOLD T., PA880, PA942, PA1684, PA3189
SKLAR M., PA3312
SKOCZYLAS A., OA3790
SKOCZYŃSKI S., PA548, PA995
SKÖLD M., PA3574, PA3923
SKORO-SAJER N., PA1990
SKOU S., PA327
SKOV F., PA1755
SKOV I., PA1333, PA2665, PA3868
SKOWASCH D., PA936, PA1678, PA1682, PA1683, PA2812
ŠKRGAT S., PA1338, PA2397, OA3679, OA4424
SKŘIČKOVÁ J., PA3412, PA4108
SKRIDE A., PA1181
SKRINDO I., OA140
SKRONSKA P., PA4112
SKUBCHENKO Y., PA3375
SKULSTAD S., PA956
SKUPINSKA M., PA4112
SKYBA P., PA550
SKYLLAS G., PA1264, OA2317
SŁADEK K., OA1410, PA2664
SLATTERY D., PA2856
SLAUGHTER L., PA2418
SLAWINSKA R., PA2412
SLEBOS D., OA136, PA492, PA494, PA495, OA772, PA1271, PA2004, PA2075, PA2444, PA4172
SLEEMAN M., PA2797, PA4065, PA4282
SLEEMAN M., PA4268
SLEIERS N., OA2935
SLEILATY G., PA349, PA2579, OA4358
SLEPCHENKO N., PA2112, PA3621, PA3622, PA3907, PA3916, PA4044, PA4045
SLIM A., PA2101
SLIM J., PA540
SLIM K., PA4040
SLINGERS G., OA1621
SLIWINSKI P., OA2289, PA4259
SLOB E., PA3268
SLUK L., PA2696
SLY P., OA146, PA1744
SMADHI H., PA620, PA2637, PA2638
SMADHI H., PA1105
SMALL E., OA2963
SMALL M., PA1691, PA2416, PA2417, PA2674
SMALLWOOD D., PA1656
SMALLWOOD N., PA1656, PA1864
SMAYRA V., PA1143
SMEENK F., PA2714
SMEENK F., PA2402
SMEETS C., PA2047
SMEETS D., PA1991
SMEREKA Y., PA2112, PA3621, PA3622, PA3907, PA3916, PA4044, PA4045
SMIDT-HANSEN T., PA880, PA1684, PA3189
SMIESZEK S., PA2800
SMILJANIC K., PA2076
ŠMIT D., PA4080
SMIT H., PA1078
SMIT K., PA3360
SMITH A., PA1893
SMITH A., RCT2883, PA4186
SMITH B., PA248
SMITH B., PA4231
SMITH C., PA3866
SMITH C., PA1290
SMITH E., PA1738, PA1743, RCT2165, PA3987
SMITH E., PA3968
SMITH G., OA762, PA1895
SMITH H., PA2516
SMITH I., OA128, PA565, PA3891
SMITH J., PA3900
SMITH J., PA901
SMITH J., PA175
SMITH J., PA173, PA177, PA178
SMITH K., PA4003
SMITH L., OA128, OA1403, PA3891
SMITH N., PA4037
SMITH P., PA1934, OA2279
SMITH R., PA3471
SMITH S., OA3726, OA3727
SMITH S., PA3204
SMITH S., PA3207
SMITH V., OA1453
SMITS H., PA582
SMITS S., PA2057
SMONDACK P., PA359, PA1870
SMTH A., OA1618
SMULDERS S., PA1078
SMYRNAKIS E., OA677
SMYTH C., PA1799
SMYTH R., PA4224, PA4229
SMYTH R., PA4218
SMYTH R., PA1290
SNAPP K., PA1979
SNELGROVE R., OA2200
SNENE H., PA390, PA1054, OA1604, PA3342, PA3343, PA3385
SNIDVONGS K., PA3208
SNOECKX A., PA1929, OA2261
SNYDER O., PA3949
SOARES B., PA1045
SOARES J., PA4160
SOARES L., PA1812
SOARES GOMES-GOUVÊA M., PA2797, PA4065, PA4282
SOARES MACHADO L., PA613
SOBIECKA M., PA1079, PA2664, OA3790
SOBRAL REBELO P., OA3119
SOBRERO G., PA1258
SOCCIO P., PA4254
SOCIAS L., PA3538
SOCORRO ÁVILA I., PA1911
SÖDERBERG S., PA244
SÖDERHALL C., OA140
SÖDERLUND Z., PA608, PA2079, PA4269
SÖDERSTRÖM J., PA3610
SOEMARWOTO R., PA1888
SOENDERGAARD M., OA3677
SOERGEL M., OA3796
SOH J., PA1011
SOHAL S., PA2793
SOHEL N., PA896
SÖHLER S., PA1669
SOHN J., OA755
SOHN M., PA977, PA978
SOJA J., PA483
SOJA J., PA482, OA1410
SOKALCHUK L., PA4074
SOKHATSKA O., PA3427, PA3428
SOKOLOVA E., PA550
SOKOLOWSKA M., OA2204
SOKOLOWSKI R., PA1134, OA3783, PA4107
SÖKÜCÜ S., PA3224
SÖKÜCÜ S., PA2045
SOLAI ELANGO D., OA3796
SOLANKI P., PA1290
SOLANO LÓPEZ A., PA385
SOLARI F., PA2076
SOLCO A., PA1763
SOLÉ D., PA1045, PA2465
SOLÉ JOVER A., PA3298
SOLELHAC G., OA2284, OA2287, PA3601
SOLER A., PA3531
SOLER D., PA1718
SOLER J., PA1317
SOLER N., PA197, PA449
SOLER X., PA3198, OA3672, PA4321
SOLER COMAS A., OA4406
SOLER SEGOVIA D., PA250, PA2466
SOLIANI M., PA3969
SOLICHOVA L., PA3841
SOLIER LÓPEZ A., PA527, PA1107, PA1346
SOLIMAN M., OA4377
SOLIŃSKI M., PA1033
SOLIS A., PA4074, PA4245
SOLIS GARCIA E., PA4159
SOLÍS GARCÍA M., PA4054
SOLIS SOLIS A., PA2423, PA2708
SOLLI P., OA784
SOLLI VEIEROD P., PA2034
SOLODIANKIN O., PA4086
SOLOMON J., RCT2886
SOLOMON M., PA1770, PA2487
SOLOPOV P., PA2835, PA2842
SOLORZANO EGURBIDE J., PA1309, PA1310, PA1319
SOLVERSON K., PA557, RCT716
SOLYMOSI D., PA2427
SOMA S., PA2656
SOMAN S., PA2772, PA2776
SOMEKAWA K., PA2632
SOMERS B., PA3490
SOMERS L., PA3892
SOMERTON C., PA2534
SOMMA D., PA2794
SOMMER N., PA2078, PA3454, PA3902
SOMMERBURG O., OA4417
SOMMET A., PA3911
SOMOGYI P., PA3516
SOMPA S., PA3231
SON K., PA3173, OA3673
SONDELL A., PA1800
SØNDERGAARD M., PA2394
SONEJI S., PA2826
SONG J., PA915
SONG J., PA1158, PA3426, PA3445
SONG S., PA594
SONG W., PA180, PA905, PA923, PA1714, PA4325
SONG Y., PA3610
SONI S., PA4273
SONIA T., PA1907
SONIA T., PA424, PA4300
SONNAPPA S., PA985, PA987, PA3286
SONNATI C., PA1205
SONNE D., PA4174

SÖNNERFORS P., PA1797, PA1803
SONT J., PA2402, OA3679
SONT J., PA882
SOO C., PA2573
SOO Y., PA433
SOOD N., PA2682
SOOMETS U., PA4301
SOON E., PA4152
SOON TAN N., OA3750
SOORONBAEV T., OA1440, PA2749
SOORONBAEV T., PA2048
SOPHOCLEOUS L., PA293
SOPIADOU A., PA2495
SORANO A., PA2762
SORDI T., PA4126
SØRENSEN ., OA141
SØRENSEN A., PA3915
SØRENSEN R., PA246, PA3839
SØRHAUG S., PA1137
SORIA F., PA3259
SORIANO A., PA449
SORIANO D., OA3784
SÖRLIN A., OA803
SORRENTINO R., PA411, PA3162
SOSA M., PA1061
SOTGIU A., PA3149
SOTGIU G., PA217, PA2114
SOTIROPOULOS G., OA765
SOTIROPOULOU A., PA1854
SOTIROPOULOU V., PA1098, PA1128
SOTIROPOULOU V., PA2655
SOTIROPOULOU Z., PA2519
SOTO CAMPOS G., PA2140
SOTO MONCIVÁIS B., PA4094
SOTO-CAMPOS G., PA2124
SOUDET S., OA3130
SOUKTANI R., PA2479, OA2921
SOUMAGNE T., PA1697, PA3620
SOUMAYA B., PA2098
SOUMAYA B., PA2098
SOUQUET P., PA1915
SOUROUR A., PA2735
SOUSA A., PA909
SOUSA A., OA141
SOUSA C., PA2641
SOUSA L., PA1918
SOUSA S., PA4001
SOUSA COELHO D., PA3487
SOUSA DE SÁ MARQUES M., PA1171
SOUTHCOTT A., PA621
SOUTHERN J., PA2452, PA2462
SOUTHWOOD M., PA4152
SOUTHWORTH T., PA3617, PA4317
SOUTO MOURA C., PA3428
SOUTOME T., PA3496
SOUTO-MIRANDA S., PA318, OA746, OA802, OA806, PA1855, OA3117
SOUZA G., PA1044
SOUZA R., OA2273, OA2276
SOUZA V., PA520, PA3313, PA3850
SOVA M., OA2325
SOVANI M., PA570, PA2774
SOVIJÄRVI A., PA1242, PA1720, PA2035, PA3317
SOYDAŞ Ş., PA2501
SOYSAL A., PA271
SOYYIGIT A., PA277
SOZIO F., OA2258
SOZZANI S., OA2258
SPAGGIARI L., PA307, PA481, OA3764
SPAGNOLO P., PA1164, PA1178, OA1457, PA1970, PA3372
SPAHN J., PA4315
SPALLUTO C., OA3109
SPALLUTO M., PA1273
SPANEVELLO A., PA217, PA369, PA887, OA1414
SPANO J., OA2184, PA3578
SPATHIS A., PA894
SPATUZZO M., PA2450
SPAZIANO G., OA751, PA4190
SPEARS M., PA1965, PA2794, RCT2883
SPEEKENBRINK R., OA3760
SPEICHER T., PA1669
SPENCE J., PA216
SPENCER L., OA801, PA1802
SPENGLER C., OA124
SPERANDEO M., PA1196
SPERANDIO P., PA520, PA3313, PA3850
SPERINDE G., PA4183
SPERK I., OA771
SPERLING S., PA1101, PA3335
SPERLING HAUGEN S., PA1101
SPETH M., PA3470
SPETSIOTI S., PA362, PA2522
SPICER V., PA581, PA591
SPILIOPOULOS K., OA3763
SPILLER R., OA1618
SPINA F., PA2538
SPINICCI M., PA442
SPITALERI D., PA4077
SPITTLE D., PA2433
SPOLIDORO G., PA943, PA3925
SPOSITO F., PA2810
SPRIO A., PA883, PA2436, PA2440
SPRUIJT I., OA763
SPRUIT M., PA1035, PA1221
SPRUIT M., PA1651, PA1811, PA1855, PA1866, OA3117, PA3349
SPRYNSKI N., PA1822
SPYCHER B., PA1006, PA1013
SQUILLACIOTI G., PA948
SRBULOVIĆ BOŽANIĆ A., PA3376
SRDIĆ D., PA2710, PA4170
SREEDHARAN J., PA2770
SRIKANTA J., PA2515
SRINIVASAN K., PA2648
SRINIVASAN M., RCT2164
SRIPRASART T., PA4155
SRITHARAN N., OA3786
SRIVASTAVA G., PA1220
SRIVASTAVA S., PA1088, PA1655, PA3320
SRIVATSAN S., PA4268
SROUR K., PA4234
SROUR O., PA4234
STAAB-WEIJNITZ C., PA4121
STAAB-WEIJNITZ C., PA593
STAALI M., PA3944
STAATS R., PA1324
STACEY C., OA4374
STACHOWIAK Z., PA294, PA2498, PA2828, PA3555
STADHOUDERS R., OA2206, PA2815, PA3896
STADLER O., OA1453
STADLER S., OA3794
STADON L., PA1099
STÆHR JENSEN J., PA246, PA3234
STAEMPFLI M., PA3432
STAENTZEL J., PA3464
STAES A., OA786
STAES M., OA750
STAFF A., OA140
STAFLER P., PA2515
STAFOGGIA M., PA2468, PA3216
STAGAKI E., PA1869, PA2431
STAHL K., PA1254, PA2078
STAHL M., PA393, PA1112, OA4417
STÅHL P., PA610
ŠTAJDUHAR A., PA2130
STAKENBORG T., PA2449
STÄLLBERG B., PA194, PA211, PA2016, PA2102, OA4376
STALLWOOD S., PA1799
STAMATATOS I., PA303, PA310
STAMATELAKIS D., PA3587
STAMOU M., PA610
STAMPANONI M., PA2056
STANG J., PA224, PA1233, PA2760
STANKOVIĆ I., PA3376
STANLEY B., PA914
STANLEY T., PA3904
STANOJEVIC S., PA2485, PA2487, PA2494, PA3195, PA4004
STANZEL F., PA490, PA491
STAPLES K., PA1273
STAPLETON R., PA2597
STARK H., PA1942, PA4277
STARKEY M., PA578
STAS M., PA3490
STAS T., PA1234
STATHA E., PA3267
STATHAKIS G., PA3588, PA4291
STATHAKIS G., PA572, PA2401
STAUDINGER H., OA2952
STAUFER U., PA589
STAVARACHE E., PA3928
STAVEM K., PA1698
STAVROPOULOS-KALINOGLOU A., PA374, PA4194
STAVROPOULOU V., OA3796
STAVROU V., OA797
STECKEL J., PA1234
STEED L., PA511, PA516, OA4375
STEELANT B., OA2937
STEELE K., PA4165
STEENBRUGGEN I., OA1612, PA3988
STEENLAND ., OA2960
STEENVOORDE P., OA3760
STEER B., PA3245, PA3247
STEER J., PA208, PA1643
STEFANKOVA M., PA3841
STEFANO O., PA484
STEFFANINA A., PA2398, PA3215, PA4320
STEFFENSEN F., PA2092, PA2418, PA3857
STEG P., PA1314
STEGBAUER M., PA1230, PA2582
STEGEMANN A., PA1216, PA1861
STEGEMANN M., PA1112
STEGEMANN-KONISZEWSKI S., PA920, PA1297
STEGER M., PA188
STEIER J., PA192, PA1088, PA1240, PA1252, PA1655, PA2029, OA2291, PA2861, PA3320
STEIJNS S., PA3504
STEIN N., PA382
STEIN R., PA3970
STEINACK C., PA1031, OA2918
STEINBEIS F., PA1305
STEINER M., OA130, PA1860, PA2422, OA3113, OA4374
STEINER M., PA2013, PA3363, PA4216, RCT4448
STEINESTEL K., PA4277
STEINFORT D., OA2269
STEINFUEHRER K., PA3265
STEINHILBER G., OA4359
STEINHOFF K., PA2646
STEINSHAMN S., PA4249
STEIROPOULOS P., PA572, PA614, OA2289, PA2389, PA3587
STELFOX H., PA557, RCT716
STELLA G., PA2636, OA3761
STELMACH R., PA321, PA322, PA1047, PA3219
STENFORS N., PA937
STENLÖF K., OA2286, PA3603, PA3605
STENLUND T., OA803, RCT2160
STENSHOLT S., PA1117
STENSRUD T., PA2760
STEPANOV O., PA422
STEPANSKYI D., PA284
STEPENSKY P., PA3183
STEPHAN Y., PA4197
STEPHAN-FALKENAU S., PA1925
STEPHANY A., PA3570
STEPNIEWSKA A., PA4112
STEPTOE A., OA675
ŠTERCLOVÁ M., PA1022, PA2661
STERINGER-MASCHERBAUER R., PA1990
STERK P., PA3560
STERK P., OA141
STERLING K., PA1316, PA1658, PA1659
STERNER T., OA3732
STERNIK L., OA1436
STEURER-STEY C., PA3364
STEVEN R., PA1245
STEVEN JAMES S., PA184
STEVENS C., PA3900
STEWARD M., PA152, PA3488
STEWART G., OA3106
STEWART H., PA3581
STEWART I., PA3494
STEWART N., OA1403
STEWART N., PA3474
STEWART R., PA1051
STICK S., PA1294
STICKLAND M., PA3514
STILIYANOV ATANASOV K., PA4131, PA4132
STILLER G., PA1097
STJEPANOVIC M., PA1110
STOCK C., OA1393
STOCK C., OA1452
STOCKER N., OA2204
STÖCKL J., PA509
STOCKLEY R., OA3756
STOEGER T., OA662, PA1731, OA2957, OA2965, OA2966, PA3245, PA3247, PA3477
STOENOIU M., OA1455
STOFFELS A., PA522, PA1221, PA2040, PA3337
STOFFELS A., PA3337
STOGER L., PA1078
STÖGER T., PA3174

STOIANOV D., PA3833
STOICESCU E., PA2491
STOIMENOV B., PA3833
STOJANOVIC Z., PA4074, PA4092
STOJCHEVA N., OA3796
STOKER N., PA3613
STOKHOLM J., OA141, OA143, OA145, OA148, PA992, PA1755, OA2189
STOLBRINK M., PA2420
STOLERIU M., PA2787
STOLERIU M., PA598, OA668
STOLESKI S., PA1721
STOLK J., PA1645, OA3661
STOLL P., PA925
STOLL S., PA3400
STOLOVICH-RAIN M., PA1127
STOLZ D., PA190, PA191, PA394, PA1299, PA1301, PA1318, OA2266, PA2711, PA3171, OA3784, PA4034, PA4062, OA9001
STOMACI M., PA1196
STOMILOVIC S., PA172
STONE H., PA3995
STONE T., PA1327
STORACI A., OA3779
STORCH G., RCT2164
STÖRK S., OA4360
STORME S., PA1915, PA1919
STORRAR W., PA3494
STOWASSER S., OA1396, RCT2887
STOWELL J., PA3393, PA3400, PA3401, OA3752
STÖWHAS A., PA360
STRADLING J., PA2099, OA2291
STRADLING J., OA4365
STRAICHMAN O., PA3308
STRANDKVIST V., OA3736
STRANG J., PA3508
STRANGE C., PA3945
STRANIERI G., PA1997
STRANZINGER E., PA997, OA1623
STRASSBERGER C., OA2286, PA3603
STRASSBURG S., OA2920
STRASSMANN A., PA3364
STRATAKOS ., PA2431
STRATAKOS G., PA4129
STRAUS C., PA3992, PA3993
STRAUß B., PA1736
STRAUSS C., PA4000
STRAZDA G., PA215, PA4042
STREBA C., PA3329
STRECKENBACH# B., OA2947
STREET T., OA1409
STREIBEL C., OA1623
STREUBEL A., PA1925
STRICKER B., PA3384
STRICKER D., PA2711
STRICKSON S., OA2940
STRIDSMAN C., PA937, PA1704, PA1708, PA2446, PA2464, PA3614, OA3732, OA3736
STRIEDL P., PA2429
STRIK H., PA1673
STRINGER K., PA4252
STRINGER W., RCT712
STRNAD A., PA3445
STRNAD P., PA1645, PA2429, PA2430
STROBEL W., PA394, PA1318, PA4034, OA9001
STRODTHOFF C., PA3502
STROULIOS G., PA2051
STRUMAN I., PA4103
STRUNZ M., PA1827, PA1833, OA2966
STRUß N., PA172
STRUYF S., PA2811
STUBBS H., PA1982, PA4220
STUCKI J., PA3172
STUDNICKA M., PA2661
STUKOVSKY K., PA975
STUMP A., PA214
STUMPP M., OA3796
STUPACHENKO D., PA3449
STUPNYTSKA G., PA212
STURGES C., PA4076
STURM E., PA4318
STURRIDGE S., PA3523
STYLEMANS D., PA1225
SU J., PA973
SU J., OA2311
SU W., PA2621
SUAREZ A., PA449
SUÁREZ R., PA3586
SUÁREZ CASTILLEJO C., PA1184
SUAREZ CUARTIN G., PA3403
SUAREZ ESCUDERO S., PA487, PA2031
SUÁREZ ORTIZ M., PA1115, PA4235
SUAREZ-CUARTIN G., PA2585
SUÁREZ-ORTIZ M., PA4244
SUBASINGHEARAC D., PA395
SUBBA-RAO R., PA3283
SUBIZA J., PA921
SUBRAMANIAN P., PA2574
SUCENA M., PA525, PA2432, PA4228
SUCHANKOVA M., PA4119
SUCHI S., PA1649
SUCKER K., PA1736, PA1737
SUDA T., OA1394, OA1449
SUDHIR R., PA432, PA4166
SUDRE C., PA2008
SÜDY R., PA556, PA2759, OA3110
SUGGETT J., PA2023, PA2408
SUGIURA T., PA465
SUGIYAMA H., PA2709
SUGIYAMA S., PA1902
SUH E., PA617, OA1389, PA1655, PA2029, PA3320
SUHAIMI A., PA3366
SUHLING H., PA1687
SUJI EAPEN M., PA3549
SÜLEYMAN A., PA2496
SULIMAN A., PA2772
SULIMAN L., PA856, PA4286
SULKU J., PA2102
SULLIVAN E., OA2307
SULLIVAN J., PA879, PA1692, PA2403
SUMIYOSHI I., PA2656
SUN B., PA1694, PA3138, PA3918, PA4041
SUN C., OA4405
SUN H., OA1385
SUN J., PA4004
SUN W., PA4270
SUN Y., PA915
SUN Z., PA309
SUNANTA O., OA3115, PA3903
SUNDAR R., PA2700
SUNDARALINGAM A., PA433, PA441, OA782, OA785
SUNDAY S., OA678, OA680, PA970, PA3932, PA3933, PA3942
SUNDE R., OA148
SUNDH J., OA2290, PA3589
SUNGURTEKIN H., PA3315, PA3316
SUNJAYA A., PA2022, PA3143
SUNMAN B., PA1771, PA2853, OA4420
SUNTHARALINGAM J., RCT2883
SUOJALEHTO H., PA257, PA263
SUOMELA S., PA257
SUORANTA S., PA3422
SUPPINI N., PA3193
SUPPLI ULRIK C., PA3234
SURENDRAN S., OA3106
SURI R., PA1751
SURI T., PA1220, OA2902
SURMONT V., OA781
SUSAM S., PA2001
SUSKA K., PA186, PA3388, PA3402
SUSTOVA P., PA4249
SUTHARSAN S., OA2920
SUTHERLAND T., PA2659
SUTOVSKA M., PA4184, PA4188
SUTTER O., PA1013
SUTTON N., PA3874
SUTTORP N., PA1668
SUURONEN K., PA257
SUZER B., PA285
SUZUKI F., PA4298
SUZUKI K., PA4079
SUZUKI K., PA1887
SUZUKI M., PA2709
SUZUKI S., PA1120
SUZUKI S., PA611, OA673, PA1844
SUZUKI T., PA465
SVANES C., PA239, PA944, PA956, OA1415, PA1723
SVARTENGREN M., PA1218
SVATON M., PA4108
SVENNINGSEN S., PA523, PA1296
SVENSSON M., PA3589
SVENSSON-RASKH A., PA2535
SVERRILD A., PA942, OA2253
SVETLANA S., PA184
SVOBODA M., PA306, PA2012, OA3758, PA3849
SVORCOVA M., PA1022
SWALDUZ A., PA1926
SWALE J., PA1939, PA4018
SWAN F., PA1215
SWAN V., PA1216
SWANN O., PA1764
SWARNAKAR R., PA3330
SWART E., PA2614
SWEENEY A., PA2702, PA2703, PA2704, PA2725
SWEENEY D., PA1892
SWEEZEY N., PA2487
SWENSON E., PA2689
SWIATECKA-URBAN A., PA3580
SWIFT A., PA464
SWIFT A., OA128
SWIFT A., PA1971
SWIFT A., OA1403, OA2277, PA3467, PA3891
SWIFT A., PA462
SWINAREW A., PA548, PA995
SWINGER K., PA4192
SWINIUCH D., PA4259
SWINNEN K., PA1973
SWISTON J., PA4134
SWOGER J., PA4137
SYED A., PA4134
SYEDA S., PA1103
SYKES D., PA1157, PA3142
SYLVAIN C., OA794
SYLVESTER K., OA120, OA127, PA3989
SYMONDS J., OA785, OA787
SYNENKO T., PA422
SYRED K., PA1141
SYRIGOS N., PA1917
SYSTROM D., OA2276, PA3460
SZABOOVA K., PA4119
SZAKACS E., PA1708
SZAMEK E., PA2054
SZARVAS Z., PA1130, PA1229, PA2576
SZASZ A., OA1383
SZASZ-BENCZUR Z., PA2452
SZCZEPANKIEWICZ A., PA294, PA580, PA2498, PA2828, PA3555, PA3557
SZCZEPANKIEWICZ D., PA580, PA3557
SZCZEPULSKA-WOJCIK E., PA4112
SZE H., PA4322
SZEITZ B., OA1383
SZÉPFALUSI Z., PA3982
SZETO M., PA1890
SZEWCZYK R., PA1831
SZEZEPANSKI I., OA2278
SZLEJF C., PA963, PA3941
SZLUBOWSKI A., PA482, PA483
SZMIGIEL S., PA548
SZOŁKOWSKA M., PA483
SZPECHCIŃSKI A., PA4259
SZTAJNBOK F., PA1913
SZTURMOWICZ M., PA1079, PA2629, OA3790
SZUBLOWSKI A., PA2694
SZŰCS G., PA479
SZULCEK R., PA4147
SZWIEC M., PA4259

T

T ASKLANY H., PA3483
T. MCNICHOLAS W., OA2289
T.KUTTY J., PA2559
TAALAIBEKOVA A., OA1440, PA2048
TAALBERG E., PA4301
TABAJ G., PA3420
TABAK M., PA2553
TABBIA G., PA573
TABE Y., PA4079
TABERNERO HUGUET E., PA1179, PA1910, PA2572
TABET G., PA1143
TABEZE L., PA2127
TABIN N., PA2711
TACCOLA M., PA2589
TACHEVA T., PA3188, PA3572
TACK G., PA365, PA3357
TACK V., PA957
TADMOR B., PA1946
TAFAREL GALLI T., PA908
TAFELMEIER M., PA4296
TAFURO F., PA353
TAGAMI Y., PA2632
TAGG C., PA4167
TAGGART C., PA1104
TAGGART C., PA2807
TAGHIBEYGLOU B., PA877
TAGLIABUE P., OA3779
TAGLIAFERRO S., PA2468, PA2469
TAGUCHI K., PA1665
TAHA S., PA3165
TAHA ASKLANY H., PA858
TAHER A., PA2449
TAHIR B., PA3891
TAHIR B., OA128
TAHSEEN S., PA1903
TAIEB C., PA1787
TAILLE C., PA517, PA1330, PA1332, PA2127, PA3958
TAIVANS I., PA215,

PA4042
TAK J., PA3413
TAKAHASHI K., PA2656
TAKAHASHI N., PA2790
TAKASAKI J., PA2709
TAKATA M., PA4273
TAKAYAMA K., PA2067
TAKAYANAGI N., PA2790
TAKEI R., PA2644
TAKEMURA T., PA1168
TAKIHARA T., OA1394
TAKKER U., PA1677
TAL M., PA1132
TALAEI M., PA1116, PA2455, PA3220, OA3795
TALAEI PASHIRI M., PA3227, OA3743
TALBOT N., PA1886
TALIK I., PA1057, PA3540
TAL-SINGER R., OA682
TALUKDAR M., OA4377
TALWAR D., PA4196
TALWAR S., PA1306
TAMER L., PA3437
TAMIM H., RCT716
TAMISIER R., PA1315, PA1326, OA2283, PA2862, PA3592
TAMIYA N., PA2067
TAMM M., PA190, PA191, PA394, PA1175, PA1299, PA1301, PA1318, OA2252, PA2616, PA3171, PA4034, OA9001
TAMM R., PA4301
TAMMEMAGI M., PA3406
TAMULENAITE E., OA4386
TAMURA A., PA4027
TAN C., PA3361
TAN C., PA3855, PA3869
TAN C., PA1307
TAN G., OA2204
TAN G., PA2769
TAN H., PA270
TAN J., PA2573
TAN M., PA514, PA3861
TAN Q., OA756, OA1632
TAN S., PA1145, PA3484, PA4240
TAN W., PA1035
TAN ON BEHALF OF THE CANCOLD COLLABORATIVE RESEARCH GROUP AND THE CANADIAN RESPIRATORY RESEARCH NETWORK W., PA3136, PA3146
TANA A., PA2066, RCT2882, PA4172
TANABE N., PA465
TANAKA A., PA611, OA673, PA1844, PA1887
TANAKA D., OA2269
TANAKA K., PA2632
TANAKA S., PA1118
TANAKA Y., PA472
TANASE A., RCT710
TANG A., PA3274
TANG J., PA1761
TANG P., PA1096
TANG S., PA1717
TANG S., PA2081
TANG W., RCT714
TANGEDAL S., PA1300, PA3229
TÅNGEFJORD S., OA2939
TANGUAY S., OA3118
TANIGAWA M., OA1394
TANIGUCHI Y., OA3132
TANIM C., PA2740
TANNER L., PA2831, PA2833
TANNI S., PA272, PA520, PA537, PA538, PA546, OA2323, OA2330, PA2375, PA2799, PA3850
TANNI S., PA272
TANNOURI F., RCT4451
TANRIVERDI A., PA3311, OA4361
TANTILIPIKORN P., PA3208
TANTILLO E., PA1302
TANYAG P., PA3535
TAO K., OA2192
TAO Y., OA1431
TAOUFIK K., PA2098
TAPIA M., PA1959
TAPSON V., OA2279
TARGA A., OA2282
TARGA A., PA1846
TARIQ K., PA3408
TARIQ M., PA1085
TARR A., PA3565
TARR J., PA3274
TARRAN R., PA1937, PA3568
TARREGA CAMARASA J., PA551, PA3909
TARRICONE R., OA3764
TARSIA P., PA413, PA1160, PA4236
TAS B., PA3508
TAŞBAKAN M., PA1191, PA1323, PA2093, OA4391
TASCI C., PA2731, OA4361
TASCI S., OA2312
TASHER D., PA1008
TASHKIN D., OA1406, PA2121
TASIOPOULOS P., PA1128
TASKIN H., PA3315, PA3316
TAŞTAN G., PA285, PA289, PA2497
TATKOV S., PA1287, PA3293
TATON O., RCT4451
TATSIOS E., OA3763
TATSUMI K., PA465
TAUBE C., OA665, PA1678, PA1682, PA1683, PA2382, OA2920, PA3623, PA3847
TAUBENHEIM S., PA1135, OA1384, PA2646
TAUBER M., PA4309
TAVANO S., OA2913
TAVANTI L., PA2454
TAVARES M., PA3379
TAVARES M., PA3380
TAVENDALE R., OA2185
TAVERNA S., PA189, PA438, PA2840, PA3898
TAVERNARAKI K., PA1917
TAVERNIER G., PA889, PA892
TAWARA Y., PA3145
TAWO K., OA2955
TAY H., PA922
TAY T., PA3177
TAYLOR A., PA2381, PA3489, PA4060
TAYLOR D., PA1340
TAYLOR J., OA3751
TAYLOR J., PA1971
TAYLOR L., PA1141
TAYLOR S., PA1805
TAYLOR S., PA516, OA4379
TAYLOR S., PA511
TAZAWA R., OA4437
TAZI A., OA4439, OA4443
TAZI MEZALEK R., OA767, PA2708
TE BRAAKE E., PA2553
TEAGUE J., OA676
TEAM R., PA2402
TEAR V., RCT2884
TEBBE J., PA3404
TEDFORD R., OA2276
TEDIM A., PA4283
TEDLOVA E., PA4119
TEDNER S., OA140
TEE A., PA1878, OA3747
TEH K., PA955
TEH K., PA241
TEH W., PA1978
TEHRANI Y., PA963, PA3941
TEIG N., PA2053
TEIJEIRO A., PA3259
TEIXEIRA G., OA2944
TEIXEIRA H., PA3551
TEIXEIRA M., PA4082
TEJEDOR ORITZ M., PA2105
TEJEDOR ORTIZ M., PA204, PA206
TEKAVEC TRKANJEC J., PA400
TEKAVEC-TRKANJEC J., PA170, PA2661, PA4072
TEKE N., PA2716, PA3846
TEKIN F., PA439, OA3127
TEKIN M., PA3290, PA3521, PA3929
TELATAR G., PA446, PA447
TELATAR T., PA964, PA969, PA3244
TELEZHKIN V., PA3529
TELG G., PA247, PA3251, OA4376
TELIAS I., PA3312
TELLEZ D., PA973
TELLI ATALAY O., PA3315, PA3316
TELLI DIZMAN G., PA3537
TELLO K., PA3454
TELLO MENA S., OA690, PA1016
TEMOV K., OA768
TEMPLEMENT D., PA957
TEMPONE A., PA2460
TEN BRINKE A., PA951, PA2388, PA2397, PA2402, PA2474, PA3207, OA3679, PA4177
TEN DIJKE P., PA4276
TEN HACKEN N., PA497
TEN HACKEN N., PA930
TEN OEVER J., PA4083
TENA J., PA4187
TENBUSCH M., PA931
TENCONI S., RCT4448
TENDA E., PA2005
TENES MAYEN A., PA1179
TENGLI N., PA3463
TENNEY R., PA932
TENTOLOURIS N., PA3926
TEO K., PA1761
TEO W., PA241, PA955
TEOVSKA N., PA2727
TEPEPA-FLORES L., PA2545
TEPPAN J., PA4318
TERADA J., PA2709
TERÁN J., PA1203
TERAN TINEDO J., PA1115, PA4233, PA4235
TERÁN-TINEDO J., PA4244
TERASAKI Y., PA1168
TERLIZZI M., PA411
TERMINI R., PA461
TERNA E., PA2377, PA2687
TERRA B., PA221
TERRAS ALEXANDRE A., PA444, PA3428
TERRAS-ALEXANDRE A., PA1960, PA1969
TERRIER B., OA4435
TERRIER O., OA3780
TERRIOU L., OA4435
TERROVITOU C., PA4025, OA4408
TERSCHLUSE C., OA3784
TERWOLBECK O., OA2944
TERZI M., OA1627
TERZI N., PA1248, PA1249
TERZI O., PA2716, PA3846
TERZIKHAN N., PA876
TERZIS G., PA2041
TESCHLER H., PA2847
TETIK VARDARLI A., PA1136
TEUMER A., PA2430
TEUTEBERG S., PA4062
TEXEIRO-PINTO A., PA4037
TEXEREAU J., OA134, PA3491
TEYMURLU F., PA1191
TEZVERGIL T., OA1381
THABANE L., RCT716
THACKER J., PA3305
THAKAR A., PA523
THAKARE P., PA1880
THAKKER D., PA2483
THAKRAR M., PA460
THALER M., PA1291, PA4276
THALLER A., OA2935
THAM M., PA582
THAMRIN C., PA1340
THANGAKUNAM B., PA1845, PA1968, PA2570, PA4239
THANGAVEL G., OA2960
THANH CONG N., PA1120
THANIKKEL L., OA1446
THANING P., PA4221
THANTHITAWEEWAT V., PA4155
THAVAGNANAM S., PA3287
THAVAGNANAM S., PA3151
THAWER A., PA2123, PA2128, PA2129
THE COLT CONSORTIUM A., OA692
THE EMPROVE TRIAL INVESTIGATOR GROUP E., RCT4449
THÉBAUD B., OA670
THEEGARTEN D., PA2701
THEIAKOS X., PA2604
THEIN O., OA4411
THEIN S., OA3778, OA4411
THEIS F., PA1827
THEIS F., PA598
THEKKEDATH KURIAN D., OA2186
THELIANDER K., PA3603
THELLE A., PA1089
THELWALL P., OA1407
THENGANATT J., OA3112
THEOBALD V., PA471, PA1976
THEOCHARI E., PA1128
THEODORO FILHO J., PA2797, PA4065, PA4282
THEORELL HAGLÖW J., PA1701
THEORELL-HAGLÖW J., OA2290, PA4297, PA4304
THERAN J., PA1259
THEREAUX J., OA2288
THIBON C., PA1048, PA2594
THICKETT D., PA1795, PA1947, PA1964, PA2825, OA3778, OA4411
THIEBAUT DE MENONVILLE C., PA2837
THIEBES A., PA183
THIEL S., PA1925
THIELE D., PA934, PA988, PA1015
THIELERT C., RCT2881
THIELS C., PA2053
THIENEMANN F., PA1904
THIJS W., PA1078
THILLAI M., PA1931, PA3434
THIO B., PA3500
THIRUCHELVAM T., PA3286
THNG K., PA1819,

PA1878
THOBIAS KAMSTRUP P., PA3182
THÖLKEN C., PA988
THOMAS A., PA3594
THOMAS C., PA4202
THOMAS D., OA1442, PA2376
THOMAS M., PA3999
THOMAS M., PA1163
THOMAS M., PA327
THOMAS P., PA986
THOMAS R., OA4421
THOMAS S., PA4239
THOMAS S., OA794
THOMASHOW B., OA682
THOMÉ FRANCO E., PA613
THOMEER M., OA809
THOMPSON A., PA470
THOMPSON A., RCT2883
THOMPSON A., OA2922
THOMPSON B., PA3475
THOMPSON C., PA2670
THOMPSON F., PA4220
THOMPSON J., PA2405, PA2406
THOMPSON R., PA462, OA1403, OA2277, PA3467
THOMSON H., PA2420
THOMSON R., PA2616
THONNELIER C., PA1332
THORARINSDOTTIR E., PA2100
THORAT T., PA2765
THORE P., PA1317, PA3464
THORLACIUS-USSING J., PA4124
THORNTON J., PA4172
THORSEN ., OA141
THORSEN J., OA145, OA148
THORSSON J., PA600
THORSTENSEN E., OA146
THORVE S., PA2627
THORVE S., PA3533
THRUN M., PA1893
THUMERELLE C., PA3954
THUMPUNYA N., PA2530
THUN HOW O., OA3747, OA3750
THURSFIELD R., PA2486, PA2490
THURSTON G., PA2484
THWAITES R., PA1306
THYS M., PA1660
TIAN M., PA555
TIAN S., OA2917
TIARAY HARISON M., PA1001
TIBENSKA E., PA4119
TIBERI S., PA1901
TIBERIO I., OA2205
TIBÉRIO I., PA3222
TIBÉRIO I., OA2255
TIBERIO L., OA2258
TIBILETTI M., PA3486
TIBUBOS M., PA541
TIDDENS H., PA2489, OA2951
TIEDEMAN C., PA441
TIEFENBACHER A., PA1140
TIELBEEK B., PA4288
TIELEMANS B., PA4137
TIETZ A., OA3796
TIEW P., PA1113, PA1878, OA2958, PA3192
TIEW* P., PA1819
TIGA D., PA467, PA1972, PA1987
TIGA-LOZA D., PA1266, PA1984
TIKHOMIROV I., PA4146
TILEBALIEVA A., OA1440
TILLEY S., PA588
TILLGREN S., PA3157
TILLY T., PA4135
TIMANER M., PA1946
TIMEHIN C., PA3934
TIMENS W., PA1271, PA1276, PA1279, PA1282, PA2069, PA3576, PA4262
TIMMEN F., OA2312
TIMMERMAN H., PA1678
TIMMERMANN H., OA753, PA888, PA936
TIMSIT J., PA1248, PA1249
TING J., PA588
TINGSKOV PEDERSEN C., OA143
TINSCHERT P., PA3382
TIOTIU A., PA1335
TIRAN B., PA3513
TIRIMANNA R., PA2775
TIRMAZY S., PA2827
TIROUVANZIAM R., PA1294
TIRPUDE S., PA2724
TISEKAR O., PA3302
TISI S., OA676
TISSOT A., OA692, PA3301
TISTAD M., PA1800
TITORENKOV P., PA1650
TIWARI P., PA976
TIWARI S., PA2441
TKACHENKO A., PA4086
TKACZ J., PA3854
TLAYJEH H., RCT716
TO M., PA4176
TO T., PA2736, PA2742
TO Y., PA4176
TOBIN M., PA2046
TOBIN M., PA3235, OA3737, PA4247
TOBIN M., PA4308
TOBINO K., OA1394, PA3496
TODEA D., PA2014, PA4302
TODEA D., PA3852
TODISCO F., PA573
TODO N., PA2067
TODOROVA Y., PA3200
TOE Q., PA4148
TOE Q., PA4076
TOELEN J., PA607
TOENNESEN B., PA927
TOENNESEN L., PA1695
TOENNIES M., PA1830
TOFFART A., PA1926, PA4104
TOGO S., PA2656
TOH T., PA2740
TOIGO M., PA590, PA2072, PA2837
TOKE S., PA3233
TOKESHI A., PA963, PA3941
TOKGÖZ AKYIL F., PA1094, PA2720, PA3224, OA3775
TOKIMATSU I., PA1887
TOKOLA K., PA4226
TOKTAS F., PA289
TOLCHKOV V., PA4255
TOLEDO PONS N., PA1184
TOLLER W., PA4149
TOLNAI J., PA1236, PA1241, PA2759, PA3516, PA3522
TOLOSA G., PA4074, PA4092
TOMACINSHI C., PA1267
TOMASELLI S., OA3761
TOMASOVIĆ-LONČARIĆ Č., PA4072
TOMASSETTI S., PA442, PA1149, PA2628, PA4232
TOMASZEWSKA-KIECANA M., PA1894
TOMBUL K., PA3994
TOMER Y., PA2081
TOMII K., PA1168, OA1394
TOMIOKA H., OA1394
TOMKOWSKI W., PA1079, PA2629, PA2664, OA3790
TOMOS I., PA377, PA2655
TOMOS I., OA4437
TONCHEVA A., PA3548
TONCHEVA A., PA3256
TONDO P., PA166, PA3598, PA3599, PA4254, PA4289
TONG J., PA2776
TONG Z., PA300, PA1927
TONI G., PA184
TONIN G., PA3986
TONIN S., PA3372
TÖNJES A., PA2646
TONKIN J., PA869, PA2066, OA2322, RCT2882, PA4172
TON-NU T., OA1430
TONSTAD S., PA3926
TOOTS A., PA1797
TOPAL ., PA2500
TOPAL E., PA282, PA296, PA2496
TOPALOVIC M., PA450, PA1852, PA3376
TOPALOVIC M., OA120, PA456, PA1973, OA3113, PA3195, PA3885, PA4004
TOPAZ G., PA3370
TOPCU A., PA3335
TOPCU D., PA355
TOPELI A., PA3537
TOPLIŠEK J., PA1981
TOPOLE E., PA3195
TOPRAK S., PA153
TORÁN-MONSERRAT P., OA2962
TORBICKI A., OA2276
TORÉN K., PA2471, PA3923
TORES GARCIA E., PA3289
TORIBIO ABREU R., PA4204
TORMO F., PA2585
TÖRNBERG A., PA2535
TORNERO SALTO J., PA499
TORNLING G., OA1397, PA3377
TORO L., PA1959
TORP-PEDERSEN C., PA3914, PA3922
TORRALBA L., PA348, PA2849, PA4067, PA4068, PA4078
TORRALBA GARCÍA L., PA2097, OA3776
TORRALBA GARCÍA Y., PA4019
TORREGIANI C., OA2913, PA3458, OA3785
TORREGO FERNÁNDEZ A., PA2423
TORRENT-VERNETTA A., OA2912
TORRES ., PA4283
TORRES A., PA197, PA545, OA1437, PA1846, PA1847, PA2798, PA2802, PA3527, OA3797, PA4038, OA4406
TORRES C., PA2137
TORRES F., PA2532
TORRES G., PA1846, OA2282, PA2802, PA4283, OA4384, OA4388
TORRES G., OA2262
TORRES M., PA3998
TORRES V., PA449
TORRES BODEN M., PA3536
TORRES CASTRO R., OA3120, PA4019
TORRES LACOMBA M., OA3121
TORRES MARTÍ A., PA4039
TORRES REDONDO M., PA627
TORRES SÁNCHEZ I., PA2526, PA3356, PA3358, PA4009
TORRES SÁNCHEZ M., PA2653
TORRES TIENZA S., PA339
TORRES* A., PA3395, PA4013
TORRES* A., PA3531
TORRES-CASTRO R., PA1809
TORRES-CASTRO R., PA334, PA1009, PA2528, PA2529, PA2533, PA2757, PA3998
TORRES-MARTÍ A., PA334
TORRONI L., PA3216
TORTA R., PA3586
TORZEWSKI M., PA2612
TOSCANO RICO M., OA2328
TOSCO A., PA3495
TOSELLO F., PA1258
TOSHNER M., PA1978
TOSIA N., PA2003
TÓTH I., PA1241, PA3516, PA3522
TOTH N., PA3429
TOTH N., PA2652
TOUBES M., PA3359
TOUIL A., PA489, PA507, PA3374
TOUIL I., PA266, PA1996, PA2098, PA3842
TOUJANI S., PA534, PA1675
TOUJENI S., PA2785
TOUMAN A., PA628
TOUMBIS M., PA4025, OA4408
TOUMPANAKIS D., PA3161
TOURIN O., PA2123, PA2128, PA2129
TOURLAKOPOULOS K., PA1192
TOURON C., PA2137
TOUVIER M., PA255, PA267
TOUW D., PA3606
TOWN I., PA1340
TOWNEND J., PA2136
TOYA S., PA2596
TOYOSHIMA M., OA1394
TRABELSI I., PA3966
TRACLET J., PA2132, PA2747
TRAJKOVSKA V., PA2111
TRAKADA G., PA3587
TRAMPER-STRANDERS G., OA2206
TRAN D., OA1430
TRAN H., OA1430
TRAN T., OA2250
TRAN T., PA2400
TRAN T., PA2400
TRAN T., PA914, PA4187
TRAN BA S., OA2959
TRAN CONG T., OA1430
TRANFIELD E., PA589
TRANOS E., OA762, PA1895
TRAORE DIABY O., OA3662
TRAPASSO R., PA553, PA554, PA2778
TRAPNELL B., PA181
TRAUNER M., PA2430
TRAUTWEIN C., PA2429, PA2430
TRAVAGLIA C., PA299
TRAVAGLINI S., PA924
TRAVAGLINO F., PA407, PA1060
TRECHLIS R., PA3502
TREGGIARI S., PA312
TREJNOWSKA E., PA548
TREJO-MELLADO E., PA1222, PA3837, PA4281
TREMBLAY G., PA4146
TREML M., PA623
TRENKENSCHUH E., PA2787
TRENNERY C., PA227
TRENTIN R., PA3598
TRESS F., PA2852

TRETHEWAY R., OA130

TREVISANI M., PA1302, PA2796, PA2836, PA3160

TRIANTAFYLLIDIS C., OA4408

TRIAS SABRIÁ P., PA499, PA2708

TRIFUNOVIC S., PA2076

TRIKI L., PA1244

TRIKI M., PA994, PA1072, PA1311, PA3344

TRIKI Z., PA2735

TRINH L., OA1430

TRINICK R., OA1443, OA2187, PA2855

TRINKMANN F., OA681, PA2413, PA3573, PA3618, PA3865, PA3880, PA3881

TRIPATHI S., PA2598

TRIPATHY J., PA4272

TRISOLINI R., PA1211, PA2694, PA2695

TRITAR F., PA1909, PA1912, PA2101

TRITTON T., PA200, PA2118, PA2119, PA3619

TRIVEDI P., PA1859

TRIVIÑO IBAÑEZ E., PA3340

TROFIMOVA D., PA3477

TROFOR A., PA3928, PA3935

TROFOR L., PA3928, PA3935

TROJANO L., PA361

TROJNAR A., PA1920

TRONCOSO ACEVEDO M., PA2015, PA3410

TRONTZAS I., PA1917

TROOSTERS T., PA326, PA367, OA804, OA805, PA1038, PA1039, PA2518, PA2540, PA2548, OA3122, PA3444, PA3874, PA3885

TRŠAN J., OA4424

TRUBA O., PA907

TRUCCO F., PA270

TRUCHETET M., PA472

TRUDZINSKI F., PA474, PA1154, OA1390

TRUDZINSKI F., PA1669, PA3239, PA4062

TRUDZINSKI F., PA3240

TRUE K., RCT2164

TRUEMEN C., PA269

TRUJILLO P., PA1161

TRUMP S., PA1305

TRUPKOVIC A., OA3731

TRUYOLS VIVES J., PA4131, PA4132

TRUYOLS-VIVES J., OA3660

TRYFON S., PA2116, PA2120, PA2431

TRZASKA-SOBCZAK M., PA2664

TRZEPIZUR W., OA2288

TSAFAROVA B., PA4255

TSAGKARAKIS F., PA303

TSAI M., PA2136, PA4323

TSAI S., PA1646

TSAI Y., PA1916

TSAKOK M., PA441

TSANAKAS J., PA1745, PA2495, PA2506

TSANEVA-ATANASOVA K., PA1878, OA3753

TSANG J., RCT716

TSANGARIS I., PA2431

TSAROUCHA A., PA2431

TSARTSALIS D., PA1068

TSATSAKIS A., PA4082

TSCHANZ S., PA3569

TSCHOPP J., PA1001

TSE G., PA3607

TSELONIS N., PA1854

TSIAMITA M., PA2431

TSIAVIA T., PA3250

TSIBA E., PA1132

TSIKAS D., OA4418

TSIKRIKA S., PA958

TSILIGIANNI I., PA3588, PA3613

TSILINGIRIS D., PA1264, OA2317

TSIM S., OA779

TSIMERMAN S., PA395

TSIMIHODIMOS V., PA4025, OA4408

TSIPA C., OA679, PA967

TSIPILIS S., PA3528

TSIRI P., PA1098, PA1128, PA2655

TSIRIDOU D., PA4273

TSIRIKOS G., PA1128

TSIRIKOS G., PA1098

TSIROGIANNI A., PA3528

TSITOURA E., OA3774, PA4125

TSITOURAS K., PA2612

TSOCHEVA I., OA2961

TSOCHEVA I., PA1000

TSOUCHNIKA E., OA4408

TSOUKALAS D., PA341

TSOUKALAS G., PA1840

TSOUKAS D., PA2431

TSRANCHEVA R., PA3833

TSUCHIDA Y., PA3440

TSUJIMURA Y., PA3145

TSUKADA A., PA2709

TSUN J., OA2192

TSURUOKA H., PA1118

TU L., PA1989

TUAN KOB T., PA549

TUCKER E., OA787, PA1099

TUDER R., PA4143

TUDGE R., PA3179, PA3956

TUDOR A., PA612

TUDORACHE E., PA3193

TUFAIL M., PA432, PA4166

TUFMAN A., PA2567

TUFVESSON E., PA210, PA576, PA2751, PA2826, PA3582, PA3895

TUĞCU G., PA282, PA296, PA1756, PA1759, PA1896, PA2500, PA2501

TUINMAN P., OA1435, RCT2881

TUINMAN P., OA1438

TUMMOLO M., PA1066

TUMPARA S., PA1645

TUNA G., PA254

TUNA KIRSACLIOGLU C., PA3290

TUNALI N., PA1810

TUNCA S., PA577

TUNNEY M., PA392, PA1104

TUNSÄTER A., PA210

TUORO A., OA784

TURA O., PA3450

TURA CEIDE O., PA2686

TURA-CEIDE O., PA1183

TURAL ÖNÜR S., PA1094, PA2045, PA2720, PA3224

TURAN B., PA336

TURATO G., PA2814

TURCI F., PA589

TUREL M., PA1981

TÜREL Ö., PA1756

TURĞUT M., OA2188

TURKER A., PA2731

TURKI C., PA534

TURKI M., PA625

TURNA A., PA1796

TURNBULL C., OA4365

TURNBULL D., PA1804

TURNBULL E., PA3529

TURNER A., PA563, PA2425, PA2433, OA3756, PA3917

TURNER A., PA1163, PA1733

TURNER F., PA2405, PA2406

TURNER K., PA4167

TURNER R., PA179

TURNER S., PA876, PA3263, PA3270

TURON G., PA2533

TURQUIER S., PA2132, PA2747

TURRICCHIA S., PA2675

TURRIN M., PA259, PA2814

TURTLE L., PA1306

TURTON H., RCT2883

TUSA C., PA3532

TUYET TANG S., PA942

TVEREZOVSKYI V., PA4051

TWEED C., OA760

TWISK J., PA2614

TWYNAM-PERKINS J., PA1775, OA2186, PA3270

TYAGI M., PA445

TYAGI V., PA445

TYDEMAN F., PA233, PA2455, PA3220

TYKESSON E., PA2079

TYNYBEKOV K., OA1440

TZAGKARAKI A., PA958

TZAKOVA A., PA4292

TZANAKIS N., PA572, PA2389, PA2393, PA2401, PA2431

TZANAKIS N., OA3774

TZANKOV A., PA4277

TZANNIS K., PA1882

TZATZADAKIS N., PA303

TZENG Y., PA3904

TZILAS ., PA2431

TZILAS V., PA377

TZIMAS T., OA4408

TZINAS A., PA960

TZIRAKI M., PA1192

TZORTZAKI E., PA2389

TZOUVELEKIS ., PA2431

TZOUVELEKIS A., PA1098, PA1128, PA2697, PA3416

TZOUVELEKIS A., PA2655, PA4129

TZUREL FERBER A., PA1132

U

UBAGS N., OA3794

UCCELLI S., OA2906

UCERO LEÓN M., PA4022

UCHIDA Y., OA673, PA1844

ÜÇVET A., OA3759

UDWADIA Z., PA4095

UEBNER H., PA3577

UEHARA S., PA929

UEYAMA M., PA4298

UEZER F., PA2701

UFUK F., PA3316

UFUK ALTINTAŞ D., PA296, PA2500

UGARTE-GIL C., PA1899

UGEDO URRUELA J., PA1910

UHLÍK J., OA2183

UIBU T., PA3422

UKOR E., OA3752

ULAS T., PA2812

ULBRICH M., PA1736, PA1737

ULLA H., PA4004

ULLAH R., PA2024

ULLDEMOLINS A., PA2052

ULLER L., PA926, OA2253, PA3157

ULLIEL-ROCHE M., PA2763

ULLMAN S., OA1453

ULLMANN N., PA3986

ULRICH M., OA667

ULRICH S., PA475, OA1440, PA2048, OA2276, PA2680, PA2681, PA2688, PA2689, PA2749, PA2750, PA3451, PA3455

ULRICH S., PA2048

ULRICH T., PA2048

ULRIK C., OA3745

ULRIK C., PA942, PA1330, PA2136, PA3182, OA3677, PA4323

ULRIK C., PA319, PA1695, PA2394, PA3232, PA3910, PA3951

ULUBAŞ B., PA3437

ULUBAY G., PA3148, OA4361

ULVESTAD M., PA3525

UMANETS T., PA1760

UMASHANKAR N., OA1630

UNAL F., PA277, PA1756

ÜNAL G., PA282, PA296, PA1756, PA2496, PA2500

UNAT Ö., PA1191, PA1323

UNDERHILL L., OA2960

UNDERWOOD J., RCT2883

UNGER K., PA1051, PA1772, PA3983

UNGER K., PA4121

UNGER S., PA1772

UNGER S., PA3983

UNO T., PA1844

UNSWORTH A., PA1162

UNTERMAN A., PA454, PA3513

UNVER O., PA3985

UPADHYAY S., PA3231

UPHAM J., OA3128, PA4179

UPPERTON S., OA2264, PA2659

UR RASOOL M., PA3452

URANGA A., PA4039

URBAN J., PA4119

URBANTAT R., PA1112

UROVI V., OA1626, PA1673

URQUHART R., PA1823

URRUTIA P., PA3998

URRUTIA GAJATE A., PA1309, PA1310, PA1319, PA2572, OA4409

URRUTIA LANDA I., PA2140

URRUTIA PEREIRA M., PA2465

URRUTIA ROYO B., PA379

URS R., PA1743, RCT2165

USATEGUI A., OA4415

USEMAN J., PA1006

USEMANN J., OA142, PA999, PA1002, PA1012

USENKO H., PA167

USKOVA S., PA2459

USMAN K., PA2050, PA2084

USMANI O., PA515, PA1642, PA2407, PA3613, PA3879, PA4059, PA4314

USSETTI M., PA1018

USSETTI GIL M., PA1019, PA1029

USSETTI GIL P., PA3297

USUI K., OA1394

UTHAMAN T., PA2136, PA4323

UTINE G., PA2853

UTLEY L., PA4192

UYAN Z., PA277

UYAR ER K., PA446, PA447, PA3244

UYSAL A., PA4242

UYTUN S., PA1756, PA1759, PA2496, PA2501

UZUN C., PA1065, OA1627, PA2731

UZUNER S., PA277, PA2496

UZUNHAN Y., PA524, OA2314, OA2959,

PA3345, OA4443
UZUNOGLU B., PA289, PA2497
UZZAMAN M., PA4208
UZZAMAN N., PA4198, PA4199
V
V. F. DE OLIVEIRA L., PA2578
V. M. FERREIRA E., OA3123
V. MATIAS M., PA1906
VAAS V., PA2847
VACA R., OA4388
VACCA M., PA1109
VACCARI A., PA3969
VACHIER I., PA586, PA2060
VACHIERY J., PA1973
VADALA R., PA3413
VADDEPALLY C., PA2698
VADEL A., OA664
VADIVELOO T., PA2610, RCT2883, PA4066
VAES A., PA1035
VAES A., PA1855, PA1866, OA3117
VAFAI-TABRIZI F., PA441
VAGHEGGINI G., PA2589
VAHLKVIST S., PA1014
VAIDYANATHAN A., OA1402
VAIOS G., PA572
VAIRA V., OA3779
VALACH C., PA237, OA2304, OA3115
VALCKE-BROSSOLLET J., PA517
VALDERRABANO-SALAS B., PA864
VALDÉS L., PA3359
VALDÉS S., PA1017
VALDES VERELST L., PA3199
VALE A., PA2707
VALENCIA A., OA666
VALENTE C., PA444, PA1969
VALENTE J., PA2737
VALENTE S., PA451
VALENTE SILVA B., PA1980
VALENTI L., OA3779
VALENTIN S., PA1317, PA1710, PA3345, PA3464
VALENTINI G., OA1450, PA1952
VALENTINO L., PA2044
VALENTOVA-BARTAKOVA L., PA1022
VALENTYNA Y., PA184
VALENZA M., PA1924, PA2526, PA3356, PA3358, PA4009, OA4428
VALENZUELA C., PA1149, OA1396, PA1938, PA2558, PA2569
VALENZUELA I., PA607
VALERIO V., PA3178
VALERO A., PA1992
VALERO A., PA2426, PA4186
VALEYRE D., OA3786
VALIPOUR A., PA358, OA771
VALKO Z., OA1383
VALL-CASAS P., OA2962
VALLE S., PA1685
VALLE FALCONES M., PA4233
VALLÉE A., OA692
VALLE-FALCONES M., PA4244
VALLEJOS E., PA1061
VALLETTA E., PA3548
VALLIANOU N., PA1264, OA2317
VALLOIS P., OA2936
VALLURI S., PA2452
VALSECCHI A., PA2380
VALSECCHI C., OA3659
VALSECCHI L., PA883
VALTONEN M., PA1242, PA2035
VALVERDE NOVILLO C., PA1319
VALVERDE PÉREZ E., OA4390
VALVERDE ZUÑIGA A., PA1985
VALYON M., PA3236, PA3243
VAMVAKARIS I., PA4129
VAN 'T HUL A., OA3117
VAN ALFEN N., PA1198
VAN ASPEREN C., PA1078
VAN BALLAER V., OA1401
VAN BATENBURG A., PA1949
VAN BEEK F., PA2008
VAN BEERSEL D., PA1021
VAN BEZOUW M., PA2402
VAN BIERVLIET S., PA1037
VAN BOEMMEL-WEGMANN S., PA904, PA906
VAN BOVEN J., PA3606
VAN BRAECKEL E., OA3122
VAN BRAGT J., PA882
VAN BUSKIRK J., PA3946
VAN CLEEMPUT J., OA781
VAN COOTEN J., PA3613
VAN CREVEL R., PA4083
VAN DE BEEK D., RCT2881
VAN DE BORNE P., PA4275
VAN DE HEI S., PA3606
VAN DE KERKHOVE C., PA905
VAN DE VEERDONK F., PA4083
VAN DE VEN M., PA2402
VAN DE WAUWER C., PA1032
VAN DEN AARDWEG J., PA3892
VAN DEN AARDWEG J., OA1609
VAN DEN BERG J., PA905, PA3609
VAN DEN BERG J., PA1078
VAN DEN BERGE M., PA3562
VAN DEN BERGE M., PA1271, PA1276, PA1279, PA1282, OA1412, PA2075, OA2199, PA2444, PA3546, PA3558, PA3561, PA3609, PA4262
VAN DEN BERG-EMONS R., PA2447
VAN DEN BERG-EMONS R., PA2456
VAN DEN BLINK B., OA1388
VAN DEN BOOMEN D., PA602
VAN DEN BORNE B., OA2266
VAN DEN BORST B., PA522, OA796, PA1188, PA1221, PA2040, PA3336, PA3337
VAN DEN BOSCH W., OA2951
VAN DEN BROEK F., RCT4452
VAN DEN BROEK L., PA3892
VAN DEN HEUVEL M., OA2266
VAN DEN HEUVEL M., OA796, PA1188
VAN DEN KIEBOOM C., PA4083
VAN DEN STEEN P., PA3199
VAN DEN STEEN P., OA686
VAN DER AA T., PA1931
VAN DER BURG N., PA576, PA3895
VAN DER DOES A., OA667
VAN DER DOES A., PA1291, PA4276
VAN DER ENT C., PA2057, PA3556
VAN DER ENT K., OA1617
VAN DER GEEST R., PA1971
VAN DER HAM I., PA3613
VAN DER HEIJDEN E., PA2714, RCT4452
VAN DER HEIJDEN E., PA498
VAN DER KAMP M., PA3500
VAN DER KLEIJ R., OA745
VAN DER LEE M., OA3789
VAN DER LEI J., PA230
VAN DER MOLEN M., OA136
VAN DER MOLEN T., PA3562
VAN DER PALEN J., PA1186, RCT2162, OA2266, PA3500, PA4205, PA4210
VAN DER PLOEG E., PA1032
VAN DER PLOEG E., OA2206, PA2815, PA3896
VAN DER PLOEG K., PA295
VAN DER POLL T., OA2313
VAN DER POUW A., PA562
VAN DER SAR I., OA1391
VAN DER SAR S., OA1405, PA3328
VAN DER VALK P., PA4210
VAN DER VIS J., PA3448
VAN DER VIS J., OA1393
VAN DER VIS J., PA2657
VAN DER WALL H., PA1776, PA1777, PA2748, PA3139, PA3141, PA3479
VAN DER WEKKEN A., PA1930
VAN DER WINDT I., PA2057
VAN DIJK K., PA1885
VAN DIJK L., PA4177
VAN DIJK M., PA492, PA494, PA495
VAN DIJK S., PA4205
VAN DIJK Y., PA2815
VAN DOORN J., PA1091, PA1198
VAN DRUNEN C., PA2815
VAN DUPPEN J., PA2449
VAN EECKHOUTTE H., OA662
VAN ENGELEN B., PA1091
VAN ERP-ZEILSTRA A., PA494
VAN ES H., PA2008
VAN ES J., PA1185
VAN EYNDHOVEN S., PA1991
VAN GEFFEN W., OA2266
VAN GEFFEN W., PA1930
VAN GEMERT J., PA1032
VAN GOGH C., OA2306, PA3980
VAN GOGH C., PA381
VAN HAGE M., OA2946
VAN HAL L., PA4177
VAN HEES H., PA522, PA1221, PA2040
VAN HEES H., PA3337
VAN HELDEN J., PA4210
VAN HELMONDT S., OA3789
VAN HELVOORT H., PA522, PA2040
VAN HELVOORT H., PA1673
VAN HELVOORT H., OA796, PA3337
VAN HEMERT M., PA1291, PA4276
VAN HERCK A., OA687
VAN HET WESTEINDE S., PA1185
VAN HOLLEBEKE M., OA3124
VAN HOOF J., OA1631
VAN HOORENBEECK K., PA278, PA1234
VAN HOVE O., PA1227
VAN HUIZEN L., PA496, PA3478
VAN HUIZEN M., PA4276
VAN KAMPEN V., PA263, PA1736, PA1737
VAN KAN C., PA1185
VAN KEULEN V., PA4099
VAN KLEEF E., PA1091
VAN LAARHOVEN A., PA4083
VAN LOO W., OA3122
VAN LOON N., PA3349
VAN MEEL E., PA3959
VAN MEER B., OA667
VAN MEERBEECK J., OA781, OA786, OA2261
VAN MEERBEECK J., PA1069, PA1929
VAN MELLE J., OA136
VAN MOOK W., PA2714
VAN MOORSEL C., OA1393, PA3448
VAN MOORSEL C., PA2008, PA2657
VAN MULLIGEN E., PA230
VAN MUYLEM A., PA3194, PA3608
VAN NEDERVEEN-BENDIEN S., PA2388
VAN NIEUWENHUYSE A., PA3490
VAN NIEUWERBURGH F., OA2199
VAN NIJNATTEN J., PA1271, PA1276, PA1279
VAN NIMWEGEN M., OA2206, PA3896
VAN NOORT E., PA2583
VAN ORSHOVEN J., PA3490
VAN OSTAEYEN A., PA278
VAN OVERMEIREN P., PA1069
VAN PAASSEN P., RCT2881
VAN PEUFFLIK I., OA1402
VAN POPPEL A., PA1069
VAN PUTTEN J., OA2266
VAN RAEMDONCK D., OA686, PA1020, PA2006
VAN RAEMDONCK D., OA687, PA1021, PA1030
VAN RAEMDONCK D., PA1286, PA4265
VAN REIN N., OA1438
VAN REST J., OA763
VAN REYK D., PA2073
VAN RIJ R., PA4083
VAN ROON E., PA4177
VAN SCHADEWIJK A., PA4276
VAN SCHAIK C., PA930
VAN SCHOOR J., PA1690
VAN SLAMBROUCK J., OA686, PA1021, OA3793
VAN STEENBERGEN S., PA456
VAN 'T HUL A., PA1035
VAN UDEN D., OA2206
VAN VEEN A., PA2402
VAN VEEN I., PA1186, OA3114
VAN VEEN I., PA2402
VAN VELZEN E., PA2402

VAN VELZEN P., OA1438
VAN VOLLENHOVEN F., PA1930
VAN VOORTHUIZEN E., PA522, PA2040
VAN VOORTHUIZEN E., OA796, PA1188, PA3337
VAN WIJK M., OA4422
VAN ZELLER M., PA615, PA627, OA2289
VAN ZELST C., PA213, OA2206, PA3896
VAN ZUTPHEN T., PA951
VAN ZYL-SMIT R., PA3859
VANAUDENAERDE B., PA603, OA686, PA1030
VANAUDENAERDE B., OA687, PA1021
VANAUDENAERDE B., PA1286, PA4265
VANBRABANT L., PA2811
VANDE VELDE G., PA4137
VANDE WEYGAERDE Y., OA3122
VANDEBROEK E., PA1734
VANDEKERCKHOVE K., PA1037
VANDEN BOSSCHE L., PA2540
VANDENBERGH N., OA804
VANDENPLAS O., PA263
VANDERELST E., OA3113
VANDERHELST E., PA1225
VANDERMEERSCH L., PA1069
VANDERPOOL R., PA473
VANFLETEREN L., OA136, PA1838, PA3253
VANFLETEREN L., PA1644, PA2464
VANFLETEREN L., PA3614
VANGURI S., PA3305
VANHOLDER I., PA278
VANHOUTTE T., OA804, PA2518
VANJARE N., PA1722
VANKA K., OA2963
VANKA K., PA922
VANOIRBEEK J., PA607, OA2937
VANOIRBEEK J., PA1734
VANOVERSCHELDE A., PA3384
VANSTAPEL A., OA686, OA687, PA3476, OA3793
VANTAGGIATO L., OA2256
VANWALLEGHEM L., PA1020
VANZELLER M., PA3482
VAN-ZYL SMIT R., PA3858, PA3864
VARANDA MARQUES J., PA3487
VARAVINOVA A., PA2088
VARDALOGLU I., PA3994
VARDAR YAGLI N., OA4361
VARELA B., PA3420
VARELA E., OA689
VARENYIOVA Ž., OA2184, PA2854, PA3578
VARGA J., PA1130, PA1229, PA2576
VARGA V., PA3295
VARGAS J., PA558
VARGAS CENTANARO G., PA4159
VARGHESE R., PA2771, PA2776
VARONE F., PA1935
VARRASO R., PA3230
VARRASO R., PA252, PA253, PA255, PA267, OA2302, PA3250
VARRAY A., PA371
VARSAMAS C., PA437
VARSOS P., PA1068
VARUGHESE R., PA460
VARUNKIV O., PA2115
VASANKARI T., PA4226
VASANKARI T., PA4226
VASARMIDI E., PA2786
VASBINDER M., PA4192
VASCONCELLO L., PA1009
VASEUR R., PA2553
VASILAREA A., PA2563
VASILEIOU V., PA3926
VASILESCU D., PA3459
VASILEVA A., OA684, OA685, PA1028, OA3112, PA3307, PA3423
VASILIAUSKAS G., PA480
VASSEUR V., PA1829
VASSILAKOPOULOS T., PA3161
VASSILAKOPOULOU V., PA3161
VASTAG Z., PA3193
VASTEL C., OA2904
VASYLE E., PA2820
VATANSEVER S., PA577
VATES-GOMEZ R., PA4244
VATHIOTIS I., PA1917
VATRELLA A., PA411
VATTIMO A., PA3912
VAUCHER J., OA2284
VAVASSORI A., PA481
VAVOUGIOS G., OA797
VAZ A., PA3386
VÁZQUES N., PA3531
VÁZQUEZ N., PA2798
VAZQUEZ R., PA2590
VAZQUEZ BOURGON J., PA1662
VÁZQUEZ BURGOS N., PA4013
VÁZQUEZ LÓPEZ M., PA3518
VÀZQUEZ-BURGOS N., PA3395
VÁZQUEZ-MERA S., PA1686, OA2202
VEA À., PA3450
VEALE A., PA3615
VECELLIO L., PA2594
VEDDER R., PA1282
VEERKAMP J., PA4123
VEEVÄLI K., PA4301
VEGAS SANCHEZ M., OA1456
VEHRESCHILD J., OA4360
VEISS-PEDERSEN P., PA1641, PA4056
VEITH C., PA4149
VEITH M., PA1278, PA1280, PA2431
VEKENS K., PA4110
VELA E., PA2741, OA4366
VELASCO J., OA3660
VELASCO ÁLVAREZ D., PA1346
VELASCO ÁLVAREZ D., PA527, PA1107
VELASCO SUAREZ C., PA989
VELÁSQUEZ C., PA467, PA1972, PA1984, PA1987
VELDSTRA C., PA3615
VÉLEZ O., PA1182
VELI A., PA2589
VELIOĞLU YAKUT Ö., PA1065, PA2731
VELLA R., OA748
VELLEKOOP B., OA1391
VELLEMAN D., PA1303
VELLIN J., PA3154
VELLOSO L., PA1814
VELTKAMP M., PA3448
VELTKAMP M., PA2008, PA2657, PA3438, OA3788, OA3789
VELUCHAMY A., PA1834
VENDITTO L., PA1753
VENDRELL RELAT M., PA3403
VENEGAS C., PA523
VENEGAS-GARRIDO C., OA3673
VENERINO P., PA484
VENERONI C., OA2913, OA3115, PA3281, PA3282
VENGOECHEA J., PA2802
VENMANS B., PA1930
VENNER K., OA3760
VENTURA M., PA3276
VENTURELLI M., PA331, OA4359
VENTUROLI N., PA2380
VERA TAPIA P., PA1857
VERA URIBE R., PA1009, PA3998
VERAL A., PA1136
VERARDO M., PA573
VERBANCK S., PA1225
VERBEKE O., PA1304
VERBEKEN E., PA448
VERBEKEN E., OA1392
VERBELEN T., PA1020, PA1021
VERBRAECKEN J., OA2289
VERBRUGGEN B., PA2449
VERBRUGGEN N., OA1388
VERCIANO PEREIRA R., PA2797, PA4065, PA4282
VERCOULEN J., PA3336
VERDI E., OA1627, PA2731, PA2743
VERDIROSI D., PA2609
VERDÚ J., OA752
VERGES S., PA2030, PA2763, PA2860
VERHAGEN A., RCT4452
VERHAMME K., PA230
VERHAMME K., PA3855, PA3869
VERHULST S., PA278, PA1234
VERÍSSIMO FERNANDES J., PA3541
VERKLEIJ M., PA2536
VERLATO G., PA2468, PA3216
VERLEDEN G., PA1020, PA2006
VERLEDEN G., OA687, PA1021, PA1030
VERLEDEN S., OA662, PA1021
VERLEDEN S., OA1392, PA3476
VERMA A., PA416, PA1711, OA3777
VERMA S., PA2806
VERMA U., PA3170, PA3413
VERMANT M., PA448, PA1286, OA1392, OA3793, PA4265
VERMAUT A., PA603, OA686, PA1030, PA1286, OA3793, PA4265
VERMEER B., OA3788
VERMEER S., OA1392
VERMEERSCH K., PA3886
VERMEULEN R., PA1754
VERNET A., PA366, PA4211
VERNOCCHI S., PA547, OA1634
VERON M., PA1926
VERPLANCKE V., PA1069
VERRI S., PA3169, PA3616
VERRONE C., PA2520
VERSCHAKELEN J., PA448, OA1392
VERSCHAKELEN J., PA3476
VERSCHOOF - PUITE R., PA295
VERSCHUEREN P., PA448
VERSCHUT V., PA3164
VERSCHUUR E., OA745
VERSCHUUREN E., PA1032
VERSHYHORA V., PA2803
VERSI A., PA3560
VERSTER J., PA3548
VERSTRAETE K., PA448, OA750, OA1392, PA1973, OA3793, PA3885
VERTUI V., PA1953, OA3659, PA4279
VERWEIJ P., PA1885
VERYKOKOU G., PA1840, PA2431
VESPASIANI GENTILUCCI U., PA407
VESTBO J., PA1707, PA1713, PA3182, OA3740, PA3879, PA3921
VESTENG L., OA1607
VESTERGAARD L., PA1083
VETHAKAN-RAJ H., PA587
VETTUKATTIL R., OA140
VEZIR D., PA618, PA619, PA2365
VEZIR E., PA1756
VIAL G., OA4385
VIAL G., OA4435
VIANA MANCUZO E., PA1156, PA1956, PA1966
VIANELLO A., PA536, PA543
VICAUT E., PA517
VICCARO F., PA3149
VICENDESE D., PA1688
VICENS ZYGMUNT V., PA1147
VICENS-ZYGMUNT V., PA2585, PA2666
VICENT R., OA4443
VICOL C., PA3928, PA3935
VIDAL M., PA2798
VIDAL-PETIOT E., PA1314
VIDOEVSKA A., PA1872
VIDYASAGAR P., PA1103
VIEBKE A., OA4360
VIEGI G., PA1693, PA2468, PA2469, PA3216
VIEIRA I., PA3487
VIEIRA L., OA2330
VIEIRA M., OA2327
VIEIRA R., PA1806
VIEIRA W., PA2733
VIEIRA PASSINI V., PA321, PA322
VIEIRA PIRES N., PA974
VIEIRA PIRES P., PA904, PA906
VIEIRA-MARQUES P., PA2737, PA3503
VIEJO CASAS A., PA1662
VIEMANN D., PA1818
VIENNEAU D., OA142, PA1002
VIEYRA R., PA3259
VIGLIO S., PA4279
VIGNA M., OA3787
VIGNA M., PA868, PA1874
VIGNUOLI M., PA2044
VIIKLEPP P., PA1677
VIINANEN A., PA247, PA942, PA1347
VIJAY GAIKWAD A., PA3549
VIJAYAKUMAR B., PA869, PA2066, OA2322, RCT2882, PA4172
VIJVERBERG S., PA2815, PA3551
VIJVERBERG S., PA876
VIJVERBERG S., OA141, OA2949, PA3548
VIJVERBERG S., PA882, PA3256, PA3268
VIKJORD S., PA3253

VIKRANTH T., PA1082
VILA I., OA2327
VILA-CÓRCOLES A., PA2366, PA2457
VILARDELL-RIFÀ G., PA3930
VILARÓ J., PA1009, PA4019
VILA-ROVIRA A., PA1121, PA2366, PA2457
VILARRASA N., PA3586
VILGRAIN I., OA4383
VILLA E., PA1208
VILLA ASENSI J., PA286
VILLABONA-RUEDA A., PA4267
VILLALOBOS M., PA2685
VILLALOBOS-PEDROZA M., PA2683
VILLAMAGUA- ARIAS N., PA339
VILLAMAÑÁN BUENO E., PA863, PA2653
VILLAMIZAR D., PA1259
VILLAMOR M., PA419
VILLANUEVA M., PA3531
VILLAR J., PA876, PA2426, PA3552
VILLAR ALVAREZ F., PA1325
VILLAR GARCIA J., PA1182, PA1715
VILLAR-HERNÁNDEZ R., PA4074, PA4092
VILLARI P., PA4005
VILLARINO A., PA592, PA595
VILLARROEL SILVA G., PA1857
VILLAS BÔAS H., PA4139
VILLEN T., PA1203
VILLÉN VILLEGAS T., PA4235
VILLÉN-VILLEGAS T., PA4244
VILLETTI G., PA895, OA2258, PA3160, PA3164, PA3166
VILLONA F., PA536
VINCENT S., PA2037
VINCENT S., PA4218
VINCENT S., PA3514, PA4231
VINCZE K., PA2652, PA3429
VIOLA C., PA2533
VIORICA Z., PA425
VIRALLY J., PA957
VIRCHOW J., PA925, PA936
VIRGINIO C., PA4181
VISCA D., PA217, PA887
VISCUSO M., PA1211
VISSER E., PA951, PA2474
VISSING ., OA141
VITACCA M., PA331, PA369, PA370, OA4359
VITAL M., PA2839
VITIELLO L., PA924
VITORATOU D., PA1758
VITRONE G., PA2380
VITTORAKIS S., PA2389
VIVALDI G., PA1116, PA2455, PA3220, PA3227
VIVAS ROCA M., PA2141
VIZIRIANNAKI S., PA2401
VIZZA C., PA2682
VLAAR A., OA2313, RCT2881
VLAGEA A., PA449
VLAHAKOS V., PA350
VLAHAKOS V., PA2517
VLAMI K., PA2431
VLASSI L., PA3369
VLAYKOVA T., PA3188, PA3572
VLIEGENTHART R., PA2004
VLIEXS M., PA2088
VOCOS M., PA989
VOELK J., PA3465
VOELKER K., RCT4449
VOERMANS N., PA522, PA1091, PA2040
VOERMANS N., PA3337
VOGEL-CLAUSSEN J., PA3470
VOGELMEIER C., PA3623
VOGELMEIER C., OA748
VOGELMEIER C., PA1669, PA4062
VOGELMEIER C., PA2431
VOGELS O., PA3438
VOGIATZAKIS E., PA1264, OA2317
VOGIATZIS I., PA362, PA367, PA1811, PA1863, PA1869, PA2038, PA2041, PA2043, PA2519, PA2522, OA4359
VOGIATZOGLOU A., PA1840
VOIGT W., PA910
VOITOVYCH A., PA4153
VOITURON N., PA606, PA4130
VOJISLAV Ć., PA184
VOLAKOVA E., PA3849
VÖLKEL S., PA3902
VÖLKER M., PA1305
VOLKOVA N., OA1616
VOLLENWEIDER P., OA2284
VOLLGRAF M., PA1830
VOLLSÆTER M., PA1676, PA1741, PA2032, PA2034, PA3137, PA3144
VOLOBUIEVA O., PA422
VOLPATO E., PA2538
VOLPI S., OA1622
VOLTOLINI L., PA299
VON BUELOW A., OA3677
VON BÜLOW A., PA942, PA1680, OA2201, PA2394
VON DER THÜSEN J., PA2694, PA3478
VON GARNIER C., PA1940, OA3794
VON LAFFERT M., OA1384
VON LENGERKE T., OA2271
VON LEUPOLDT A., PA2540, PA2548
VON MUTIUS E., PA582, PA876, PA934, PA988, PA1015, OA2954, PA3257, PA3948
VON WACHENFELDT K., PA605, PA2077
VON WACHTER C., OA2267
VONCKEN S., PA4288
VONK J., PA3562
VONK J., PA3558, PA3609
VONK J., PA1754, PA3576
VONK NOORDEGRAAF A., PA1185, PA1983, OA2276
VONTETSIANOS A., PA1869, PA2038, PA2519
VOORTMAN T., OA4378
VORA P., PA904, PA906
VORSELAARS A., PA2657, PA3417, OA3788
VOS P., PA562
VOS R., PA603, OA686, OA687, PA1020, PA1021, PA1030, PA1286, PA3476, OA3793, PA4265
VOS S., PA1842, OA3799
VOS W., OA1402
VOSKREBENZEV A., PA3470
VOSS A., PA1830
VOSS C., OA2966
VOSS WINTHER S., PA249
VOSSE B., PA1091
VOTRUBA J., PA2694
VOULGARIS A., PA572, PA614
VOZA A., PA2596
VRBIĆ M., PA3376
VRIJLANDT E., OA121
VUKIĆ DUGAC A., PA1026, PA1875, PA2586, PA3447
VULTURAR D., PA2014, PA3852, PA4302
VUONG V., PA973, PA1658, PA1659, PA3862
VUUST P., PA4203
VUYLSTEKE M., OA786
VYAS V., PA3272
VYSE A., PA2452
VYTHINATHAN D., PA1011
W
W COSTELLO R., PA1330, PA2136, PA4323
W ORME M., PA4196
WACHTLIN D., OA1396
WACKENTHALER A., PA4150
WACKER F., PA3470
WACKER J., PA3502
WADDOUPS L., PA160
WADELL K., OA803, PA1797, PA1800, RCT2160
WAEIJEN-SMIT K., PA1651, PA3349
WAERN I., PA3165
WAFA B., PA203, PA205, PA4090
WAFY S., PA2005
WAGENAAR M., OA3760
WAGERS S., OA141
WAGHMARE S., PA2627
WAGHMARE S., PA3533
WAGLEY A., PA386
WAGNER L., PA3509, PA3519
WAGNER S., PA4296
WAHAB M., PA174, PA182, PA899, PA900
WAIN L., PA1965
WAIN L., OA2326, PA2794, PA3235, OA3737, OA3800, PA4247
WAKEHAM N., PA1237
WAKENSHAW L., PA1863
WAKIM J., PA1143
WALD T., PA3888
WALDMANN A., PA4006
WALGRAEVE C., PA1069
WALHA M., PA2564
WALI A., PA1903
WALI S., PA3550
WALKER B., PA2123, PA2128, PA2129
WALKER J., OA800
WALKER R., PA2726, PA3987
WALKER R., PA2851
WALKER S., PA2543, OA3800
WALKER S., PA1099
WALKER U., OA1453
WALKER-BONE K., PA1735
WALLACE K., PA3983
WALLACE M., RCT2164
WALLER D., PA302, RCT4448
WALLER L., OA2960
WALLGREN-PETTERSSON C., PA1091
WALLIN K., PA288
WALLMEIER J., PA2053, PA3404
WALLNER O., PA2833
WALMSLEY S., PA2086
WÄLSCHER J., PA457
WALSH J., OA3106
WALSH J., OA132
WALSH L., OA682
WALSH S., OA1402
WALSH T., PA2767
WALSHE R., PA3934
WALSTED E., PA1232, PA2039
WALSTON J., PA4267
WALTER J., PA2567
WALTER CANONICA G., PA1330
WALTERS A., PA2584, PA3365
WALTERS E., PA1688, PA2482
WALTERS G., PA251, PA1692, PA3997
WALTERS G., PA1163, PA1733
WALTERS H., PA163, PA1699, PA1730
WALTERS R., OA3737, PA4247
WALTON D., OA787
WALUSIAK-SKORUPA J., PA263
WAND O., PA1131, PA1132, PA2451, PA3339, PA3370
WANDALSEN G., PA1045
WANG A., PA1262
WANG C., PA1289
WANG C., PA3399
WANG D., RCT712
WANG E., PA1330, PA4323
WANG F., PA4004
WANG H., PA1652, PA2026, PA2374
WANG H., PA198
WANG J., PA4087
WANG J., RCT2164
WANG K., PA4004
WANG P., PA1897
WANG R., PA1927
WANG S., PA2678
WANG T., OA4387, OA4389
WANG W., PA555, PA1262, OA3755
WANG X., PA227
WANG X., PA376
WANG Y., OA2192
WANG Y., PA585, PA587, OA2964
WANG Y., PA3249
WANG Y., PA555, PA1262, PA1291, PA4276
WANG Y., PA4252
WANG-JAIRAJ J., PA1932
WANIN S., PA3958
WARBURTON D., RCT2887
WARD C., PA1293, PA1808
WARD J., PA2809
WARD S., PA1867, PA3365, PA4193
WARD T., OA130, PA1860
WARD T., PA4216
WAREING P., PA2648
WARGNY M., PA2608
WARING S., PA2771
WARK P., PA922, PA1821, PA1825, PA2074, PA3168
WARWICK G., PA4167
WASAMOTO S., PA3517
WASCHKI B., PA4062
WASEDA Y., PA1168
WASHKO G., PA4252
WAT D., OA4381
WATAI K., PA917
WATANABE K., PA2632
WATANABE N., PA2790
WATANBE A., PA4123
WATERS V., PA2487, PA2488
WATERTON J., PA3486
WATHALL S., OA4374
WATKINS J., PA1739, PA4215
WATKINS K., PA2405, PA2406
WATKINS L., PA365,

PA3357
WATKINS W., PA996, PA1740, OA2300, PA3278
WATKINSON R., OA147
WATMOUGH A., PA1162
WATSON A., PA1273
WATSON C., PA1150
WATSON J., OA1403
WATSON J., PA1336, PA2021
WATSON K., PA248, PA975
WATSON L., OA1403
WATSON P., PA1215
WATSON R., PA4017
WATT M., PA4187
WATTIE J., PA3900
WATTIE J., PA933, OA2203
WATTS E., PA2086
WATZ H., PA367, OA662, OA681, PA934, PA1669, OA3113, PA3573, PA3880, PA3881, PA3882, PA3886, PA4062, PA4189
WAUTERS E., OA687
WAWMAN R., PA2066, PA2565
WAXMAN A., OA2273, OA2279, PA3460
WAZIRI H., PA2565
WEATHERALD J., PA460, PA557, RCT716, PA4134
WEATHERLEY N., PA3891
WEATHERLEY N., OA128
WEAVER J., PA922
WEBB A., PA473
WEBER A., PA1270, PA1272
WEBER R., PA1230
WEBER R., OA1446
WEBER S., PA272, PA613
WEBER S., PA1015
WEBER T., PA4053
WEBER T., PA609
WEBER# R., OA2947
WECHSLER M., PA3492, PA3493
WECHSLER M., PA3191
WECHSLER M., OA9002
WECHSLER M., PA3212
WECKMANN M., PA988, OA2954, PA3948
WEDEKIND D., PA2071
WEDZICHA J., PA869, OA2322, PA3879
WEDZICHA J., RCT710, PA1113
WEDZICHA W., PA4178
WEE W., PA3473
WEE W., PA1770
WEE Y., PA3432
WEERASINGHE D., PA2748, PA3139
WEERSINK E., OA3671
WEERSINK E., PA497
WEERSINK E., PA930, PA2402
WEGENER A., PA1083
WEHRMEISTER F., OA2330
WEI L., OA3750
WEI X., PA599
WEI Y., OA3781
WEIDHAAS S., PA1736, PA1737
WEIDINGER D., PA931, PA3577
WEILE J., OA2901
WEILER N., PA3502
WEINBERGER D., OA4422
WEINER D., PA2486
WEINHEIMER O., PA3888
WEINMAN J., PA2543
WEINREICH U., PA246, OA2330
WEINREICH U., PA1651
WEINREICH U., PA4105
WEISE M., PA925
WEISSER S., OA2948
WELCH H., OA785, PA1789
WELCH L., OA3734, OA4433
WELDON B., PA1757
WELDON S., PA2807
WELLER D., PA2028, OA4380
WELLS A., PA1261, OA1452, OA1454, PA1948
WELLS J., PA3945
WELLS M., PA2121
WELSCH J., PA3455
WELSH D., PA3550
WELSH L., OA121
WELSNER M., OA2920
WELTE T., OA753, PA1254, PA1645, PA1669, PA1687, PA1816, PA1818, PA1942, PA2078, PA2597, RCT2881, PA3470, OA3748, PA4062, PA4113, PA4122, PA4277
WELTER S., PA490, PA491
WELTI L., OA2947
WEMEAU L., OA4438
WEN F., PA915
WEN S., PA4105
WENDEL-GARCIA P., PA1254, PA1944
WENDT A., PA2412
WENDT C., RCT712
WENER R., PA1929
WENNERGREN G., PA943, PA3925
WENTING L., PA1654
WENZEL S., PA3568
WERE J., OA763
WERLEIN C., PA4277
WERNER C., PA3404
WERNER R., PA1781
WERNERSSON S., PA3165
WERTHEIM D., PA2481
WERTHEIM H., PA4083
WERTHER T., PA3281
WESSENDORF T., PA3847
WEST A., PA617, OA1389, PA3333
WEST A., OA1615
WEST J., OA798
WESTALL G., PA2793, PA3432
WESTERGREN-THORSSON G., PA576, PA600, PA608, PA2079, OA3660, PA4133, PA4269
WESTHÖLTER D., OA2920
WESTHOVENS R., PA448
WESTIN J., PA1838
WESTRENEN W., PA589
WETZKE M., OA4417
WEYCKER D., PA3416
WEYNAND B., PA448, OA1392, PA1734, PA3476
WHALLEY D., PA3260
WHARTON J., PA4138
WHEATLEY I., OA3728
WHEELER C., PA902
WHEELOCK A., PA3249, PA3574
WHEELOCK C., OA2190, PA3897
WHEELOCK C., PA1337
WHETSTONE C., PA933, PA935, OA2203
WHEWAY G., OA3751
WHIPDAY L., PA889
WHITBY J., PA2726
WHITE E., RCT712
WHITE L., PA2851
WHITE L., PA879, PA1692, PA2403
WHITE N., OA4433
WHITE N., PA3201
WHITE R., PA2682
WHITE R., PA4175
WHITE R., PA4098
WHITE S., PA2715, PA2718
WHITEHOUSE A., PA2478, PA3947, PA3964
WHITELEY M., PA1111
WHITEMAN M., PA2074
WHITESIDE J., PA3324
WHITFIELD C., OA2922
WHITTAKER H., OA3741, OA3744
WHYTE M., PA2086
WIBOWO A., PA1888
WICKI B., PA2616
WICKREMASINGHE M., PA3494
WIĘCKOWSKA B., PA2498
WIECZOREK M., PA4112
WIENECKE S., PA1830
WIENER-OGILVIE S., PA511
WIENHOLD S., PA1830
WIENKER J., PA488
WIERNIK E., PA1314
WIERSINGA W., OA2313
WIERTZ I., PA2657
WIEST G., PA2663
WIFFEN L., PA223, PA2437
WIG N., PA1883, PA4069
WIGLE T., PA4192
WIIG R., OA2907
WIJAYASINGHE E., PA165
WIJBENGA N., OA688
WIJERATNE P., PA2008
WIJESINGHE N., PA528
WIJK S., PA2826
WIJKSTRA P., PA562
WIJMANS L., OA766, OA769
WIJNANT S., OA4378
WIJNTJES J., PA1198
WIJSENBEEK M., OA1396, PA1932, PA1949
WIJSENBEEK M., OA3789
WIJSENBEEK M., OA1391, PA3417
WIJSENBEEK M., PA1933
WIJSMAN P., PA497
WIJSMAN P., PA930
WIK M., PA1117
WIKER H., PA3229
WIKLUND F., OA4376
WIKSTRÖM-JONSSON E., PA1337
WILCKE J., PA561
WILCKE T., PA3182
WILD J., PA464, OA1403, PA3323, PA3891
WILD J., OA128, PA3474
WILD J., OA1407
WILD L., PA1254
WILD P., PA506
WILD R., PA2118, PA2119, PA3619
WILDE M., PA986
WILES S., PA920
WILHELM E., PA3604
WILHELM E., PA1230
WILKENS F., PA1167
WILKENS H., PA1167
WILKES D., PA4175
WILKIE H., PA3524
WILKI-KURTZHALS L., PA4174
WILKINS C., PA2706
WILKINS J., OA3752
WILKINS M., PA1989, PA4138
WILKINSON A., PA3246
WILKINSON D., OA1442
WILKINSON E., PA2473
WILKINSON T., PA2728, RCT2884, OA3109, PA4278
WILKINSON T., PA1273
WILLACY O., OA1399
WILLARD A., PA1767
WILLEMS L., PA603, OA686, PA1030, PA1286, OA3793
WILLEMS T., OA136
WILLEMS VAN BEVEREN A., PA494
WILLÉN D., PA2079
WILLERS C., PA997
WILLERS C., OA1623
WILLETTS G., PA1742
WILLIAMS A., PA3201
WILLIAMS A., PA3235
WILLIAMS B., PA1339
WILLIAMS E., PA1742
WILLIAMS E., PA3283, PA3285
WILLIAMS E., PA918
WILLIAMS M., PA1954
WILLIAMS N., PA3523
WILLIAMS N., PA3494
WILLIAMS S., PA1804
WILLIAMS T., PA1764
WILLIAMSON L., PA2523
WILLIAMSON M., PA2856
WILLINGER T., OA2935
WILLISON K., PA2058
WILLMERING M., PA3474
WILLMORE L., PA3179, PA3956
WILLS G., OA760
WILSON A., PA1738, PA1746, RCT2165, OA3664
WILSON F., OA1403
WILSON H., PA2019
WILSON K., PA3550
WILSON M., PA4273
WILSON N., PA3432
WILSON S., PA2809
WILSON S., OA1411
WILTSHIRE L., PA933, OA2203
WIMALASEKERA S., PA2422
WIMMS A., PA1316
WIN T., PA3425
WINANTEA J., PA2693, PA2701
WINBERG A., PA940
WINCK J., OA134, PA1217
WIND A., OA1393
WINDERS T., OA682
WINDISCH W., PA518, PA1649, PA2758
WINGFIELD DIGBY J., PA175, PA901
WINGFIELD-DIGBY J., PA175
WINSA LINDMARK S., PA937
WINTHROP K., PA1901, OA3749, OA3754
WINWARD S., PA3309
WINZEN A., PA3265
WIQVIST K., PA3567
WIRENFELDT PEDERSEN J., PA1647
WIRTZ H., PA1135, OA1384, PA1669, PA2646
WISE R., RCT712
WISE R., PA218
WISEMAN D., RCT2882
WISNIEWSKI S., RCT712
WISSELINK H., PA2004
WISSER O., PA3172
WISZNIEWSKA M., PA263
WITA M., PA548
WITHERS A., PA1746
WITTE T., OA1452
WITTEBOLS L., PA2811
WITTMAN J., OA3108
WITTMANN J., OA1432, OA1434
WITZENRATH M., PA1305, PA1307, PA1668, PA1830, PA2082, RCT2881, OA4360
WLODARCZYK K., OA4433
WOEHLK C., PA926
WOEHRLE H., PA2846, PA2847, PA3862, PA3863

WOEHRLE T., PA4075
WOEST M., PA3164
WÖGRATH M., PA2787
WOHLERS A., OA2954
WÓJCIK-PSZCZOŁA K., PA3158
WOJDA E., PA4259
WOJSYK BANASZAK, I., PA294
WOJSYK-BANASZAK I., PA2498, PA3555, OA4417
WOLDHUIS R., PA1276
WOLDMAR N., OA1383
WOLF D., PA1762, PA3967
WOLF D., PA1766
WOLF M., PA942
WOLFF C., PA3256, PA3268, PA3548
WOLFSON D., PA3949
WOLLSCHING-STROBEL M., PA518, PA1649, PA2758
WOLMARANS K., PA1904
WOLOWIK A., PA1894
WOLTERS J., PA1276
WOLTMANN G., OA4407
WON H., PA180
WONG A., PA955
WONG C., PA459
WONG C., PA2573
WONG C., PA2830
WONG G., PA3264
WONG H., PA932
WONG K., PA4183
WONG L., PA1716
WONG M., PA3432
WONG N., PA1776
WONG Q., PA241
WONG R., PA2630
WONG W., OA2250
WONG Y., PA2081
WONG Y., PA241, PA955
WONG CHONG BOON N., PA1330
WOO J., PA2599
WOOD D., PA3984
WOOD H., OA2961
WOOD H., PA1000
WOOD J., PA412
WOOD L., PA578, PA918, PA3168
WOOD L., PA3897
WOOD R., OA747, PA2118, PA2119, PA3619
WOOD R., PA2109
WOODALL M., PA1290
WOODCOCK A., PA175
WOODFORD C., PA1658, PA1659
WOODHEAD F., PA2670, RCT2886
WOODRUFF P., RCT712, PA2121
WOODS J., OA1615
WOODS J., PA3474
WOODWARD K., PA4175
WOODWARD R., OA779
WOOTTON D., PA412
WORBOYS A., PA1944
WORT S., PA476, OA2275
WORT S., PA2672, PA4076, PA4138
WORT S., PA4148
WOTHERSPOON S., PA2384
WOUTERS E., PA1661, OA3115, PA3990
WOUTERS E., PA3136, PA3146
WOUTERS E., PA237, OA2304
WOUTERS E., OA119, PA1669
WOUTERS H., PA2387
WOZNIAK D., PA565
WOŹNICA K., PA1920
WRAIGE E., PA270
WRENCH C., PA3585
WRENGER S., PA1816
WRENNALL J., PA1937, PA3568
WRIGHT A., PA3373
WRIGHT L., PA1151, PA2654
WRIGHTSON J., PA441
WU C., PA4088
WU C., PA2475
WU F., PA4032
WU G., PA555, PA1262
WU J., OA3749, OA3754
WU J., PA4032
WU J., OA684, OA3112, PA3307, PA3423
WU J., OA685
WU J., PA1028, PA3515
WU K., PA3459
WU K., PA4109
WU K., PA1916
WU M., PA916
WU Q., PA2615
WU R., OA1616
WU S., PA4041
WU W., PA4182
WU X., PA601
WU Z., PA617, OA1389, PA3989
WUIDART M., PA290
WÜLFINGHOFF N., OA2920
WURZENBERGER C., PA1937, PA3568
WURZENBERGER C., PA1937
WÜST A., PA2616
WUYTS M., OA804, OA805, PA1038, PA1039
WUYTS W., OA1393
WUYTS W., OA805, PA1936
WUYTS W., PA448, PA1149, OA1454, PA1734, PA1935
WUYTS W., PA1286, OA1392, PA4265
WYLER F., PA2492
WYLLIE A., OA4422
WYNANDS Q., PA2480
WYNNE K., PA918
WYROSTKIEWICZ D., PA1079
WYSKA E., PA3158
WYSOCKI M., PA3536

X

XANTHOULI P., PA471, PA474, PA1976, PA2677
XANTHOULI P., PA2673
XAVERIUS IVAN F., OA3747
XAVIER L., PA297
XAVIER R., OA2205
XENAKI D., PA2073, PA4246
XEPAPADAKI P., PA3264, PA3267
XESS I., PA1883
XIA C., PA3212, PA4321
XIA Y., PA387
XIANHUI Z., PA1654
XIAO Y., PA300
XING H., PA4262
XING J., PA3191
XIONG L., PA4133
XIPOLITOS A., PA340
XIPOLITOS A., PA1849, PA4014
XU B., PA198
XU G., OA1385
XU H., OA756
XU H., PA1113, PA1878, PA3352
XU J., PA3423
XU L., PA3249
XU N., PA4032
XU P., PA4182
XU S., PA3221
XU T., OA3750
XU T., PA1261
XU W., PA309
XU X., PA459
XU X., PA3607
XU Y., PA1642, OA3741, PA4059
XUE G., PA309
XUE M., PA4041

Y

YAACOBY-BIANU K., PA508
YABUKI Y., PA157
YADAV A., PA2441
YADAV G., PA3413
YADAV S., PA1285
YADAVILLI R., PA2000
YADDANAPUDI K., PA4272
YADOLLAHI A., PA877
YAFFI R., PA3468
YAHYAOUI T., PA261, PA262
YAKOUBI R., PA221
YALÇIN ., PA2496
YALCIN B., PA3244
YALÇIN E., PA282, PA296, PA1771, PA2025, PA2500, PA2502, PA2853, OA4420
YALMAN A., PA3315, PA3316
YALNIZ I., PA2524
YAMAGUCHI F., PA1887
YAMAGUCHI I., PA917
YAMAGUTI W., PA538
YAMAJI Y., PA4180
YAMAMOTO H., PA1168
YAMAMOTO M., OA673
YAMAMOTO Y., PA1898
YAMAMOTO Y., PA2790
YAMANO Y., PA2644
YAMASHITA Y., PA2791
YAMAUCHI H., OA1394
YAMMINE S., OA142, PA997, PA1002, PA1012, OA1447
YAN M., PA1876
YAN Q., PA876
YAN Y., PA2678
YANAGISAWA S., PA3517
YANAKA K., OA3132
YANAZ M., PA277, PA285, PA289, PA2497, PA3985
YANEV N., PA4255
YAÑEZ A., PA3259
YANG A., PA198
YANG A., OA772
YANG B., PA391
YANG H., OA4406
YANG I., PA4179
YANG J., OA3131, PA3456
YANG J., PA4087
YANG L., PA598, PA599, PA1827, PA1833, OA2957, PA3477
YANG L., PA300, PA1927
YANG L., OA2189
YANG M., OA4406
YANG R., PA173, PA177, PA178
YANG R., OA1633
YANG X., PA2371
YANG Y., PA2050, PA2075
YANG M., PA4325
YANGUI F., PA994, PA1072, PA1311, PA3344
YANGUI I., PA2368
YANIK S., PA931
YANLLI BONDUKE M., PA339
YANO K., PA917
YANSHENG W., PA1820
YAO J., PA3465
YAO X., PA3561
YAO Y., PA916
YAOCHUAN H., PA1265
YAPAR D., PA271
YARDIMCI G., PA154
YARIMIZU H., OA4410
YAROVA P., PA3529
YASAR A., PA577
YASINSKA V., PA942, PA1337
YASIRO R., PA1814
YASSINE N., PA1108, PA2617, PA3480
YASSINE O., PA1907
YASSINE O., PA4300
YATACO R., OA756
YATES J., PA4202
YATES T., PA4216
YATIM S., PA3366
YATSYSHYN R., PA2829
YAVUZSAN E., PA1094
YAZAN H., PA277, PA282, PA296, PA1756, PA2496, PA2500
YAZGAN S., OA3759
YE T., PA2085
YE W., RCT712
YEAP J., PA2118, PA2119, PA3619
YEGEN C., PA606, OA2921, PA4130
YEGIT C., PA289
YELURI S., PA1777
YEN A., OA3755
YENDLE L., PA1742
YENIGUN B., PA2731
YEO Y., PA3889
YERKOVICH S., PA1752, OA4421
YERLIKAYA Z., PA2497
YEROVI ONOFRE S., PA2859
YESAYAN A., PA4011
YESIL-CELIKTAS Ö., PA2049
YEŞILDAĞLI H., PA1125
YEUNG L., OA761
YEVTUSHENKO A., PA1331
YEW M., PA3352
YIALLOUROS P., PA293, OA2306, PA3980
YIALLOUROS P., PA1004
YIGITLER B., OA4361
YII A., PA3177
YILDIRIM A., PA3247
YILDIRIM A., OA662, OA686, PA2787, PA3174, OA3656
YILDIRIM E., OA4361
YILDIZ F., PA966, PA968, PA972
YILDIZ Ö., PA1065
YILDIZ P., PA3244
YILDRIM A., OA2966
YILMAZ ., PA2500
YILMAZ A., PA296, PA2496
YILMAZ M., OA3127
YILMAZ M., PA2731
YILMAZ Ö., PA577, OA2188
YILMAZ U., OA1381
YILMAZ KARA B., PA447
YILMAZ YEGIT C., PA277, PA285, PA2497, PA3985
YILMAZEL UÇAR E., OA1605
YIN-DECLUE H., RCT2164
YIP K., OA3778
YKSNØY Ø., PA1137
YLISAUKKO-OJA T., PA1347
YOGESWARAN A., PA3454
YOKOTA H., PA465
YOKOYAMA T., PA2644
YOLDA-CARR D., OA4422
YONEDA H., PA157
YONEDA K., OA2269
YONEDA S., OA3132
YOO H., PA1148
YOO H., PA1941
YOO K., PA913, PA1342, PA3611
YOON H., PA3445
YOON H., PA913
YOON S., PA1142
YOON S., PA220
YORDANOV P., PA405
YORDANOVA G., PA3505
YORGANCIOĞLU A., PA4185
YOSHIDA K., PA4183

YOSHIDA M., PA4079
YOSHIDA M., PA1665
YOSHIZAWA A., PA1168
YOSRA B., PA2098
YOSVANI A., PA2590
YOUNG B., PA412
YOUNG G., PA2565
YOUNG K., OA3755
YOUNG L., RCT2887
YOUNG S., PA3549
YOUROUKOVA V., PA4255
YOUSSEF I., PA265, PA1067, PA1122, PA1124
YOUSUF A., PA4237
YSERBYT J., PA448, OA805, OA1392, PA1734
YU C., PA1714
YU C., PA1322
YU F., PA1871, PA4015
YU F., PA300, PA1927
YU H., PA3201
YU T., PA2805
YU T., PA1871, PA4015
YU W., PA459
YU X., PA3138
YU Y., OA4417
YUAN P., PA2678
YUAN T., PA4115
YUAN W., PA198
YUE W., PA4032
YUEMIN C., PA1654
YUEN N., PA1232, PA2039
YUJEN C., PA1265
YUKSEL A., PA446, PA447, OA1628, PA3244, PA3848
YUKSEL B., PA4242
YUKSEL H., PA282, PA296, PA577, OA2188, PA2496, PA2500
YUKSEL DOLGUN T., PA1771
YULE A., OA1618
YUMRUKUZ M., PA446, PA447
YUMRUKUZ SENEL M., PA3244
YUMUSAKHUYLU A., PA289
YUNG B., PA436
YURT A., PA2449
YUSTE SÁNCHEZ M., OA3121
YUSUF F., PA931
YUSUF O., PA1716
YUSUF S., PA1716

Z

ZAABI A., PA1652
ZAARA A., PA1996, PA2623, PA3842
ZAARA E., PA266
ZABADANOVA S., PA1650
ZABINI D., PA4149
ZACHARASIEWICZ A., OA2948
ZACHARIADES A., PA910
ZACHARIAH A., PA4239
ZACHARIS A., PA3528
ZACKS N., PA1132
ZADI M., PA2372
ZADROŻNA M., PA3158
ZAFAR A., PA1881
ZAFAR M., PA165
ZAFARI V., PA2055
ZAFIROPOULOS A., PA4082
ZAGHBA N., PA1108, PA2617, PA3480
ZAGO A., PA3986
ZAHEER F., PA1169
ZAHID H., PA386
ZAHIGIAN R., OA2917
ZAHRALDIN K., PA287
ZAIATS L., PA2829
ZAIBI H., PA1176, PA2575, PA3936
ZAIDI S., PA2386, PA2396
ZAIGHAM S., OA1415, PA1701
ZAIKOV S., PA235
ZAINUDDIN H., PA1773
ZAIRI ., PA316, PA1785
ZAIRI S., PA314, PA1724, PA1782, PA1783, PA1784, PA1788, PA1790, PA1791, PA1792, PA1793, PA2631
ZAJĘCKI W., PA482, PA483
ZAKA S., PA1879
ZAKI I., PA1141
ZAKINE E., OA4435
ZAKIS K., PA1939, PA4018
ZAKRISSON A., OA3732
ZAKYNTHINOS S., PA362, PA2522
ZALACAIN M., PA392, PA1822, OA2916
ZALACAIN JORGE R., PA2572, PA4033, PA4039, OA4409
ZALCMAN G., PA4111, OA4438
ZALDIBAR BARINAGA M., PA1309
ZALEWSKA A., PA3153
ZALEWSKA-JANOWSKA A., PA2727
ZAMAMI Y., PA2791
ZAMAN F., PA232, PA2633
ZAMANIAN R., PA1974
ZAMARRÓN E., OA4392
ZAMBELLI E., PA3166
ZAMBON A., OA2291
ZAMBONI F., PA2830
ZAMBRANO CHACON M., PA2015, PA3410
ZAMFIR V., PA427
ZAMPOGNA E., PA217
ZAMPROGNO P., PA609
ZAMUDIO DOMINGO L., PA414, PA1059
ZAN D., OA1455
ZANATTA E., PA1178, OA1457, PA1970
ZANCONATO S., PA3472
ZANELI S., PA2519
ZANEN P., PA2657
ZANETTE B., OA1615, PA3473
ZANETTI M., PA1702
ZANFRAMUNDO G., PA1953
ZANIN V., RCT714
ZANINI M., PA4017
ZANINI U., PA1172
ZANNIN E., PA3276
ZAPATA COMAS ., PA2423
ZAPATA COMAS T., PA2708, PA3403
ZAPATA ORTEGA M., PA478
ZAPATER A., OA2282, OA2284
ZAPATER MATUTE A., OA4384
ZAPPA M., PA217, PA887
ZARACA F., OA3764
ZARAGKAS S., PA303
ZARATI D., PA1724
ZARGOUNI A., PA1667, PA1928, PA2639
ZARIC B., OA2263, PA4008
ZARKADI E., PA1098, PA1128
ZAROGIANNIS S., PA434, PA435, OA780
ZARRAT E., OA3130
ZARRICUETA F., PA3998
ZARROUK S., PA2781
ZARYCHTA J., OA1410
ZASTRZEŻYŃSKA W., OA1410
ZATLOUKAL J., PA4193
ZATLOUKAL J., PA3849
ZAWADZKI F., PA1033
ZAYAS N., PA2679, PA2685, OA3133
ZAYAS N., PA2683
ZAZUETA-MARQUEZ A., PA1284
ZDANOWSKI R., PA865
ZDRAL A., PA1277
ZDRAZILOVA-DUBSKA L., PA2378
ZEBADUA R., PA2679, PA2683, PA2685, OA3133
ZECCHI R., PA3166
ZECH A., PA3347
ZEDER K., PA477, PA3462, PA4136
ZEIGER R., PA218
ZEINALI S., OA1386
ZEITLIN N., OA1436
ZEJDA J., PA995
ZEJDA J., OA674
ZELINKOVA H., PA3841
ZELLERHOFF H., OA771, PA2701
ZEMAITIS M., PA480
ZENDAH I., PA3390, PA4052
ZENG S., PA1247
ZENG Y., PA4041
ZENGA A., PA2507
ZENGIN S., PA3608
ZENGIN AKKUS P., PA2025
ZENNER D., OA763
ZENOBI R., OA2947
ZERAATKAR D., OA2311
ZERBELIYEV N., PA945
ZERILLO B., PA529
ZERIMECH F., PA1278, PA1280
ZERIZER F., PA2763
ZERVAS E., OA679, PA967
ZERVAS E., PA341
ZERVAS E., PA2389, PA2397, PA2697, PA3207, PA3369, OA3679
ZERVOU E., PA377
ZETTERGREN A., PA3231
ZEVALLOS VILLEGAS A., PA1115, PA2859, PA4233, PA4235
ZEVALLOS-VILLEGAS A., PA4244
ZEVLA D., OA3774, PA4125
ŽGANK A., PA1981
ZHA J., PA387
ZHANG B., PA1262
ZHANG C., OA1632
ZHANG C., PA3249
ZHANG H., PA309
ZHANG J., PA1262
ZHANG J., PA2484
ZHANG J., PA2371
ZHANG J., PA2482
ZHANG J., PA2625
ZHANG K., PA1296
ZHANG L., PA3278, PA3279
ZHANG L., PA915
ZHANG M., PA3191, PA3210
ZHANG N., PA2805
ZHANG R., PA2595
ZHANG S., PA227, PA1691
ZHANG T., PA4041
ZHANG W., PA309
ZHANG X., RCT714
ZHANG Y., PA2615
ZHANG Y., PA2390, PA3209
ZHANG Z., OA756
ZHAO B., PA986
ZHAO F., OA4430
ZHAO J., PA1262
ZHAO L., OA2275, PA2672
ZHAO Y., PA1262
ZHAOYUN Y., PA2757
ZHELYAZKOVA Y., PA3188
ZHENG B., OA3800
ZHENG J., PA915
ZHENG L., PA2678
ZHENG P., PA4041
ZHENG X., PA2075
ZHENG Z., PA309
ZHI C., PA2409
ZHONG N., PA915
ZHONG S., OA670
ZHOU C., PA3614
ZHOU C., PA1979
ZHOU C., PA3249
ZHOU J., PA3607
ZHOU L., OA2252, PA3171
ZHOU S., PA598, PA599, PA1827, PA1833
ZHOU X., PA4075
ZHOU X., PA1701
ZHOU X., PA4297
ZHOU Y., RCT2164
ZHOU-SUCKOW Z., PA2056
ZHU D., RCT714
ZHU J., PA2668
ZIANT S., PA886
ZIARNIAK K., PA580, PA3557
ZICHEN J., PA884, PA3152, PA3938
ZICHNALIS G., OA3679
ZIEDI H., PA2713
ZIEGAHN N., PA393, PA1112, PA1672
ZIEGLER L., OA1440
ZIEHR H., PA1830
ZIELHUIS S., PA4177
ZIGLIO G., PA1160
ZIJP T., PA3606
ZIMNA K., PA1079
ZIMRAN E., PA3183
ZINDR V., PA2012
ZINELLU E., PA948
ZINENKO O., PA422
ZINS M., PA252, PA941, PA1314, PA3250
ZIOUECHE S., PA4052
ZIREK F., PA3290, PA3521, PA3929
ZIRLIK A., PA3462
ZISMAN L., PA4143
ZISSEL G., PA3442
ZISSIMOPOULOS A., PA614
ŽIVANOVIĆ D., PA418, PA1152
ZLÁMALOVÁ T., PA3444
ZNAGUI T., PA489
ZNEGUI T., PA162, PA507, PA871, PA2383, PA3362, PA3374
ZOCCHI C., PA2762
ZOCCOLI G., PA1060
ZOE D., OA797
ZOE K., PA3354
ZOLLER T., PA1305, OA4360
ŻOŁNOWSKA B., PA2664
ZOMER D., OA1617
ZOMPATORI M., PA3424
ZORGATI H., PA2777, PA2782, PA2783, PA3383
ZORICA L., PA184
ZORPIDOU D., PA340, PA2563, PA4014
ZORRILA L., PA2679
ZORRILLA L., PA2685, OA3133
ZOSKY G., OA2963
ZOTOS N., OA4408
ZOTOS P., OA3763
ZOTTI S., PA924
ZOU D., OA2286, PA3603, PA3605, PA4297
ZOUARI H., PA1244, PA2752
ZOUNEMAT KERMANI N., OA1411, PA2819, PA3561
ZOUNEMAT-KERMANI N., PA918, PA923, PA3563, PA3564
ZOVKO T., OA3731
ZOZ D., OA1396
ZRIBI H., PA314, PA317, PA1782, PA1783, PA1784, PA1785, PA1786, PA1788, PA1790, PA1791, PA1792, PA1793, PA1794,

PA2626, PA2631
ZRIBI M., PA2458
ZSEMLYE E., PA4119
ZSUZSANNA C., PA184
ZUBAIR S., PA386
ZUBER B., OA2314, OA4443
ZUBERBIER T., PA2727, PA3153
ZUCCARINO F., PA1182
ZUCCARINO N., PA3856
ZUCCHETTA P., PA3472
ZUCCHETTI S., PA1172
ZUCCOTTI G., PA2507, PA2508, PA2509
ŻUCHOWSKA J., PA907
ZUFFI A., PA2391
ZUIL M., OA1437
ZUIL MORENO M., PA4102
ZULFIKAR S., PA2738, PA4020
ZUMPE S., OA135
ZUNG S., PA3912
ZUÑIGA D., PA2558
ZURBA L., OA2308, PA2478
ZURKOVA M., PA3444
ZVER A., OA1620, PA3962
ZVEZDIN B., PA3207
ZVOL I., PA878
ZWICK R., PA1811
ZWICK R., PA358
ZWINGMANN K., PA1230, PA2582
ŻYCIŃSKA M., PA483
ZYSMAN M., PA2837, OA2936, PA3345, PA3890
H
HATZIAGOROU E., PA1745