

ERS Research Seminar
Pharmacology of asthma and COPD: current and future developments
5 – 6 May 2022; Napoli, Italy

Day 1 – Thursday, 5 May 2022

08:45-09:00 Registration
09:00-09:10 Welcome and introduction

Session 1: Pharmacology of asthma and COPD - current knowledge

Chairs: Dave Singh and Joergen Vestbo

09:10-09:30 Understanding the mechanism of action of bronchodilators in asthma and COPD (*Maria Gabriella Matera – IT*)
09:30-09:40 Discussion
09:40-10:00 How do inhaled steroids work and interact in asthma and COPD? (*Maarten Van Den Berge – NL*)
10:00-10:10 Discussion
10:10-10:30 Biomarker guided pharmacological intervention (*Daiana Stolz – CH/DE*)
10:30-10:40 Discussion
10:40-11:00 *Coffee break*

Session 2: Emerging new concepts and treatments

Chairs: Mario Cazzola and Daiana Stolz

11:00-11:20 Do we understand remodelling in asthma and COPD? (*Eleni Papakonstantinou – CH/DE*)
11:20-11:30 Discussion
11:30-11:50 Lung regeneration: is it still far from reality? (*Reinoud Gosens – NL*)
11:50-12:00 Discussion
12:00-12:20 Emerging classes of drugs for the treatment of obstructive lung disease (*Dave Singh - UK*)
12:20-12:30 Discussion
12:30-13:30 *Lunch*

Session 3: Challenges for clinical development

Chairs: Clive Page and Maria Gabriella Matera

13:30-14:00 Key challenges faced for approval of anti-inflammatory drugs for asthma and COPD – European Medicines Agency perspective (*Laura Fregonese – UK*) - *remotely*
14:00-14:30 General discussion

14:30-15:25 Session 4 – Breakout: what is this seminar’s position on the selection of treatment in asthma and COPD? – Dave Singh, Paola Rogliani and Alexander Mathioudakis

14:30-14:40 Explain tasks and operating methods

14:40-15:25 Session 1 - Identifying surrogate markers and outcomes

- **Group 1:** Which surrogate markers can be used to assess and quantify disease in a pre-clinical stage? Do we need drug intervention in pre-clinical detectable disease? – **Chair: Dave Singh**
- **Group 2:** Which are the read-outs to assess drug effect in the progression of the disease? – **Chair: Paola Rogliani**
- **Group 3:** Is an effect on remodelling required for drug efficacy? If so, how to assess it? – **Alexander Mathioudakis**

15:25-15:45 *Coffee break*

15:45-16:30 **Session 2 - How do we select treatments for patients with severe asthma and COPD?**

- **Group 1:** What is non-clinical evidence to sustain combination therapy including ICS in COPD? What about LABA/LAMA in asthma? – **Chair: Dave Singh**
- **Group 2:** Are there realistic treatment goals for monoclonal antibodies in COPD? How do they differ from asthma? – **Chair: Paola Rogliani**
- **Group 3:** Which features suggest considering patients for non-pharmacological, i.e. bronchoscopic interventions in asthma and COPD? – **Alexander Mathioudakis**

16:30-17:00 *Round table*

Day 2 – Friday, 6 May 2022

09:00-09:30 Summary of day 1 and possible output, next steps and plenary discussion

Session 5: Challenges in the treatment of patient with asthma and COPD

Chairs: Maarten Van Den Berge and Clive Page

09:30-09:50 New insights into steroid resistance (*Nicola Hanania – USA*) – *pre-recorded*

09:50-10:00 Discussion

10:00-10:20 Comorbidities and drug interactions (*Mario Cazzola – IT*)

10:20-10:30 Discussion

10:30-10:50 Precision medicine in asthma, pharmacogenomics and beyond (*Anke-Hilse Maitland- Van Der Zee – NL*)

10:50-11:00 Discussion

11:00-11:20 General discussion

11:20-11:40 *Coffee break*

11:40-12:20 Session 6 – Breakout: what is this seminar’s position on the selection of treatment in asthma and COPD? – Joergen Vestbo, Reinoud Gosens, Maia Rukhadze

11:40-11:50 Explain tasks and operating methods

11:50-12:20 Session 1 - How to streamline clinical and basic research

- **Group 1:** How can academia and industry cooperate in translating relevant clinical questions to experiments? – **Chair: Joergen Vestbo**
- **Group 2:** How to translate experimental data to clinical practice? – **Chair: Reinoud Gosens**
- **Group 3:** Which themes should be prioritized? – **Chair: Maia Rukhadze**

12:20-12:50 *Round table*

12:50-13:00 Conclusion

13:00-14:00 *Lunch and Departure*