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)
10:30-10:40  Discussion
10:40-11:00  Coffee break

Session 2: Emerging new concepts and treatments
Chairs: Maria Belvisi and Mario Cazzola

11:00-11:20  Do we understand remodeling in asthma and COPD? (Eleni Papakonstantinou – GR)
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 (Chris Brightling – UK)
12:20-12:30  Discussion
12:30-13:30  Lunch

15:00- Session 3: Challenges for clinical development
Chairs: Clive Page and Alberto Papi

13:30-14:00  Key challenges faced during clinical development of anti-inflammatory drugs for asthma and COPD
14:00-14:30  Key challenges faced for approval of anti-inflammatory drugs for asthma and COPD (Laura Fregonese – UK)
14:30-15:00  General discussion
Session 4 – Breakout: what is this seminar’s position on the selection of treatment in asthma and COPD? – Dave Singh and Paola Rogliani

15:00-15:15 Explain tasks and operating methods

15:30-16:15 Session 1 - Identifying surrogate markers and outcomes – Dave Singh

- 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?
- Which are the read-outs to assess drug effect in the progression of the disease?
- Is an effect on remodeling required for drug efficacy? If so, how to assess it?

16:15-17:00 Session 2 - How do we select treatments for patients with severe asthma and COPD? – Paola Rogliani

- What is non-clinical evidence to sustain combination therapy including ICS in COPD? What about LABA/LAMA in asthma?
- Are there realistic treatment goals for monoclonal antibodies in COPD? How do they differ from asthma?
- Which features suggest considering patients for non-pharmacological, i.e. bronchoscopic interventions in asthma and COPD?

17:00-17:30 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)
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

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

11:50-12:20  **Session 1 - How to streamline clinical and basic research**
- How to translate relevant clinical questions to experiments?
- How to translate experimental data to clinical practice?
- Which themes should be prioritized?
- How can academia and industry cooperate?

12:20-12:50  *Round table*

12:50-13:00  Conclusion

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