### 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: Maria Belvisi and Mario Cazzola

11:00-11:20 Do we understand remodeling 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 (TBC)
12:20-12:30 Discussion

12:30-13:30 Lunch

#### Session 3: Challenges for clinical development

Chairs: Clive Page

- 13:30-14:00 Key challenges faced during clinical development of anti-inflammatory drugs for asthma and COPD
- 14:00-14:30Key challenges faced for approval of anti-inflammatory drugs for asthma and COPD –<br/>European Medicines Agency perspective (Laura Fregonese UK)
- 14:30-15:00 General discussion

### 15:00-17:30 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