

### Details for presentation topics

### 1) Definition, epidemiology and impact of severe asthma:

the definition of severe asthma has evolved over time (within GINA; over ATS 2002 towards ERS/ATS definition 2014); epidemiology of (refractory) severe asthma versus uncontrolled asthma; impact of severe asthma on individual patients and societies / health care systems;

### 2) Pathogenesis of severe asthma and its natural history:

novel insights into different pathways leading to eosinophilic versus non-eosinophilic airway inflammation in asthma; innate versus adaptive (mucosal) immunity; chronic airway remodeling;

### 3) Differential diagnosis and phenotyping of severe asthma:

from uncontrolled asthma towards refractory severe asthma;

#### 4) Current and future biomarkers in severe asthma:

diagnostic, prognostic and/or theragnostic biomarkers in blood, sputum and exhaled air; role of imaging biomarkers (for endotyping in clinical practice or as intermediate surrogate endpoint in clinical trials);

#### 5) Co-morbidities in severe asthma across the life course:

Four clusters of co-morbidities can be defined in severe asthma: a/ as integral part of severe asthma phenotypes (e.g. nasal polyposis in late-onset severe eosinophilic asthma), b/ as complication of long-lasting disease (fixed airflow limitation; bronchiectasis), c/ as complication of treatment (osteoporosis due to chronic treatment of OCS), or d/ as effect modifiers (sleep apnea syndrome or symptomatic gastro-oesophageal reflux, aggravating severe asthma);

## 6) What is different about severe asthma in children and adults? *Prognostic and therapeutic strategies;*

### 7) Anti-eosinophil and anti-type 2 directed targeted therapies:

targeted therapies of type 2 severe asthma (beyond direct anti-eosinophil therapies): biologics = anti-IgE (omalizumab), anti-IL5 (mepolizumab, reslizumab) and anti-IL5R (benralizumab); anti-IL4R (dupilumab), anti-TSLP, anti-IL33 (R), ...; optimal patient selection;

### 8) Treatment of non-type 2 severe asthma:

treatment of non-type 2 severe asthma (severe asthma due to neutrophilic or pauci-granulocytic inflammation): biologics (e.g. anti-IL17 (R) monoclonal antibodies); oral treatments (e.g. macrolides); inhaled therapies (LAMA / tiotropium; triple therapy) and interventional bronchoscopy (e.g. bronchial thermoplasty).

# Programme

09:00 - 09:10	<b>Opening of the ERS Satellite Symposium 2018</b> Guy Brusselle (BE) & Stephen Holgate (UK)		
09:15 - 10:30	Basics		
09:15 - 09:40	Live from Rome: Definition, epidemiology and impact of severe asthma		
09:40 - 09:50	Questions Chair: Walter Canonica (IT) Speaker: Alberto Papi (IT)		
09:55 – 10:20	Live from Brussels: Pathogenesis of severe asthma and its natural history		
10:20 - 10:30	Questions		
	Chair: Guy Brusselle (BE) Speaker: Bart Lambrecht (BE)		
Coffee Break 25 minutes			
10:55 – 12:10	Diagnosis and management (Part I)		
10:55 – 11:20	Live from Paris: Differential diagnosis and phenotyping		
11:20 - 11:30	QuestionsChair: Marc Humbert (FR)Speaker: Pascal Chanez (FR)		
11:35 – 12:00	Live from London: Current and future biomarkers in severe asthma		
12:00 - 12:10	Questions		
	Chair: Stephen Holgate (UK) Speaker: Chris Brightling (UK)		
Lunch and closed session with local faculty 1 hour 40 minutes			
13.50 – 15:25 Diagnosis and management (Part II)			
13.50 – 14:15	Live from Amsterdam: Co-morbidities in severe asthma across the life course		
14:15 – 14:25			
	Chair: Marielle Pijnenburg (NL) Speaker: Elisabeth Bel (NL)		
Coffee Break 25 Minutes			
14.50 - 15:15	Live from Stockholm: What is different about severe asthma in children and adults?		
15:15 – 15:25	QuestionsChair: Sven-Erik Dahlen (SE)Speaker: Gunilla Hedlin (SE)		
15:30 – 16:55	Treatment		
15:30 - 15:55	Live from Berlin: Anti-eosinophil and anti-type 2 directed targeted therapies		
15:55 – 16:05	Questions		
	Chair: Klaus Rabe (DE) Speaker: Roland Buhl (DE)		
16:10 – 16:45 Live from Madrid: Stratification and treatment of non-type 2 severe asthma   16:10 – 16:45 Overstime			
16:45 – 16:55	Questions Chair: Alvar Agusti (SP) Speaker: Luis Perez de Llano (SP)		
17:00 - 17:10	Closing of the ERS Satellite Symposium 2018		
.,	Guy Brusselle (BE) & Stephen Holgate (UK)		

## Venues

City	Hotel	Address
Amsterdam	Novotel City Amsterdam	Europaboule
Berlin	Novotel Berlin Am Tiergarten	Strasse des
Brussels	Radisson Blu Royal Hotel	Rue du Faus
London	Park Plaza Victoria	239 Vauxhal
Madrid	NH Principe de Vergara	Calle del Pri
Paris	Novotel Paris Bercy	5 Rue de Be
Rome	Eurostars Roma Aeterna Hotel	Via Casilina
Stockholm	Radisson Blu Waterfront	Nils Ericson

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