

## GAAPP 2020 Scientific Meeting Summary

Thanks to all who could participate in our 4<sup>th</sup> scientific meeting on June 8<sup>th</sup> directly. For all who did not have the opportunity to participate in the virtually meeting we provide the audio files attached.

Here is a short summary of each speaker's contribution.

We had four very great speakers who talked about highly topical issues.

- Prof. Ioana Agache, Past-President EAACI
- Prof. Tobias Welte, Past-President ERS
- Patrice Becker M.D., Section Chief, Ashtam and Airways Biology, NIAID/DAIT/AAABB
- Prof. Andrew Menzies-Gow, Severe Asthma specialist and NHS England's National Clinic Director for Respiratory Services

### **Prof. Agache: "EAACI Guidelines: House Dust Mite-driven Allergic Asthma"**

<https://onlinelibrary.wiley.com/doi/epdf/10.1111/all.13749>

- 85% kids with asthma have allergies
- HDM allergy in 20-40% adults with asthma
- Model 1 vs Model 2 approach
- Update to AIT guidelines:
  - HDM tablets - Moderate recommendation → Adults
  - HDM Drops - Low recommendation → Adults & kids
  - HDM SCIT - Low recommendation → Adults & kids

Prevention in kids with AE or strong atopic history---yes---may improve lung function in small airways

### **Prof. Agache: "Recommendations on the Use of Biologicals in Severe Asthma"**

<https://onlinelibrary.wiley.com/doi/epdf/10.1111/all.14235>

- Biologic treatment (benralizumab, dupilumab and omalizumab) will be decided upon phenotype and endotype (depending on biomarkers and comorbidities)
- Shared Decision Making plays a key role in SA treatment choice
  - Phenotype + Biomarker + Desired Outcome
  - Shared Decision Making between patients and HCP
  - Initiate 3 months trial & evaluate response
- Please check the Biomarker slide and Comorbidity slide!

### **Prof. Welte: "Respiratory Diseases and COVID-19"**

He reported about an interesting link to Italy Fashion Week & spread from China and the super-spread from the Austrian ski area Ischgl to most Iceland cases.

Spread of disease due to Day 5 before symptoms & PCR testing in first 5 days negative

Progression of COVID - Day 14 is key - recovery or progression to ARDS

Fatigue most notable symptom for weeks post COVID

Angiogenesis depends on affected cells. COVID-19 is an endothelial disease; flu affects epithelial

Comorbidities: Cardiovascular & Metabolic most common for complication

- Asthma 9% &
- COPD 5%
- Hypertension 56%
- Diabetes 32%

Treatment: Heparin for all patients - all other treatments are experimental

EOS depletion? Welte had patients on biologics with COVID

High eNO High ICS/LABA

No secondary infections seen yet

### **Prof. Becker: NIH/NIAID**

- Her institute is conducting two studies about:
  - Ped allergy & asthma COVID study: within 2000 families; post hospitalization study, 1 year post COVID
  - Changes in the immune system: Immune signatures of those who have complications vs those who do not
- ACT Treatment Trial---Remdesivir vs Remdesivir +////Mederna vaccine Phase I
- Vaccine likely to be available in 2021 or later; Treatment likely in late 2021-2022
- Patient Engagement in R&D—PFDD, Patient Advocates, Ad Boards, trial design
- Unified airway approach to stop COVID in nasal passage before entering lung

### **Prof. Menzies-Gow: The Future of Severe Asthma – Advancing the Science**

- 48% of asthma patients have never seen a specialist
- >50% of asthma related healthcare costs are caused by 10% of asthma population
- Epithelium seems to be key sensor for external environment; forms protective barrier; produces cytokines
- Cytokines trigger downstream inflammation process
- TSLP, IL33, IL25 interrupt earlier in cascade
- Some patients claim complete remission of asthma
- OCS Stewardship; 17% OCS rx by PUD (must do better given long-term side effects of OCS!)