



## ERS 2019

### WORKING GROUP MEETING MINUTES: Severe Asthma and Biomarkers

28<sup>th</sup> September 2019

Novotel Madrid Campo De Las Naciones, Madrid, Spain

Meeting details			
Meeting date	Saturday 28 <sup>th</sup> September		
Meeting time	17:00-18:00		
Chair	Zuzana Diamant		
Attendees	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">                     Glenn Crater                      Tony D'Urzo                      Eric van Ganse                      Manon Belhassen                      Diana Urlichich                      Nikos Papadopoulos                      Joaquin Sastre                 </td> <td style="width: 50%; border: none;">                     Michael Walker                      Naomi Launders                      Sarah Lucas                      Graham Lough                      Ian Pavord                      Ulla Seppala                 </td> </tr> </table>	Glenn Crater Tony D'Urzo Eric van Ganse Manon Belhassen Diana Urlichich Nikos Papadopoulos Joaquin Sastre	Michael Walker Naomi Launders Sarah Lucas Graham Lough Ian Pavord Ulla Seppala
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Objectives			
1	Update on current project		
2	New project ideas		
Items			
Previous Meeting	<p>Zuzana chaired in place of Leif Bjermer, who was unable to attend due to a prior commitment.</p> <p>Reviewed minutes from the previous meeting</p> <ul style="list-style-type: none"> <li>The FeNO research needs exercise highlighted a potential project on whether FeNO can help guide treatment in adult asthmatics, however there was a lack of interest in this project and no one has come forward to lead it, so it will not be taken forward.</li> </ul>		
Update on current project	<p><b>The FeNO/NICE 'Point-of-care biomarkers in asthma management: time to move forward' letter to the editor.</b></p> <p>Update: letter has been reworked and accepted in Allergy.</p>		
New projects	<p><b>Define and prioritise one or two future WG projects.</b></p> <p><b>What are the key research needs in terms of biomarkers &amp; severe asthma?</b></p> <p><b>What could we, as REG, feasibly do to address these?</b></p> <p><b>Who would lead the project?</b></p> <p><b>Would it be fundable?</b></p>		



- Joaquin proposed sputum as being the best biomarker. There was some discussion around how to get more from sputum, firstly, with flow cytometry and then myeloperoxidase. Flow cytometry is currently not standardized and not widely available. Similar with sputum induction, processing and analysis protocols. Discussed the need for more widespread, standardized use of point-of-care biomarkers.
- Electronic nose (e-Nose) was discussed as a promising “point-of-care” technique, using breath prints by mass spectrometry to get VOC information. Applied a.o. in neutrophilic asthma, lung cancer and assessing treatment effect. Perhaps needs to be more understanding of exactly what is driving the signal.
- FeNO was also discussed including ideas raised at the previous meeting.
  - One single FeNO measurement is not that useful, longitudinal FeNO measurements would be more useful.
  - May help determine the need of ICS in COPD, although may not be easy to determine a clear cut off FeNO level.
  - Can’t assess FeNO during exacerbations due to OCS.
  - Smoking is a major confounder that needs to be considered.
  - There is still a need to compare FeNO devices.
- A review piece into biomarkers was discussed.
  - What are the needs and future direction in terms of biomarker measurement? Zuzana talked about the position paper on biomarkers EAACI has recently published, which highlighted a need for reliable and composite biomarkers. There is a pool of data from biologic treated patients, but not all variables are available. It is difficult to know what we could add that isn’t already in the EAACI paper and any paper may be out of date by the time its published. However, there is a need for point-of-care/ reliable/composite biomarkers (using clinical and patient characteristics alongside biomarkers), and these need prospective testing. It was proposed that potentially we are missing something and a review could be on how much we do know but not over selling what we do know.
  - Ian suggested perhaps looking at the clinical trial data that is already available (QUEST/ IL5 data/ DREAM etc.) to investigate the features of asthma, biomarkers and exacerbation risk further in that data. Despite same severity and lung function and symptom scores in asthma, increased blood eosinophils and FeNO can significantly increase the exacerbation risk, even in those with mild asthma, but it’s a risk that can be modified with appropriate treatment (ICS). Maybe REG could push for risk scoring test in asthma.

**ACTION POINT:** REG to investigate what clinical trial data is available.



- Discussion of severe asthma and biologics  
Sanofi promoting FeNO, in terms of their biologics. Biologics are all against eosinophils. Tony raised the point that there is an issue with primary care knowing when to refer severe asthma patients for biologics. Nikos proposed that since primary care is different between different countries then it may be useful to do a mapping exercise looking at the patient journey from first consultation to biologic prescription. Glenn also proposed that it may be possible to look in a database such as OPC at when biologics became available and assess what happened. Could be compared to say Greece where biologic prescribing is more widespread. We could assess the impact of biologics, effect on outcomes. Does low T2 exist? Are we wrongly classifying patients?

**ACTION POINT:** REG to discuss idea with Nikos and starting developing idea into a proposal.

If any working group members have further thoughts or ideas on these proposed ideas or a new idea then please let us know.