



REG Summit 2019

WORKING GROUP MEETING MINUTES: Biomarkers and Severe Asthma

Meeting details	
Meeting location	Divani Palace Acropolis, Athens, Greece.
Meeting date	Thursday 28 th March
Meeting time	15:00
Chair	Leif Bjermer
Attendees	Sarah Lucas Amanda Bracey Rupert Jones Ron Dandurand Jaco Voorham Heath Heatley Thomas Schuessler Eric Van Ganse Francine Ducharme Manon Belhassen Dermot Ryan Zuzana Diamont David Price Helena Binetskaya John Busby Liam Heaney Ioanna Tsiligianni
Objectives	
1	Provide an update on current project
2	Development of a tangible plan for the next project
3	Identify new project ideas
Items	
Update on current project	Biomarkers in asthma management letter to the editor Letter is being updated and will be circulated to the co-authors and submitted to Allergy.
Development of the next project	A research needs exercise related to FeNO in adult asthmatics has been completed. We need to define a clear project and develop a tangible plan to move forwards.
New project ideas	There is a need for biomarkers that will predict long-term outcomes. Lots done on biomarkers on exacerbations. It would also be useful to have biomarkers that reflect remodelling. Biomarkers as predictors and mechanisms of action.



It may be useful to be able to combine different parameters together and to be able to align lung function with biomarkers. Currently, there are not regular FeNO measurement in primary care. Serial FeNO data would be very useful, at least every year (potentially could be done every 3-6 months in Montreal), however, it is likely to be difficult to get funding/support. There may be industry support for home testing??

It was discussed whether testing of FeNO would be possible when patients collect SABA inhalers in pharmacies, but it was noted that in some patient groups the patients were less likely to collect their own prescriptions.

Steve Turner currently has a study looking at whether FeNO can help guide the treatment of asthma in 6-16 year olds. This is perhaps something that could be considered in adults.

FeNO could be interesting for looking at differences between smoker and ex-smokers.

Could look at FeNO to predict ICS responsiveness. David Price is conducting a study looking at this in COPD/ACO patients.

During exacerbations there are changes in eosinophils, at high and low end, but it is not known what happens to FeNO. FeNO could be looked at in patients admitted to hospital with a COPD exacerbation.

There are currently difficulties in measuring and analysing FeNO in studies as there are differences in FeNO measurements between devices. There are also issues with stability in the devices and some have up to 5 % error.

Biologic management should be in secondary, not primary care, and the question is how do we follow a patient on biologics? What biomarkers should be used? In biologic super-responders could look at the use of FeNO in decreasing ICS.

Ron Dandurand presented some of his recent work on: oscillometry linked to functional imaging, Relaxed Expiratory Occlusion Monitoring (REOM), and mean curvature of isophotes as novel CT biomarker for COPD and ILD.