

ERS 2019 WORKING GROUP MEETING MINUTES: Technology Working Group

28th September 2019 Novotel Madrid, Campo de las Naciones

Meeting details			
Meeting location	Novotel Madrid, Campo de las Naciones		
Meeting date	Saturday 28 th September 2019		
Meeting time	14.00-15.00		
Chair(s)	Ron Dandurand		
Attendees	Ron Dandurand Michael Walker Naomi Launders Sarah Lucas Graham Lough Glenn Crater Ulla Seppala Diana Urlichich Ted Popov Nikos Papadopoulos	Anouk Veldman Simon Bourre Ian Lintott Manon Belhassen Esther Metting Eric Van ganse Pilar Rivera Ortega Joan Soriano Job van Boven	
Objectives			
1	Update on projects		
2	Prioritisation of projects and future direction		

Items		
Oscillometry opinion piece	 An update on progress of the oscillometry opinion piece was briefly discussed. Ron Dandurand taking the lead on the project. Good timing for project: a recent publication (Lennart, 2019) has discussed application of oscillometry in clinical setting. ATLANTIS study (Postma, 2019) also highlighted as an important recent article. Concluded that a meeting was taking place on Tuesday to discuss the project further. 	
Scoping review of smart inhalers	The history and funding potential of the project was discussed It was pointed out that the project leads were not present, and that funding was unlikely in this financial year. The project has been on the	



REG project list for long time, with the idea originally appearing from Omar's systematic review on smart inhalers.

• Adherence in smart inhalers was discussed

The adherence project is also looking at smart inhalers. Adherence can be measured directly through smart inhaler use. What is the calculation for adherence? What is the target for adherence? How do we know we've met it? How do you prove the value?

Potential studies were discussed.

A framework is needed to discuss what smart inhalers do. Do we look at individual or population-based feedback? How does information get collected? The focus should be on smart inhalers and apps related to them.

It was queried what organisation we should go to for funding: societies or industry or tech? Manufacturers of equipment? Not a complex project, so not a huge amount of money needed. Can run studies within app itself bringing costs down significantly. Studies 5-10,000 patients at a time.

It was asked if anyone had looked at impact on putting dose counters on inhalers. Glenn Crater said that we've yet to see any evidence that inclusion of dose counters improves outcomes. Companies will not pay in premium until proof of better outcomes. Need to show value first. A follow up meeting is to take place with AstraZeneca.

The leadership of the project and potential funding was discussed.

It was highlighted that there was no PI currently attached to the project, but that Neil was interested. Although there is no funding in place for the project, there is a rough steering committee. How can new technology/smart inhalers help us notice when exacerbation is occurring? Can it predict risk of exacerbation? We need to show that one definition is better than another, agree what we are assessing and how we are assessing it. With electronic input systems, we have more information.

Asthma exacerbations

The proposal and the methodology of the project were considered.

Decisions need to be made before proposal finalisation. Look at stepwise process: Start with Delphi to define exacerbations, work out the spectrum and the role new technology might have, then a systematic review.

Meta-analysis of what datasets are available, followed by a prospective cohort. Focus on real-life data (more pragmatic/observational). Already done with >300 patients in 9 countries.



	Needs to be 3 distinct project phases and we need to focus on concrete plans for phase 1. Which technology do we look at? Industry interested in devices which have already improved effectiveness and value. Which one is of most interest? Only 1 app in NHS used and the hardware and software are linked together.	
Leadership and direction	 Funding was discussed for each project Oscillometry opinion piece – no funding in place. Smart inhalers - There is a budget and it has been pitched to a funder, who expressed interest. But unlikely funded this year. Still open and available but might get money from funder next year. Exacerbations - Need to focus on Delphi phase first. Need to complete before coming back for more funding for later phases. Ted Popov suggested time is right for personalised device. Currently lacking something new and objective on device market. Used by patients and doctors. Ted will submit a proposal. Have plenty of questionnaires and devices, but nothing applicable on patient level. Spyrotech have rapid gas sensors. Already in advance stage. So will have cheap technology in next 5 years. Will be suited for biotech in future. Applying for Euro funding for 2020. Measuring relative contribution of central & peripheral airways. Going to present in Summit 2020. It was questioned whether we merged with small airways group? Small airways is dormant, but could change name and merge. Decision needs to be made by REG board. Ron suggested we should be together, and it's on the list to discuss with Omar.	