

17th ECFS Basic Science Conference Pre-Conference Meeting Antimicrobial Resistance

Albufeira, Portugal, 30 March 2022 1.30 pm to 5 .00 pm

Pre-conference meeting is a collaboration by national CF Patient Associations (France, Germany, Italy, Belgium, Netherlands, UK), CFE and ECFS

Moderators: Professor Jane Davies (Imperial College London) and Professor Pavel Drevinek (University Hospital Prague)

Never has there been a more exciting time to be working in the science behind cystic fibrosis. The progress over the last few years in CFTR modulator therapy and the energy this has catalysed in drug development will be genuinely game-changing. Improvements in diagnosis and standards of care over the last few decades have led to health and survival benefits, with a huge proportion of the CF population now reaching adulthood. However, the majority of these people have chronic pulmonary infections and, at least to date, there is little evidence that even transformational therapies will have a major impact on these. We are still completely reliant on antimicrobials, and will remain so for the foreseeable future. Antimicrobial resistance (AMR), identified by the World Health Organisation as "one of the most urgent health threats of our time", is a well-recognised and worsening problem in CF.

At this pre-conference meeting, we bring together opinion-leaders from around the world to discuss mechanisms of AMR, the interpretation of in vitro susceptibility testing for CF organisms, and the future drug development pipeline. We consider not only classical antimicrobials, but also novel strategies to combat infection. We aim to ensure our field retains a focus on chronic lung infection and is not blinded by the enthusiasm around new developments. It is imperative we do not allow this serious issue to continue unchecked.

Part 1: The phenomenon of AMR in CF

1:30 – 1:40 pm AMR, epidemiology, current strategy of antibiotic therapy in CF Pavel Drevinek, CZ

1:40 – 2:05 pm **How to determine and interpret antimicrobial susceptibility of CF pathogens Rafael Canton, ES**

2:05 – 2:30 pm AMR and *P. aeruginosa*: towards the MDR phenotype Helle Krogh Johansen, DK

2:30 – 2:55 pm **Does the CF resistome matter?** Lucas Hoffman, USA

General discussion and Coffee break 2:55 – 3:25 pm

Part 2: Novel antimicrobial approaches to fight CF infections

3:25 – 3:50 pm **Preclinical development of new anti-biofilm therapies Tom Coenye, BE**

3:50 – 4:15 pm **Phage therapy: The Belgian experience** Sarah Djebara, BE

4:15 – 4:40 pm What is in the clinical pipeline Pierre-Régis Burgel, F

4:40 – 5:00 pm General discussion & Wrap-up Jane Davies, UK