**Cystic Fibrosis (CF) and Antimicrobial Resistance (AMR)**

AMR is now the leading cause of death globally [1]. Antibiotics remain a key and necessary therapeutic for people with cystic fibrosis (pwCF) particularly as recurrent and increasingly multidrug resistant respiratory infections dominate as a cause of morbidity and mortality [2]. There is, therefore, an urgent and unmet need for the development of new antimicrobials to treat respiratory infections in CF. To this end, the CF Trust (the Trust) partnered with the Medicines Discovery Catapult (MDC) to create the CF AMR Syndicate; a unique cross-sector collaboration that brings together people with CF and leading experts in CF/AMR from industry, academia and the clinic.

**The Syndicate**

**Our Mission:** to accelerate the translation and adoption of new CF antimicrobials and diagnostics to the clinic, through collaboration. Bring new treatments to people with CF, faster.

**Our Goals**

- Build supporting tools and resources for CF antimicrobial and diagnostic development
- Create a unique cross-sector CF AMR Network to facilitate collaboration and knowledge exchange
- Identify, enable and support CF antimicrobial and diagnostic programmes

**The managing partners, the Trust and MDC, joined together with pwCF, academics, industry and clinical collaborators to form the CF AMR Syndicate.**

**Towards a Toolkit of Enabling Resources**

An initial scoping exercise undertaken by the Syndicate focused on sector needs and challenges in antimicrobial discovery. Two key challenges were identified:

1. Difficulty in accessing appropriate clinical samples and data
2. Lack of a well-defined preclinical development pathway

The Syndicate then worked with the community to initiate collaborative R&D projects to address these challenges:

**The UK CF Infection Biorepository**

A coordinated national network of labs that enables researchers from academia and industry to access well-characterised, high quality clinically relevant samples, data and expertise.

**Patient-focused Target Product Profiles**

The TPPs aim to provide guidance for drug developers on the key characteristics and requirements that antimicrobials should meet in order to successfully address the needs and priorities of pwCF.

**PIPE-CF**

A global consortium led by Dr. Jo Fothergill (University of Liverpool) to develop an evidence-based preclinical framework for the development of antimicrobial therapeutics in CF.

**Support and Grow the CF Antimicrobial Pipeline**

Our aim is to work closely with innovators at every stage of antimicrobial discovery to bring the Syndicate-developed resources, expertise and wider network to impact on their programmes and grow and accelerate the antimicrobial pipeline in CF. We are working in partnership with other organisations to enable this.

**The CF AMR Network**

Through the CF AMR Network we facilitate collaborative programmes and knowledge exchange by bringing together a diverse group of actors from across different sectors of expertise, knowledge and resource, and ultimately bring new therapies to pwCF faster.

**Conclusions**

By providing innovators and researchers with access to an ecosystem of specialist support and enabling resources, the Syndicate is rapidly establishing itself as a unique entity which is helping to accelerate antimicrobial drug discovery, bringing novel treatments to the clinic faster. Through the Syndicate, insights into the needs and priorities of pwCF are made visible, critically helping inform those working in the drug discovery space. The Syndicate continues to gain momentum in its mission to accelerate the translation and adoption of new antimicrobials for those with CF and beyond.

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**References**
