


NEWS UPDATE, 25 MARCH 2021

The AMR Accelerator: A New Public-Private Collaboration to Tackle Antibiotic Resistance Together

The AMR Accelerator Programme connects seven projects launched by the Innovative Medicines Initiative (IMI) during 2019 and 2020. With more than 50 partners and 295 million Euro of dedicated funding, the Programme is united by a common goal to develop new tools and therapeutics to fight resistant pathogens. A wide-ranging series of antibacterial programmes will advance the pipeline of antibiotics targeting *Mycobacterium tuberculosis*, nontuberculous mycobacteria and Gram-negative bacteria. 2021 will be an exciting year with the start of several First-In-Human studies, as well as the potential addition of two new Accelerator projects.

The AMR Accelerator currently has seven projects: AB-Direct, COMBINE, ERA4TB, GNA NOW, RespiNTM, RespiTB, and TRIC-TB. These public-private partnerships are funded by IMI with matched in-kind contribution from EFPIA companies, and complement and build on the capabilities of the IMI New Drugs for Bad Bugs (ND4BB) Programme. The AMR Accelerator will address many of the scientific challenges of AMR.

Current projects	
Total budget	295 M€
Partners	57 participants from 14 countries
Duration	2019 - 2025
Goal	Up to 10 preclinical candidates and 5 'Phase 2-ready' assets by 2025

The AMR Accelerator Programme is composed of three Pillars:

- The **Capability Building Network** ([COMBINE project](#)) provides coordination and support across the Accelerator, in addition to its scientific goals to improve and standardise animal models used in AMR research, and optimise the design of clinical trials.
- The **Tuberculosis Drug Development Network**, encompassing the [ERA4TB project](#), is working to accelerate the development of new treatment regimens for tuberculosis.
- The **Portfolio Building Networks**, integrating [RespiriTB](#), [RespiriNTM](#), [TRIC-TB](#), [GNA NOW](#), and [AB-Direct](#) projects, are set up to support collaborative efforts to discover and advance new antibacterial assets.

The recently published [AMR Accelerator portfolio pipeline](#) provides an overview of the 13 antibacterial programmes and where they stand in terms of novelty and development stage. If successful, projects in the Accelerator are expected to deliver up to ten new preclinical candidates and five 'Phase 2-ready' assets by 2025.

Ander Karlén, Professor at Uppsala University and COMBINE Coordinator: "It is very exciting to see this large number of partners combining resources and experience to deliver these very important goals".

Concrete activities of the AMR Accelerator since start include:

- A virtual Cross-Pillar meeting, bringing together representatives from all projects to exchange information, explore synergies, and discuss challenges.
- A series of **COMBINE** webinars and the launch of an [open call for preclinical and clinical data sets from the study of prevention or treatment of bacterial infections](#).
- Under the **Respiri** projects, nine research teams and Janssen Pharmaceutica have come together to search for new weapons in the fight against mycobacterial tuberculosis and non-tuberculous mycobacteria.
- Swiss pharmaceutical company, BioVersys, and GlaxoSmithKline (GSK) are co-leading the **TRIC-TB** project which kickstarted the development of a novel compound aimed at overcoming the resistance against ethionamide and prothionamide for the treatment of tuberculosis. The candidate has recently entered into Phase 1.
- In the two-year long **AB-Direct** project, GSK, together with project partners, initiated work on a programme investigating tissue distribution of gepotidacin, which will be investigating in a clinical Phase 1 study, sponsored by Inserm, to start early in 2021. Gepotidacin is currently in Phase 3 development by GSK as a potential treatment for uncomplicated urinary tract infection and uncomplicated gonorrhoea.
- In the TB-dedicated network, the European Regimen Accelerator for Tuberculosis (**ERA4TB**) has already endorsed ten specific Asset Progression Plans for six different compounds which are in progress, two already in Phase 1 studies.
- In addition, the Gram-Negative Antibacterials NOW (**GNA NOW**) consortium successfully managed to keep on track its three programmes owned by the biotech companies

Evotec and Nosopharm in spite of the drug development challenges posed by the COVID-19 pandemic.

Pierre Meulien, IMI Executive Director: “The AMR Accelerator shows how collaboration and solidarity allow researchers to contribute to the elimination of antibiotic-resistant tuberculosis and AMR. This is particularly important now, in the midst of the COVID-19 pandemic, as AMR research is essential to reducing the burden of secondary bacterial infections in the future.”

About COMBINE

The COMBINE project was created to support the coordination of the AMR Accelerator projects and provide them with the resources they need to achieve their goals. These include data management guidelines and an IT infrastructure to enable the collection, aggregation, storage, sharing and analysis of datasets generated by AMR Accelerator projects. COMBINE is also helping to ensure that data adheres to 'FAIR' principles, i.e. it is findable, accessible, interoperable, and re-useable. Promoting communication among the projects is another COMBINE priority. On the scientific front, COMBINE is improving the animal models used in AMR research and develop improved tools to reliably translate results in animals into results in humans. The project is also optimising the design and analysis of clinical trials. These tools help all projects in the AMR Accelerator to deliver results that will help to accelerate the development of novel antibiotics and vaccines against AMR.

For more information on COMBINE, please visit www.amr-accelerator.eu/project/combine.

About the AMR Accelerator

The aim of the Antimicrobial Resistance (AMR) Accelerator Programme is to progress the development of new medicines to treat or even prevent resistant bacterial infections in Europe and worldwide. The programme comprises the following three pillars: a Capability Building Network, a Tuberculosis Drug Development Network, and the Portfolio Building Networks.

The scope of the AMR Accelerator is broad; under one structure, it addresses many of the scientific challenges of AMR, and it supports the development of new ways to prevent and treat AMR. More broadly, the AMR Accelerator contributes to the European action plan on AMR.

For more information on the AMR Accelerator, please visit www.amr-accelerator.eu.

About the Innovative Medicine Initiative

The Innovative Medicines Initiative (IMI) is Europe's largest public-private initiative aiming to speed up the development of better and safer medicines for patients. IMI supports collaborative research projects and builds networks of industrial and academic experts in order to boost pharmaceutical innovation in Europe. IMI is a joint undertaking between the European Union and the European Federation of Pharmaceutical Industries and Associations, EFPIA.

For more information on IMI, please visit www.imi.europa.eu.

AMR Accelerator Participants

Asclepia Outsourcing Solutions
BEAM Alliance
Bill & Melinda Gates Foundation
BIOASTER
BIOCOM AG
BioVersys
Centre Hospitalier Régional Universitaire de Tours
Centre Hospitalier Universitaire de Poitiers
Clinical Studies Sweden Forum South
Consiglio Nazionale delle Ricerche
Critical Path Institute
École polytechnique fédérale de Lausanne
Erasmus MC - University Medical Center Rotterdam
Evotec
FFUND BV

Leiden University Medical Center
Lygature
Medical University of Vienna
Mitologics
North Bristol NHS Trust
Nosopharm
Paul-Ehrlich-Institut
Public Health England
QPS Netherlands
Research Center Borstel
Sciensano
Sorbonne University
Statens Serum Institut
Synapse Research Management Partners
TB Alliance

Foundation Innovative Medicines for Tuberculosis
Fraunhofer IME
grit42
GSK
Helmholtz Centre for Infection Research
Helmholtz Institute for Pharmaceutical Research Saarland
ImaBiotech
Infectious Diseases Models for Innovative Therapies
Inserm
Institute Pasteur
Institute Pasteur de Lille Foundation
Instituto de Investigación Hospital Universitario La Paz
Janssen Pharmaceutica
Latvian Institute of Organic Synthesis

The National Institute for Health and Care Excellence
Universidad Carlos III Madrid
University Leiden
University of Antwerp
University of Copenhagen
University of Dundee
University of Köln
University of Liverpool
University of Padova
University of Pavia
University of Poitiers
University of Zaragoza
Uppsala University

Disclaimer This news update reflects the authors' views and neither IMI nor the European Union, EFPIA or any Associated Partners are responsible for any use that may be made of the information contained herein.

For more information

Anders Karlén

COMBINE Project Coordinator

anders.karlen@ilk.uu.se; +46 18 471 4293

Clément Robijns

COMBINE Communication Manager

c.robijns@biocom.de; +49 30 2649 2158

The AMR Accelerator receives funding from the Innovative Medicines Initiative 2 Joint Undertaking under grant agreement No 853976 | 853967 | 853979 | 853932 | 853903 | 853800 | 853989. This Joint Undertaking receives support from the European Union's Horizon 2020 research and innovation programme and EFPIA. ERA4TB receives additional support from Global Alliance for TB Drug Development, Bill & Melinda Gates Foundation and University of Dundee.

