

Antimicrobial Memory Recovery & Exploratory Programme Snapshot

The antibiotic 'R&D void'

Since the early 1990s there has been a void in the clinical development of antibiotics. Drug R&D is a complex process and inherent challenges including complex science, lack of sufficient return on investment and strategic changes in therapeutic areas for drug discovery led to many companies abandoning their antibiotic discovery programmes. It is important that these programmes are revisited, as technological advances, changing needs and an evolving disease landscape means that it may be time to revive them. Expert

engagement, both former and present, is vital: they can help swiftly identify promising compounds and identify and overcome antibiotic R&D roadblocks to recover candidate drugs that may help to expand the antibiotic discovery pipeline.

GARDP's Antimicrobial Memory Recovery and Exploratory Programme aims to recover the knowledge, data, and assets of forgotten, abandoned, or undeveloped antibiotics while the search for new drugs is pursued, and a new generation of researchers in antibiotic R&D is championed.

Memory Recovery and Exploratory Programme



MAIN GOALS

By 2023:

- Build a global, leading panel of world experts in antibiotic drug discovery, R&D
- 1-2 new chemical entities in pre-clinical or clinical development
- Champion a new generation of antibiotic R&D researchers



REVIVE: Educational activities including webinars, blogs, 'Talk to an expert'



Virtual Antibiotic R&D Resource ('Toolbox')



Knowledge Legacy & Project Recovery



Early-stage research to build a portfolio of recovered and new candidates for drug development

Programme objectives

Primary objectives:

- Create an open-access website, REVIVE, for everyone with an interest in antimicrobial discovery, R&D
- Identify drug opportunities, including 'early-stage, forgotten and abandoned' antibiotics, to lead to the development of 1-2 New Chemical Entities (NCEs) in pre-clinical or clinical development

Secondary objectives:

- Build a global, leading panel of world experts in antibiotic drug discovery and development with industry and academic background
- Launch a Virtual Antibiotic R&D Resource ('Toolbox') to include links to guidelines, protocols and standard operating procedures, databases
- Support international training courses in antibiotic discovery, R&D
- Establish partnerships with those in academia and industry to discover, research, and develop new antimicrobials

Joining forces for concerted action

The Antimicrobial Memory Recovery and Exploratory Programme's success relies on the collective response from experts: over 100 international experts have engaged in the programme to date. It also relies on the global scientific and pharmaceutical communities: so far, around 70 recovered candidates, NCEs, and drugs under development from several companies have undergone due diligence.

In January 2018, the Programme launched REVIVE, to bring together people engaged in the fight against antimicrobial resistance. REVIVE provides a space for inventors, chemists, researchers, and more to connect with each other, and with world-class experts from the golden age of antibiotic development.

GARDP is also collaborating and harmonising its work with similarly focused entities and funding bodies, to ensure pooled non-competitive efforts towards achieving the ultimate objective of developing new antibiotics.

Supporting the Antimicrobial Memory Recovery Programme

The estimated cost of this seven-year programme is €96.1 million. Private, public, and in-kind contributions are essential for our collective endeavour to identify drug opportunities to expand the antibiotic pipeline, while new classes of, and target for, drugs are identified.

About GARDP

Launched in 2016 by WHO and DNDi, the Global Antibiotic Research & Development Partnership (GARDP) aims to develop and deliver new treatments for bacterial infections where drug resistance is present or emerging, or for which inadequate treatment exists, while endeavouring to ensure sustainable access. GARDP is currently operating within DNDi, which provides its governance.