

## **CARB-X Awards Additional Funding to Debiopharm for Continued Development of Early-Stage Antibiotic Targeting Drug-Resistant *N. Gonorrhoeae* Infections**

Lausanne, Switzerland – Boston, USA – November 21st, 2024 – Debiopharm ([www.debiopharm.com](http://www.debiopharm.com)), a Swiss-based global biopharmaceutical company, is proud to announce the extension of funding from the Combating Antibiotic-Resistant Bacteria Biopharmaceutical Accelerator (CARB-X), a global non-profit partnership dedicated to supporting early-stage antibacterial research and development to address the rising threat of drug-resistant bacteria. This funding will support the preclinical development of **Debio 1453, a novel antibiotic specifically designed to combat *Neisseria gonorrhoeae* infections**. In line with the Debiopharm's vision to set a new standard for treating *N. gonorrhoeae* infections by developing antibiotics with targeted activity, while potentially avoiding microbiome dysbiosis, **the newly awarded \$5.76 million USD** will facilitate the advancement of essential preclinical research, positioning Debio 1453 for clinical progression.

With Debio 1453, Debiopharm aims to provide a potentially valuable addition to the current antibiotic armamentarium, as a new treatment for *N. gonorrhoeae* infections, especially strains showing significant resistance to existing therapies. The project includes pivotal objectives such as the completion of non-clinical pharmacology and safety packages, the manufacturing of the active pharmaceutical ingredient (API) and drug product, and the submission for a first-in-human clinical trial.

“The threat of antimicrobial resistant infections, like gonorrhea, is not slowing down. That’s why we’re taking action now to make suitable options available for patients in the future,” **explained Thierry Mauvernay, President of Debiopharm**. “This funding from CARB-X is vital, not only financially, but also to support and raise interest in the advancement of new antibiotic classes. This inspires our continued quest to reach important research milestones for this novel antibacterial designed to specifically treat gonorrhea infections that are resistant to current therapies.”

“We are pleased to provide continued support for the preclinical development of Debio 1453,” said **Erin Duffy, PhD, R&D Chief of CARB-X**. “*Neisseria gonorrhoeae* has become resistant to every antibiotic class - and nearly all drugs in these classes - resulting in a growing and significant global public-health risk. With a novel way to target the bacteria and novel chemistry with which to do so, the Debiopharm product has the potential to be a significant new therapy for treating gonorrhea.”

*N. gonorrhoeae* has emerged as a significant public health threat due to its rapidly increasing resistance to available antibiotic treatments. In 2020, there were approximately 82.4 million new cases of gonorrhea among individuals aged 15–49 years globally, 677,769 of which in the United States [1-2]. This issue underscores an urgent global need for new therapies to prevent complications like pelvic inflammatory disease, ectopic pregnancy, infertility, and even an elevated risk of contracting and spreading *Chlamydia trachomatis* and HIV infections, which can occur if gonorrhea infections are left untreated [1,3]. Gonorrhea can be passed from a pregnant mother to baby, for whom it can cause sepsis and neonatal conjunctivitis, which if left untreated may lead to complete blindness [3].

“We are running out of time when it comes to drug-resistant *Neisseria gonorrhoeae*. Today, these bacteria have managed to outsmart almost all current antibacterial therapies, soon leaving physicians unarmed to support their patients in the fight against this persistent superbug. Now more than ever, new antibiotics are needed to avoid serious public health consequences caused by this infection. CARB-X’s grant for Debio 1453 research, will fuel the advancement of this potential new option for patients,” **expressed Morgane Vanbiervliet, Manager, Market intelligence, Infectious Diseases, Debiopharm**.

Debio 1453 leverages a unique mechanism of action that targets the FabI enzyme, which is critical for the growth and survival of *N. gonorrhoeae*. Studies presented at the 2024 Congress of the European Society of Clinical Microbiology and Infectious Diseases (ESCMID) have shown encouraging pre-clinical efficacy signals, highlighting Debio 1453's potential to offer a powerful new weapon in the fight against resistant strains of *N. gonorrhoeae*.

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## **About CARB-X**

CARB-X (Combating Antibiotic-Resistant Bacteria Biopharmaceutical Accelerator) is a global non-profit partnership dedicated to supporting early-stage antibacterial research and development to address the rising threat of drug-resistant bacteria. CARB-X supports innovative therapeutics, preventatives and rapid diagnostics. CARB-X is led by Boston University and funded by a consortium of governments and foundations. CARB-X funds only projects that target drug-resistant bacteria highlighted on the CDC's [Antibiotic Resistant Threats list](#), or the [Priority Bacterial Pathogens list published by the WHO](#), with a priority on those pathogens deemed Serious or Urgent on the CDC list or Critical or High on the WHO list. <https://carb-x.org/> | X (formerly Twitter) [@CARB\\_X](#)

## **Debiopharm's commitment to patients**

Debiopharm aims to develop innovative therapies that target high unmet medical needs primarily in oncology and bacterial infections. Bridging the gap between disruptive discovery products and real-world patient reach, we identify high-potential compounds and technologies for in-licensing, clinically demonstrate their safety and efficacy, and then hand stewardship to large pharmaceutical commercialization partners to maximize patient access globally.

For more information, please visit [www.debiopharm.com](http://www.debiopharm.com)

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## **Sources**

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[2] CDC. "CDC's 2022 STI Surveillance Report underscores that STIs must be a public health priority". 2024

[3] WHO. "Gonorrhoea (Neisseria gonorrhoeae infection)". 2024