European Gram Negative Antibacterial Engine (ENABLE)

Research Areas

- Tool Development
- Basic Research

At a Glance

- Status: Active Consortium
- Year Launched: 2014
- Initiating Organization: Innovative Medicines Initiative
- Initiator Type: Government

Abstract

The European Gram Negative Antibacterial Engine (ENABLE) project, within the Innovative Medicines Initiative’s (IMI’s) New Drugs for Bad Bugs (ND4BB) program, is working to advance the development of potential antibiotics against Gram-negative bacteria, such as Escherichia coli. ENABLE’s ultimate goal is to develop antimicrobial candidates for testing in the clinic, bringing the possibility of new antibiotics to treat Gram-negative infections one step closer to patients. ENABLE will create and manage a drug discovery platform for testing and optimizing molecules that are still in the earlier stages of drug discovery but have the potential to become future drug candidates capable of treating resistant Gram-negative infections. The expected duration of the project is six years.

Mission

ENABLE aims to improve early-stage antibacterial drug discovery and advance the progress of new medicines.

Specifically, ENABLE is working toward the following:
Consortium History

February 2014: ENABLE was launched.
March 2014: ENABLE launched its first open call for promising Gram-negative programs.
May 2014: ENABLE launched its second open call for promising Gram-negative programs.
June 2014: ENABLE presented at BIO in San Diego, Calif.

Structure & Governance

ENABLE is an IMI project and is subject to its rules and regulations for setting up a governance board.

The total cost of the project is €101 million, with €58.9 million from the European Commission via IMI. This project is funded by the IMI, a public-private partnership between the European Union (EU) and the European Federation of Pharmaceutical Industries and Associations (EFPIA), resources of which are composed of financial contributions from the EU Seventh Framework Programme and in kind contributions from EFPIA members. Large pharmaceutical companies participating in IMI projects do not receive IMI funding.

Intellectual Property

ENABLE puts into practice principles of collaboration and open innovation through an intellectual property (IP) agreement that was tailored to meet the needs of the project. A key aspect of the agreement is that it allows improvements made to a molecule within the project to be assigned to the original molecule owner. At the same time, there are agreed mechanisms to compensate those partners that contributed to the improvements. The project therefore represents an opportunity to enhance, in an open and transparent way, the collaborative impact of pharmaceutical research, and the IP policy could prove inspirational for research and development collaborations in other disease areas.

The IMI IP policy governs the IP regime of all projects funded by the IMI Joint Undertaking. To assist with specific IP queries, IMI has set up a dedicated IP Helpdesk, which can be contacted by emailing IMI-IP-Helpdesk@imi.europa.eu. The IMI IP policy can be accessed at
Data Sharing

Spanning 13 countries, ENABLE brings together an initial set of 32 partners including 11 small to medium-sized enterprises (SMEs). SMEs participating in ENABLE will benefit from access to the top antimicrobial drug discovery and development expertise brought in by other partners to see their molecules further developed.

According to IMI’s IP policy, the participants undertake to disseminate the data as soon as reasonably practicable but not later than one year after the termination or expiry of the project. The project agreement shall include a description of the material, which must be disseminated in accordance with the IP policy and referenced in the grant agreement. If the participants do not disseminate within such time periods without good reason, then the Executive Office has the right to disseminate such results in a manner consistent with the grant agreement.

Impact/Accomplishment

IMI’s antimicrobial resistance (AMR) program, ND4BB, is the focus of a comment piece in Nature Reviews Microbiology by John Rex of AstraZeneca, who is involved in ND4BB. The article explains how IMI and other projects around the world are tackling the challenges in antibiotic research and development. The article concludes: “Although the [AMR] crisis is far from resolved, the leadership of the European Commission are to be commended for their far-sighted approach to creating ND4BB and its projects, all of which provide hope that the global community will have access to an adequate pipeline of novel antimicrobial agents with which to address the challenge of AMR.”

Links/Social Media Feed

Homepage  http://nd4bb-enable.eu/
Other website  http://www.imi.europa.eu/content/enable
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