ENABLE-2 Antibiotic Discovery Platform

Supporting early-stage antibiotic programmes to ensure a sustainable flow of new antibacterial candidates into the development pipeline

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The ENABLE-2 Support Model

• ENABLE-2 is led by Uppsala University and supports early-stage antibiotic discovery programmes that target WHO priority pathogens.

• A Drug Development Platform effectively progresses multiple parallel programmes and provides a wide spectrum of expertise at no cost for the programme owner. A core team of specialised scientists proactively supports the programme owner in advancing their antibacterial candidate, providing experimental services and expert advice.

• A Scientific Advisory Board comprised of infectious diseases specialists and experts from large pharma provide guidance and strategic recommendations.

• The programme owner retains ownership of all data generated and retains IP rights to all new compounds developed.

ENABLE-2 operations

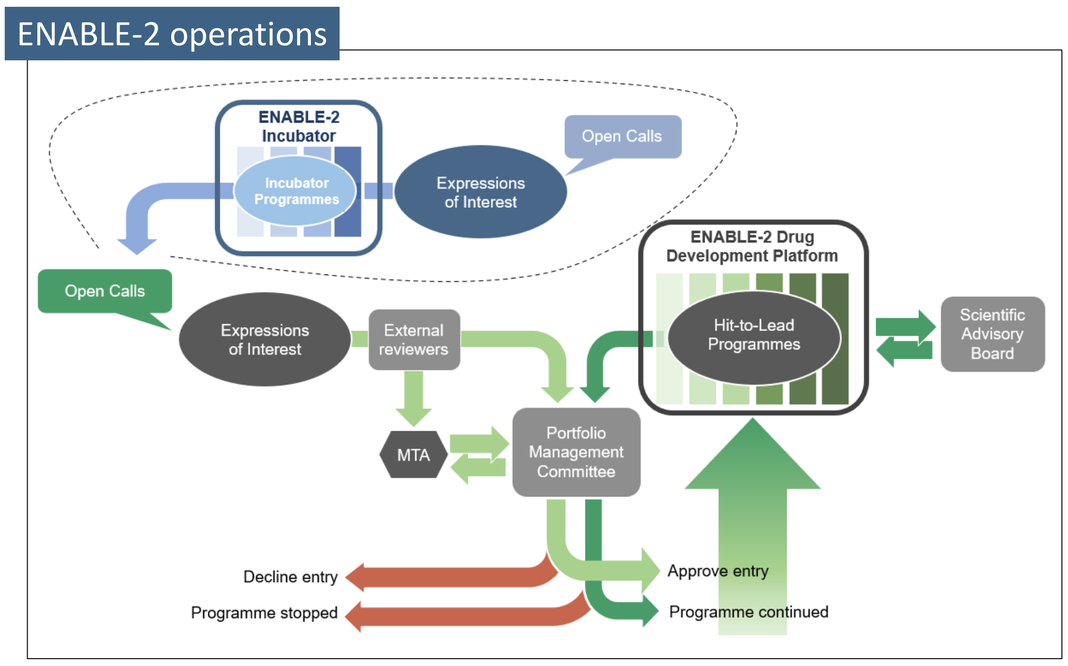

Figure 1. ENABLE-2 has continuous open calls for:
• **Incubator programmes** (blue): Evaluation of the antibiotic potential of novel compounds (Hit validation). Successful programmes may apply for Hit-to-Lead development in ENABLE-2.
• **Hit-to-Lead programmes** (green): Non-confidential applications are evaluated by external reviewers and eligible applicants prepare a full application to the Portfolio Management Committee (PMC). The PMC meets on a regular basis to select new programmes and review ongoing programmes. The Scientific Advisory Board provides guidance and strategic recommendations to ongoing programmes.

ENABLE-2 Drug Development Platform

• **Uppsala University** (Sweden): Overall management, medicinal chemistry, molecular modelling, microbiology, *in vitro* cytotoxicity.

• **SciLifeLab** (Sweden): Compound logistics, *in vitro* ADME profiling, bioanalysis, protein production, biophysical and biochemical assays, X-ray crystallography, PKPD modelling.

• **RISE** (Sweden): Formulation, pharmaceutical development, in silico predictions, bioanalysis, safety.

• **Statens Serum Institut** (Denmark): *In vivo* PK studies, *in vivo* efficacy studies.

• **Latvian Institute of Organic Synthesis** (Latvia): Medicinal chemistry, *in vivo* PK studies.

ENABLE-2 in the antibiotic R&D ecosystem

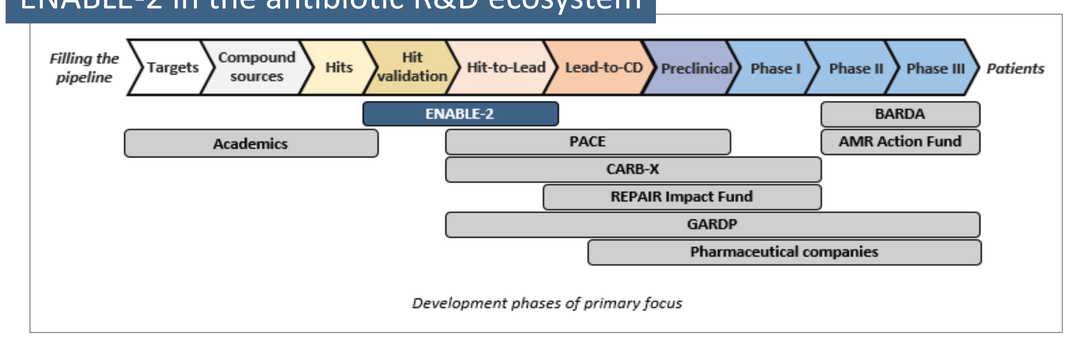

Figure 2. ENABLE-2 supports early-stage programmes (Hit validation and Hit-to-Lead).

Mission and Goal

Support a portfolio of early-stage antibiotic programmes (Hit validation and Hit-to-Lead) to channel successful programmes into one of the downstream initiatives for further development.

Vision

- Increase the number of parallel programmes
- Broaden eligibility to include SMEs and privately-funded universities
- Global open calls

Open Calls for new antibiotic programmes

ENABLE-2 is accepting Expressions of Interest from researchers at publicly-funded universities and research institutes throughout Europe.

There are two entry levels:

ENABLE-2 Incubator programme – Hit validation

- Novel compounds with some documented whole cell antibacterial activity against any species or strain (including efflux-deficient or hyperpermeable strains), with a MIC of at least 32 µg/mL, or
- Novel compounds with only documented bacterial target activity.
- Potential for development as direct-acting antibiotics for systemic use.
- Not previously reported to have antibacterial activity.
- Antimicrobial peptides with only membrane perturbation activity are not eligible.
- Novel natural products are eligible.

ENABLE-2 Hit-to-Lead programme

- Novel Hit compounds with wild-type whole cell antibacterial activity and the potential for development as direct-acting antibiotics for systemic use.

Are you working with new potential antibiotics and need resources to develop them?

For information about how ENABLE-2 can support your project, please visit our website

www.ilk.uu.se/enable2

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