

Vaccines (and More) Against Antimicrobial Resistant Infections: The COMBINE Project (Part of the IMI AMR Accelerator)

<u>Linda Marchioro</u>, Karen Huber, Benjamin Hofner, Bernhard Kerscher, Rakel Arrazuria, Isabelle Bekeredjian-Ding <u>linda.marchioro@pei.de</u>

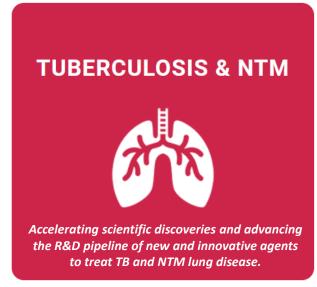
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IMI AMR Accelerator

Public-Private collaboration to progress the development of new medicines to treat or prevent resistant bacterial infections





















COMBINE

A coordination role and a scientific mission around capability building

Coordination and support of the Accelerator projects (WP 1-3)

WP4 – Improve the **design and analysis of clinical trials** for vaccines and antibacterial agents (data-driven)

WP5 - Improve animal infection models and translation to clinical efficacy





Bottlenecks in the R&D of vaccines against AMR?

Vaccine Expert Workshop (February 2021) – Focus on *S. aureus, C. difficile, K. pneumoniae,* Extraintestinal pathogenic *E. coli*

- Gaps in basic knowledge:
 - Role of precolonisation, microbiome, (toxins)
 - Pathogenesis, optimal target(s)/pathway(s)/antigen combination
- Preclinical testing:
 - Lack of reliable animal models (e.g. different pathogenicity)
 - Translation issues
- Clinical testing:
 - Manifold clinical manifestations \rightarrow Endpoint definition
 - Low incidence, characterisation of study population ightarrow Feasibility
 - Lack of surrogates of protection





Next step (WP4)

Integrative data-analysis to investigate bottlenecks and propose solutions for translation and clinical trial design

- Open data call: share clinical and matched preclinical data from antibiotics, <u>vaccines</u>, mAbs, successes or <u>failures</u>?
- Capability building: Share ideas or expertise?

Contact: IMI-COMBINE@pei.de

Stay up to date: https://amr-accelerator.eu/





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