

Voices from the AMR Accelerator: tackling antimicrobial resistance together

The AMR Accelerator efforts to develop new treatments for tuberculosis and other drug resistant infections, and capability building for science took centre stage in the #AMRacceleratorVoices campaign this spring. With a large portion of our funding dedicated to progressing new treatments for drug resistant Tuberculosis (or TB), the AMR Accelerator puts TB on the top of the AMR research agenda.

TB is the deadliest infectious disease worldwide causing around a fourth of all deaths from drug resistant infections¹. Despite its terrible toll on public health, TB has historically not received adequate attention in the research agenda for antimicrobial resistance (or AMR)²³. While more recent developments including the launch of the AMR Action Fund, a new public-private partnership, signal a renewed interest in AMR from the international public health community and industry, only one biotech company which includes a TB programme in its portfolio has thus far received investment from the fund. In the meantime, the TB epidemic continues to escalate with a global increase in the incidence rate and number of deaths between 2019 and 2021, reversing years of decline⁴.

The establishment in 2019 by the Innovative Medicines Initiative (now the Innovative Health Initiative) of new research platforms projects under the umbrella of the AMR Accelerator Programme, where TB is a main pillar, is an important step forward in the fight against TB. With more than €410 million (>80% of the total funding of the AMR Accelerator) raised to progress new TB treatments, the AMR Accelerator places TB on top of the AMR research agenda. The launch of the social media campaign under the #AMRacceleratorVoices hashtag, sought to highlight the many exciting achievements and plans from the TB research and

¹ Dean, A. S., Auguet, O. T., Glaziou, P., et al. 25 years of surveillance of drug-resistant tuberculosis: achievements, challenges, and way forward. (2022) *The Lancet Infectious Diseases*, 22-7: e191-e196, [https://doi.org/10.1016/S1473-3099\(21\)00808-2](https://doi.org/10.1016/S1473-3099(21)00808-2).

² Treatment Action Group, Tuberculosis research funding trends 2005-2018. (2019) <https://www.treatmentactiongroup.org/resources/tbrd-report/tbrd-report-2019/> (accessed 17 April 2022).

³ Laxminarayan, R., Van Boeckel, T., Frost, I., et al. The Lancet Infectious Diseases Commission on antimicrobial resistance: 6 years later. (2020) *The Lancet Infectious Diseases*, 20-4: e51-e60, [https://doi.org/10.1016/S1473-3099\(20\)30003-7](https://doi.org/10.1016/S1473-3099(20)30003-7).

⁴ World Health Organization, Global Tuberculosis Report 2022. (2022) <https://www.who.int/teams/global-TB-programme/tb-reports/global-tuberculosis-report-2022>.

capability building projects in the AMR Accelerator, working together to support and progress a broad portfolio of programmes that target *Mycobacterium TB*.

On the TB front, the AMR Accelerator collaboration has already proven to be especially valuable in providing projects with the opportunity to exchange experiences and discuss ideas and results in different forums for collaboration, ranging from webinars to scientific interest groups to further our joint knowledge base. The successful completion of TRIC-TB's Phase 1 clinical trial described by Michel Pieren of BioVersys was a major milestone for the AMR Accelerator to celebrate and a demonstration of how the Accelerator is translating project research into direct outcomes. Modesto Remuinan, Project Leader at GSK, emphasized how TRIC-TB through the AMR Accelerator was granted access to cutting edge platforms developed by the ERA4TB project which help address key questions for the future development of TRIC-TB's asset and support the delivery of shorter, simpler and better tolerated treatment regimens for patients with TB.

To kick off the campaign at the occasion of the World TB Day on March 24, 2023, the Scientific Lead of UNITE4TB, Prof. Michael Hoelscher, Director of the Division of Infectious Diseases and Tropical Medicine at LMU University Hospital Munich, highlighted UNITE4TB's exciting journey starting clinical trials this year to find new treatment regimens for TB. Katharine Cresswell from ERA4TB took stock of the great work being done in the project so far to develop safer regimens with treatment-shortening potential for TB. In the RespiTB project, Luis Ballell, Senior Director for Global Public Health at Johnson & Johnson further described how the focus would need to sharpen in the second phase of the project in order to secure before the project's end the expected delivery of new chemical entities that will be further developed into a new treatment regimen benefiting TB-affected people living with high medical needs.

As described by PRIMAVERa project coordinator, Irina Meln, Senior Innovation Manager, European Vaccine Initiative, and Linda Marchioro, Biostatistician at the Paul-Ehrlich-Institut working on clinical trial design and analysis in the COMBINE project, the AMR Accelerator's work is further supported by capability building efforts seeking to strengthen the scientific basis in the AMR field. In the PRIMAVERa project, for example, the consortium is developing a platform which seeks to accommodate variable epidemiological scenarios that can help health authorities use local epidemiological data and prioritise the use of limited resources to make the best use of vaccines and monoclonal antibodies to reduce antimicrobial resistance. In COMBINE, project partners investigate the current challenges in clinical trials for novel medicines against AMR and aim to improve the study of clinical trial design for vaccine efficacy trials as well as to refine the translation for antibiotics, in order to better use data from animal models prior to testing in humans.

Listen to all the #AMRacceleratorVoices [here](#).

About AMR Accelerator

The AMR Accelerator receives funding from the Innovative Medicines Initiative 2 Joint Undertaking under grant agreement No 853976 | 853967 | 853979 | 853932 | 853903 | 853800 | 853989 | 853932 | 101034420. This Joint Undertaking receives support from the European Union's Horizon 2020 research and innovation programme and EFPIA. ERA4TB receives additional support from Global Alliance for TB Drug Development, Bill & Melinda Gates Foundation and University of Dundee.

About COMBINE

This project has received funding from the Innovative Medicines Initiative 2 Joint Undertaking under grant agreement No 853967. This Joint Undertaking receives support from the European Union's Horizon 2020 research and innovation programme and EFPIA companies' in kind contribution.

About the Innovative Medicines Initiative

About the Innovative Medicine Initiative The Innovative Medicines Initiative (IMI) is Europe's largest public-private initiative aiming to speed up the development of better and safer medicines for patients. IMI supports collaborative research projects and builds networks of industrial and academic experts in order to boost pharmaceutical innovation in Europe. IMI is a joint undertaking between the European Union and the European Federation of Pharmaceutical Industries and Associations, EFPIA. For more information on IMI, please visit <https://www.imi.europa.eu/>

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