TO: Christopher Egerton-Warburton, Chair

Prof Rosanna Peeling, London School of Hygiene and Tropical Medicine

Prof Keith Klugman, Bill and Melinda Gates Foundation

Prof Susanna Sternberg Lewerin, Swedish University of Agricultural Sciences

Prof Kelly Chibale, University of Cape Town

Dr David Gray, University of Dundee

Prof Melissa Leach, Institute of Development Studies

Prof Elias Mossialos, London School of Economics and Imperial College London

Dr Bill Love, Destiny Pharma

Ms Florence Séjourné, Da Volterra

Dr Jorge Villacian, Janssen Diagnostics

Dr Theo Kanellos, Zoetis

Global Antimicrobial Resistance Innovation Fund (GAMRIF) Expert Advisory Board

CC: Professor Dame Sally Davies, Chief Medical Officer for England and UK government adviser

Rt Hon Nick Herbert, Member of Parliament for Arundel and South Downs

19 December 2016

Open letter re: Request to prioritise research to combat drug-resistant tuberculosis in efforts to combat antimicrobial resistance

Dear esteemed Chair and members of the Expert Advisory Board,

We congratulate the Global Antimicrobial Resistance Innovation Fund (GAMRIF) on its commitment to invest an additional £50 million over the next five years in research and development (R&D) to combat antimicrobial resistance (AMR), and appreciate your role as advisors to the United Kingdom on how best to spend these much-needed resources. As advocates, scientists, clinicians, implementers, and people affected by tuberculosis (TB), we encourage you to prioritise drug-resistant TB (DR-TB) in your efforts.

The final report of the Review on Antimicrobial Resistance, commissioned by the U.K. government, described DR-TB as a "cornerstone of the global AMR challenge" and concluded "tackling TB and drug-resistant TB must be at the heart of any global action against AMR." DR-TB is the leading cause of AMR-related deaths—causing one in three—and primarily plagues low- and middle-income countries, where it takes a tremendous human and economic toll. Yet with better diagnostics and treatment, nearly a million lives could be saved over the next ten years alone. However, insufficient funding for TB R&D has slowed research efforts. Over the past decade, global funding for TB R&D has never surpassed one-third of the projected USD 2 billion annual need, and is now on the decline.

Despite this critical shortage of resources, the limited funding that has been invested in R&D to combat DR-TB has produced an impressive return on

investments. Within the past five years, the TB research field has introduced several important advances, including a rapid test that can detect TB and resistance to rifampicin, one of the main drugs used to treat it, and two new drugs to treat DR-TB, delamanid and bedaquiline. With promising candidates in the pipeline and a better understanding of the basic science of TB, the TB research community is well poised to develop further life-saving new interventions. An injection of funding for high quality R&D to combat DR-TB would be catalytic in producing high-impact innovations, such as a rapid test for detecting resistance to other TB medicines, shorter and less toxic treatments for DR-TB, and options to prevent DR-TB.

Given the tremendous need and opportunity that DR-TB poses, we respectfully urge the GAMRIF to include ample funding to support TB R&D in your allocations. In particular, we call your attention to the <u>3P Project</u>, an innovative investment framework to incentivize DR-TB drug research proposed by Médecins Sans Frontières and now being taken forward by the International Union Against Tuberculosis and Lung Disease.⁵ By combining push, pull, and pool mechanisms, the 3P Project seeks to attract new researchers and developers, and re-engage traditional investors, in the development of new TB drug regimens.

We appreciate your consideration of this request, and look forward to following the investments of the GAMRIF. We would be happy to provide additional information on the importance of R&D for DR-TB and how it can best be supported. We kindly request your response by Monday, January 16, 2017, which can be directed to Mike Frick at mike.frick@treatmentactiongroup.org.

Respectfully submitted,
Global TB Community Advisory Board (Global)
RESULTS UK (UK)
TB Alert (UK)
TB Europe Coalition (Europe)
Treatment Action Group (USA)

¹ Review on Antimicrobial Resistance. Tackling Drug-Resistant Infections Globally: Final Report and

Recommendations. London: Review on Antimicrobial Resistance; 2016. Available from: https://amr-review.org/sites/default/files/160525_Final%20paper_with%20cover.pdf.

2 Chapter TDP Protection of the National TDP Applied for the State of the State of TDP Applied for the

 $^{^2 \,} Stop \, TB \, Partnership. \, Why \, We \, Need \, a \, UN \, High-Level \, Meeting \, on \, TB. \, Available \, from: \\ \underline{http://www.stoptb.org/assets/images/news/UN\%20High-Level\%20Meeting\%20on\%20TB.pdf.}$

³ Review on Antimicrobial Resistance. Tackling Drug-Resistant Infections Globally.

⁴ M Frick. 2016 Report on Tuberculosis Research Funding Trends, 2005–2015: No Time to Lose. New York: Treatment Action Group; 2016. Available from: www.treatmentactiongroup.org/tbrd2016.

⁵ For more information on the 3P Project, please see: https://www.msfaccess.org/spotlight-on/3p-project-new-approach-developing-better-treatments-tb.