



SHAREABLE PDF

The case for assessing the full value of new tuberculosis vaccines

Nebiat Gebreselassie¹, Raymond Hutubessy², Johan Vekemans¹ ²,
Saskia den Boon², Tereza Kasaeva¹ and Matteo Zignol¹

Affiliations: ¹Global TB Programme, World Health Organization, Geneva, Switzerland. ²Dept of Immunization, Vaccines and Biologicals, World Health Organization, Geneva, Switzerland.

Correspondence: Nebiat Gebreselassie, World Health Organization, Global TB Programme, Avenue Appia 20, Geneva 1211, Switzerland. E-mail: gebreselassien@who.int



@ERSpublications

A multidisciplinary framework is needed to guide the research needed for making economic and health impact arguments for tuberculosis vaccine development and uptake <http://bit.ly/2stNDok>

Cite this article as: Gebreselassie N, Hutubessy R, Vekemans J, *et al.* The case for assessing the full value of new tuberculosis vaccines. *Eur Respir J* 2020; 55: 1902414 [<https://doi.org/10.1183/13993003.02414-2019>].

This single-page version can be shared freely online.

Tuberculosis (TB) ranks as the leading cause of death among infectious diseases in human history, claiming over a billion lives in the past two centuries alone [1, 2]. Although a number of important advances have been made to control TB in the past decade, an estimated 10 million people fell ill with TB and 1.5 million died from the disease in 2018 alone [1]. The only licensed TB vaccine, bacille Calmette–Guérin (BCG), provides partial protection against severe forms of TB in infants and young children (averting thousands of paediatric deaths annually), but fails to stop transmission of pulmonary tuberculosis in adults [3, 4]. The World Health Organization (WHO)'s End TB Strategy stipulates that more effective vaccines are needed to end the TB epidemic, which will subsequently bolster efforts to achieve broader global health ambitions under universal health coverage, and a number of other sustainable development goal targets, particularly the targets focused on eradicating poverty in all its forms, ending the AIDS epidemic, strengthening health systems, and reducing premature mortality among women and children [5, 6]. By preventing TB disease, an effective vaccine would also reduce the need for antibiotics, an essential step for curbing antimicrobial resistance. Recognising this, member states during the United Nations General Assembly high level meeting on TB, held in New York in 2018, have committed to increase investment in and accelerate research for the development of more effective TB vaccines that are affordable and accessible by all countries that need them [7].