

## Acceptability of a novel TB vaccine or BCG booster among adults, caretakers of adolescents and adolescents in Manhiça District, southern Mozambique.

Kristin N Nelson<sup>1</sup>, Casey Randleman<sup>1</sup>, Agostinho Lima<sup>2</sup>, Lavanya Vasudevan<sup>1</sup>, Lisa Marie Cranmer<sup>1</sup>, **Alberto L García-Basteiro**<sup>3</sup>, Sozinho Acacio<sup>2</sup>

<sup>1</sup>Emory University, Atlanta, GA, USA; <sup>2</sup>Manhiça Health Research Institute, Manhiça, Mozambique; <sup>3</sup>ISGlobal, Barcelona, Spain

**Background:** Neonatal vaccination with the BCG vaccine prevents TB in young children, but protection wanes by early adolescence. As a result, vaccination of adolescents and adults will be key to global TB prevention efforts. However, the effectiveness of a vaccination program hinges on the willingness of individuals to be vaccinated. We examined factors that contribute to willingness to receive a novel TB vaccine or BCG booster dose in a country with a high burden of TB, Mozambique.

**Methods:** From March to May 2024, we conducted a cross-sectional survey of adults, adolescents and caretakers of adolescents in Manhiça district, Mozambique, to characterize attitudes towards a hypothetical TB vaccine. We collected information on past experiences with TB, evaluated general knowledge and attitudes about vaccines, and determined willingness to be vaccinated with a BCG booster or new TB vaccine.

**Results:** Among 158 adolescent and adult participants (27 adolescents and 131 adults), 130 (82%) would be willing to receive a novel TB vaccine and 116 (73%) would be willing to receive a BCG booster. Among 42 caretakers of adolescents, 69% (n = 23) would be supportive of their adolescent receiving a new TB vaccine and 88% (n = 37) would be supportive of their receiving a BCG booster. Willingness to receive a TB vaccine was not different among adults and adolescents who had personal experience with TB, but was lower (66%) among those who reported ever having a negative vaccination experience.

**Conclusion:** Willingness to receive a novel TB vaccine or BCG booster was overall high, with some differences by vaccine type. Estimates of coverage for new vaccines are critical inputs for modeling efforts aiming to project the public health impact of TB vaccine programs, and a clearer understanding of potential barriers to uptake of a TB vaccine can inform planning for vaccine introduction.

### Funding Sources

Emory/Georgia TRAC (P30AI168386)

### Conflicts of Interest

None.

