

Supplementary Table S1: Stratified incidence by age

| Age group | Number of new and relapse cases^a | | | Number of age group population^b | incidence |
|------------------|--|---------------------|--------------------|---|------------------|
| | male cases | female cases | total cases | | |
| 0-4 | 11848 | 10355 | 22203 | 24039675 | 0,00092 |
| 5-14 | 16335 | 14406 | 30741 | 46819525 | 0,00066 |
| 15-24 | 31350 | 32695 | 64045 | 44268729 | 0,00145 |
| 25-34 | 41750 | 32327 | 74077 | 41864399 | 0,00177 |
| 35-44 | 41617 | 29166 | 70783 | 39269150 | 0,00180 |
| 45-54 | 44505 | 28835 | 73340 | 31883182 | 0,00230 |
| 55-64 | 39836 | 22321 | 62157 | 20940415 | 0,00297 |
| >65 | 27761 | 13523 | 41284 | 14906304 | 0,00277 |

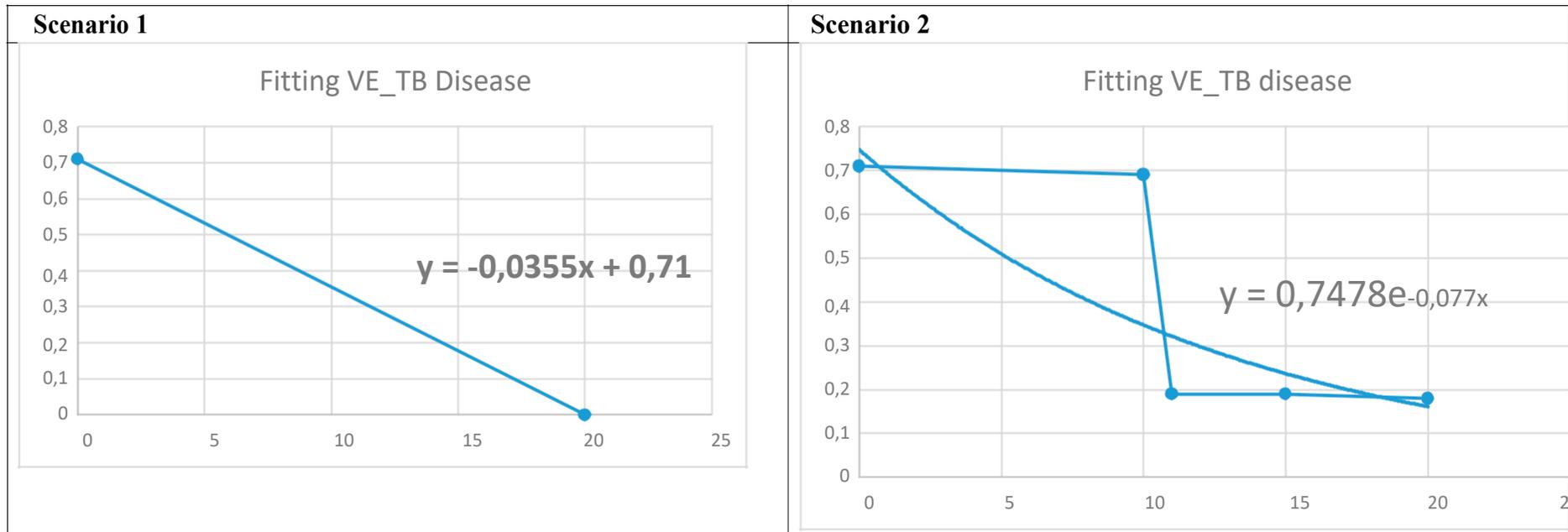
^asource : World Health Organization, TB Burden Estimate for Indonesian settings in 2017. <https://www.who.int/tb/country/data/download/en/>

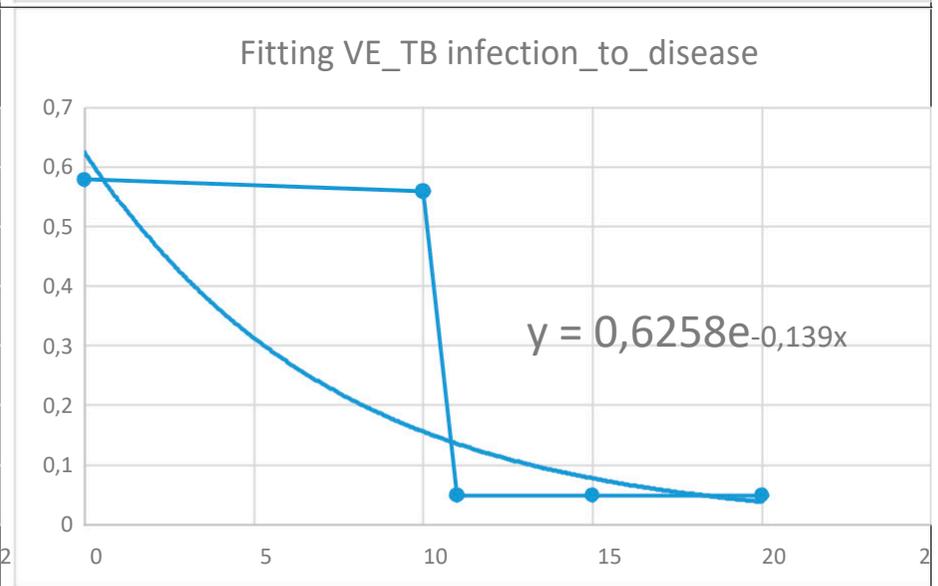
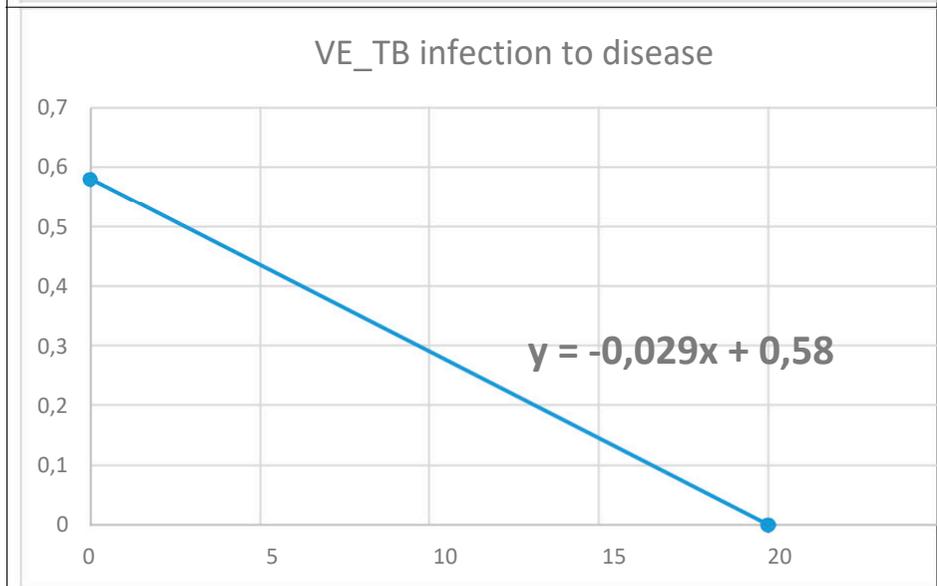
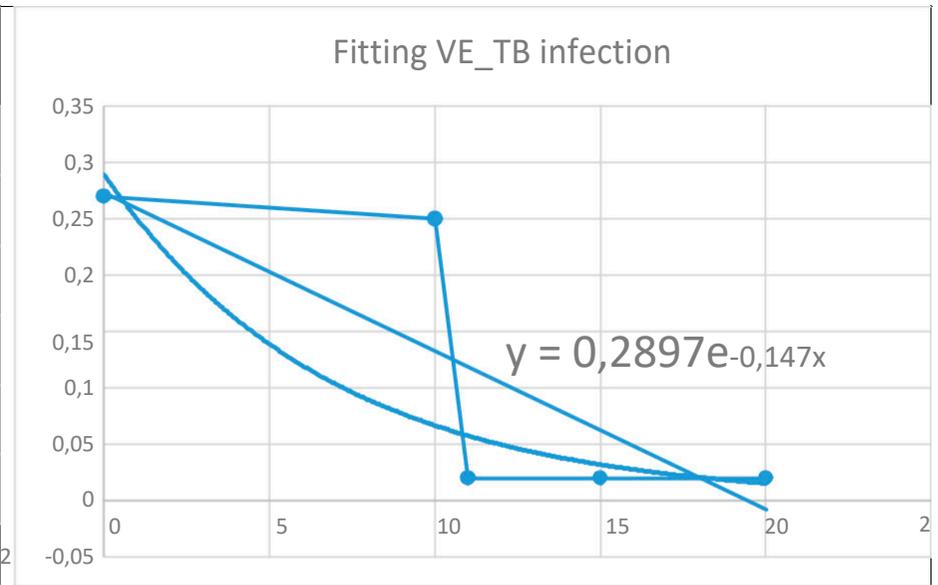
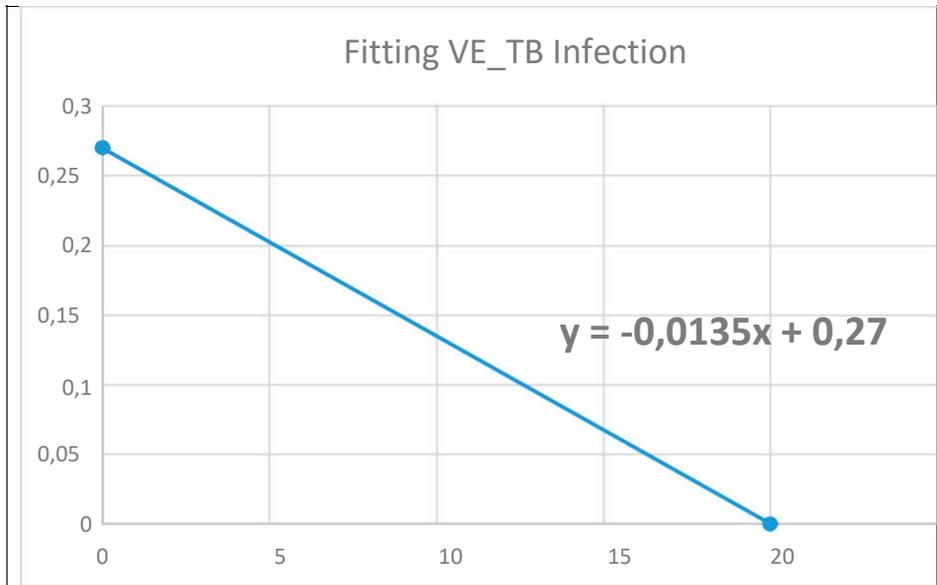
^bsource : Indonesia Population Projection in 2017, Indonesian National Statistics (Badan Pusat Statistik, BPS), 2013.

Supplementary Table S2: Fitting the waning effect of vaccine effectiveness (VE) for scenario 1 and 2.

Scenario 1 : we assumed that the vaccine effectiveness would wane linearly over a 20-year period. Accordingly, we estimated that the average protection would be comparable to that assumed in the base-case scenario.

Scenario 2 : we assumed that the vaccine's effectiveness would wane exponentially over time

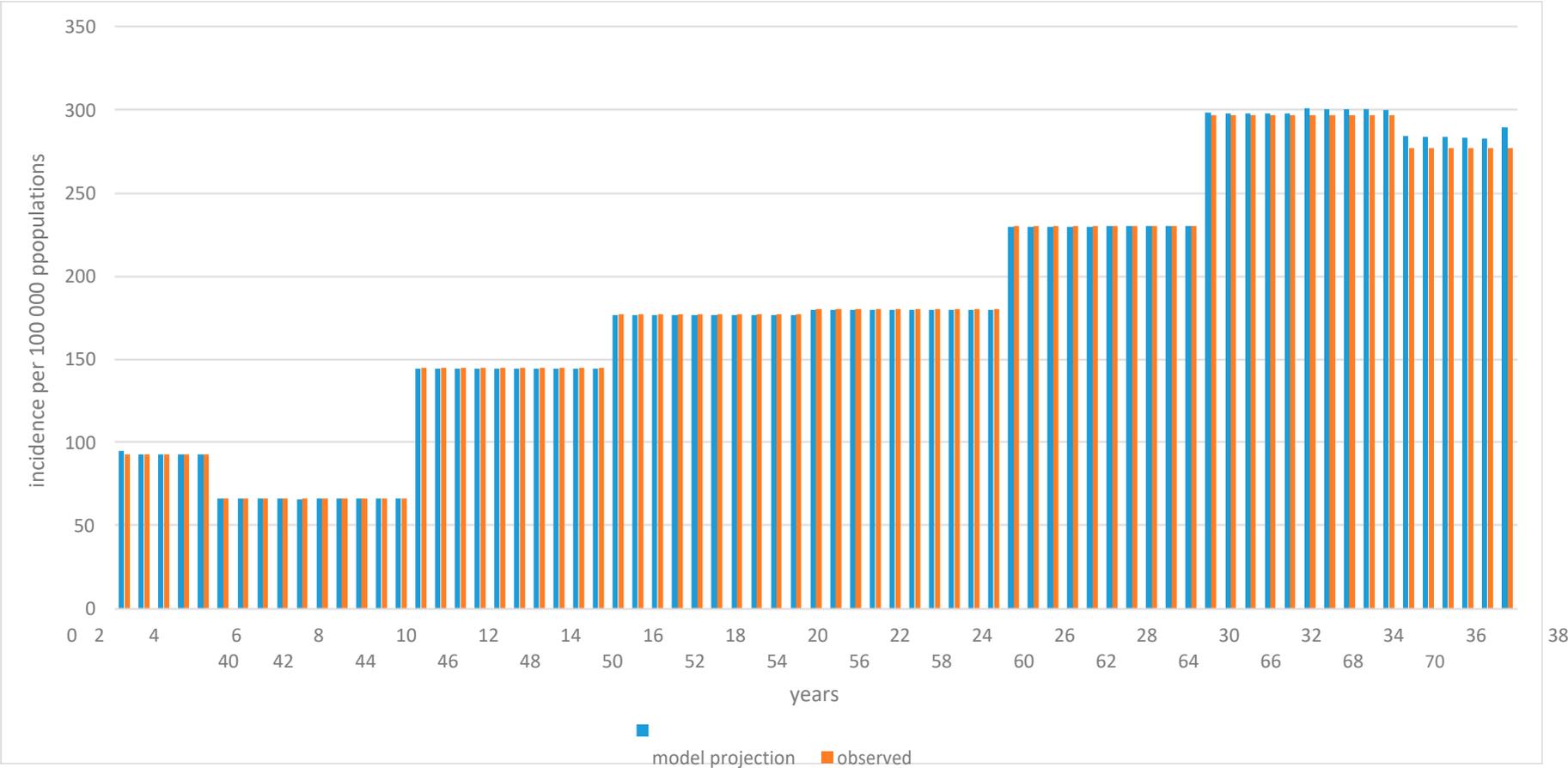




y is the vaccine effectiveness (VE), x is time (year)

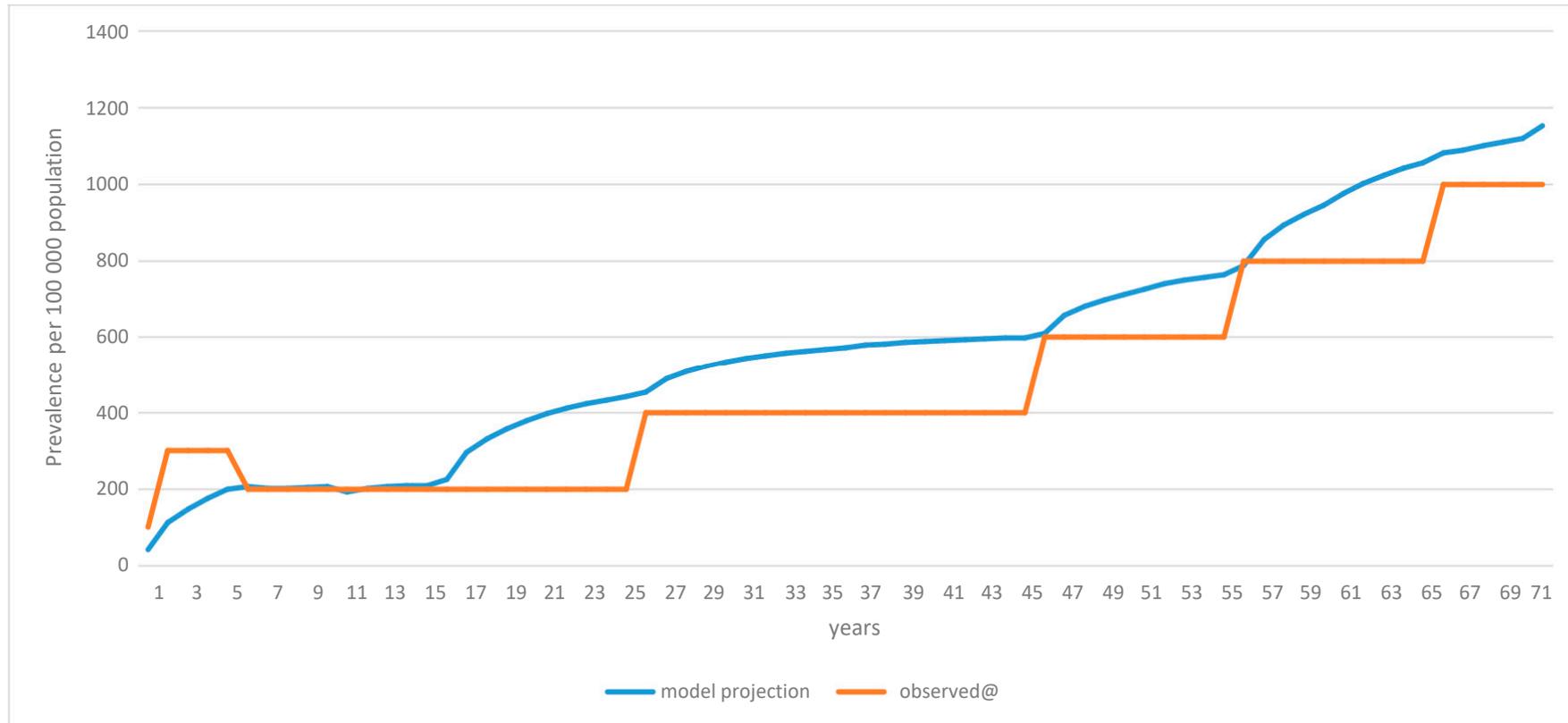
Supplementary Figure S1: Model internal validation

We validated the model by comparing the TB incidence derived from the predicted simulation with that in the observed dataset used for the input parameters.



Supplementary Figure S2: Model external validation

We calibrated the model predicted TB prevalence on that obtained from local data in 2018.



Source observed data : BALITBANGKES. Laporan Nasional RISKESDAS 2018 [Internet]. 2019 [cited 2019 Jun 13]. Available from: http://labmandat.litbang.depkes.go.id/images/download/laporan/RKD/2018/Laporan_Nasional_RKD2018_FINAL.pdf.