

## S1 Appendix

**S1 Table. Modified Poisson Regression Stratified by Region and Combined using Meta-Analysis: factors associated with an unfavorable TB treatment outcome**

|                          | Asia-Pacific<br>Relative Risk (95%<br>CI) | CCASAnet<br>Relative Risk (95%<br>CI)       | Central Africa<br>Relative Risk (95%<br>CI) |
|--------------------------|---|---|---|
| Age (per 10 years)       | 1.11 (0.70, 1.77)                         | 1.02 (0.86, 1.22)                           | 0.97 (0.78, 1.20)                           |
| BMI (per 1 unit)         | 0.88 (0.75, 1.03)                         | 1.03 (0.98, 1.09)                           | 1.00 (0.95, 1.04)                           |
| CD4 (200 vs. 50 cells)   | 0.69 (0.43, 1.12)                         | 1.02 (0.45, 2.27)                           | 0.86 (0.70, 1.05)                           |
| CD4 (500 vs. 50 cells)   | 0.33 (0.08, 1.39)                         | 1.20 (0.05, 27.33)                          | 0.63 (0.34, 1.16)                           |
| Female (vs. Male)        | 1.80 (0.83, 3.88)                         | 1.48 (1.02, 2.15)                           | 0.97 (0.64, 1.45)                           |
| No Xpert (vs. had Xpert) | 1.96 (0.48, 8.02)                         | 0.96 (0.52, 1.77)                           | 1.89 (0.33, 10.78)                          |
| On ART at TB diagnosis   | 0.81 (0.41, 1.59)                         | 1.22 (0.84, 1.79)                           | 0.63 (0.41, 0.96)                           |
|                          | East Africa<br>Relative Risk (95%<br>CI)  | Western Africa<br>Relative Risk (95%<br>CI) | Combined<br>Relative Risk (95%<br>CI)       |
| Age (per 10 years)       | 1.03 (0.94, 1.14)                         | 0.95 (0.72, 1.27)                           | 1.02 (0.95, 1.10)                           |
| BMI (per 1 unit)         | 0.99 (0.96, 1.01)                         | 0.98 (0.92, 1.04)                           | 0.99 (0.97, 1.02)                           |
| CD4 (200 vs. 50 cells)   | 0.66 (0.54, 0.81)                         | 0.80 (0.54, 1.18)                           | 0.76 (0.67, 0.86)                           |
| CD4 (500 vs. 50 cells)   | 0.43 (0.18, 1.01)                         | 0.50 (0.16, 1.63)                           | 0.53 (0.34, 0.81)                           |
| Female (vs. Male)        | 0.92 (0.76, 1.11)                         | 0.91 (0.55, 1.50)                           | 1.08 (0.86, 1.37)                           |
| No Xpert (vs. had Xpert) | 1.17 (0.57, 2.38)                         | 2.01 (0.52, 7.74)                           | 1.21 (0.80, 1.81)                           |
| On ART at TB diagnosis   | 0.70 (0.56, 0.88)                         | 0.71 (0.42, 1.20)                           | 0.79 (0.62, 1.01)                           |

The combined relative risks (RRs) and 95% CIs were computed based on the results of the region-specific RRs using the meta- analysis approach of DerSimonian and Laird, a random effects method which makes no assumption regarding homogeneity across sites.