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| **Supplemental Digital Content 2.** Correlates of infant TST positivity up to 24 months stratified by HIV exposure | | | | | | | | | | | |
| **Characteristics among infants with TST results up to of age** | | | | | | | | | | | |
| **Baseline characteristics** | **HIV Exposed** | | | | | **HIV Unexposed** | | | | | |
| **Overall** | **TST positive** | **TST negative** | **HR\* (95% CI)** | **p** | **Overall** | **TST positive** | **TST negative** | **HR\* (95% CI)** | **p** |
| **N=170\*\*** | **N=17** | **N=153** | **N=152** | **N=5** | **N=147** |
| **n (%) or** | **n (%) or** | **n (%) or** | **n (%) or** | **n (%) or** | **n (%) or** |
| **median (IQR)** | **median (IQR)** | **median (IQR)** | **median (IQR)** | **median (IQR)** | **median (IQR)** |
| **Infant characteristics** | | | | | | | | | | |
| Female sex | 90 (52.9) | 6 (35.3) | 84 (54.9) | 0.46 (0.17-1.24) | 0.125 | 74 (48.7) | 2 (50.0) | 61 (48.8) | 1.57 (0.26-9.42) | 0.619 |
| WAZ score (N=308) | -0.1 (-1.1-0.6) | -1.0 (-1.4-0.1) | -0.1 (-0.9-0.7) | 0.57 (0.32-1.01) | 0.055 | 0.2 (-0.6-0.8) | 0.4 (0.3-1.3) | 0.1 (-0.7-0.8) | 1.62 (0.85-3.12) | 0.142 |
| Underweight (WAZ < −2) (N=308) | 6 (3.7) | 1 (5.9) | 5 (3.4) | 1.69 (0.22-12.7) | 0.613 | 6 (4.2) | 0 (0) | 6 (4.3) | -- | 1.00 |
| BCG vaccination | 168 (98.8) | 17 (100.0) | 151 (98.7) | -- | 1.000 | 152 (100.0) | 4 (100.0) | 125 (100.0) | 1 | n/a |
| Received ARVs for PMTCT (N=158) | 154 (94.5) | 16 (94.1) | 138 (94.5) | -- | 1.000 | -- | -- | -- | -- | -- |
| Infant TB exposure | 2 (1.18) | -- | 2 (1.31) | -- | -- | -- | -- | -- | -- | -- |
| **Maternal characteristics** | | | | | | | | | | |
| Age, yrs | 28 (24-31) | 22 (20-30) | 28 (24-32) | 0.88 (0.79-0.98) | **0.022** | 23 (21-26.5) | 26 (24-27) | 23 (21-26) | 1.09 (0.94-1.28) | 0.242 |
| BMI, kg/m2 | 24.4 (22.3-27.9) | 23.5 (22.4-24.9) | 24.8 (22.3-28.1) | 0.84 (0.72-0.97) | **0.022** | 23.8 (22.2-27.5) | 29.2 (24.1.7-30.6) | 23.7 (22.1-27.2) | 1.13 (0.97-1.31) | 0.108 |
| Partner HIV status (N=255) | 61 (45.5) | 6 (37.5) | 55 (46.6) | 0.71 (0.26-1.97) | 0.515 | -- | -- | -- | -- | -- |
| HIV viral load undetectable (n=148) † | 102 (68.9) | 9 (60.0) | 93 (69.9) | 0.69 (0.25-1.94) | 0.485 | -- | -- | -- | -- | -- |
| CD4, cells/mm3 (N=76) † | 456 (330-653.5) | 493 (411-594) | 455 (320-688) | 1.00 (1.00-1.00) | 0.976 | -- | -- | -- | -- | -- |
| ART before pregnancy (N=170) | 114 (67.1) | 8 (47.1) | 106 (69.3) | 0.41 (0.16-1.06) | 0.066 | -- | -- | -- | -- | -- |
| ART on enrollment (N=170) | 170 (100.0) | 17 (100.0) | 153 (100.0) | 1 | n/a | -- | -- | -- | -- | -- |
| Any IPT use (N=170) | 141 (82.9) | 15 (88.2) | 126 (82.4) | 1.63 (0.37-7.14) | 0.515 | -- | -- | -- | -- | -- |
| IPT on enrollment (N=141) | 32 (22.7) | 4 (26.7) | 28 (22.2) | 1.29 (0.41-4.05) | 0.662 | -- | -- | -- | -- | -- |
| LTBI+ (TST+ or QFT-Plus+) ‡ | 61 (35.9) | 8 (47.1) | 63 (34.6) | 1.09 (0.42-2.83) | 0.856 | 54 (35.5) | 3 (60.0) | 51 (34.7) | 1.79 (0.30-10.71) | 0.524 |
| QFT-Plus + (N=321) | 51 (30.0) | 8 (47.1) | 43 (28.1) | 1.34 (0.52-3.46) | 0.550 | 51 (33.8) | 2 (40.0) | 49 (33.6) | 0.84 (0.14-5.05) | 0.853 |
| TST+ (N=321) ‡ | 33 (19.4) | 5 (29.4) | 28 (18.3) | 1.79 (0.63-5.09) | 0.273 | 6 (4.0) | 1 (20.0) | 5 (3.4) | 6.97 (0.78-62.42) | 0.083 |
| TST >10 mm (N=321) | 17 (10.0) | 4 (23.5) | 13 (8.5) | 3.82 (1.47-9.92) | **0.006** | 6 (4.0) | 1 (20.0) | 5 (3.4) | 7.73 (1.29-46.27) | **0.025** |
| TST ≥5 mm (N=321) | 33 (19.4) | 5 (29.4) | 28 (18.3) | 2.32 (0.82-6.59) | 0.114 | 21 (13.9) | 1 (20.0) | 20 (13.7) | 3.46 (0.39-30.98) | 0.267 |
| **Household characteristics** | | | | | | | | | | |
| Household TB exposure during study | 2 (1.18) | -- | 2 (1.31) | -- | -- | -- | -- | -- | -- | -- |
| Lack of running water | 98 (57.7) | 11 (64.7) | 87 (56.9) | 1.33 (0.49-3.60) | 0.573 | 77 (50.7) | 2 (40.0) | 75 (51.0) | 0.64 (0.11-3.80) | 0.619 |
| Lack of electricity | 54 (31.8) | 5 (29.4) | 49 (32.0) | 0.86 (0.30-2.44) | 0.777 | 58 (38.2) | 1 (20.0) | 57 (38.9) | 0.40 (0.04-3.55) | 0.408 |
| Lack of flush toilet | 161 (94.7) | 17 (100.0) | 144 (94.1) | -- | 1.00 | 149 (98.0) | 5 (100.0) | 144 (98.0) | -- | 1.00 |
| Persons in household | 3 (2-4) | 3 (3-5) | 4 (3-5) | 0.88 (0.63-1.22) | 0.448 | 3 (2-4) | 4 (3-5) | 3 (2-4) | 1.11 (0.65-1.89) | 0.696 |
| Single room household¶ | 28 (16.5) | 6 (35.3) | 22 (14.4) | 2.95 (1.10-7.97) | **0.033** | 41 (27.0) | 0 (0) | 41 (27.9) | -- | 1.00 |
| Abbreviations: IQR interquartile range, WAZ weight-for-age Z score, ARV antiretrovirals, HIV human immunodeficiency virus, TB tuberculosis, IPT isoniazid preventive therapy, TST tuberculin skin test, LTBI Latent tuberculosis infection, QFT-Plus QuantiFERON-TB Gold.  \*Hazard ratio (HR) estimated using cox regression  †CD4 and HIV viral load data collected from routine programmatic data. Undetectable viral load ≤20 copies/ml  ‡TST positive defined as ≥5 mm induration if HIV positive and ≥10 mm induration if HIV negative  ¶Fisher’s exact p-value  \*\* includes 2 children with HIV-seroconversion | | | | | | | | | | |