**Table S1 Demographics and clinical data of subjects**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Characteristics** | **Active PTB**  **(n=103)** | **Inactive PTB**  **(n =16)** | **Characteristics** | **Active PTB**  **(n=103)** | **Inactive PTB**  **(n =16)** |
| Gender (M/F) | 71/32 | 13/3 | IGRA (+) | 90/101† | 15/15 |
| Age (Years old) | 44.7±15.5 | 50.2±12.6 | Sputum (+) |  |  |
| TB contact | 5 | 0 | Smearing | 25/100 | 0 |
| Smoking | 29 | 6 | TB-DNA | 21/72 | 0/11 |
| T2DM | 18 | 2 | Xpert test | 12/21 | 0/2 |
| GHbA1C (%) | 6.53±0.24 | 5.95±0.33 | BALF (+) |  |  |
| WBC (109/L) | 6.55±2.30 | 6.34±2.00 | Smearing | 29 | 0 |
| ESR (mm/h) | 36.8±3.35 | 27.6±7.48 | TB-DNA | 36/100 | 0 |
| CD4+T (106/L) | 535±25.6 | 613±61.1 | Xpert test | 64/99 | 0/14 |
| Cavitary lesion | 46 | 0 | Mtb Culture (+) | 59/101 | 0 |

PTB, pulmonary tuberculosis; IGRA, interferon-γ release assay; T2DM, type 2 diabetes; GHbA1C, glycated hemoglobin A1c; WBC, white blood cell; ESR, erythrocyte sedimentation rate; Xpert, GeneXpert MTB/RIF; Mtb, *Mycobacterium tuberculosis*; †Actual cases involved.

**Table S2 Comparisons of BALF and blood levels of sCD14, IL-17 and IL-22 in 76 PTB patients**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Active PTB** | | | | **Inactive PTB**  **(n =6)** |
|  | **Total**  **(n=70)** | **Sputum-based**  **(n =20)** | **BALF-dependent**  **(n =37)** | **Clinical**  **(n =13)** |
| sCD14 |  |  |  |  |  |
| BALF | 3.13±0.20\* | 3.48±0.33\* | 3.41±0.30 | 1.80±0.21 | 2.30±0.44 |
| serum | 2.57±0.15 | 2.50±0.23 | 2.77±0.24 | 2.12±0.14 | 1.99±0.21 |
| IL-17 |  |  |  |  |  |
| BALF | 2.43±0.20 | 3.14±0.35 | 2.55±0.30 | 1.02±0.13 | 1.95±0.66 |
| serum | 2.07±0.22 | 2.15±0.41 | 2.27±0.33 | 1.35±0.32 | 1.06±0.37 |
| Il-22 |  |  |  |  |  |
| BALF | 3.50±0.26\*\* | 4.39±0.44\*\* | 3.77±0.36\* | 1.37±0.25 | 2.60±0.76 |
| serum | 2.52±0.15 | 2.55±0.26 | 2.67±0.24 | 2.04±0.17 | 1.95±0.26 |

PTB, pulmonary tuberculosis; BALF, bronchoalveolar lavage fluid; \**P* < 0.05, \*\**P* < 0.01 when compared with data in next line.

**Table S3 Sensitivities and specificities of serum levels of sCD14, IL-17 and IL-22 in prediction of bacteriological confirmation in PTB patients**

|  |  |  |  |
| --- | --- | --- | --- |
| **Items** | **Sensitivity**†  **(%)** | **Specificity**  **(%)** | **Cut-off value (μg or ng/mL)** |
|
| Bacteriologically-unconfirmed |  |  |  |
| sCD14 | 92.3 | 24.6 | ≤2.91 |
| IL-17 | 92.3 | 22.8 | ≤3.29 |
| IL-22 | 92.3 | 24.6 | ≤2.93 |

† minimal requirement of WHO (≥ 90%).

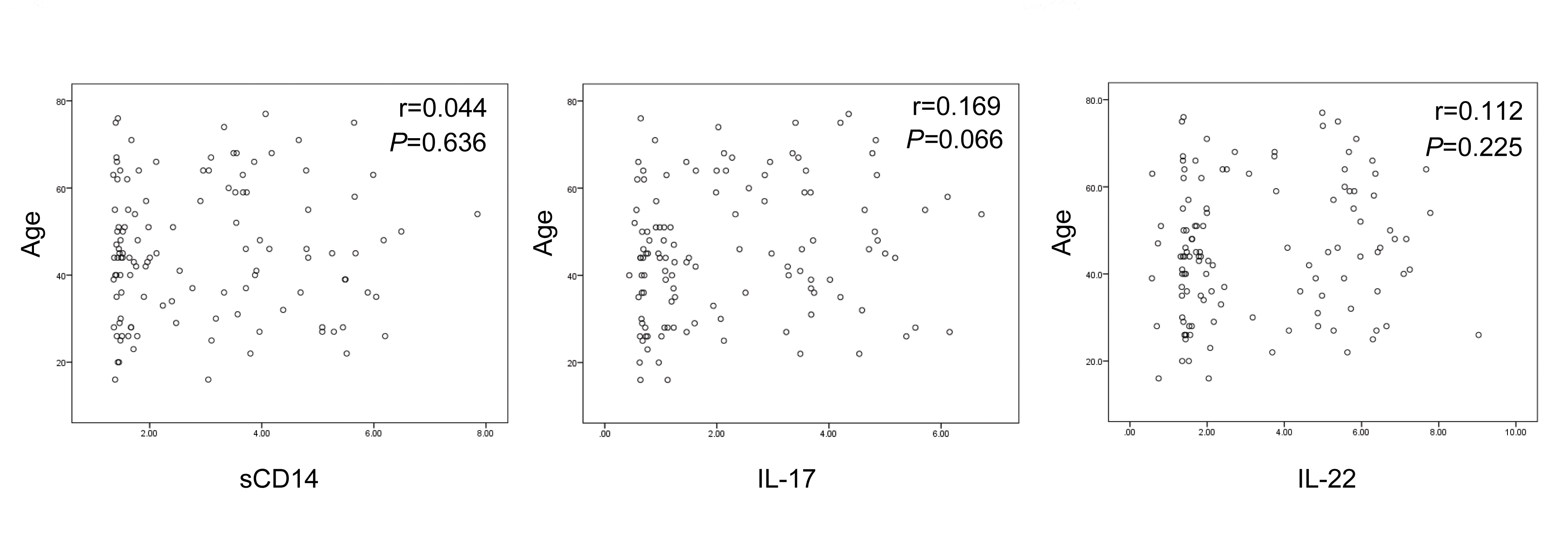


Fig. S1 Correlations between age and BALF levels of sCD14, IL-17 and IL-22 in PTB patients. The age was uncorrelated with sCD14, IL-17 and IL-22.

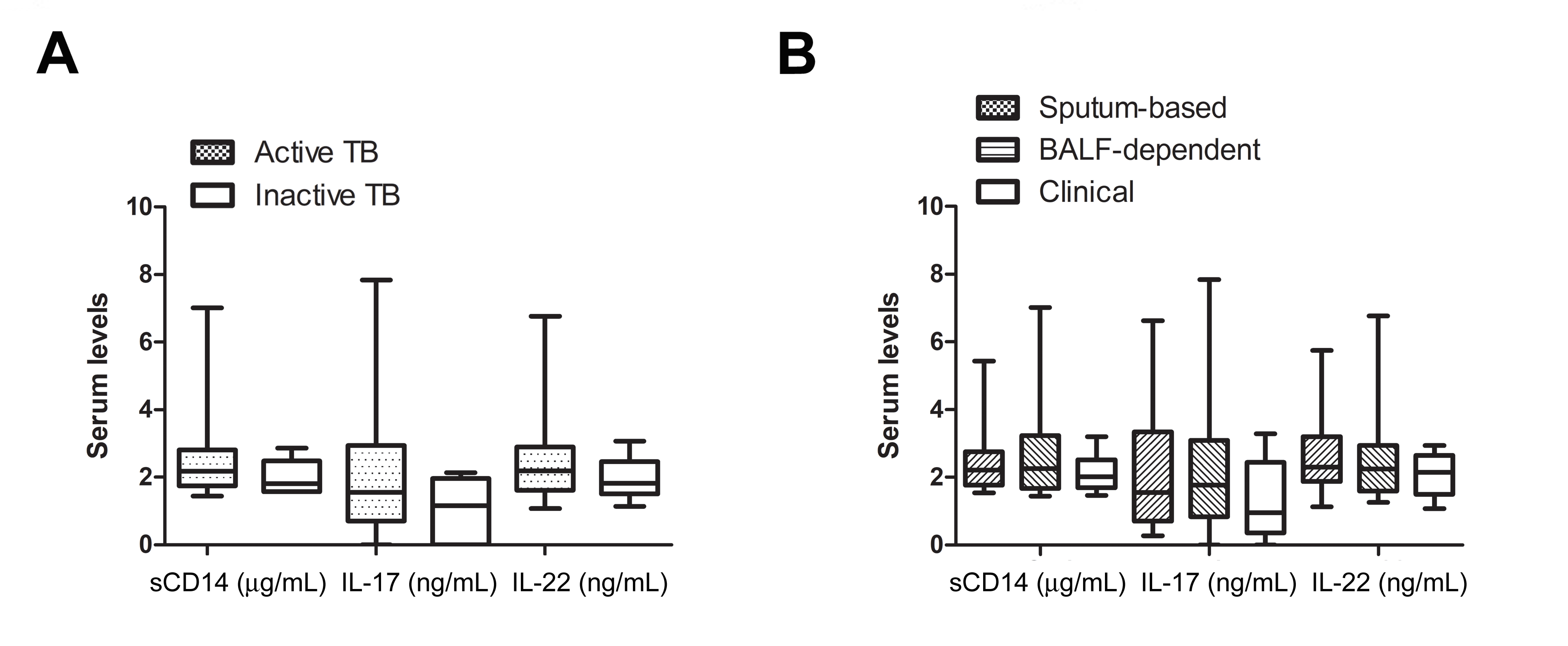


Fig. S2 Serum levels of sCD14, IL-17 and IL-22 in PTB patients. Serum levels of sCD14, IL-17 and IL-22 were comparable in patients with active and inactive PTB (A), and were not associated with bacteriological conformation manners (B).

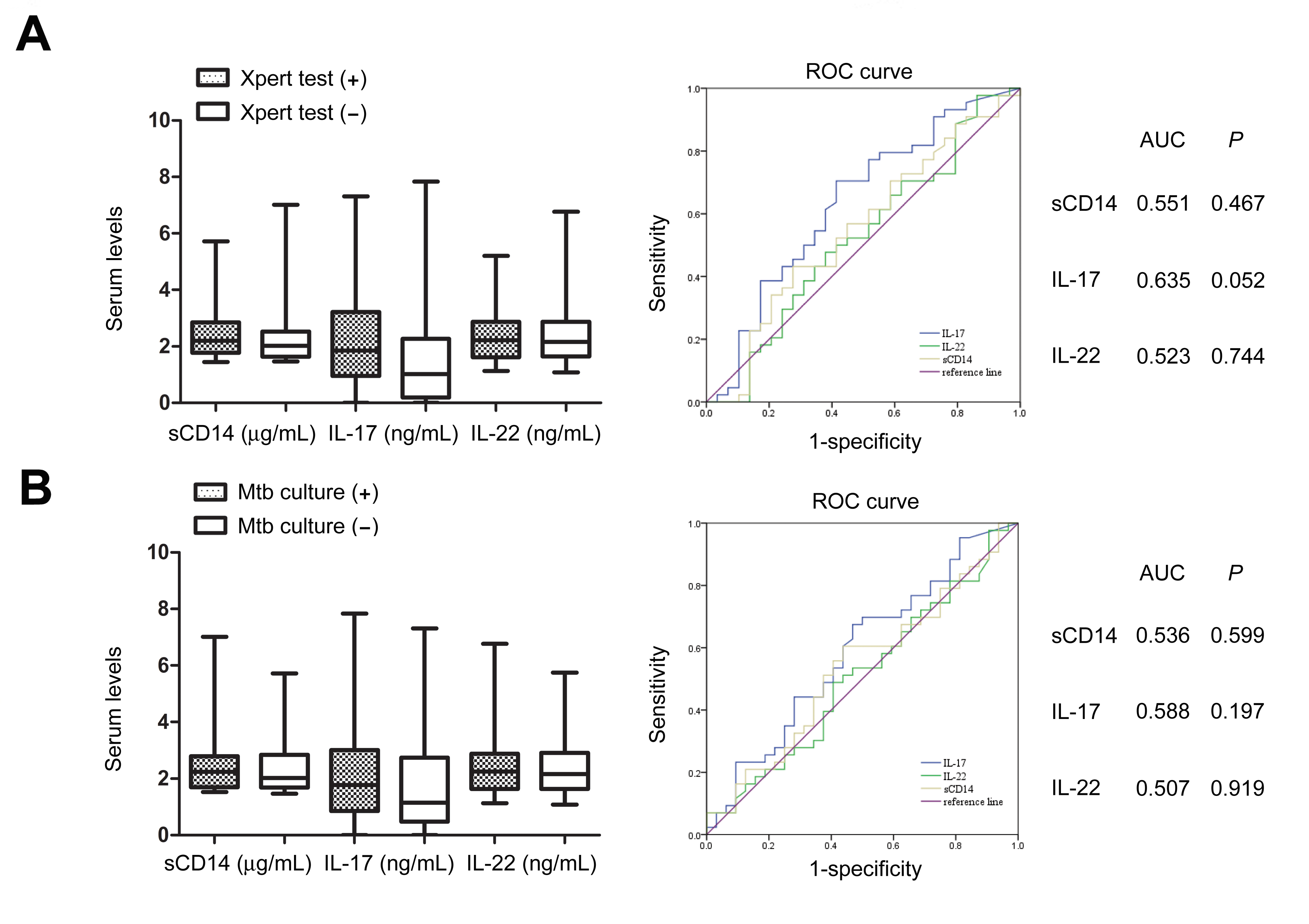


Fig. S3 Significance of serum levels of sCD14, IL-17 and IL-22 in PTB patients. Xpert, GeneXpert MTB/RIF; Mtb, *Mycobacterium tuberculosis*;ROC, receiver operating characteristic curve; AUC, area under roc curve; Serum levels of sCD14, IL-17 and IL-22 were unable to predict the results of Xpert (A) and Mtb culture (B).