Table S1 Paired-patients information for DS and MDR patients

| Pair No. | DS-PTB |  |  |  |  | MDR-PTB |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sex | Age, years | History \#, months | PN | PC | Sex | Age, years | History \#, months | Drugs | PN | PC |
| Pair 1 | F | 24 | 1 | 2 | 1 | M | 43 | 1 | R | 2 | 1 |
| Pair 2 | M | 30 | 3 | 4 | 2 | M | 48 | 3 | R | 1 | 5 |
| Pair 3 | M | 30 | 1-2 | 2 | 1 | M | 31 | 1-2 | H, R | 5 | 2 |
| Pair 4 | M | 42 | 2 | 2 | 0 | M | 50 | 2 | H, R, FLQ | 3 | 4 |
| Pair 5 | M | 50 | 2 | 2 | 1 | M | 46 | 2 | H, R, Z, E, S | 1 | 2 |
| Pair 6 | M | 50 | 1-2 | 0 | 0 | M | 38 | 1-2 | R | 0 | 0 |
| Pair 7 | F | 51 | <1 | 1 | 0 | M | 56 | <1 | H, R | 1 | 1 |
| Pair 8 | M | 56 | <1 | 2 | 1 | M | 67 | <1 | H, R | 3 | 3 |
| Pair 9 | F | 82 | 1 | 0 | 0 | M | 73 | 1 | H, R, FLQ | 0 | 0 |
| Pair 10 | F | 26 | <1 | 3 | 2 | M | 39 | <1 | R | 6 | 0 |
| Pair 11 | M | 26 | $<1$ | 2 | 0 | M | 26 | $<1$ | R | 2 | 1 |
| Pair 12 | F | 32 | 1-2 | 1 | 1 | F | 32 | 1-2 | R | 0 | 0 |
| Pair 13 | M | 57 | <1 | 2 | 1 | F | 29 | <1 | H, R | 6 | 0 |
| Pair 14 | M | 59 | $<1$ | 3 | 1 | M | 62 | $<1$ | R | 3 | 0 |
| Pair 15 | M | 61 | 2-3 | 1 | 0 | M | 59 | 2-3 | H, R, S, E | 1 | 0 |
| Pair 16 | M | 69 | 2-3 | 0 | 1 | F | 24 | 2-3 | R | 5 | 3 |
| Pair 17 | F | 18 | <1 | 0 | 1 | M | 39 | <1 | R | 1 | 0 |
| Pair 18 | M | 20 | <1 | 1 | 1 | M | 19 | <1 | R | 0 | 1 |
| Pair 19 | F | 26 | 1-2 | 0 | 0 | F | 26 | 1-2 | R | 1 | 0 |
| Pair 20 | F | 28 | 3 | 3 | 1 | M | 30 | 3 | H, R, FLQ | 4 | 0 |
| Pair 21 | F | 29 | $<1$ | 1 | 1 | M | 24 | $<1$ | R | 0 | 0 |
| Pair 22 | M | 33 | <1 | 0 | 0 | M | 20 | <1 | R | 0 | 0 |
| Pair 23 | M | 37 | 1 | 0 | 1 | M | 34 | <1 | H, R | 2 | 3 |
| Pair 24 | F | 38 | 1-2 | 0 | 0 | F | 26 | 1-2 | R | 1 | 3 |
| Pair 25 | M | 39 | 2-3 | 2 | 1 | F | 33 | 2-3 | H, R | 0 | 0 |
| Pair 26 | M | 42 | 1-2 | 0 | 2 | F | 28 | 1-2 | R | 4 | 0 |
| Pair 27 | M | 57 | 2-3 | 7 | 4 | F | 30 | 2-3 | R | 1 | 0 |
| Pair 28 | M | 63 | 2-3 | 2 | 1 | M | 69 | 2-3 | R | 1 | 1 |
| Pair 29 | M | 63 | <1 | 1 | 0 | M | 20 | <1 | R | 0 | 5 |
| Pair 30 | M | 64 | 1 | 0 | 2 | M | 34 | 1-2 | R | 4 | 1 |
| Pair 31 | F | 66 | 2-3 | 1 | 0 | M | 50 | 2-3 | H, R, FLQ | 3 | 3 |
| Pair 32 | M | 83 | <1 | 0 | 1 | F | 32 | $<1$ | H, R, Z, E | 0 | 1 |
| Pair 33 | F | 29 | <1 | 1 | 0 | M | 60 | <1 | H, R | 0 | 2 |
| Pair 34 | M | 57 | 1 | 1 | 0 | M | 22 | <1 | R | 1 | 2 |
| Pair 35 | M | 50 | 3 | 0 | 2 | M | 73 | 3 | H, R | 1 | 2 |
| Pair 36 | F | 37 | $<1$ | 0 | 1 | F | 33 | <1 | R | 0 | 2 |
| Pair 37 | F | 30 | 2 | 2 | 4 | M | 23 | 2 | R, Ofx | 3 | 2 |
| Pair 38 | M | 20 | 1-2 | 0 | 0 | M | 54 | <2 | H, R | 0 | 0 |
| Pair 39 | M | 23 | $<1$ | 0 | 1 | M | 61 | 2-3 | H, R, FLQ | 2 | 2 |
| Pair 40 | M | 52 | <1 | 2 | 0 | M | 51 | 2 | H, R | 0 | 0 |
| Pair 41 | M | 60 | <1 | 1 | 1 | M | 84 | 2-3 | R | 0 | 1 |
| Pair 42 | M | 27 | 1 | 7 | 0 | M | 49 | 3 | H, R | 3 | 3 |
| Pair 43 | M | 80 | <1 | 0 | 0 | M | 57 | 3 | H, R | 6 | 3 |
| Pair 44 | F | 69 | <1 | 2 | 1 | F | 58 | 3 | H, R, S | 3 | 2 |
| Pair 45 | M | 62 | <1 | 0 | 1 | M | 59 | 3 | H, R, Z | 3 | 1 |
| Pair 46 | M | 71 | <1 | 0 | 0 | F | 26 | 3 | H, R, E | 1 | 0 |

History \#, the disease history lengths were recorded in the electronic case archiving system. However, later it was noted that these disease history lengths are unreliable, and the real average history length would be much longer. DS, drug sensitive; MDR, multi-drug resistant; PTB, pulmonary tuberculosis; H, isoniazid; R, rifampicin; S, streptomycin; E, ethambutol; Ofx, ofloxacin; Z, pyrazinamide; FLQ, fluoroquinolone; PN, pulmonary nodular consolidation; PC, pulmonary cavity.


Figure S1 Percentage lesion lung involvement volume on CT of DS and true MDR cases and RR cases. The bars in the graph indicate median value. DS, drug sensitive; RR, rifampicin-resistant pulmonary tuberculosis; MDR, multi-drug resistant pulmonary tuberculosis.

Table S2 Prevalence, mean number and mean size for PN and PC between RR cases ( $\mathrm{n}=22$ ) and true MDR cases ( $\mathrm{n}=24$ )

|  | Prevalence | No. of PN or PC (mean) \# | Size (mean) \#, mm |
| :--- | :---: | :---: | :---: |
| PN |  |  |  |
| RR-PTB | $63.3 \%(14 / 22)$ | $2.36(33 / 14)$ | 11.02 |
| True MDR-PTB | $75 \%(18 / 24)$ | $2.83(51 / 18)$ | 12.59 |
| P | 0.403 | 0.334 | 0.190 |
| PC |  |  |  |
| RR-PTB | $54.5 \%(12 / 22)$ | $2.17(26 / 12)$ | 15.41 |
| True MDR-PTB | $66.7 \%(16 / 24)$ | $2.25(36 / 16)$ | 20.3 |
| P | 0.400 | 0.410 | 0.104 |

\#, for positive cases. PN, pulmonary nodular consolidation; PC, pulmonary cavity; RR, rifampicin-resistant; MDR, multidrug-resistant; PTB, pulmonary tuberculosis.


Figure S2 Number of pulmonary nodular consolidation and pulmonary cavity for RR cases and MDR cases. RR, rifampicin-resistant pulmonary tuberculosis; MDR, true multi-drug resistant pulmonary tuberculosis. This Figure is re-used with permission from Song et al. (29).

