

**Supplementary Table S1.** Drug resistance profiles of 1,668 patients predicted by whole genome sequencing

Type of resistance	No. (%)			
	Total	New case	Retreated cases cases	Unknown
Resistance to single drug only	136 (8.15)	110 (8.53)	33 (9.71)	3 (7.89)
RIF	21 (1.26)	12 (0.93)	9 (2.65)	0 (0.00)
INH	53 (3.18)	37 (2.87)	14 (4.12)	2 (5.26)
EMB	1 (0.06)	0 (0.00)	1 (0.29)	0 (0.00)
PZA	5 (0.30)	4 (0.31)	0 (0.00)	1 (2.63)
SM	46 (2.76)	49 (3.80)	7 (2.06)	0 (0.00)
FQs	10 (0.60)	8 (0.62)	2 (0.59)	0 (0.00)
Multi-drug resistant (MDR)	31 (1.86)	10 (0.78)	21 (6.18)	0 (0.00)
INH+RIF+FQs	1 (0.06)	0 (0.00)	1 (0.29)	0 (0.00)
INH+RIF	8 (0.48)	3 (0.23)	5 (1.47)	0 (0.00)
INH+RIF+EMB	3 (0.18)	2 (0.16)	1 (0.29)	0 (0.00)
INH+RIF+SM	5 (0.30)	0 (0.00)	5 (1.47)	0 (0.00)
INH+RIF+ETH	1 (0.06)	1 (0.08)	0 (0.00)	0 (0.00)
INH+RIF+SM+FQs	1 (0.06)	0 (0.00)	1 (0.29)	0 (0.00)
INH+RIF+PZA+SM	1 (0.06)	1 (0.08)	0 (0.00)	0 (0.00)
INH+RIF+EMB+SM	7 (0.42)	2 (0.16)	5 (1.47)	0 (0.00)
INH+RIF+SM+PAS	1 (0.06)	0 (0.00)	1 (0.29)	0 (0.00)
INH+RIF+SM+ETH	1 (0.06)	0 (0.00)	1 (0.29)	0 (0.00)
INH+RIF+EMB+PZA+ETH	1 (0.06)	1 (0.08)	0 (0.00)	0 (0.00)
INH+RIF+SM+KAN+AMI+CAP	1 (0.06)	0 (0.00)	1 (0.29)	0 (0.00)
Resistance to two drugs (except MDR)	35 (2.10)	25 (1.94)	8 (2.35)	2 (5.26)
RIF+SM	2 (0.12)	1 (0.08)	1 (0.29)	0 (0.00)
RIF+EMB	1 (0.06)	0 (0.00)	1 (0.29)	0 (0.00)
INH+ETH	16 (0.96)	12 (0.93)	3 (0.88)	1 (2.63)
INH+SM	13 (0.78)	10 (0.78)	2 (0.59)	1 (2.63)
INH+EMB	1 (0.06)	1 (0.08)	0 (0.00)	0 (0.00)
SM+PAS	1 (0.06)	0 (0.00)	1 (0.29)	0 (0.00)
BDQ+CFZ	1 (0.06)	1 (0.08)	0 (0.00)	0 (0.00)
Resistance to three or more drugs	<b>11 (0.66)</b>	<b>8 (0.62)</b>	<b>3 (0.88)</b>	<b>0 (0.00)</b>
INH+EMB+SM	1 (0.06)	1 (0.08)	0 (0.00)	0 (0.00)
INH+SM+ETH	6 (0.36)	4 (0.31)	2 (0.59)	0 (0.00)
INH+SM+PAS	1 (0.06)	1 (0.08)	0 (0.00)	0 (0.00)
SM+KAN+AMI+CAP	1 (0.06)	0 (0.00)	1 (0.29)	0 (0.00)
INH+SM+KAN+AMI+CAP	2 (0.12)	2 (0.16)	0 (0.00)	0 (0.00)
Pan drug susceptible	1,445 (86.6)	1,137 (88.1)	275 (80.9)	33 (86.8)

**Note.** INH, isoniazid; RIF, rifampicin; PZA, pyrazinamide; EMB, ethambutol; SM, streptomycin; FQs, fluoroquinolones; ETH, ethionamide; KAN, kanamycin; AMI, amikacin; CAP, capreomycin; BDQ, bedaquiline; CFZ, clofazimine.

**Supplementary Table S2.** Drug resistance rates between three lineages (*n*, %)

Drug resistance type	lineage3	lineage4	lineage2	$\chi^2$	P value
Any drug resistance	40 (8.7) <sup>a</sup>	40 (9.0) <sup>b</sup>	143 (18.6) <sup>ab</sup>	33.899	< 0.001
First line drugs					
Isoniazid	29 (6.3) <sup>a</sup>	21 (4.8) <sup>b</sup>	74 (9.6) <sup>ab</sup>	10.840	0.004
Rifampin	6 (1.3) <sup>a</sup>	12 (2.7) <sup>b</sup>	37 (4.8) <sup>ab</sup>	11.710	0.003
Ethambutol	3 (0.7)	1 (0.2)	11 (1.4)	Fisher	0.092
Pyrazinamide	1 (0.2)	1 (0.2)	5 (0.7)	Fisher	0.495
Streptomycin	6 (1.3) <sup>a</sup>	10 (2.3) <sup>b</sup>	84 (10.9) <sup>ab</sup>	62.053	< 0.001
Second line drugs					
Fluoroquinolones	2 (0.4)	4 (0.9)	6 (0.8)	Fisher	0.708
Ethionamide	5 (1.1)	8 (1.8)	12 (1.6)	0.825	0.683

**Note.** <sup>a</sup>Means statistically significant between lineage3 and lineage; <sup>b</sup>Means statistically significant between lineage4 and lineage2. No statistical difference in the resistance rates of lineage3 and lineage4. Amikacin, kanamycin, capreomycin, bedaquiline, clofazimine, and linezolid were excluded because the number of drug-resistant strains is too low.