**Supplementary**

Table S1: Frequency of 1st and 2nd line TB-drug resistance mutations

|  |  |  |  |
| --- | --- | --- | --- |
| Drug | Gene Muation | Frequency | Percentage |
| Rifampicin | rpoB\_p.His445Tyr | 1 | 2.3  |
|  | rpoB\_p.Ser450Leu | 20 | 45.5  |
|  | rpoB\_p.Asn437Asp | 1 | 2.3  |
|  | rpoB\_p.Asp435Gly | 2 | 4.5  |
|  | rpoB\_p.Leu430Pro | 2 | 4.5  |
|  | rpoB\_p.Leu452Pro | 5 | 11.4  |
|  | rpoB\_p.Asp435Tyr | 2 | 4.5  |
|  | rpoB\_p.Met434Ile | 1 | 2.3  |
|  | rpoB\_p.Gln432Pro | 1 | 2.3  |
|  | rpoB\_p.Asp435Tyr | 2 | 4.5  |
|  | rpoB\_p.Ser441Leu | 1 | 2.3  |
|  | rpoC\_p.Leu527Val | 1 | 2.3  |
|  | rpoB\_p.Ser450Val | 1 | 2.3  |
|  | rpoB\_c.1295\_1303del | 1 | 2.3  |
|  | rpoB\_p.Asp435Val | 1 | 2.3  |
|  | rpoB\_p.His445Leu | 1 | 2.3  |
|  | rpoB\_p.His445Arg | 1 | 2.3  |
| Isoniazid | fabG1\_c.-15C>T | 7 | 16.3  |
|  | fabG1\_c.-17G>T | 2 | 4.7  |
|  | fabG1\_c.-8T>C | 2 | 4.7  |
|  | inhA\_p.Ser94Ala | 2 | 4.7  |
|  | katG\_p.Ala106Val | 1 | 2.3  |
|  | katG\_p.Ser315Asn | 1 | 2.3  |
|  | katG\_p.Ser315Thr | 27 | 62.8  |
|  | katG\_p.Thr394Ala  | 1 | 2.3  |
| Pyrazinamide | pncA\_c.140\_143del | 1 | 5.6  |
|  | pncA\_c.421\_421del | 2 | 11.1  |
|  | pncA\_c.523\_524insGGAGA | 1 | 5.6  |
|  | pncA\_Chromosome:g.2288682\_2288710del | 1 | 5.6  |
|  | pncA\_Chromosome:g.2288682\_2289052del | 1 | 5.6  |
|  | pncA\_p.Ala146Thr | 1 | 5.6  |
|  | pncA\_p.Asp12Glu | 1 | 5.6  |
|  | pncA\_p.Leu151Ser | 1 | 5.6  |
|  | pncA\_p.Leu85Arg | 1 | 5.6  |
|  | pncA\_p.Ser67Pro | 1 | 5.6  |
|  | pncA\_p.Thr135Pro | 4 | 22.2  |
|  | pncA\_p.Thr76Pro | 1 | 5.6  |
|  | pncA\_p.Trp68Cys | 1 | 5.6  |
|  | pncA\_p.Val155Gly | 1 | 5.6  |
| Ethambutol | embB\_p.Gln497Arg | 5 | 16.7  |
|  | embB\_p.Gln497Pro | 1 | 3.3  |
|  | embB\_p.Gly406Ala | 1 | 3.3  |
|  | embB\_p.Gly406Asp | 2 | 6.7  |
|  | embB\_p.Gly406Ser | 1 | 3.3  |
|  | embB\_p.Met306Ile | 6 | 20.0  |
| 　 | embB\_p.Met306Val | 14 | 46.7  |

2nd line TB drugs

|  |  |  |  |
| --- | --- | --- | --- |
| Drug | Gene muation | Frequency | Percentage |
| Streptomycin | gid\_c.115\_115del | 1 | 5.6  |
|  | rpsL\_p.Lys43Arg | 14 | 77.8  |
|  | rpsL\_p.Lys88Arg | 1 | 5.6  |
|  | rrs\_r.514a>c | 2 | 11.1  |
| Quinolones | gyrA\_p.Ala90Val | 4 | 18.2  |
|  | gyrA\_p.Asp94Ala | 4 | 18.2  |
|  | gyrA\_p.Asp94Asn | 1 | 4.5  |
|  | gyrA\_p.Asp94Gly | 11 | 50.0  |
|  | gyrA\_p.Ser91Pro | 1 | 4.5  |
|  | gyrB\_p.Glu501Asp | 1 | 4.5  |
| Aminoglycosides | rrs\_r.1401a>g | 10 | 100.0  |
| prothionamide | ethA\_c.1299\_1300insG | 1 | 4.8  |
|  | ethA\_c.364\_365insA | 1 | 4.8  |
|  | ethA\_c.820\_830del | 3 | 14.3  |
|  | ethA\_c.821\_831del | 1 | 4.8  |
|  | ethA\_Chromosome:g.4326004\_4326574del | 1 | 4.8  |
|  | ethA\_Chromosome:g.4326086\_4327547del | 1 | 4.8  |
|  | fabG1\_c.-15C>T | 7 | 33.3  |
|  | fabG1\_c.-17G>T | 2 | 9.5  |
|  | fabG1\_c.-8T>C | 2 | 9.5  |
|  | inhA\_p.Ser94Ala | 2 | 9.5  |
| PAS | folC\_p.Ser150Gly | 1 | 12.5  |
|  | thyA\_p.Thr22Ala | 1 | 12.5  |
|  | thyX\_c.-16C>T | 6 | 75.0  |
| CS | ald\_c.460\_460del | 1 | 100.0  |
| Linezolid | rrl\_r.2814g>t | 1 | 100.0  |