# Mycobacterium Tuberculosis Sequencing Report

## Summary

* Software:
  + TB-Profiler1 v{{ version }}
  + tbAnalyzer v1.0
* Analysis Date: {{ date }}
* Strain type: {{ sublineage }}
* Resistance: {{ drtype }}

## Resistance

* Resistance is reported if a resistance-associated mutation has been found. Individual mutations are listed as well as their confidence values as reported in the WHO catalogue2

|  |  |  |  |
| --- | --- | --- | --- |
| Drug | Mutations | WHO confidence | Interpretation |
| Isoniazid | {{ isoniazid\_variants }} | {{ isoniazid\_confidence }} | {{ isoniazid\_interpretation }} |
| Rifampicin | {{ rifampicin\_variants }} | {{ rifampicin\_confidence }} | {{ rifampicin\_interpretation }} |
| Ethambutol | {{ ethambutol\_variants }} | {{ ethambutol\_confidence }} | {{ ethambutol\_interpretation }} |
| Pyrazinamide | {{ pyrazinamide\_variants }} | {{ pyrazinamide\_confidence }} | {{ pyrazinamide\_interpretation }} |
| Streptomycin | {{ streptomycin\_variants }} | {{ streptomycin\_confidence }} | {{ streptomycin\_interpretation }} |
| Fluoroquinolones  - Levofloxacin  - Moxifloxacin | {{ levofloxacin\_variants }}  {{ moxifloxacin\_variants }} | {{ levofloxacin\_confidence }}  {{ moxifloxacin\_confidence }} | {{ levofloxacin\_interpretation }}  {{ moxifloxacin\_interpretation }} |
| SLIDs  - Amikacin  - Kanamycin  - Capreomycin | {{ amikacin\_variants }}  {{ kanamycin\_variants }}  {{ capreomycin\_variants }} | {{ amikacin\_confidence }}  {{ kanamycin\_confidence }}  {{ capreomycin\_confidence }} | {{ amikacin\_interpretation }}  {{ kanamycin\_interpretation }}  {{ capreomycin\_interpretation }} |
| p-aminosalicylic acid | {{ para\_aminosalicylic\_acid\_variants }} | {{ para\_aminosalicylic\_acid\_confidence }} | {{ para\_aminosalicylic\_acid\_interpretation }} |
| Ethionamide | {{ ethionamide\_variants }} | {{ ethionamide\_confidence }} | {{ ethionamide\_interpretation }} |
| Cycloserine | {{ cycloserine\_variants }} | {{ cycloserine\_confidence }} | {{ cycloserine\_interpretation }} |
| Linezolid | {{ linezolid\_variants }} | {{ linezolid\_confidence }} | {{ linezolid\_interpretation }} |
| Bedaquiline | {{ bedaquiline\_variants }} | {{ bedaquiline\_confidence }} | {{ bedaquiline\_interpretation }} |
| Delamanid | {{ delamanid\_variants }} | {{ delamanid\_confidence }} | {{ delamanid\_interpretation }} |

## References

* Ohio Paper Here
* Phelan, J., O’Sullivan, D.M., Machado, D. et al. Integrating informatics tools and portable sequencing technology for rapid detection of resistance to anti-tuberculous drugs. Genome Med 11, 41 (2019). <https://doi.org/10.1186/s13073-019-0650-x>
* Catalogue of mutations in Mycobacterium tuberculosis complex and their association with drug resistance. Geneva: World Health Organization; 2021. Licence: CC BY-NC-SA 3.0 IGO.