

**Patient Name :** Demo Patient Name  
**Age / Sex :** 62 Y / F  
**Referred By :** DEMO HOSPITAL  
**Centre :** HOD Head Office

**Lab No :** Demo Visit No  
**Registration On :** 05-Nov-24 08:57  
**Patient ID :** UHID.DEMO.001

## Xpert MTB/XDR

**Accession No:** DEMO\_BARCODE **Collected On:** 05-Nov-24 08:57 **Received On:** 06-Nov-24 16:29 **Approved On:** 07-Nov-24 17:46

Observation	Result	Unit	Biological Ref. Interval	Method
Mycobacterium Tuberculosis Complex (MTBC)	MTB Not Detected			Nested real-time polymerase chain reaction (PCR)
Isoniazid (INH) Resistance	Not Detected			Nested real-time polymerase chain reaction (PCR)
Fluoroquinolone (FLQ) Resistance	Not Detected			Nested real-time polymerase chain reaction (PCR)
Amikacin (AMK) Resistance	Not Detected			Nested real-time polymerase chain reaction (PCR)
Kanamycin (KAN) Resistance	Not Detected			Nested real-time polymerase chain reaction (PCR)
Capreomycin (CAP) Resistance	Not Detected			Nested real-time polymerase chain reaction (PCR)
Ethionamide (ETH) Resistance	Not Detected			Nested real-time polymerase chain reaction (PCR)



**Patient Name :** Demo Patient Name  
**Age / Sex :** 62 Y / F  
**Referred By :** DEMO HOSPITAL  
**Centre :** HOD Head Office

**Lab No :** Demo Visit No  
**Registration On :** 05-Nov-24 08:57  
**Patient ID :** UHID.DEMO.001

**Interpretation:**

Drug	Drug Resistance Determining Gene Target	Result
Isoniazid (INH)	<ul style="list-style-type: none"><li>Inh A promoter</li><li>Kat G</li><li>Inh A promoter</li><li>FabG-1</li><li>OxyR-ahpc intergenic region</li></ul>	Mutations contributing to INH resistance have been detected in one or more of the following genes: katG, fabG1, oxyR-ahpC intergenic region and inhA promoter
Fluoroquinolone (FLQ)	<ul style="list-style-type: none"><li>gyrA</li><li>gyrB</li></ul>	Mutations contributing to FLQ resistance have been detected in one or more of the following genes: gyrA and gyrB quinolone resistance determining regions (QRDR)
Amikacin (AMK)	<ul style="list-style-type: none"><li>rrs</li><li>eis promoter</li></ul>	Mutations contributing to AMK resistance have been detected in one or more of the following genes: rrs gene and eis promoter
Kanamycin (KAN)	<ul style="list-style-type: none"><li>rrs</li><li>eis promoter</li></ul>	Mutations contributing to KAN resistance have been detected in one or more of the following genes: rrs gene and eis promoter
Capreomycin (CAP)	<ul style="list-style-type: none"><li>rrs</li></ul>	Mutations contributing to CAP resistance have been detected in the following gene: rrs gene
Ethionamide (ETH)	<ul style="list-style-type: none"><li>Inh A promoter</li></ul>	Mutations contributing to ETH resistance have been detected in the following gene: Inh A promoter

**Clinical Notes:**

- GeneXpert MTB/XDR Resistance test is a real time nested PCR assay for the detection of extensively drug resistant(XDR) Mycobacterium tuberculosis complex DNA in a sputum or cultured growth of Mycobacterium tuberculosis complex.
- Mutations or polymorphisms in primer or probe binding regions may affect detection of new or unknown XDR- TB strains resulting in drug susceptible result.
- This test does not confirm the susceptibility to INH, FLQ, AMK, KAN, CAP and ETH since mechanism of resistance other than those detected by assay may exist that may be associated with lack of clinical response to treatment.
- A negative test does not exclude the possibility of isolating MTB complex DNA from the sputum sample. The Genexpert MTB/ XDR Assay may be used in conjunction with mycobacterial culture to address the risk of false negative results and to recover the organism for further characterization and susceptibility testing
- Limit of detection is approximately 136 CFU/ mL in unprocessed sputum.
- It does not distinguish between species of Mycobacteria tuberculosis complex nor detects atypical Mycobacteria.
- This assay should not be used for monitoring the efficacy of anti-tubercular treatment.
- Specimens with "MTB Trace DETECTED" results when tested with the Xpert MTB/RIF Ultra Assay are expected to be below the Limit of Detection of the MTB/XDR Assay, and are not recommended for testing with the Xpert MTB/XDR Assay.
- Presence of deletions or rare mutations in any of the target genes could lead to "INDETERMINATE" results for a particular drug.

**Advise:** Please correlate results clinically.



This is a Demo Signature  
and the doctor's signature should appear here

*In case of any unexpected or alarming results, please contact us immediately for re-confirmation, clarifications, and rectifications, if needed.*

