

PathoDetect Kit

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In news– Pune-based Mylab Discovery Solutions private limited has launched PathoDetect Kit for TB detection recently.

What PathoDetect Kit?

- It simultaneously detects multiple drug resistance to Rifampicin and Isoniazid in a single test (**tuberculosis and multidrug-resistant tuberculosis**).
- Mylab had received Central Drugs Standard Control Organisation CDSCO, TB Expert Committee and ICMR approval for the first indigenous TB Detection kit to detect tuberculosis.
- The kit has been named PathoDetect MTB RIF and INH drug resistance kit.
- The kit is an RT-PCR-based kit for accurate detection and will be used with Mylab Compact device systems – which will allow automated testing of multiple samples within two hours.
- The entire project was estimated at a cost Rs 275-300 crore and the test kit will cost Rs 650. This PathoDetect kit combined with the Mylab Compact device platform will fill the current gaps in tuberculosis testing,
- With automation, the complete testing process can be done even in rural areas with the mobile molecular lab.
- The test kits have been designed to work in ambient temperatures compared to existing PCR options which needed 2-8 degrees cold storage.
- The TBConnect App – an Integrated TB Workflow app from diagnostics to treatment – will also directly push results to the central grid and needs no manual upload.
- Presently there are two different tests to be conducted: one to detect TB and the other to check drug resistance – against only one drug (Rifampicin). With this kit,

there will be no liquid handling and it is a cartridge-based system.

Note:

- Annually, 20 lakh new cases of TB are detected and around 4.9 lakh deaths are reported every year due to the disease.
- data indicates 25% of the global cases of TB were in India and there is a 5-18 per cent death rate in drug resistance.
- Mylab and Serum Institute of India have come together to create a unique Cy-Tb solution which is Fast, Accurate, and Cost Effective.
- The Drug Controller General of India has granted market authorisation to SII's Cy-TB kit which can be used as skin test for diagnosis of latent tuberculosis.

Further

reading:

<https://journalsofindia.com/world-tuberculosis-tb-day-2022/>