

Moderate complexity automated by NAAT

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What is NAAT?

Nucleic Acid Amplification Test or NAAT is type of viral diagnostic method used for identifying the virus and the extent of damage that it has done to the body.

What is it used for?

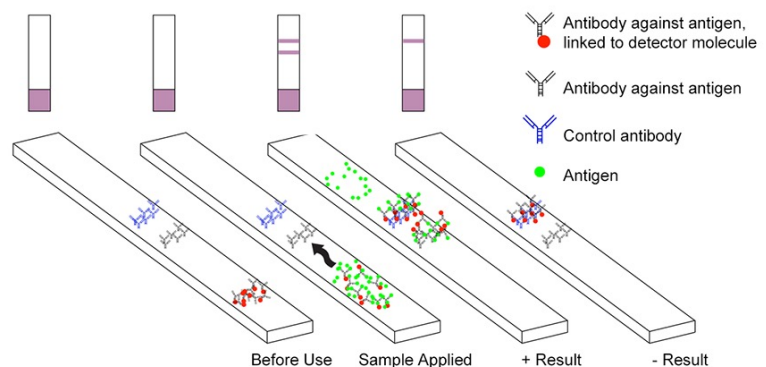
NAAT serves as a diagnostic test for conditions&diseases like CF, Covid,TB etc. It was operational from **JANUARY 2014**.

Rifampicin-susceptible TB

Rifampicin-resistant TB (RR-TB) defined as resistance to rifampicin detected using genotypic or phenotypic methods with or without resistance to other first-line anti-TB drugs. MDR-TB/RR-TB has been an area of growing concern to human health worldwide and posing a threat to the control of TB.

How does NAAT work?

The NAAT procedure works **by first amplifying - or making many copies of - the virus's genetic material, if any is present in a person's specimen**. Amplifying those nucleic acids enables NAATs to detect very small amounts of viruses in a specimen, making these tests highly sensitive for diagnosing.



New type of NAAT in field!

Globally, isoniazid-resistant, rifampicin-susceptible TB is estimated to occur in 13.1% (95% confidence interval [CI]: 9.9–16.9%) of new cases and 17.4% (95% CI: 0.5–54.0%) of previously treated cases. Several manufacturers have developed **moderate complexity automated NAATs for detection of TB and resistance to rifampicin and isoniazid** on high throughput platforms for use in laboratories. The tests belonging to this class are faster and less complex to perform than phenotypic culture-based drug susceptibility testing (DST) and line-probe assays (LPA). They have the advantage of being largely automated following the sample preparation step. Moderate complexity automated NAATs may be used as an initial test for detection of TB and resistance to both first-line TB drugs simultaneously (rifampicin and isoniazid).



