North Shore LIJ Laboratories

TECHNICAL BULLETIN

Effective Date: April 15th, 2015

Mycobacterium tuberculosis Complex PCR and rifampin resistance detection

North Shore-LIJ Laboratories only orderable test for MTB PCR and rifampin resistance detection is **MTBPCR**.

This test will be automatically performed on AFB smear positive respiratory specimens. Requests outside of the scope of regular testing have to go through consultation with the Director of Infectious Disease Diagnostics.
Contact: (516) 719-1079, (516) 224-8505, or (516) 719-8595.

Results will be reported as **detected**, **not detected**, or **indeterminate** (inhibitory). An indeterminate result cannot be resolved as detected or not detected due to interference or nonspecific signal; if necessary an additional specimen should be collected and tested.

MTB PCR and rifampin resistance detection (MTB/RIF assay by GeneXpert®) is an amplified nucleic acid test that uses PCR for the qualitative detection and identification of *Mycobacterium tuberculosis* Complex DNA in sputum. The assay will detect but not differentiate between the species of the MTB-complex (i.e., *M. tuberculosis*, *M. bovis*, *M. africanum*, *M. canettii*, *M. microti*, *M. caprae*, *M. pinnipedi*, *M. mungi*, and *M. orygis*).

This assay also will detect mutations of the *rpoB* gene associated with rifampin resistance. Resistance to rifampin is often an indication of multidrug resistance to tuberculosis. Molecular resistance detection must be confirmed by a reference laboratory (NYS-DOH).

This assay replaces the former *Mycobacterium tuberculosis* Complex Amplified Probe (D DTB)

The specimen requirements for this test are concentrated sediments from induced or expectorated sputum, AFB smear positive.

If you have any questions, please contact Client Services at (516) 719-1100.