



LABORATORY ALLIANCE
of Central New York, LLC
www.laboratoryalliance.com

To: Infectious Disease Clinicians
Infection Control Practitioners

From: Paul Granato, Ph.D., Director of Microbiology

Date: February 19, 2015

Subject: Use of Xpert MTB/RIF Test for Respiratory Precautions

Since early 2014, Laboratory Alliance of CNY has been performing the Xpert MTB/RIF PCR test on sputum specimens submitted to the Microbiology department for acid fast smear and culture.

The Xpert MTB/RIF assay is a direct specimen PCR test that is FDA-cleared for detecting *Mycobacterium tuberculosis* complex in sputum. In addition, the assay can also detect the presence of the *rpo* gene in MTB-positive specimens which is a surrogate marker of rifampin resistance, indicating that the MTB is a likely multi-drug resistant strain.

The FDA has recently cleared the Xpert MTB/RIF assay for use in the decision-making process for removing hospitalized patients from respiratory isolation who are suspected of having pulmonary MTB infection. Studies have shown that a single negative Xpert MTB/RIF test result has a negative predictive value (NPV) of 99.7%, while two consecutive negative Xpert MTB/RIF test results have a NPV of 100%. As such, the use of the Xpert MTB/RIF test will allow for the early removal of patients from respiratory isolation compared to the use of conventional smear/cultural methods.

Please do not hesitate to contact me (Email: paulgranatophd@lacny.com or Tel: 315-410-7036) if you have any questions or concerns.