

3.24.14

- **Mycobacteriology laboratory expands service offering**
- **New test to differentiate *Mycobacterium tuberculosis* complex species**
- ***Mycobacterium avium* complex Combo MIC methodology change**
- **Pharmacokinetics test offering**

Dear Valued Client:

There is much activity at National Jewish Health[®] Advanced Diagnostic Laboratories, and we want to make sure you are aware of some important changes.

Expanded Mycobacteriology Laboratory Services

The mycobacteriology laboratory identifies mycobacterial species and performs antimicrobial susceptibility testing for *M. tuberculosis* complex and for nontuberculous mycobacteria (NTM), including Minimal Inhibitory Concentrations (MICs) and combination MICs for NTM. We also offer molecular tuberculosis testing (nucleic acid amplification and multidrug resistant tuberculosis screen) from respiratory and non-respiratory specimens, including cerebrospinal fluid specimens and formalin-fixed embedded tissue blocks seven days a week.

Species Differentiation for *Mycobacterium tuberculosis* complex: Test Code MTB7

Effective April 15, 2014, the mycobacteriology laboratory will provide species differentiation for *Mycobacterium tuberculosis* complex strains using a line probe assay and replacing a legacy platform that provided a Yes or No answer for *M. tuberculosis* complex only.

The list price for MTB7 is \$185, and the CPT code is 87556. This test will be run seven days a week. For your convenience, a copy of the mycobacteriology requisition from which you can order the test is enclosed. This requisition also will be available as a fillable pdf on njlabs.org on April 15, 2014.

The *Mycobacterium tuberculosis* complex consists of the closely related organisms *M. tuberculosis*, *M. africanum*, *M. bovis*, *M. bovis* BCG, and a few additional species rarely identified in the U.S. The accurate molecular species identification within the *Mycobacterium tuberculosis* complex is paramount to guide public health and primary care decisions more effectively. Contact tracing can be different in cases of *M. tuberculosis* and *M. bovis*. Additionally, unnecessary pyrazinamide treatment can be rapidly excluded from the treatment regimen in the case of *M. bovis*, or *M. bovis* BCG since they are naturally resistant to pyrazinamide.

The distribution of the various species is as follows and may vary according to the patient population served: *M. tuberculosis* (95%), *M. bovis* (2%), *M. bovis* BCG (1.5%), and others (1.5%).

Mycobacterium bovis Calmette-Guerin (BCG) is a live-attenuated strain of *M. bovis*. In addition to its well-known use as a vaccine against tuberculosis overseas, BCG is still the most effective agent for the treatment of transitional cell carcinoma of the bladder. Patients with BCG disease are typically first encountered by a primary care or emergency room physician, sometimes months or years after the last exposure to BCG.

M. bovis causes disease in cattle, deer and other mammals. In humans, consumption of unpasteurized infected cow's milk products can cause infection, as well as transmission from an infectious TB patient harboring *M. bovis* bacilli.

***Mycobacterium avium* Complex Combo MIC Methodology Change**

Effective May 1, 2014, the mycobacteriology laboratory will run MIC combination testing for *Mycobacterium avium* complex strains with a microtiter platform, instead of utilizing a macro-broth-based system. The new platform allows for the determination of the single MIC for rifampin and ethambutol at the same time as the combination MIC for these two compounds, shortening the overall turnaround time significantly.

The list price remains \$305.70 for the 8-drug MIC and \$427.98 for the 12-drug MIC. However, this methodology change does impact the CPT codes, as indicated below.

Test Name	Test Code	CPT Code(s) prior to May 1	CPT Code(s) after May 1
8-drug MIC	NTM1	87188x9	87188x6, 87186
12-drug MIC	NTM2	87188x13	87188x10, 87186

Pharmacokinetics Test Offering

The pharmacokinetics laboratory performs therapeutic drug monitoring for anti-mycobacterial, anti-fungal and anti-retroviral compounds, and measures 25-Hydroxyvitamin D and cortisol serum levels.

For your convenience, a copy of the pharmacokinetics requisition is included with this letter. This form also is available as a fillable pdf on njlabs.org.

We appreciate your continued support of National Jewish Health Advanced Diagnostic Laboratories. Please contact any of our team members listed on the contact information flier included with this mailing if you have any questions or would like additional information regarding these changes.

Sincerely,



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