

National Jewish Health Advanced Diagnostic Laboratories Launches Molecular Assay for NTM Drug Resistance

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DENVER — National Jewish Health Advanced Diagnostic Laboratories has launched a new line probe assay to rapidly detect nontuberculous mycobacteria (NTM) infections and identify NTM species and drug-resistance markers at a molecular level within 48 hours after obtaining a sample from culture. It is the first and only laboratory in the United States to offer such a test.



NTM are ubiquitous in the environment and related to *Mycobacterium tuberculosis*, the cause of tuberculosis, although NTM infections are not transmitted person-to-person. In 2018, NTM lung disease was diagnosed in an estimated 75,000 to 105,000 patients in the United States. Among individuals 65 years of age and older, NTM prevalence is rising 8 percent each year.

“NTM prevalence continues to increase worldwide,” said Charles L. Daley, MD, chief of Mycobacterial & Respiratory Infections at National Jewish Health. “Precise identification of NTM species is crucial to effective treatment since treatment outcomes vary significantly by species.”

“CF patients are particularly vulnerable to NTM infections,” said Jerry Nick, MD, director of the Adult Cystic Fibrosis Program at National Jewish Health. “The faster and more accurately we can identify patterns of drug resistance in NTM species from CF patients, the better we can treat the infection, which can be life-threatening.”

The NTM-DR line probe assay is an accurate test that allows rapid differentiation of *M. tuberculosis* from several frequently encountered NTM species, including the slowly growing *M. avium*, *M. intracellulare*, and *M. chimaera* species as well as several rapidly growing mycobacteria, including *M. abscessus* and its subspecies.

In addition to species and subspecies identification of frequently encountered NTM, this line probe assay identifies genetic markers associated with macrolide and aminoglycoside resistance, two important drugs used for the treatment of NTM infections.

Rapid NTM identification and drug resistance testing is performed 7 days a week. For more information, please visit njlabs.org and search for the AFB6 test.

National Jewish Health is the leading respiratory hospital in the nation. Founded 120 years ago as a nonprofit hospital, National Jewish Health today is the only facility in the world dedicated exclusively to groundbreaking medical research and treatment of patients with respiratory, cardiac, immune and related disorders. Patients and families come to National Jewish Health from around the world to receive cutting-edge, comprehensive, coordinated care. To learn more, visit the media resources page.

Media Contacts

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