

# **MMDx** Heart

# The Molecular Microscope® Diagnostic System (MMDx®) for Heart Transplant Patients

As part of your transplant journey, your doctor may recommend a biopsy to assess the health of your heart. A biopsy will provide information that your clinical team can use to guide your post-transplant treatment and to detect any signs of rejection.

A biopsy is typically performed as an out-patient procedure with local anesthetic. During the procedure, a very small sample is taken from your heart.

Based on a decade of research, MMDx Heart is a cutting-edge test for transplant biopsies. It will help your clinical team make an accurate diagnosis and smart decisions about your treatment.

#### What is MMDx Heart?

When your doctor performs a biopsy, they may decide to use MMDx Heart test, a test designed to assess the health of your transplant.

The process is very straightforward. Your biopsy sample is sent to a reference lab, where the MMDx Heart test is used to measure the expression levels of specific genes in your transplanted organ.

If your transplanted heart is injured or being damaged by your immune system, specific genes are "expressed" by the heart: information encoded in DNA is transcribed by the cell to mRNA (messenger RNA).

By detecting and reading the patterns in the mRNA, **MMDx Heart can recognize rejection or injury** in the molecules of your heart. This information may help your doctor to determine if you need treatment and, if necessary, quickly and accurately individualize your treatment options.

## How does this help me?

This test helps your clinical team by providing additional information regarding the health of your transplanted heart.

MMDx Heart can distinguish rejection or injury at the molecular level. If other diagnostic tests have proved inconclusive, MMDx Heart may help your doctor determine whether you need additional treatment. If you do, the precise and objective information provided by **MMDx Heart can help your doctor recommend a treatment plan that's personalized for you.** 

## Does this mean I need another biopsy?

No, this can be done with your scheduled biopsy, which is either for surveillance or is requested by your doctor.

#### What will this cost me?

Like any diagnostic procedure, the cost of the test may vary based on your insurance and/or healthcare provider.

If you're interested in trying MMDx Heart for your next biopsy, ask your doctor to inquire about the cost. The dedicated team at the MMDx reference lab will support your doctor in the prior authorization and billing appeal process.

#### Is MMDx covered by my insurance provider?

A growing number of insurance companies are reimbursing the cost of MMDx Heart, including Medicare. The reference lab that runs the MMDx Heart test has a dedicated team who works closely with patients, physicians, and insurance companies to obtain coverage through accurate billing requests and appeals.

# How do I get MMDx?

Ask your physician if MMDx Heart is appropriate for your next biopsy. A specimen kit can be ordered at thermofisher.com/onelambda/mmdx.

# How quickly will I get my results?

Your doctor will receive your test results within 48 hours after the reference lab receives your biopsy sample.



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