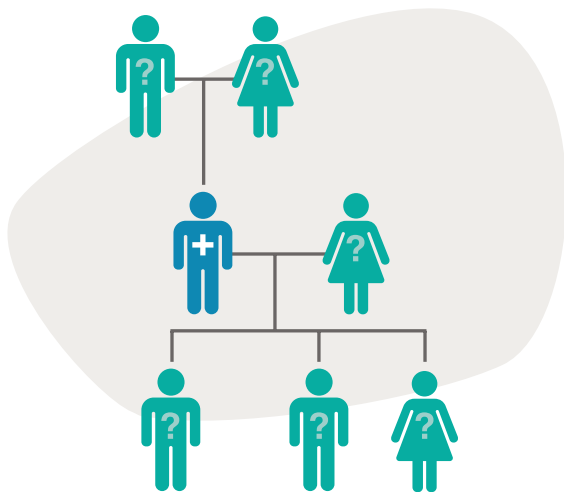


WHO SHOULD CONSIDER GENETIC TESTING?

Genetic testing may be appropriate if you have a known or suspected diagnosis of one or more of the following:²⁻⁷

- unexplained arrhythmia
- cardiomyopathy
- sudden and unexplained cardiac arrest
- conditions that affect the aorta
- hypercholesterolemia
- pulmonary hypertension
- congenital heart disease
- a family member with one of the above conditions whose genetic cause is already known



For more information on the benefits of genetic testing, please visit www.invitae.com/patients.

²Priori, SG, et al. *Heart Rhythm*. 2013; 10:e85-108.

³Ackerman, MJ, et al. *Heart Rhythm*. 2011; 8:1308-39.

⁴Goldberg AC, et al. *J Clin Lipidol*. 2011; 3:133-40.

⁵Hiratzka, LF, et al. *Circulation*. 2010; 121:e266-369.

⁶McLaughlin, VV, et al. *J Am Coll Cardiol*. 2009; 53:1573-619.

⁷Richards AA, Garg V. *Current Cardiology Reviews*. 2010; 6:91-97.

SIMPLE BILLING, NO SURPRISES

WITHIN THE UNITED STATES

INSURANCE

Invitae will work directly with your insurance company to coordinate coverage and payment. Regardless of whether our laboratory is in-network or out-of-network with your insurance provider, Invitae is committed to making genetic testing affordable. Typically patients pay no more than \$100 out of pocket for one of our tests. If you receive a bill for more than \$100, please call us at 800-436-3037 to discuss payment options.

PATIENT PAY

You have the option to pay \$250 for your genetic testing. This option requires upfront payment before test results are released. In addition, your clinician must place the order online and provide your e-mail address so we can send you a link to pay online using a credit card.

MEDICARE & FINANCIAL ASSISTANCE

Invitae accepts Medicare and Medicaid. We may also be able to offer testing at limited or no expense to those who qualify for need-based assistance.

For further information, please contact Client Services at clientservices@invitae.com or 800-436-3037.

OUTSIDE THE UNITED STATES

PATIENT PAY

You have the option to pay \$250 for your genetic testing. This option requires upfront payment before test results are released. In addition, your clinician must place the order online and provide your e-mail address so we can send you a link to pay online using a credit card.

INSTITUTIONAL BILLING

Invitae will work with your institution to set up a contract if one is not already in place.

For complete billing information, please visit www.invitae.com/billing.

This guide applies only to gene and panel testing; for exome testing please see the Invitae exome patient guide.



INVITAE

Genetic testing for
hereditary heart conditions

THE GENETICS OF HEART CONDITIONS

About one-third of all adults in the US will develop some form of heart condition during their lifetimes.¹ Many types of heart conditions occur due to a combination of risk factors; some are hereditary.

Hereditary heart conditions occur as a result of disease-associated genetic variations—also called pathogenic variants—that we inherit in our DNA. Hereditary heart conditions are often diagnosed at a young age and may affect many people in a family.

HOW CAN GENETIC TESTING HELP ME?

Knowledge is a powerful tool when it comes to hereditary heart conditions. People with certain types of heart conditions may benefit from diagnostic genetic testing to better understand risks, confirm a diagnosis, or inform an appropriate medical management plan—or a combination of all three.

Genetic testing for heart conditions is recommended by medical societies including the American Heart Association, American College of Cardiology, and Heart Rhythm Society.

A single test can affect several lives.

¹Mozaffarian, D, *et al.* Heart disease and stroke statistics—2015 update: a report from the American Heart Association. *Circulation*. 2015; 131:e29-322.

WHAT ARE THE BENEFITS OF GENETIC TESTING?

Genetic testing produces information that may help you or your healthcare provider:

- establish or confirm your specific diagnosis
- provide an explanation of the underlying cause of your heart condition
- uncover potential risk of developing an underlying, multisystem condition that affects more than your heart
- make informed medical decisions and provide an opportunity to start risk reduction strategies
- identify other at-risk relatives for whom genetic testing is recommended
- make informed family planning decisions

WHAT ARE THE POTENTIAL RESULTS?

POSITIVE

If testing identifies a variant associated with heart disease, consult with your healthcare provider to create a management plan and to identify relatives who may need to be tested.

NEGATIVE

If testing identifies no variants associated with a hereditary heart disease, the underlying cause of your heart condition remains unknown. As our knowledge of genetics improves, additional genetic testing may become available.

VARIANT OF UNCERTAIN SIGNIFICANCE

In some cases, testing can identify a variant, but it is not known at this time whether the variant is associated with heart disease. If new information about your family history of heart conditions becomes available, this could change what your test results mean for you and your relatives. Always let your healthcare provider know if there are any updates regarding your family medical history.

HOW DOES IT WORK?

Invitae's clinical genetic tests must be ordered by a healthcare professional. Once your healthcare provider orders the test, you will provide either a blood or a saliva sample.

Invitae will conduct the testing at its San Francisco laboratory, and return the results to your healthcare provider within 10–21 days on average.

Your healthcare provider will then discuss the results with you, along with any risk reduction steps you—or your family members—can take based on your individual results.

NOTES:

Learn more at www.invitae.com/patients.