Hereditary Cardiovascular Disease

Sequencing

Cardiovascular diseases affect the heart and blood vessels and can impact the heart's ability to supply blood to the body. This report tests 44 genes associated with hereditary cardiovascular diseases, including arrhythmia syndromes, aortic and other blood vessel syndromes, cardiomyopathies, and high cholesterol and heart attack.

YOUR RESULTS

Genetic findings that increase your risk

Variant detected in the MYBPC3 gene

Variants in the MYBPC3 gene are associated with familial hypertrophic cardiomyopathy, which increases the risk for cardiovascular disease.

What does this result mean?

Your risk

Your results indicate an increased risk of developing symptoms related to a genetic cardiovascular condition. It does not mean that you have or will definitely develop symptoms of cardiovascular disease.

Talk to a clinician

It is important to discuss your result with a clinician. A clinician can work with you to create a personalized risk management plan, which may include additional screenings, medications, and lifestyle modifications.

Impact on your family

Since you share DNA with your family, they may also have the same genetic variant(s) – especially close family members, like your parents, siblings, and children.

More details about these results

GENE

MYBPC3

VARIANT

c.772G>A [1 copy]

ASSOCIATED CONDITION(S)

Familial Hypertrophic Cardiomyopathy

Familial hypertrophic cardiomyopathy (HCM) is an inherited condition in which the heart muscle becomes too thick, making it harder for the heart to pump blood to the rest of the body. Although some people have no symptoms, others have symptoms such as chest pain, shortness of breath, heart palpitations, and lightheadedness. Over time, HCM can lead to complications such as abnormal heart rhythms (arrhythmias), heart failure, and sudden cardiac death. Symptoms usually develop in young adulthood but can appear anytime.

In most cases, having just one MYBPC3 variant is sufficient to increase a person's risk for familial HCM.

Please have your clinician refer to **your Clinical Sequencing lab report** for any clinical use, also linked below in the **About this test** section. This test cannot determine whether multiple variants, if detected, were inherited from only one parent or from both parents. This may impact how these variants are passed down and their clinical significance.

What can I do to manage my cardiovascular disease risk?

Your result is associated with an increased risk for cardiovascular disease, but there are things you can do that may help protect your heart and vascular health. Talk with a clinician about next steps that may be right for you.

What does this result mean for family members?

Since you share DNA with your family members, they may also have the same genetic variant(s) as you.

It is important to share your results with family members since it may help them identify any cardiovascular risks sooner. A healthcare professional, such as a doctor or genetic counselor, can help them decide if genetic testing is right for them.

These conversations can be challenging, and whether to share your results is a personal decision. **See this article** for important questions to consider.

If you are planning a family, a genetic counselor or your doctor can help you understand risk to future children and what options may be available.

What should I do next?

Schedule a consultation

A clinical consultation is included in your 23andMe+ Total Health membership. During this consultation, a clinician can answer questions about your results and how they relate to your personal and family medical histories, and can help create a risk management plan tailored to you.

Go to 23andMe Clinic

View your Clinical Sequencing lab report

Your clinical lab report is prepared by Fulgent Genetics and contains a summary of your genetic results from exome sequencing. You can save and print it to keep for your records or share with healthcare professionals.

View clinical lab report

Genes and their associated conditions

Genetic cardiovascular conditions associated with each gene analyzed in this report.

Gene analyzed	Associated genetic conditions
ACTA2	Familial Thoracic Aortic Aneurysm and Dissection*
ACTC1	Familial Hypertrophic Cardiomyopathy*
APOB	Familial Hypercholesterolemia*
APOE	Type III Hyperlipoproteinemia*
BAG3	Familial Dilated Cardiomyopathy* and Myofibrillar Myopathy*
CALM1	Catecholaminergic Polymorphic Ventricular Tachycardia* and Long QT Syndrome*
CALM2	Catecholaminergic Polymorphic Ventricular Tachycardia* and Long QT Syndrome*
CALM3	Catecholaminergic Polymorphic Ventricular Tachycardia* and Long QT Syndrome*
CASQ2	Catecholaminergic Polymorphic Ventricular Tachycardia*
COL3A1	Ehlers-Danlos Syndrome, Vascular Type*
DES	Familial Dilated Cardiomyopathy* and Myofibrillar Myopathy*
DSC2	Arrhythmogenic Right Ventricular Cardiomyopathy*
DSG2	Arrhythmogenic Right Ventricular Cardiomyopathy*
DSP	Arrhythmogenic Right Ventricular Cardiomyopathy*; and Dilated Cardiomyopathy with Wooly Hair, Palmoplantar Keratoderma, and Tooth Agenesis*
FBN1	Marfan Syndrome*
FLNC	Familial Dilated Cardiomyopathy* and Myofibrillar Myopathy*
KCNH2	Long QT Syndrome*
KCNQ1	Long QT Syndrome*
LDLR	Familial Hypercholesterolemia*
LDLRAP1	Familial Hypercholesterolemia*
LMNA	Familial Dilated Cardiomyopathy*
MYBPC3	Familial Hypertrophic Cardiomyopathy*
MYH11	Familial Thoracic Aortic Aneurysm and Dissection*
MYH7	Familial Dilated Cardiomyopathy* and Familial Hypertrophic Cardiomyopathy*
MYL2	Familial Hypertrophic Cardiomyopathy*
MYL3	Familial Hypertrophic Cardiomyopathy*
PCSK9	Familial Hypercholesterolemia*
PKP2	Arrhythmogenic Right Ventricular Cardiomyopathy*
PRKAG2	Familial Hypertrophic Cardiomyopathy*
RBM20	Familial Dilated Cardiomyopathy*
RYR2	Catecholaminergic Polymorphic Ventricular Tachycardia*
SCN5A	Brugada Syndrome*, Familial Dilated Cardiomyopathy*, and Long QT Syndrome*
SMAD3	Loeys-Dietz Syndrome*
TGFB2	Loeys-Dietz Syndrome*
TGFB3	Loeys-Dietz Syndrome*
TGFBR1	Loeys-Dietz Syndrome*
TGFBR2	Loeys-Dietz Syndrome*
TMEM43	Arrhythmogenic Right Ventricular Cardiomyopathy*
TNNC1	Familial Dilated Cardiomyopathy* and Familial Hypertrophic Cardiomyopathy*
TNNI3	Familial Hypertrophic Cardiomyopathy*
TNNT2	Familial Dilated Cardiomyopathy* and Familial Hypertrophic Cardiomyopathy*
TPM1	Familial Hypertrophic Cardiomyopathy*
TRDN	Catecholaminergic Polymorphic Ventricular Tachycardia* and Long QT Syndrome*
TTN	Familial Dilated Cardiomyopathy*

About this test

This test was performed by Fulgent Genetics for 23andMe. For more details about the test methodologies, performance, and limitations, **view your clinical lab report**.

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