## Preventable Sudden Death

due to a Heart Arrhythmia

Sudden death can be caused by a heart arrhythmia, which is an abnormality in the heart's electrical conduction system that can affect newborns, children, and adults. Many times this abnormality is caused by a change in a gene that a person is born with.

Unfortunately, people who are born with this abnormal gene usually do not have any symptoms, and the first presentation of the condition is death itself. Therefore, without genetic testing they remain unaware of this life-threatening predisposition.

Once a healthcare professional knows about the condition, however, heart arrhythmias can be treated, and sudden death <u>can likely be prevented</u> through various interventions, such as medications.

If a person has a change in a gene associated with sudden death, his or her risk of death increases even further during exercise. If you've ever heard a news story about an athlete who collapsed and died while exercising or playing a sport, many times it is because the person's genes were predisposing him or her to sudden death, and because no one knew of this predisposition, death could not be prevented.

It is important to remember that the analysis covered by this report only evaluated the data that was provided from your genetic test. If data was not provided then it was not included in the analysis. Some types of genetic tests provide more data than others and you may also want to discuss your genetic testing options with a healthcare professional if you want to confirm that your genetic testing provided comprehensive data on genes associated with sudden death.

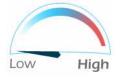
### Your Genetic Assessment

You are <u>NOT</u> predisposed to Sudden Death



#### Clinical Significance

This potential condition can have a <u>very significant</u> impact upon your health & wellness.



### Your Risk of Sudden Death

You do <u>not</u> have any variations in genes that are associated with sudden death due to a heart arrhythmia.



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#### Actionability

Preventive measures have been shown to help prevent or delay the progression of this condition.

# **Genetically Tailored Prevention**

#### **Additional Information**

- You are not predisposed to sudden death due to a heart arrhythmia.
- This analysis included both rare and more common genetic causes of sudden death due to an abnormal heartbeat, including:
  - Hypertrophic Cardiomyopathy (HCM)
  - o Dilated Cardiomyopathy (DCM)
  - o Restrictive Cardiomyopathy (RCM)
  - Long QT Syndrome (LQTS)
  - Arrhythmogenic Right Ventricular Dysplasia (ARVD)
  - o Brugada Syndrome
  - Catecholaminergic Polymorphic Ventricular Tachycardia (CPVT)
- ✤ It is important to understand that you may still be at risk of sudden death from other causes that were not assessed here. For instance, you may have cholesterol build-up in the arteries that feed your heart (known as coronary artery disease, or CAD), which would put you at risk of sudden death due to a heart attack. Your healthcare provider will be able to screen you for both early and late stage heart disease and, if necessary, implement interventions.

#### Additional Resources

- Here are some additional resources you can use if you would like to learn more about sudden death due to heart arrhythmias:
  - Sudden Arrhythmia Death Syndromes Foundation: <u>www.sads.org</u>
  - Cardiac Arrhythmias Research and Education Foundation (C.A.R.E.): <u>www.longqt.org</u>
  - Hypertrophic Cardiomyopathy Association: <u>www.4hcm.org</u>
  - Mayo Clinic Hypertrophic Cardiomyopathy Page: www.mayoclinic.org/hypertrophiccardiomyopathy