Atrial Fibrillation

Atrial fibrillation, sometimes called AFib or AF, is a common type of arrhythmia, or irregular heartbeat. It occurs when the atria (the two upper chambers of the heart) beat irregularly. People with atrial fibrillation have a higher risk for blood clots, stroke, and heart failure.

Jamie, we could not determine your result for this report.

This report is intended to provide a genetic likelihood estimate for this condition. However, many of the variants used to calculate your result could not be determined.

This can be caused by random test error or other factors that interfere with the test.

Ways to take action

Your overall likelihood of developing atrial fibrillation also depends on other factors, including lifestyle. Experts agree that healthy lifestyle habits can help lower the chances of developing this condition.

- Maintain a healthy weight
- Avoid smoking
- Limit alcohol consumption

Start taking action

About atrial fibrillation

What is atrial fibrillation?

Normally, the two upper chambers of the heart (the atria) pump blood into the two lower chambers of the heart (the ventricles) at a steady beat. Then the ventricles pump blood to the rest of the body.

Atrial fibrillation occurs when the atria beat fast and irregularly, which causes the atria and the ventricles to be uncoordinated. This can lead to heart palpitations (feelings of the heart fluttering, pounding, or skipping a beat). In addition, when the atria beat irregularly, they can’t pump blood effectively into the ventricles, so the ventricles may have to work harder to pump blood to the rest of the body.
not pump as much blood to the rest of the body. This can lead to dizziness, fatigue, or chest pain.

**How can atrial fibrillation impact your health?**

When the heart is not pumping properly, blood can pool in the atria. This increases the risk for blood clots, which can lead to a stroke. Additionally, atrial fibrillation may weaken the heart muscles, which can lead to heart failure.

**Other factors that can impact your chances of developing atrial fibrillation**

It is estimated that up to six million Americans have atrial fibrillation. Besides genetics, weight, and lifestyle, some factors that can increase a person’s chances of developing atrial fibrillation include:

- Age (this condition becomes more common as people get older)
- Family history of atrial fibrillation or a related arrhythmia called atrial flutter
- Certain health conditions (including high blood pressure and overactive thyroid)
- Currently taking certain medications

**Keep in mind**

This report does not diagnose atrial fibrillation. It also does not provide information about or diagnose other types of irregular heartbeats (arrhythmias). Consult with a healthcare professional if you are concerned about your likelihood of developing atrial fibrillation, have a personal or family history of atrial fibrillation or atrial flutter, or before making any major lifestyle changes.

If you have already been diagnosed with atrial fibrillation by a healthcare professional, it is important to continue any treatment plans, including medications and lifestyle modifications, that they prescribe.

The likelihood of developing atrial fibrillation also depends on other factors, including age, weight, and family history.

This report does not account for every possible genetic variant that could affect your likelihood of developing atrial fibrillation, and it does not include rare genetic variants that have a large impact on the likelihood of developing this condition.

This report is based on a genetic model created using data from 23andMe research participants and has not been clinically validated.

**How we got your result**

**Methods**

This report is based on a statistical model that takes into account your genetic results at 2,946 genetic markers, along with the ethnicity and sex you reported in your account settings, to estimate the likelihood of developing atrial fibrillation or atrial flutter. We used data from 23andMe research participants to calculate this estimate. Results and estimates may be updated over time as the model or scientific understanding about this condition improves.

**About the result**

People whose result is associated with odds of developing atrial fibrillation that are at least 1.5 times higher than average are considered to have an increased likelihood. Between 5% and 20% of individuals receive an "increased likelihood" result, depending on ethnicity. These results are based on thousands of genetic markers, and random test error at one or more of these markers can lead to a small margin of error in your estimated likelihood of developing atrial fibrillation. For people whose estimates are near the boundary between typical and increased likelihood, this margin of error may introduce some uncertainty about whether their estimated likelihood is considered "typical" or "increased".
Scientific validity across ethnicities
We verified that the model meets our scientific standards for individuals of European, Hispanic/Latino, East/Southeast Asian, South Asian, Sub-Saharan African/African American, and Northern African/Central & Western Asian descent.

How we may use ethnicity and sex to customize this result
• If you indicated in your account settings that you are of European, Hispanic/Latino, East/Southeast Asian, South Asian, Sub-Saharan African/African American, or Northern African/Central & Western Asian (Middle Eastern) descent, your result is tailored based on data from individuals of that ancestry.

• Otherwise, your result may be based on data from individuals of European descent because there is not enough data from individuals of your ancestry at this time. Data from individuals of European descent is used because the most data is available for this population.

• Your Atrial Fibrillation result also takes into account the sex you indicated in your account settings.

See our white paper to learn more about the science behind this report.

Read More:

“Atrial Fibrillation.” Am Fam Physician. 2016 Sep 15;94(6):online. *


Gorenèk B et al. (2017). "European Heart Rhythm Association (EHRA)/European Association of Cardiovascular Prevention and Rehabilitation (EACPR) position paper on how to prevent atrial fibrillation endorsed by the Heart Rhythm Society (HRS) and Asia Pacific Heart Rhythm Society (APHRS)." Eur J Prev Cardiol. 24(1):4-40. *

