**What Does A Pathogenic Variant(s) Identified Or A Variant(s) Of Likely Pathogenic Result Mean?**

The result means that a mutation, or a genetic change, was identified in a specific gene that increases the lifetime chance of developing certain cancers. Your personal results contain more detailed risk information specific to the mutation identified in your genes. This result does not mean that you have cancer or that you will definitely develop cancer in your lifetime.

**What Does No Known Pathogenic Variant(s) Identified Result Mean?**

The result means that no variant or genetic change known to be associated with or predicted to be associated with, based on current knowledge and test methods, disease(s) is identified. Sometimes, variant(s) of unknown significance (VUS) is included in the report. VUS are variants that do not fit into pathogenic, likely pathogenic, or benign classifications according to ACMG and/or other relevant professional standards, or the criteria for pathogenic (likely pathogenic) and benign are contradictory for the variant.

**Who Will See My Test Results?**

Your results are available to you and the healthcare provider who ordered your test, as well as any additional providers you designated. Your results will not be sent by Otogenetics to your insurance company, employer, or any other healthcare provider without your explicit request.

**Should I Share My Results With My Healthcare Provider?**

It is recommended that you share your results with your healthcare provider. Sharing your results allows your provider to guide you to appropriate resources and discuss tailored options for cancer screening and prevention.

**Are There Any Protections Against Discrimination Based On These Results?**

In 2008, a federal law called the Genetic Information Non-Discrimination Act (GINA) was passed. Under the terms of GINA, medical insurance companies and employers are prohibited from discriminating against individuals on the basis of genetic information. GINA defines genetic information as including not only genetic test results, but also family cancer history, and the fact that genetic testing occurred. The terms of GINA specify that insurance companies cannot raise rates, cancel a plan, or determine eligibility because of genetic testing. Employers also are prohibited from making hiring, firing, or promotion decisions based on genetic testing. The terms of GINA carry exceptions. For example, an exception might include employers with fewer than 15 employees and those with military insurance. Additionally, GINA does not extend to life, disability, or long-term insurance companies. Some states may have protections regarding discrimination from these types of insurance. Individuals may consider purchasing these policies prior to undergoing genetic testing.

**CANCER RISKS**

**If There Is No One In My Family Who Had Cancer, Do I Still Have An Increased Risk?**

Yes. This result means your chance of developing certain cancers over your lifetime is higher than that of an average person your age, regardless of your family history. We encourage you to speak with your healthcare provider and to schedule an appointment with a board-certified genetic counselor.
What Does Your Test Result Mean?

How Can I Reduce My Risk Of Developing Cancer?
You and your healthcare provider can use this information to make a personalized screening and prevention plan. Following your plan may lower your chance of developing cancer or may increase the chance that any cancer detected will be diagnosed when it is at an earlier and more treatable stage. For more detailed information about some of the options that your healthcare provider could discuss with you, see the screening guidelines provided in your results. Please keep in mind that there is no right or wrong option when deciding on a plan to reduce your risk of developing cancer. It is a very personal choice.

Does This Result Mean That I Need To Have Surgery?
You and your healthcare provider should discuss options for women with a BRCA1 mutation, or other pathogenic mutation(s). Surgery may be one way to help reduce the risk of developing certain cancers. However, your age and other factors influence which risk-reduction strategy may be best for you at this time. Screening measures and risk-reducing medications other than surgery may also be available. If you have questions, speak with your healthcare provider.

How Did I Get A Mutation?
Both men and women can have and pass on a mutation or mutations in a gene or genes. You may have inherited the mutation from either your mother or your father. Based on this genetic analysis alone, it is not possible to determine how you inherited this mutation. In rare instances, a mutation could originate with you and would not be present in your mother or father. However, the great majority of gene mutations are passed from generation to generation. Please keep in mind that parents do not choose to pass a specific gene mutation to their children. Your risk of cancer is not affected by whether a mutation was passed to you from your father or your mother.

ABOUT FAMILY
Should I Talk With My Relatives About My Result?
You are encouraged to share these results with your relatives. It is normal to feel some anxiety about this. But knowing this information may help your relatives understand their own future risk of developing cancer, which may help them prevent a cancer or detect it early. However, keep in mind that not everyone wants to know their cancer genetic status and genetic testing is a personal decision. Talking about genetic test results and their impact on the family is an ongoing discussion rather than a one-time conversation.

Who Specifically In My Family Should Also Get Tested?
Mutations in the certain genes are inherited in a dominant fashion. This means that each of your siblings and children has a 50% chance of having inherited the same mutation. This mutation was likely inherited from one of your parents. If they choose to undergo testing, this can determine which side of your extended family is also at risk to have the same mutation(s). It is typically recommended that an individual undergo genetic testing at an age at which it will impact their medical care. In children <18 years, genetic testing is generally not recommended when results would not impact medical management.

Pathogenic: causing or capable of causing disease