

Genetic testing for hereditary cancer first starts with a genetic consultation to collect and analyze the personal and/or family history of cancer. If a pattern suggestive of hereditary cancer is identified, then genetic testing may be considered for further clarification or confirmation of the specific cancer risks.

Depending on the history, it may be recommended that a specific individual in the family is the first to undergo the genetic testing. Whenever possible, it is recommended to initiate testing in a family member who has had a diagnosis of cancer most suggestive of hereditary causes, since this is the most likely person to have a mutation identified through the testing. However, we understand that this is not always possible, such as when the family member is deceased or is otherwise unable or unwilling to undergo the testing.

If a cancer-associated gene mutation has previously been identified in the family, then testing can be targeted to that specific mutation with the ability to definitively confirm or rule out increased risk. If no prior testing has been done, then genetic testing may include one or a few specific genes that are strongly suspected based on the history. Alternatively, in some cases, more broad panels to include testing of multiple genes may be considered.

To help understand the possible results, it is important to have a brief background about what genetic testing looks for. Each of our genes is made up of a string of thousands of letters. These letters make up an instruction manual for how to build a protein, and the proteins are what is actually making our body function how it should. Genetic testing generally looks at genes through sequencing and deletion/duplication analysis. Most of the genes that we associate with hereditary cancer risk make proteins that help our bodies prevent various types of cancer from forming.

- My results are positive what does that mean?
- My results are negative what does that mean?
- My results say I have a variant of uncertain significance what does that mean?

Click here to learn more about scheduling a genetic counseling appointment for questions about hereditary cancer predisposition.

Additional Resources

*Positive Results Facebook Group

Genetic Support Foundation hosts a Facebook group for Hereditary Cancer Support and



Resources. Get trusted information and join a community of support.

*Cascade Screening Connector

Genetic Support Foundation has partnered with the Washington State Department of Health to provide cascade screening to help people identify and contact family members who may have an increased chance of developing cancer.

*FORCE (Facing Our Risk of Cancer Empowered)

The FORCE mission is to improve the lives of individuals and families facing hereditary cancer. Resources include peer navigation and expert-reviewed information. *<u>AliveAndKickn</u>AliveAndKickn is a nonprofit working to improve the lives of individuals and families affected by Lynch Syndrome and associated cancers through research, education, and screening.

*Health Experiences USAThis national research project brings patient voices into the healthcare experience and features video clips of people facing hereditary cancer. Individuals from a variety of backgrounds share both positive and negative experiences about living with hereditary cancer.

Related Articles

• Sporadic vs. Inherited Cancers

Research over the past few decades has shown that genes play a key role in the development and behavior of cancers. In short, genes are the instructions that tell our cells how to grow and function to keep us healthy. Therefore, changes within those instructions can cause cells to lose...

Why Consider Genetic Testing for Cancer Risk?

There are several reasons why someone may consider genetic testing for hereditary cancer predisposition, which are outlined below. High-Risk Screening and Risk Management One of the primary benefits of knowing about hereditary cancer risk is the ability to take control of that risk in partnership with your healthcare team. Genetic...

Common Concerns about Genetic Testing

Genetic testing for cancer risk is a very personal decision, and is not right for everyone. Some people are concerned about the benefits versus potential risks, while others are more concerned with insurance or privacy issues. Click below to learn more about these common concerns pertaining to genetic testing: Will...

• DNA Banking

If genetic testing is performed but does not identify a harmful genetic variant, or if testing is declined for any reason, DNA banking is another resource available to



ensure the ability for future genetic testing of one's DNA. This is primarily for the benefit of family members, and can allow...

• Breast Cancer

Breast cancer is a complicated disease, and there is no single explanation for it. In the vast majority of breast cancer, the cause is likely some genetics, some environmental factors (such as exposures to to toxins and/or chemicals), and a lot of it is just bad luck. In most cases...