



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 testing and clarification of hereditary risk for cancer helps to guide recommendations and decisions for appropriate medical management, cancer screening, and cancer prevention approaches. High-risk cancer screening may include earlier and/or more frequent screenings to try to detect cancer at the earliest, most treatable stages. Surgery or medications may also be available to reduce the overall risk of developing cancer. Specific recommendations should be discussed with your providers.

Potential to Rule Out Increased Risk

If the cancers in a family are caused by a [known mutation](#), and testing rules out that mutation in a family member (a true [negative](#) result), then his or her cancer risk should be no greater than the population risk and high-risk screening is no longer necessary. Further, his or her children would also not be at risk for the mutation.

Cancer Treatment Decisions

As our understanding of the relationship between genetics and cancer expands, so does the range of cancer treatment options. Many new cancer treatments are being studied and developed to target particular types of genetic mutations found in cancers (both inherited and not inherited). This important work is helping to make treatments more personalized and effective.

Further, individuals with hereditary cancer risk may be at higher risk to develop a second cancer in the future. In planning the treatment course for a current diagnosis, knowledge of genetic risk may influence decisions about the type or extent of current treatments (for example, some people may consider more extensive surgery, such as bilateral mastectomies, to remove the current tumor as well as prevent the development of a future cancer). Also, some mutations are known to cause increased sensitivity to treatment-related side effects (such as radiation-induced damage), which may guide the treatment plan toward safer approaches.



Information for Family Members

For individuals who already have a diagnosis of cancer, another common concern is the implications for the health of loved ones. Genetic testing is most helpful when first performed in an individual who has had the cancer of concern (if a mutation exists in the family, this is where testing is most likely to positively identify it). If a causative mutation is [identified](#), then testing of at-risk family members becomes much more straightforward to definitively confirm or rule out the associated cancer risks. If, on the other hand, testing does not confirm hereditary risk in a person with the cancer of concern, then further testing of family members is not usually recommended or useful, and family members should be followed based on the history of cancer in the family.

Click [here](#) to learn more about scheduling a genetic counseling appointment for questions about hereditary cancer predisposition.

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...

- [Genetic Testing for Hereditary Cancer](#)

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...

- [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...



Why Consider Genetic Testing for Cancer Risk?

- [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 toxins and/or chemicals), and a lot of it is just bad luck. In most cases...