

# The Genetics of Hereditary Cancer

Did you know that many cancers are hereditary, and your genetic code is the key to unlocking your risk?

# Our very own **PrecisionGU** genetic testing may help you:

- Predict your risk for a variety of diseases.
- Determine if your children may inherit this risk.
- § Gain peace of mind.
- More precisely guide your health care decision making.



Finding out if you have an inherited risk:

- § May explain your personal and/or family history of cancer.
- \$ Helps your doctor make informed decisions about potential treatments and surveillance.
- Clarifies your risk for developing other cancers and the need for additional screening options for early diagnosis.
- Suggests other relatives who may benefit from genetic testing.

## **Hereditary Cancer**

- \$ Is caused by a mutation in one or more of a person's genes.
- \$ Is passed down from a parent to a child.
- § Often occurs at an earlier age and can be more aggressive.

#### What to Know if Considering Genetic Testing

Genetic testing can give you valuable information and is a very personal decision.

With **PrecisionGU**, Michigan Institute of Urology:

- \$ Uses innovative, state-of-the-art resources to determine if genetic testing is right for you.
- \$ Can guide you through your decision-making process.
- \$ Helps you understand your genetic makeup to give you peace of mind and empower you to make more informed healthcare decisions.

You own your results so you may also show them to a genetic counselor to get additional advice.

To see if you are a candidate for **PrecisionGU** genetic testing, speak with your urologist or a navigator from MIU.

#### For more information:

Call: (586) 701-9965

Email: GeneticsNavigator@michiganurology.com

Visit: michiganurology.com





#### What Information Will Genetic Testing Provide?

Genetic testing may provide valuable information if you are:

- Worried about possibly getting certain cancers because of your family medical history.
- Worried about a cancer that was just diagnosed.
- Surrently being treated for cancer.

#### Results

If your test does not show a genetic mutation, this means you are not any more likely to get that cancer just based on your genes.

While this does not guarantee you will not develop cancer, a negative result can bring peace of mind.

If your test is positive, showing a mutation, there is a 50% chance that parents, siblings, and children also have this same mutation. In addition, you may be at increased risk for other cancers separate from the one that was already diagnosed.

### What Are the Potential Results from Genetic Testing?

There are three possible test results:

**Positive** 

An inherited gene mutation was found that may increase your risk for certain cancers.

**Negative** 

No mutations were found in the genes tested. Your risk for developing cancer may be based on other factors such as your personal or family medical history.

Variant of Uncertain Significance A VUS result indicates a change in at least one of the genes tested. However, scientific knowledge does not yet provide enough information about whether this change increases your risk for certain cancers. This result should not be used to guide your medical care.

Your doctor will discuss the implications of your genetic test findings in relation to your personal and family history.

#### How is Genetic Testing Done?

Genetic testing involves a simple blood test that looks for changes in your genetic profile.

- We will draw your blood at the Michigan Institute of Urology office you normally visit.
- We will process it in our own lab.
- We will customize the testing to your specific needs.



#### Who Should Have Genetic Testing?

Testing may be offered if you or a close relative have:

- § A diagnosis of high risk or metastatic prostate cancer.
- Prostate cancer diagnosed before age 60 or died of prostate cancer.
- Multiple relatives on the same side of the family with the same or associated cancers, such as breast, ovarian, pancreatic, prostate, colorectal, uterine, bladder, kidney, stomach, or melanoma.
- Ashkenazi Jewish ancestry.
- A known family history of an abnormal gene such as BRCA 1/2 or Lynch mutation.



