



Prostate Cancer Biomarkers and Family History

Conversations with your doctor about prostate cancer screening should begin at the age of 45. However, if you have a family history of prostate cancer, or if you are in a high-risk group as an African-American or a Veteran, those conversations should begin at the age of 40.

The most common, routine screening tool for prostate cancer is the prostate-specific antigen (PSA) test. This is a simple blood test that measures the presence of PSA in your bloodstream. This test is usually the first step in any prostate cancer diagnosis. However, the PSA blood test, by itself, cannot tell you if cancer is present.

Reasons you might have elevated PSA levels, other than cancer:

- Advanced age
- Prostatitis (inflammation of the prostate gland)
- Riding a bicycle
- Recent sex (within the past 48 hours)
- Supplements
- Urinary tract infection

What is a Biomarker?

A biomarker is a molecule found in blood, body fluids, or tissues that can signal a normal or abnormal process, or a condition or disease. PSA is a biomarker for the diagnosis and screening of prostate cancer and it was the first cancer biomarker approved by the FDA.

New biomarkers have been identified and developed to help doctors determine how likely it is that prostate cancer will be found in a biopsy. The goals of biomarker tests are to decrease unnecessary biopsies while increasing the likelihood of prostate cancer detection without missing a significant number of prostate cancers.

Additional Biomarker Tests

In addition to a PSA blood test, other biomarker tests are available to help you and your doctor decide if a biopsy should be taken. These tests can help patients gain information about their cancer and can aid in both the diagnosis and the decision on treatment. Some of these tests include:

PCA3 Test

- A urine test used to determine your risk of prostate cancer which more accurately detects the possibility of prostate cancer
- Used to determine the need for repeated biopsies

4Kscore® Test

- A blood test used to determine the risk of a patient having aggressive prostate cancer
- The test measures total PSA, free PSA, intact PSA, and certain enzymes called kallikrein

These tests, and others, should be used in conjunction with PSA tests, digital rectal exams (DRE), patient information, and biopsy information to provide a personalized risk assessment for patients. Always consult with your doctor and care team to determine the best steps for you.







Prostate Cancer Screening for High-Risk Men

Are You High Risk?

All men are at risk of developing prostate cancer at some time in their lives. However, you may be at increased risk if you:

- Have a family history of prostate, breast, colorectal, or ovarian cancer
- Are African-American
- Are a Veteran

Falling into one or more of these categories could increase your risk of developing prostate cancer or being diagnosed with more aggressive disease. Knowing your risk could help you detect prostate cancer in its earliest stages. Most men should begin discussing prostate cancer screening with their doctor at the age of 45, but those at higher risk should begin having those conversations at the age of 40.



Family History

Knowing your family history of prostate cancer and other cancers can help determine your risk since some genetic mutations for cancers overlap. Some families, and even some cultures, find it difficult to discuss health and cancer history. However, these conversations are important and may help save lives. Having these conversations can often deepen family bonds and bring everyone closer.

Genetic Testing

Genetic testing can be broken down into two types: germline and somatic. Germline testing focuses on finding inherited gene mutations in every cell of the body while somatic testing identifies mutations that only exist in the tumor.

| Germline Testing | Somatic Testing |
|--|---|
| Conducted on blood or saliva Identifies inherited gene mutations present in every cell of the body Provides eligibility for targeted therapies if cancer progresses Provides risk of additional cancers Offers information regarding family member's risk of developing cancer | Conducted on tissue or circulating tumor DNA in the blood Identifies gene mutations that exist only in the tumor Provides eligibility for targeted therapies if cancer progresses |

Talk to your healthcare provider or a genetic counselor about the pros and cons of genetic testing. Genetic testing is not for everyone, but learning more can help you make the best decisions for you and your family.



A ask the **DOCTOR**



Living with Prostate Cancer

What does it mean to "live" with prostate cancer? Well, for most men it means continuous and routine screening, learning ways to manage side effects of treatments, and discovering new ways to adapt to life after diagnosis. After a prostate cancer diagnosis, priorities regarding relationships, careers, or lifestyle may change.

There are more than three million prostate cancer survivors in the United States and each of them are on an individual journey to navigate their life with this disease.



What is Survivorship?

Survivorship focuses on the health and well-being of a person with cancer from the time of diagnosis until the end of life. This includes the physical, mental, emotional, social, and financial effects of cancer.

All patients who have completed primary cancer treatment should receive a comprehensive care summary and follow-up plan. The plan will inform you and your treatment team of the long-term effects of prostate cancer and its treatment, identify support resources in the community, and provide guidance on follow-up care, early detection, and health maintenance.

Survivorship Care Plan

- Should be provided to every cancer survivor after primary treatment
- Serves as a comprehensive care summary
- Provides a record of treatments and follow-up plan
- Acts as a roadmap to life after prostate cancer treatment

Below are tips that may help you maximize your quality of life after a prostate cancer diagnosis:

- Join a prostate cancer support group
- Connect with a prostate cancer advocacy organization
- Stay current on prostate cancer diagnosis and treatment advances
- Speak with a sexual health specialist
- Make time for what you really want
- Find ways to relax



- Exercise regularly
- Maintain a healthy weight
- Eat a healthy diet



ask the **DOCTOR**



Shared Decision Making

Shared Decision Making Defined

Shared decision making is a process in which patients and healthcare providers decide **together** the best plan of care based on the patient's values and goals. This approach involves clinicians and patients sharing the best available evidence, and patients are supported and encouraged to consider all options, with the goal of making the most informed decisions possible.



Ideally, shared decision making occurs in a stepby-step process. A treatment decision is based on many factors, but the provider must:

- Ask for patient input
- Provide an unbiased list of options, including pros and cons
- Understand the patient's values and preferences
- Decide, with the patient, on the best choice
- Continue open communication with the patient to determine if the best decision was made

Successful shared decision making is interactive, occurs in real-time, includes a mutual sharing of information, and allows time for understanding and weighing options. Sometimes, when appropriate, key family members may also be present and included in the discussions.

Why Shared Decision Making?

Shared decision making must be built on the core skills of good communication and can lead to patients:

- Learning more about the disease and treatment options
- Being more active in their healthcare decisions
- Choosing more conservative treatment options
- Improving health outcomes
- Staying on treatment longer

Resources aimed at improving shared decision making may include patient portals, decision tools, decision support toolkits, videos, guides, and more.



