Have you been diagnosed with **metastatic prostate cancer?**

It's important to know your **HRR*** **status**

Ask your care team about a **biomarker test** to learn about your HRR status.

*HRR = homologous recombination repair.

Made in paid consultation with:









LUNGEVITY







WHAT ARE HRR MUTATIONS

A biomarker test may

help identify HRR

mutations that may

affect your disease

A **biomarker** (short for biological marker) is found in the blood or tissue and measures what is happening in your cells. It can help identify whether your body can respond to certain treatments. This information may help you and your doctor find treatment options.

Every cell in your body contains thousands of genes, which are made up of DNA. One set of genes, called **homologous recombination repair (HRR) genes**, helps repair a type of damage to your DNA called "double-strand breaks."

Sometimes these HRR genes can have variations known as <u>mutations</u>, which can be found in patients with prostate cancer.

Getting a biomarker test can identify HRR gene mutations or other mutations in your cells and find out if cancer runs in your family. Make sure to talk to your **prostate cancer care team** about other tests you may need. They can use this information to help find treatment options for you.

There are 2 types of HRR mutations that may drive the disease:



INHERITED MUTATIONS

- Also known as germline mutations
- May be **passed down** from family members
- Found in **every cell** in the body



ACQUIRED MUTATIONS

- Also known as <u>somatic tumor</u> mutations
- May happen **at any point** in a person's life
- Only found in certain cells, like cancer cells

WHY GET TESTED

How molecular biomarker testing can help your care team treat metastatic prostate cancer



A <u>molecular biomarker test</u>

A molecular biomarker test can identify HRR mutations in a number of HRR genes. These genes include, but are not limited to:

ATM, ATR, BRCA1, BRCA2, BARD1, BRIP1, CDK12, CHEK2, FANCA, FANCL, MLH1, MRE11A, NBN, PALB2, RAD51B, RAD51C, RAD51D, and RAD54L



HRR mutations occur in about **1 in 4 men** with <u>metastatic</u> <u>castration-resistant</u> prostate cancer (<u>mCRPC</u>)[†]



KNOW YOUR FAMILY HISTORY

The risk of getting prostate cancer is **68% higher** if your father or one or more brothers has had it.

The National Comprehensive Cancer Network[®] (NCCN[®]) recommends ALL adults with <u>metastatic prostate cancer</u> receive a biomarker test that may identify HRR mutations.

*HRRm = HRR mutation.

[†]There are two types of metastatic prostate cancer: <u>Metastatic castration-resistant prostate cancer (mCRPC)</u>:

A type of prostate cancer that has spread to other parts of the body and does NOT respond to a hormone therapy or surgical treatment to lower testosterone.

Metastatic castration-sensitive prostate cancer (mCSPC):

A type of prostate cancer that has spread to other parts of the body and responds to a hormone therapy or surgical treatment to lower testosterone.



HOW THE TEST WORKS

Testing helps find out if HRR mutations are present, which can help your care team find treatment options for you



HOW TO GET TESTED

If you have metastatic prostate cancer, talk to your doctor about a test to learn more about your HRR status



Here's how a molecular biomarker test to identify HRR mutations works

HRR TESTS FOR INHERITED MUTATIONS

may involve testing saliva, blood, tumor samples,* and/or cheek swab (**buccal swab**).

HRR TESTS FOR ACQUIRED MUTATIONS

may involve testing a tumor sample.* If tumor testing isn't possible, blood plasma may be tested.

ALL ADULTS WITH METASTATIC PROSTATE CANCER

should be tested for **both** inherited and acquired mutations as close as possible to the time of diagnosis. Your doctor may decide whether further testing is required if your cancer progresses.

You should also be tested if you have a family history of certain cancers. Ask your care team if testing is right for you at any point in your journey.

MULTIGENE PANELS

Ask your prostate cancer care team about using a **<u>multigene panel</u>**, which is a biomarker testing panel that detects multiple inherited and acquired HRR mutations.

*Although tumor-based testing can identify both inherited and acquired mutations, it can't tell which type of mutation they are from.

For more resources, visit

www.ThisIsLivingWithCancer.com

The NCCN recommends that everyone diagnosed with metastatic prostate cancer get a biomarker test to identify HRR gene mutations.

Here are the steps you can take:



At diagnosis, **ask your prostate cancer care team** about getting a biomarker test to identify HRR gene mutations. While you're there, have your care team **schedule a test** if appropriate





If your disease progresses, **ask about retesting**, as it can impact your treatment plan

Questions to ask your prostate cancer care team

Take this list of questions to your next appointment with your care team to have a more productive conversation.

- What type of tests are needed?
- Can I be tested for both acquired and inherited HRR gene mutations?
- Are you using a multigene panel?
- How is the molecular biomarker test for HRR done?
- How do I get my test results, and when can we look at them together?

Knowing your HRR status helps your prostate cancer care team help you.





Here are some terms that appear in this brochure that may be helpful for you and your loved ones to know throughout your treatment journey.

Acquired mutation (somatic tumor): Mutations that are not inherited and can occur throughout life. Mutations are not fully random, as several risk factors for increased mutations exist.

Biomarkers: Substances, such as proteins, found in blood, other body fluids, or tissues that are signs of what's happening in cells or the body. They can alert your doctor that something may be wrong.

Buccal swab: A way to collect DNA cells inside the cheek by using a cotton swab.

HRR: Homologous recombination repair, a type of gene that repairs a type of damage to your DNA.

Inherited mutation (germline): A mutation that is passed down through family members.

Metastatic castration-resistant prostate cancer (mCRPC): A type of prostate cancer that has spread to other parts of the body and does NOT respond to a hormone therapy or surgical treatment to lower testosterone.

Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines[®]) for Prostate Cancer V.1.2025. © National Comprehensive Cancer Network, Inc. 2024. All rights reserved. Accessed December 4, 2024. To view the most recent and complete version of the guideline, go online to NCCN.org. NCCN makes no warranties of any kind whatsoever regarding their content, use or application and disclaims any responsibility for their application or use in any way.

Metastatic castration-sensitive prostate cancer (mCSPC):

A type of prostate cancer that has spread to other parts of the body and responds to a hormone therapy or surgical treatment to lower testosterone.

Metastatic prostate cancer: Prostate cancer that has spread to other parts of the body.

Molecular biomarker test: A test that helps doctors look at your genes to identify whether your body can respond to certain treatments, which could help you and your care team find treatment options.

Multigene panel: A multigene biomarker testing panel that detects inherited and acquired mutations.

Mutation: A variation in a gene.

Prostate cancer care team: A group of healthcare professionals involved in your care and treatment for prostate cancer. They may include a urologist, medical oncologist, genetic counselor, radiation oncologist, and nurse navigator.

