

# Informing Prostate Cancer Treatment Decisions: Genomic Testing to Define Your Risk



## How Do I Know My Risk of Aggressive Prostate Cancer?

If you're **newly diagnosed with prostate cancer**, you'll want to know: How serious is my cancer? What is the risk of the cancer spreading, or coming back after treatment? Your doctor will discuss with you this information about your cancer:

- ▶ PSA level
- ▶ Gleason score (from your biopsy)
- ▶ Stage: how much of the prostate is affected by the cancer (from MRI, PSMA PET/CT, and/or digital rectal exam)

If you've **already had a prostatectomy**, you and your doctor will consider whether more treatment is needed. Your doctor will discuss with you your pathology report and post-operative PSA levels.

In some cases, the standard methods of assessing risk of aggressive prostate cancer (such as PSA and Gleason score) may not provide enough information. Who needs treatment, when to treat, and how much treatment is needed are not always clear.

Genomic testing can supplement the information from your biopsy or radical prostatectomy to help you choose a treatment to lower your risk of poor outcomes.

## What is Genomic Testing?

*Genomic testing* refers to tests done to look at the genes inside a person's cancer cells to learn about the gene or protein changes in these cells which make them different from normal cells. Genomic testing is done on your biopsy tissue, or, if you've had surgery, from the prostate gland itself.

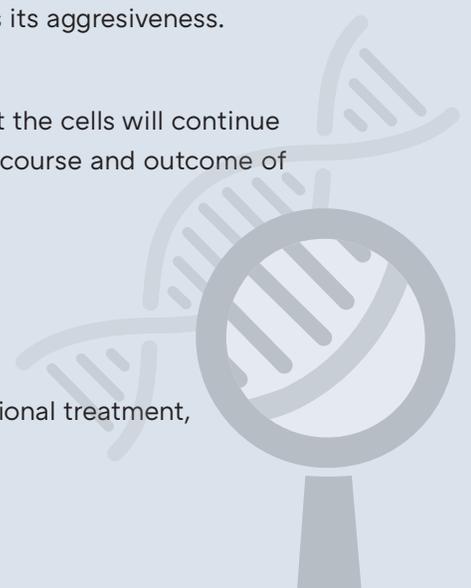
In general, these tests look at the *gene expression*, or activity, of specific genes known to be related to prostate cancer. This is a measure of how much the genes are "turned on" to make proteins in the cancer cells, and can provide extra information about the behavior of the disease, such as its aggressiveness.

## What Does Prostate Cancer Genomic Testing Tell Us?

Based on the genes in your cancer cells, genomic testing shows the likelihood that the cells will continue to divide and spread, and the cancer to progress. This is your prognosis (the likely course and outcome of your cancer), including:

- ▶ Risk of recurrence
- ▶ Risk of metastasis (spread)
- ▶ Risk of death from prostate cancer

Keep in mind that this is the risk **before** you have received any treatment (or additional treatment, in post-surgery patients).

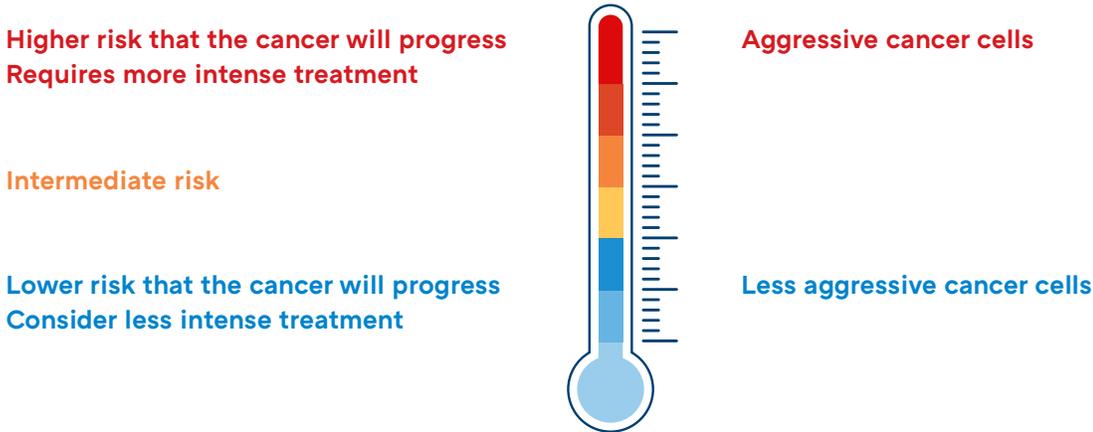




## How Do Genomic Testing Results Guide My Treatment Options?

Your result is reported as a number, or score. If you have a higher score (higher-risk cancer), you can opt for more treatment, or earlier treatment, to limit the risk of the cancer spreading or coming back. For example, hormone therapy can be added to radiation therapy.

If you have a lower score (lower-risk cancer), you can consider lower intensity, or delayed treatment. This can spare you from unnecessary side effects. For example, active surveillance may be preferred vs. immediate treatment with radiation therapy or surgery.



## How Do We Select a Test?

If you and your doctor have determined that genomic testing may help guide your care, there are several options. Experts generally recommend choosing a test with the highest level of scientific evidence to support its use.

Genomic testing is not the only factor in your treatment decisions. You and your doctor will need to consider all available information.

Go to [PCF.org](http://PCF.org) to learn more about choosing a treatment for your prostate cancer, and how genomic or other biomarker testing may inform your care.

