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# Your Prostate Pathology Report: Cancer (Adenocarcinoma)

pulled out it removes a small cylinder of prostate tissue, which is called a **core**. The doctor will typically remove cores from several different areas of the prostate during a biopsy.

The pathologist will give each core (biopsy sample) a number (or letter) in your pathology report, and each core will get its own diagnosis. If cancer or some other problem is found, it is often not in every core, so you need to look at the diagnoses for all of the cores to know what is going on.

### Adenocarcinoma and other types of prostate cancer

Adenocarcinoma is a type of cancer that develops in gland cells, such as the cells that make up most of the prostate. Adenocarcinoma is by far the most common type of cancer found in the prostate gland.

Much less common types of cancer that can start in the prostate include:

- Small cell neuroendocrine carcinoma
- Large cell neuroendocrine carcinoma
- Urothelial (transitional cell) carcinoma

The treatment and outlook for these rare cancers are typically different from those for prostate adenocarcinoma.

### If the biopsy report mentions intraductal carcinoma as well as regular prostate cancer (adenocarcinoma)...

If the biopsy finds prostate adenocarcinoma (the most common type of prostate cancer), an additional finding of <u>intraductal carcinoma</u><sup>3</sup> might affect the treatment options your doctor recommends.

If the biopsy shows **high-grade** adenocarcinoma (cancer), which is likely to grow quickly, finding intraductal carcinoma as well isn't likely to change your treatment options.

But if the biopsy shows a **low-grade** cancer (which is likely to grow slowly) and intraductal carcinoma is seen as well, your doctor might be more likely to recommend active treatment options such as surgery or radiation therapy, rather than active surveillance (not treating the cancer right away but watching it closely). This is because there's likely to be high-grade (fast growing) cancer somewhere in the prostate, even if it wasn't detected by the biopsy.

If your biopsy shows both intraductal carcinoma and prostate cancer (adenocarcinoma), discuss what this might mean with your doctor.

#### If the biopsy report mentions perineural invasion...

**Perineural invasion** means that cancer cells were seen surrounding or growing alongside a nerve fiber within the prostate.

When this is found on a biopsy, it means that there is a higher chance that the cancer has spread outside the prostate. Still, perineural invasion doesn't mean that the cancer

## Other findings that do not affect treatment or outlook if cancer is found

### High-grade prostatic intraepithelial neoplasia (PIN)

High-grade prostatic intraepithelial neoplasia (high-grade PIN) is a **pre-cancer** of the prostate.

If prostate cancer is found on the biopsy and high-grade PIN is mentioned as well, it doesn't affect a person's outlook or their treatment options. In this case, the term 'high-grade' refers to the PIN and not the cancer, so it has nothing to do with the Gleason score or how aggressive your cancer is.

### Acute inflammation (acute prostatitis) or chronic inflammation (chronic prostatitis)

Inflammation of the prostate is called **prostatitis**. (Acute means it started recently, whereas **chronic** means it's been going on for a while.)

Prostate inflammation can have different causes. Most often, prostatitis reported on biopsy does not need to be treated.

Inflammation (especially acute inflammation) might raise your prostate-specific antigen (PSA) blood level, but it is not linked to prostate cancer.

If prostate cancer is found on the biopsy and inflammation or prostatitis is mentioned as well, it doesn't affect a person's outlook or treatment options.

### Atrophy, adenosis, or atypical adenomatous hyperplasia

All of these are terms for benign (not cancer) conditions the pathologist might see under the microscope, but that sometimes can look like cancer.

Atrophy is a term used to describe a shrinkage of prostate tissue.

- **Diffuse atrophy** affects the entire prostate gland. This is most often caused by hormone treatment or radiation therapy to the prostate.
- Focal atrophy only affects certain areas of the prostate. Focal atrophy can

- AMACR (racemase)
- PIN4 cocktail
- ERG

All of these tests can be used to help diagnose prostate cancer. But not everyone needs them, so whether or not your report mentions these tests has no effect on the accuracy of your diagnosis.

# What if my doctor asks that a special molecular test be done on my biopsy specimen?

There are different reasons your doctor might order one of the newer types of tests that can be done on prostate biopsy samples. For example:

- Some tests can help tell how likely it is that a man has prostate cancer, even if cancer wasn't seen in the biopsy samples. This can help guide whether another biopsy should be considered.
- If prostate cancer has been found, some tests can help determine if certain treatments are likely to be helpful.

If your doctor advises one of these newer tests, ask them about the purpose of the test and what the results might tell you.

### Hyperlinks

- 1. <u>www.cancer.org/cancer/types/prostate-cancer.html</u>
- 2. <u>www.cancer.org/cancer/types/prostate-cancer/detection-diagnosis-staging/how-diagnosed.html</u>
- 3. <u>www.cancer.org/cancer/diagnosis-staging/tests/biopsy-and-cytology-</u> <u>tests/understanding-your-pathology-report/prostate-pathology/high-grade-</u> <u>prostatic-intraepithelial-neoplasia.html</u>
- 4. <u>www.cancer.org/cancer/diagnosis-staging/tests/biopsy-and-cytology-</u> <u>tests/understanding-your-pathology-report/prostate-pathology/atypical-prostate-</u> <u>pathology.html</u>
- 5. <u>www.cancer.org/cancer/types/prostate-cancer/detection-diagnosis-</u> <u>staging/staging.html</u>

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The American Cancer Society medical and editorial content team (<u>https://www.cancer.org/cancer/acs-medical-content-and-news-staff.html</u>)

Our team is made up of doctors and oncology certified nurses with deep knowledge of cancer care as well as editors and translators with extensive experience in medical writing.

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