



[cancer.org](http://cancer.org) | 1.800.227.2345

## Your Prostate Pathology Report: Atypical or Suspicious Findings (Including ASAP)

When biopsy samples are collected from your prostate, they are studied by a doctor with special training, called a **pathologist**. After testing the samples, the pathologist creates a report on what was found. Your doctor can use this report to help manage your care.

- [What is a 'core' on a prostate biopsy pathology report?](#)
- [Suspicious or atypical findings](#)
- [Acute inflammation \(acute prostatitis\) or chronic inflammation \(chronic prostatitis\)](#)
- [Atrophy, adenosis, or atypical adenomatous hyperplasia](#)
- [If the biopsy report mentions a seminal vesicle...](#)
- [Lab tests that might be done on prostate biopsy samples](#)

The information here is meant to help you understand some of the medical terms you might see in your pathology report after your prostate is biopsied.

### What is a 'core' on a prostate biopsy pathology report?

The most common type of prostate biopsy is a [core needle biopsy](#)<sup>1</sup>. For this procedure, . For this procediar3<sup>1</sup>

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's going on.

## Suspicious or atypical findings

Sometimes when looking at a biopsy sample with a microscope, the pathologist sees cells that might be cancer, but there are too few of them to be sure. A finding like this might be described as:

- **Suspicious for cancer**
- **Atypical small acinar proliferation (ASAP)**
- **Glandular atypia**
- **Atypical glandular proliferation**

A lot of things that can be seen under the microscope are not cancer but can look like cancer, so the pathologist has to be very cautious when diagnosing [prostate cancer](#)<sup>2</sup>, especially on a small biopsy sample.

Still, having an atypical or suspicious finding on your prostate biopsy could mean you have prostate cancer that the biopsy missed. Overall, if 100 men with an atypical or suspicious finding had a second biopsy, cancer would be found in about 40 to 50 of them.

Because of this risk, close follow up after an atypical or suspicious finding is important. Most doctors will recommend getting another prostate biopsy within 3 to 6 months. Another option might be close follow up with blood, urine, or imaging tests. One reason that another biopsy is not always done is because most cancers that are found after an “atypical” finding on a biopsy are not life threatening.

If you have an atypical or suspicious finding on your biopsy, talk to your doctor about if and when you should have another biopsy.

### **If the biopsy report also mentions high-grade prostatic intraepithelial neoplasia (PIN)...**

[High-grade prostatic intraepithelial neoplasia \(high-grade PIN\)](#)<sup>3</sup> is considered a **pre-cancer** of the prostate, because sometimes it can turn into prostate cancer over time.

While high-grade PIN increases your risk of having prostate cancer, this risk is not

nearly as high as if your biopsy report mentions findings that are atypical or suspicious for cancer. Therefore, if you have both, the atypical or suspicious findings on your biopsy are more important, as they have a greater impact on your cancer risk and future care.

### **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 is not caused by infection and 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.

### **Atrophy, adenosis, or atypical adenomatous hyperplasia**

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

**Atypical adenomatous hyperplasia** (sometimes called **adenosis**) is another benign condition that can sometimes be seen on a prostate biopsy.

### **If the biopsy report mentions a seminal vesicle...**

The seminal vesicles are glands that lie just behind the prostate. Sometimes part of a seminal vesicle is sampled during a biopsy. This is not a cause for concern.

### **Lab tests that might be done on prostate biopsy samples**

If the pathologist sees cells in the biopsy samples that might be cancer, different types of lab tests might be done to help tell if they are cancer cells. These tests are often **immunohistochemical (IHC)** stains done on very thin slices of biopsy samples, which are placed on glass slides and viewed under a microscope. Sometimes other types of tests are done as well.

Some of the tests that might be done include:

- High molecular weight cytokeratin (HMWCK) or 34BE12
- ck903
- ck5/6
- p63
- p40
- AMACR (racemase)
- PIN4 cocktail
- ERG

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

Unfortunately, even with these tests, a biopsy diagnosis of atypical or suspicious findings means that it isn't clear if cancer is present or absent.

## Hyperlinks

1. [www.cancer.org/cancer/types/prostate-cancer/detection-diagnosis-staging/how-diagnosed.html](http://www.cancer.org/cancer/types/prostate-cancer/detection-diagnosis-staging/how-diagnosed.html)
2. [www.cancer.org/cancer/types/prostate-cancer.html](http://www.cancer.org/cancer/types/prostate-cancer.html)
3. [www.cancer.org/cancer/diagnosis-staging/tests/biopsy-and-cytology-tests/understanding-your-pathology-report/prostate-pathology/high-grade-prostatic-intraepithelial-neoplasia.html](http://www.cancer.org/cancer/diagnosis-staging/tests/biopsy-and-cytology-tests/understanding-your-pathology-report/prostate-pathology/high-grade-prostatic-intraepithelial-neoplasia.html)

Last Revised: July 7, 2023

Written by

