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Your Prostate Pathology Report: Prostatic Intraepithelial Neoplasia (PIN) and Intraductal Carcinoma

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.

Prostatic intraepithelial neoplasia (PIN)

In [PIN²](#), the prostate cells don't look normal under the microscope, but the abnormal cells don't look like they've grown into other parts of the prostate (like cancer cells would). PIN is not cancer, but it can sometimes lead to a higher risk of prostate cancer.

PIN is often described as either:

- **Low-grade PIN** if the patterns of prostate cells appear almost normal, or
- **High-grade PIN** if the patterns of cells look more abnormal

Low-grade PIN

Many men begin to develop **low-grade PIN** at an early age, but low-grade PIN is not thought to be related to prostate cancer risk.

If low-grade PIN is reported on a prostate biopsy, your follow-up will typically be the same as if nothing abnormal was seen. In fact, many pathologists don't even mention low-grade PIN on the biopsy report when they see it, because it usually has no significance.

High-grade PIN

Unlike low-grade PIN, **high-grade PIN** is considered a **pre-cancer** of the prostate, because it can turn into prostate cancer over time. Although most often high-grade PIN does *not* turn into cancer, there still is a higher risk of developing prostate cancer later if you have high-grade PIN.

Because of this increased risk, it's likely your doctor will want to watch you carefully and may advise getting another prostate biopsy, or possibly a [lab test³](#) (other than your PSA level) to help determine your risk of having prostate cancer. This is especially true if high-grade PIN is found in different areas of your prostate (known as **multifocal high-grade PIN**), or if not all parts of the prostate were sampled.

If your pathology report mentions high-grade PIN, discuss your options for what comes

next with your doctor.

Intraductal carcinoma of the prostate

In intraductal carcinoma, prostate cancer (carcinoma) cells can be seen growing into pre-existing prostate ducts. This condition is often seen next to high-grade (fast-growing) prostate cancer.

If the biopsy report mentions only intraductal carcinoma...

If the prostate biopsy report mentions intraductal carcinoma but not prostate adenocarcinoma (the most common type of prostate cancer), there's still a strong chance that there is high-grade prostate cancer near where the biopsy was taken from.

Because of this, most doctors will recommend treatment such as surgery or radiation.

Diagnosing intraductal carcinoma is tricky for pathologists because it can look a lot like high-grade PIN (see above), so you may want to consider asking for a second opinion in this setting.

If your biopsy shows intraductal carcinoma in the absence of usual prostate cancer, discuss your options with your doctor.

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 intraductal carcinoma 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.

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

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 with a microscope, but that can sometimes look like cancer.

Atrophy is a term used to describe a shrinkage of prostate tissue (seen with a microscope).

- **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

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