

# Prostate Cancer

## Prostate Adenocarcinoma

### What is Prostate Adenocarcinoma?

Prostate Adenocarcinoma accounts for 95 percent of all prostate cancers. It starts in the prostate gland and, if not treated successfully at an early stage, can spread to other parts of the body. Other than skin cancer, Prostate Adenocarcinoma is the most common cancer in American men, with 185,000 cases diagnosed each year.

### Who is most likely to have Prostate Adenocarcinoma?

Prostate Adenocarcinoma becomes more common in men over age 50. Eighty percent of prostate cancer cases occur in men over age 65. African-American men have an above average risk. A family history of prostate cancer and a high-fat diet also increase risk.

### What characterizes Prostate Adenocarcinoma?

Prostate Adenocarcinoma can be characterized by changes to the size, shape, or texture of the prostate. Physicians can sometimes detect these changes through a *digital rectal exam (DRE)*. In addition, a

*Prostate Specific Antigen (PSA)* exam detects the level of PSA, a protein produced by prostate cells, in the blood. Higher PSA levels indicate the possibility of cancer. While most prostate cancers do not present symptoms, urinary abnormalities (such as increased frequency/urgency, decreased stream, or impotence) can be associated with prostate cancer.

#### Definitions

##### Prostate:

A walnut-sized gland located in the male reproductive system, just below the bladder and in front of the rectum.

##### Adenocarcinoma:

A type of cancerous, or malignant, tumor that originates in a gland or glandular structure.

##### Invasive, Infiltrating:

Capable of spreading to other parts of the body.

##### Malignant:

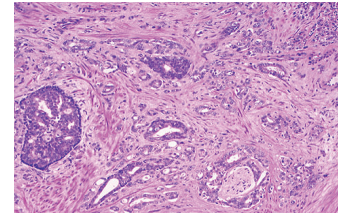
Cancerous and capable of spreading.

##### Pathologist:

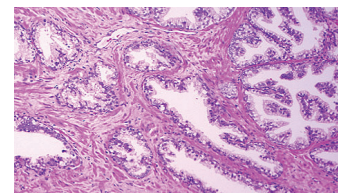
A physician who examines tissues and fluids to diagnose disease in order to assist in making treatment decisions.

##### Lymphatic:

Relating to lymph glands.



Prostate Adenocarcinoma can be characterized by changes to the size, shape or texture of the prostate.



Normal prostate cells.

### How does the pathologist make a diagnosis?

If the results of a DRE and/or PSA are not within the normal range, a biopsy will be performed. In this procedure, the primary care physician will obtain multiple thin cores of tissue for the pathologist to examine under the microscope. Another way for the pathologist to make a diagnosis of prostate cancer, though less common, is by examining pieces (chips) of prostate tissue, which are removed from the prostate during a *transurethral resection*. This process is done for enlargement of the prostate gland (benign prostatic hypertrophy, or BPH). Pathologists can diagnose prostate cancer in whole prostate glands that are removed during a *radical prostatectomy*, a surgical treatment of prostate cancer. Finally, pathologists can diagnose prostate cancer that has spread by examining cells and tissue from other body sites.

### What else does the pathologist look for?

In all prostate tissue samples, a *Gleason grade* is assigned by the pathologist. This important number, which ranges from 2 (best) to 10 (worst), is a strong measure of how aggressive the prostate cancer is and can be used to help determine prognosis and type of therapy. Physicians often look at a combination of your Gleason grade, clinical stage, and serum PSA level (how fast your PSA is rising) in deciding on the best treatment. For needle biopsies and prostate chips, the pathologist will also report the amount of tissue involved that is cancerous and this finding can influence treatment. For radical prostatectomy tissue, pathologists define the stage or extent of the cancer and whether the cancer is at the tissue edge (margins). These findings are very important for prognosis and will influence the decision as to whether additional treatment is needed after surgery. Stage in the radical prostatectomy can be 2 (better) or 3 (worse), with spread into seminal vesicles (structures attached to the back of the prostate) or lymph nodes removed before or during surgery indicating a worse prognosis. Physicians also perform clinical staging tests (radiology or x-ray studies), usually before surgery, to try to tell if the cancer has spread.

For more information, go to: [www.skincancer.org](http://www.skincancer.org) (Skin Cancer Foundation) or [www.nlm.nih.gov](http://www.nlm.nih.gov) (National Library of Medicine, National Institutes of Health). Type the keywords Basal Cell Carcinoma or Skin Cancer into the search box.



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