



## Advanced and metastatic prostate cancer – what is it?

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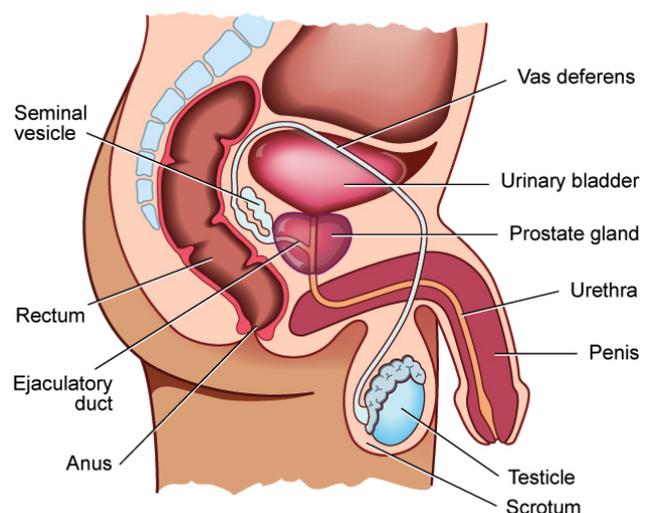
Prostate cancer is the most commonly diagnosed cancer in Australian men, with about 17,000 men newly diagnosed each year. For most men the long-term outlook is very good - relative to the general population and considering other causes of death, 95% of men with prostate cancer will survive at least five years after diagnosis and 91% of men with prostate cancer will survive 10 years or more. Today there are around 220,000 Australian men alive after a diagnosis of prostate cancer.

Of concern to our mission, for men who develop advanced prostate cancer, the outlook is not as good. Prostate cancer kills more than 3,000 men in Australia every year, representing about 12% of all male deaths from cancer. So, what is advanced prostate cancer, how is it detected and how is it treated?

### What is the prostate?

The prostate is a small gland located below the bladder and in front of the rectum (lower bowel) in men. It surrounds the urethra, the passage that leads from the bladder, out through the penis through which urine and semen pass out of the body. The prostate gland is part of the male reproductive system (see diagram).

The prostate produces some of the fluid that makes up semen, which enriches and protects sperm. The prostate needs the male hormone testosterone to grow and develop. Testosterone is made by the testicles.



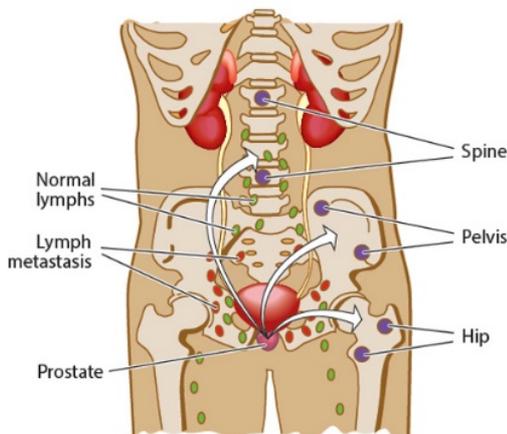


In an adult, the prostate gland is usually about the size of a walnut and it is normal for it to grow larger as men age. Sometimes this can cause problems, such as difficulty with passing urine.

### What is prostate cancer?

Prostate cancer occurs when abnormal cells develop in the prostate. These cells have the potential to continue to multiply, and possibly spread beyond the prostate. Cancers that are confined to the prostate are called **localised** prostate cancer. These cancers can be slow growing and may never need treatment. Sometimes localised prostate cancer does need treatment, such as surgery or radiation therapy, and treatment often successfully gets rid of the cancer.

If the cancer spreads into the surrounding tissues near the prostate or into the lymph nodes in the pelvis, it is called **locally advanced** prostate cancer. Depending on the extent of spread in the pelvis, these cancers can be a little more difficult to treat. Treatment options include surgery, radiation therapy and sometimes hormone therapy. In most cases, these cancers can be treated successfully.



Prostate cancer that has spread to other parts of the body including other organs, lymph nodes (outside of the pelvis) and/or bone is called **advanced or metastatic** prostate cancer. This type of cancer is the most difficult to treat, however there are several good treatment options available to help slow the growth of the cancer, extend life and relieve pain and discomfort from the disease. This blog will focus on advanced and metastatic prostate cancer and not locally advanced disease.

### Diagnosing advanced and metastatic prostate cancer

Advanced prostate cancer does not always cause symptoms. When there are symptoms, the type of symptoms experienced will depend on where the cancer has spread to. The cancer growing in the prostate may cause urinary difficulties such as needing to go frequently, poor flow, bleeding or discomfort. If the cancer has spread to the bones, there may be pain in the lower back, upper thighs or hips. Advanced prostate cancer may also cause unexpected weight loss and fatigue. If you experience these symptoms it is important to talk to your doctor.

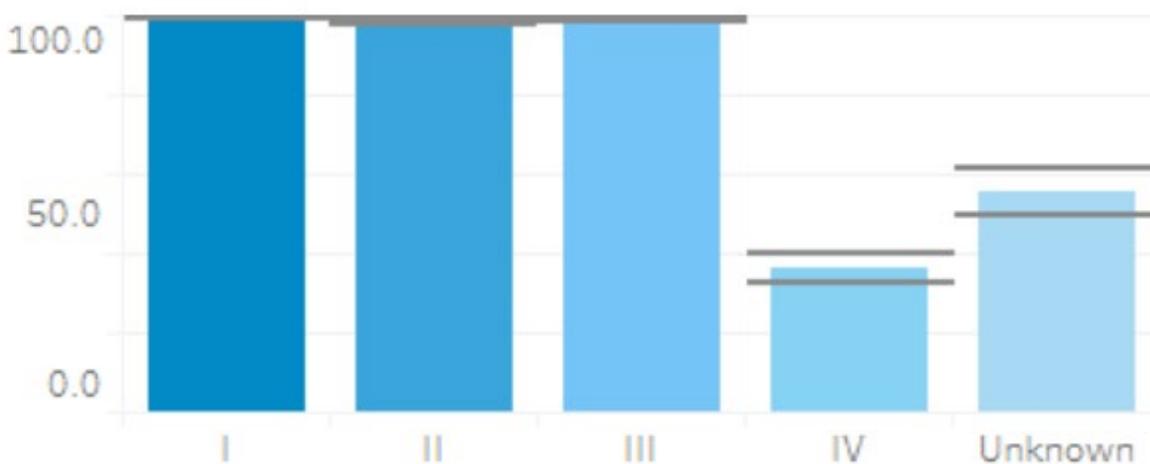


Some men with localised or locally advanced prostate cancer may develop advanced/metastatic disease sometime after their prostate cancer is first treated. When this happens, the cancer is called **recurrent** disease. After treatment for localised or locally advanced disease, men will have regular PSA tests. A rising PSA is the usual first indicator that the cancer may have started growing.

Unfortunately, around 4% of prostate cancers are not detected until the disease is already advanced/metastatic. This is known as Stage IV prostate cancer. Figures released by the

### 5-year relative-survival, by stage at diagnosis

Prostate cancer, Males



Australian Institute of Health and Welfare (AIHW) earlier this year show that the five-year survival rate for men who have Stage IV prostate cancer when they are first diagnosed is just 36.4%. In contrast, men whose cancers were Stage I (localised prostate cancer) had a five-year survival rate of 100%.

As with recurrent disease, the first indicator that something is happening in the prostate is an elevated PSA test result. The doctor may then take a biopsy of the prostate to determine if there is cancer present and, if so, how likely it is to grow and spread quickly. They are also likely to do an MRI scan to assess the size of the prostate and look for any abnormal areas and/or do a physical examination (a digital rectal examination) to feel the size and shape of the prostate gland.



Further tests to determine where the cancer has spread to and the size of the cancers include:

**Computerised tomography** - a scan that uses x-ray beams to create detailed images of the inside of the body. It may be done to show where in the body the cancer has spread, based on locating abnormal features such as enlarged lymph nodes or bony outgrowths.

**PSMA-PET scan** - PSMA stands for Prostate Specific Membrane Antigen. It is a protein found on the surface of prostate cells. A PSMA-PET scan involves injecting a radioactive substance attached to a molecule that can stick to PSMA into the body. This is a very sensitive and accurate way to image and accurately locate prostate cancer wherever it is in the body.

**Bone scan** - This involves injecting a weakly radioactive substance into the body. If there are cancer cells damaging the bone, then the scan may be positive, although a positive scan can also be due to other causes of bone damage such as an old fracture or inflammation.

### **Should you have a PSA test?**

PSA stands for prostate specific antigen. It is a protein made by prostate cells. PSA can be measured through a simple blood test. Abnormally high levels of PSA indicate that prostate cancer may be present, but other conditions can also cause elevated PSA, such as non-cancerous prostate enlargement (benign prostatic hyperplasia, BPH) or prostatitis (an infection in the prostate).

If you have symptoms of prostate cancer (trouble urinating, blood in your urine or semen, pain in your lower back, pelvis or legs) talk to your doctor about your symptoms and PSA testing.

If you do not have any symptoms of prostate cancer and you are over age 50, or 40 with a family history of prostate cancer (a father, brother, uncle or grandfather with prostate cancer), talk to your doctor about testing for prostate cancer using the PSA test as a part of your regular health check-up.

It is important that you make an informed decision about testing based on the latest available evidence on the benefits and potential harms of testing and subsequent treatment for prostate cancer. PCFA has a website with helpful information, visit [psatesting.org.au/info](https://psatesting.org.au/info).

### **How is advanced/metastatic prostate cancer treated?**

There are many effective treatments available and new therapies are becoming available on a regular basis to treat advanced/metastatic prostate cancer. Although most advanced/metastatic



prostate cancer is not curable, current treatments can help control the growth of the cancer, manage your symptoms and extend your life expectancy, while maintaining good quality of life.

The main treatments for advanced prostate cancer are systemic. These are treatments that can move through the blood stream to locate and control prostate cancer metastases wherever they are in the body. Examples of systemic treatments include hormone therapy, chemotherapy and radioisotope therapy. These therapies effectively reduce the amount of cancer in the body and slow its growth. There are many different systemic therapies, the best therapy for you will depend on your age, general health, the nature of your cancer and your preferences.

Sometimes, localised treatments that target specific areas of prostate cancer may be used to control cancer that has spread. These include radiation therapy and surgery. These treatments effectively target individual areas where the cancer has spread to kill or remove the cancer.

Although advanced/metastatic prostate cancer is not currently curable, research is continuing to find new medicines and therapies to slow the spread of prostate cancer. PCFA remains dedicated to funding life-saving prostate cancer research, promoting prostate cancer awareness and supporting men and their families impacted by prostate cancer. Visit us at [pcfa.org.au](http://pcfa.org.au) for more information.