

# **Prostate Cancer: Hormone treatment**

**Information for patients,  
families and friends**



## **About this booklet**

This booklet is designed to give you information about hormone treatment for prostate cancer and what to expect.

Please ask your radiation oncologist if you require further information on hormone treatment options for prostate cancer.

## **Why do we use hormone treatments to treat prostate cancer?**

Prostate cancer needs the male hormone, testosterone, to grow. The removal of this hormone usually causes the cancer to regress or shrink.

Testosterone is produced mainly by the testicles, with a little coming from small glands in the abdomen called the adrenals. Testosterone is responsible for maintaining the male characteristics, including libido, the ability to achieve erections, promoting beard growth and maintaining sperm production.

Medication has been developed that can do the same job as the surgical removal for the testes, but can be reversed when the drug is ceased. This has meant that doctors have started to use hormone treatment in men with early disease, in combination with other treatments to improve the chances of long-term control and cure.

This approach of combining medical hormone treatment with radiation has been studied in many large-scale randomised clinical trials in the last decade and has shown the combination can be highly effective.

## **How is hormone treatment administered?**

Originally the only treatment available was to remove the part of the testes that produces testosterone. This is still preferred by some people, but leads to permanent removal of testosterone.

Other methods have been developed to block the hormone effect on a temporary basis, using medication rather than surgery. These treatments may be recommended for between six months and two years for men with localised disease. For men with spread to other parts of the body, permanent treatment is preferred although we are researching whether it is safe to use the drugs intermittently.

One of the most common drugs is given as an injection or an implant monthly, three-monthly or four-monthly. It stops the testes from producing testosterone, reducing levels in the bloodstream by over 90%.

We sometimes recommend a short course of the tablets to cover the first few weeks since the implants can take a couple of weeks to start working. The tablets work either by stopping the adrenal glands from making the testosterone or preventing cells elsewhere in the body absorbing it.

## **General side effects**

All drugs affect the hormone levels in the body, and some of the side effects are therefore similar to symptoms for a woman going through menopause.

### **Short term side effects include:**

- Hot flushes – Particularly at night.
- Decreased libido.
- Loss of erections.
- Shrinkage of the genitalia.
- Irritability.
- Loss of ability to concentrate.
- Changes in hair – More grows on the head and less on the body and face.
- Weight gain.

### **Long term side effects include:**

- Loss of bone density (osteoporosis).
- Loss of muscle bulk.

## Specific tablet side effects

The following list includes the most common side effects of specific tablets.

### **Flutamide (Eulexin®), Bicalutamide (Cosudex®), Nilutamide (Anandron®) tablets**

- Gastrointestinal upset such as diarrhoea or constipation.
- Swelling under the nipples with some tenderness.
- Gynaecomastia (the abnormal development of mammary glands in males, causing breast enlargement) is sometimes seen, especially if used without one of the implant drugs.
- Abnormalities in liver function.

### **Nilutamide (Anandron®) tablet**

- Occasional visual disturbances.

### **Cyproterone (Androcur®) tablet**

- Tiredness.
- Disturbances in liver function.
- Shortness of breath.
- Tendency of clot formation.

Other side effects may occur, and can be found in the information leaflets dispensed with each drug.



## Alfred Health

Radiation Oncology  
55 Commercial Road  
Melbourne VIC 3004  
T 03 9076 2337  
F 03 9076 3465

[alfredhealth.org.au](http://alfredhealth.org.au)

## Further information:

### The Alfred

[alfredhealth.org.au](http://alfredhealth.org.au)

### Alfred Health Radiation Oncology

[alfredhealth.ro](http://alfredhealth.ro)

### Latrobe Regional Hospital

[lrh.com.au](http://lrh.com.au)

### Cancer Council Victoria

[cancervic.org.au](http://cancervic.org.au)

If you would like to provide feedback or request a copy of this information in a different format, contact us at [patient.information@alfred.org.au](mailto:patient.information@alfred.org.au)



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