Hormone Therapy for Localised Prostate Cancer  
*Treatment Types Fact Sheet*

Information in this fact sheet is meant to assist you in making decisions about your treatment. Always make medication decisions in consultation with your healthcare team.

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| **What is hormone therapy used for?** | Hormone therapy may be given on its own as a treatment for men who aren’t well enough for surgery or radiotherapy. It may also be given to men who have been monitored using watchful waiting and whose cancer has started to progress.  
Hormonal therapy may be given before radiotherapy. This is known as neo-adjuvant therapy, which can help make radiotherapy treatment more effective. Hormonal therapy is also sometimes given after radiotherapy (adjuvant therapy), where the aim is to reduce the chance of the cancer coming back.  
Hormonal therapy can slow or stop the growth of cancer cells for many years. It doesn’t involve surgery or radiation, so there’s little risk of bowel or bladder problems.  
Hormonal therapy won’t get rid of all the cancer cells if it’s the only treatment given. It can cause a range of side effects that include breast swelling, hot flushes, erection problems (impotence) and a lowered sex drive. |
| **How does chemotherapy work?** | Hormones control the growth and activity of normal cells. In order to grow, prostate cancer depends on the hormone testosterone, which is produced by the testicles. Hormonal therapies reduce the amount of testosterone in the body. They can be given as injections or tablets.  
Some drugs ‘switch off’ the production of male hormones from the testicles by reducing the levels of a hormone produced by the pituitary gland. These drugs are called pituitary down-regulators or gonadotrophin-releasing hormone antagonists (GnRH antagonists). They include treatments such as Zoladex® (goserelin acetate).  
They are usually given as a pellet injected under the skin of the abdomen (goserelin), or as a liquid injected under the skin or into a muscle (leuprorelin acetate). Injections are given either monthly or every three months.  
Other hormonal therapy drugs work by attaching themselves to proteins (receptors) on the surface of the cancer cells. This blocks the testosterone from going into the cancer cells. These drugs are called anti-androgens and are often given as tablets.  
A commonly used anti-androgen is Cosudex® (bicalutamide). Anti-androgen tablets are usually given for two weeks before the first injection of a pituitary down-regulator. This prevents tumour flare, which is when symptoms from the prostate cancer get worse after the first dose of treatment. |
| What are the common side effects? | Unfortunately, most hormonal therapies usually cause erection difficulties (impotence) and loss of sexual desire for as long as the treatment is given. If the treatment is stopped, the problem may disappear. Some types of anti-androgens are less likely to cause impotence than others.  
Hormonal therapy can cause bone thinning (osteoporosis), which can sometimes lead to tiny cracks in the bone (fractures). The risk of bone thinning increases if you are taking hormonal therapy for long periods. You may have to have a special type of x-ray called a DEXA scan (dual-energy x-ray absorptiometry scan). This scan allows doctors to check the bones for any areas of weakness or fractures. You might also be given bone-strengthening drugs called bisphosphonates, which can help if you experience problems.  
Most men who have hormonal therapy experience hot flushes and sweating. Your doctor can prescribe medicines to help relieve side effects while you are having treatment. The flushes and sweats will stop if treatment is stopped.  
Hormonal treatment can also make you put on weight and feel constantly tired, both physically and mentally. Some drugs, such as Cosudex®, may also cause breast swelling and tenderness.  
Different drugs have different side effects, so it’s important to discuss the possible effects with your doctor or specialist nurse before you start treatment. By being aware of the effects that may occur, you may find them easier to cope with. |
| Effects of hormone treatments on sexuality | In men with prostate cancer, it can be helpful to lower testosterone levels. This may be done by giving tablets or injections, or by removing the testicles.  
These treatments may reduce your sex drive, and if and when you do feel like sex, you may not be able to get or keep an erection. You may also notice that you produce less semen, need to shave less often and have less muscle strength. These side effects will often disappear once treatment is finished.  
Some men having hormonal therapy treatments may develop breast swelling and tenderness. A man whose testicles have been removed may feel less masculine. However, neither the operation nor hormonal therapy will make you feminine, as some men fear. If you feel it would help you, sometimes false testicles can be used to give the appearance and feel of normal testicles.  
Hormonal therapy will affect a man’s fertility by reducing sex drive and making it difficult to get an erection. These effects usually disappear once the treatment has finished. If your testicles are removed you will be infertile. |


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