

Treatment options after your first hormone therapy

This page describes treatments for men with prostate cancer that is no longer responding so well to their first [hormone therapy](#). You may hear these treatments called second-line hormone therapy.

[Read more about the first hormone therapy you might have.](#)

Why is my first hormone therapy not working so well?

The first hormone therapy you have may keep your cancer under control for several months or years. But over time, the behaviour of your cancer cells may change and your cancer may start to grow again. This may happen even though your hormone therapy is still reducing the amount of testosterone in your body.

Although your prostate cancer is no longer responding as well to the type of hormone therapy you are currently having, it may still respond to other types of hormone therapy, or a combination of other treatments.

Hormone therapy

This page explains how hormone therapy treats prostate cancer, who can have hormone therapy, and the possible side effects.

[Find out more](#)

How will I know if my hormone therapy is not working so well?

While you are having hormone therapy you will have regular [prostate specific antigen \(PSA\) tests](#) to check how well the treatment is working.

A continuous rise in your PSA level may be the first sign that your cancer is no longer responding so well to your hormone therapy.

If your PSA has risen, then you may have more PSA tests to confirm that the hormone therapy has stopped controlling your cancer so well. Your doctor or nurse will also ask you about any symptoms you may have developed, such as urinary problems or bone pain. You may have scans, such as an [MRI scan or a CT scan](#), to get a better idea of how the cancer is growing and which treatments may help.

If your hormone therapy is no longer controlling your cancer so well then your doctor will talk to you about other possible treatment options. If your PSA level is only rising very slowly and you do not have any symptoms, you may not need to start a new treatment straight away.



In this fact sheet:

- How does hormone therapy work?
- Why is my first hormone therapy not working so well?
- How will I know if my first hormone therapy is not working so well?
- What further treatments are available?
- Who will be involved in my treatment?
- How will I know how well my treatment is working?
- Dealing with prostate cancer
- Questions to ask your doctor or nurse
- More information
- About us

This fact sheet is for men with prostate cancer that is no longer responding so well to their first hormone therapy. Your partner, family or friends might also find it helpful.

We describe possible treatment options and

How does hormone therapy work?

Hormone therapy works by either stopping your brain from telling your body to make testosterone, or by stopping testosterone from reaching the cancer cells.

Treatment options after your first hormone therapy

This fact sheet is for men who would like to find out more about prostate cancer that is no longer responding so well to their first hormone therapy. It describes treatments that may help and lists other sources of support.

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What further treatments are available?

The aim of treatments is to control your cancer and delay or manage any symptoms you might have, such as pain and urinary problems. You will normally continue the first type of hormone therapy, even if it has stopped working so well. This is because the hormone therapy will still help to keep the amount of testosterone in your body low.

Sometimes, you may have more than one of the treatments we describe here. You might not have treatments in this order, and some treatments may not be suitable for you. Talk to your doctor or nurse about your treatment options.

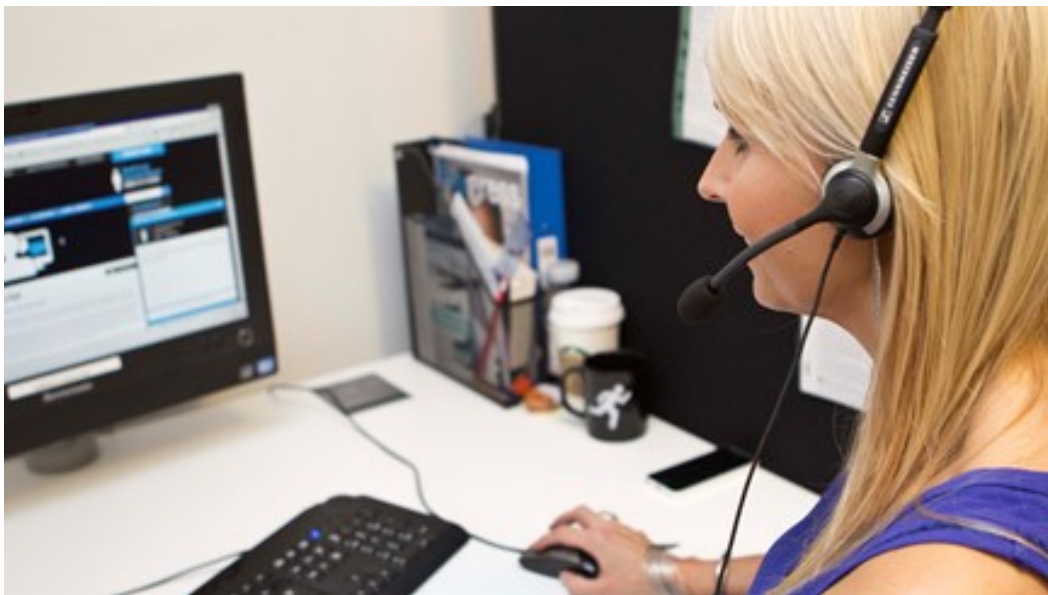
When talking about possible treatments you and your doctor will consider:

- how far your cancer has spread
- if you have any symptoms
- how long your cancer responded to your first hormone therapy
- your general health and any other health problems you have.

Your own thoughts will also be important. For example, how having a treatment will fit in with your daily life and the possible side effects.

Treatment options may include:

- anti-androgens
- steroids
- chemotherapy
- abiraterone
- enzalutamide
- oestrogens
- radium-223
- clinical trials and new treatments
- other treatments to manage symptoms.



Our Specialist Nurses

Ask all the questions you need answers to, or just talk. Our nurses have time for you.

[Find out more](#)

Anti-androgens

These are a type of hormone therapy that stops testosterone from reaching the prostate cancer cells. You may start taking an anti-androgen, such as bicalutamide (Casodex®), alongside your usual injections. Some health professionals call this combined androgen blockade or dual androgen blockade. It may be slightly more effective than using an LHRH agonist on its own when cancer has spread to other parts of the body.

If you are already having injections and anti-androgen tablets and your PSA is rising, your doctor may suggest that you stop taking the anti-androgen for a little while to see if your PSA level falls. You may hear this called a 'withdrawal response'. Some men find that their PSA level is lowered for a few months, or sometimes longer.

Like all treatments, anti-androgens can cause side effects. These can be similar to the side effects of other types of hormone therapy, and can include breast swelling and tenderness.

[Read more about the effects of hormone therapy.](#)

Steroids

Steroids can help stop the adrenal glands producing as much testosterone. Steroids may also help improve your appetite and energy levels, and can treat pain. You might also have steroids in combination with other treatments, including [chemotherapy](#) and [abiraterone](#).

Steroids you may take include:

- dexamethasone
- prednisolone
- hydrocortisone.

Like all treatments, steroids can cause side effects. But steroids are given in a low dose to treat prostate cancer, so most men don't get many side effects. These will affect each man differently, and you might not get any side effects. Before you start treatment, talk to your doctor or nurse about the possible side effects. Some of these are listed below.

- Steroids can cause indigestion and irritate the stomach lining. You should take them after a meal, and you may be prescribed medication to reduce the irritation.
- Some men have an increased appetite. Try to eat a [healthy diet](#).
- You may have more energy and a more active mind. This can make you feel irritable, anxious or have trouble sleeping. Speak to your doctor or nurse if you're having any problems. If you take steroid tablets twice a day, taking the second tablet early in the afternoon (before 4pm) can help with problems sleeping.
- You may get water retention, which can cause swollen hands and feet. This is usually only a problem if you are taking steroids for a long time.
- The risk of getting infections may be slightly higher. Tell your GP if you have any signs of infection, such as a high temperature.
- Your skin may bruise more easily. This shouldn't cause any problems.
- Steroids can cause raised blood sugar levels. You may have your blood sugar level checked. Tell your doctor if you are urinating more often or get very thirsty, as these can be signs of high blood sugar.

Don't suddenly stop taking steroids as this can make you ill.

You will be given a steroid treatment card, which explains that you are taking steroids. You should carry this with you at all times. Show it to anyone treating you (such as a doctor, nurse or dentist), as it's important that they know you are taking steroids.

Chemotherapy

Chemotherapy uses anti-cancer drugs to kill cancer cells, wherever they are in the body.

In the UK, docetaxel (Taxotere®) is the standard chemotherapy treatment for men with prostate cancer that has spread to other parts of the body ([advanced prostate cancer](#)) and that is no longer responding to [hormone therapy](#).

If you've already had treatment with docetaxel and your cancer has started to grow again, you may be able to have a newer chemotherapy drug called cabazitaxel (Jevtana®).

Docetaxel and cabazitaxel may help some men to live longer. They can also help to improve symptoms such as pain.

You will be given a steroid such as prednisolone or dexamethasone to take with chemotherapy. This can help make the chemotherapy more effective and reduce the side effects.

Chemotherapy may not be suitable for everyone as the side effects are sometimes difficult to deal with. Side effects include being more likely to get an infection and feeling more tired than usual. People react in different ways to it. Some men may get a lot of side effects while others will only have a few. Your doctor will check your general health to make sure you are fit enough for chemotherapy.

[Read more about chemotherapy.](#)

Chemotherapy

This page describes how chemotherapy can be used to treat prostate cancer, and the possible side effects.

[Find out more](#)

Abiraterone

Abiraterone (Zytiga®) is a new type of hormone therapy for men with [advanced prostate cancer](#) that has stopped responding to other [hormone therapy](#) treatments. It works by stopping the production of testosterone.

Abiraterone may help some men to live longer. It can also help control symptoms.

It's suitable for men who have already had docetaxel [chemotherapy](#) and whose cancer has started to grow again. It's also effective in men who have stopped responding to other types of [hormone therapy](#) but haven't yet had [chemotherapy](#).

Abiraterone isn't widely available if you've already had [enzalutamide](#).

Abiraterone is taken as tablets. You will also take a steroid called prednisolone to reduce the risk of side effects. Possible side effects of abiraterone include:

- fluid retention, which can cause swelling in your ankles or hands
- high blood pressure
- liver problems.

It can also cause the level of potassium in your blood to drop. This could make you feel tired and you may be at risk of a fast, irregular heartbeat. Speak to your doctor if you notice anything unusual. Your doctor will check your health with blood tests, and you will have regular blood pressure checks.

[Read more about abiraterone, including the possible side effects.](#)

Abiraterone

If you have advanced prostate cancer, you may be interested in our information on abiraterone (Zytiga®), a new type of hormone therapy.

[Find out more](#)

Enzalutamide

Enzalutamide (Xtandi®) is a new type of hormone therapy for men with advanced prostate cancer that has stopped responding to other [hormone therapy](#) treatments. It works by stopping the hormone testosterone from reaching the prostate cancer cells.

Enzalutamide may help some men to live longer. It can also help control symptoms.

It's available for men who have already had docetaxel chemotherapy and whose cancer has started to grow again. It's also available for men who have stopped responding to [hormone therapy](#) but haven't yet had [chemotherapy](#).

Enzalutamide isn't widely available if you've already had [abiraterone](#).

Enzalutamide is taken as tablets. Like all medicines, it can cause side effects. These include:

- fatigue (extreme tiredness)
- loose and watery bowel movements (diarrhoea)
- hot flushes
- bone pain
- headaches.

[Read more about enzalutamide.](#)

Enzalutamide

Learn about enzalutamide, a new type of hormone therapy for men with advanced prostate cancer.

[Find out more](#)

Oestrogens

Oestrogens are a type of hormone therapy that can be used to treat prostate cancer. Oestrogen is a hormone found in both men and women, but women usually produce more.

Oestrogens are used less often than other treatments. They can be given as a tablet called diethylstilbestrol (Stilboestrol®). They can also be given through a patch that sticks to your skin like a plaster.

Like all treatments, oestrogens can cause side effects. These can be similar to the side effects of other types of hormone therapy, and can include breast swelling and tenderness. A low dose of radiotherapy to the breast area can prevent this.

Diethylstilbestrol can also increase your risk of circulation problems, such as blood clots. You will usually take drugs such as aspirin or warfarin to make this less likely. You may not be able to take diethylstilbestrol if you have a history of high blood pressure, heart disease or strokes. Your doctor or nurse will discuss this with you.





How hormone therapy affects you

This page describes the side effects of hormone therapy for prostate cancer and ways to help manage them.

[Find out more](#)

Radium-223

Radium-223 (Xofigo®) is a new treatment for men with prostate cancer that has spread to the bones and has stopped responding to hormone therapy. Radium-223 can delay bone [symptoms of advanced cancer](#), such as bone thinning, and can reduce [bone pain](#). It may also help men live longer.

Radium-223 is a radioactive substance that is injected into a vein through a small tube inserted into your arm (a cannula). The injection only takes a few minutes.

You will normally have an injection every four weeks, for up to six injections. You can usually go home straight after each injection.

Radium-223 travels around the body in the blood and collects in bones that have been damaged by prostate cancer. It kills prostate cancer cells in the bones, but doesn't damage many surrounding healthy cells. This means it

doesn't usually cause severe side effects. If you do get side effects, they may include:

- feeling and being sick (nausea and vomiting)
- diarrhoea (loose and watery bowel movements)
- low levels of blood cells called platelets, which can cause bruising.

[Read more about radium-223.](#)

Clinical trials and new treatments

A clinical trial is a type of medical research study that aims to find new and improved ways of preventing, diagnosing, treating and managing illnesses. There are clinical trials looking into new treatments for prostate cancer that is no longer responding so well to hormone therapy. There are also trials to find out whether existing treatments work better in new combinations or doses. Taking part in clinical trials can be a way of having newer treatments that aren't yet widely available.

[Read more about clinical trials](#) or ask your doctor or nurse.

Other treatments to manage symptoms

If you have prostate cancer that has spread to the bones or other parts of the body you may get [symptoms such as bone pain or urinary problems](#). There are treatments to help manage symptoms. These are sometimes called palliative treatments.

These treatments include:

- pain-relieving drugs such as paracetamol or ibuprofen, or stronger drugs such as codeine or morphine
 - **radiotherapy** to shrink the cancer and reduce symptoms
 - drugs called **bisphosphonates** to treat bone problems such as pain.
-

Who will be involved in my treatment?

You may see different health professionals depending on the treatment you are having. For example, you may see an oncologist as well as a urologist. Oncologists specialise in treating cancer with treatments other than surgery, such as radiotherapy and drug treatments. Urologists are surgeons who treat diseases of the urinary system, including prostate cancer.

If you have **chemotherapy** you may see an oncologist, as well as a specialist chemotherapy nurse, or a pharmacist. Pharmacists will check you're having the right medicines at the right doses. You may also be offered a referral to community services. These include district nurses and palliative care nurses who can help control symptoms.

You might also have appointments and check-ups more often than before. This will depend on what treatments you are having and if you have any symptoms.

How will I know how well my treatment is working?

During and after your treatment your doctor or nurse will check how well your treatment is working.

You may have regular [PSA tests](#), and other tests such as [MRI or CT scans](#) if your doctor thinks this is necessary. Your PSA levels alone are not always enough to know if your treatment is working. So your doctor will use your PSA level and any other test results, along with information about how you are feeling, to check how well the treatment is working. If you are feeling better this could be a sign that the treatment is working. If the treatment is not controlling the cancer then you and your doctor can discuss which treatment to try next.

One aim of your treatment will be to help manage any symptoms from your cancer, and help make sure that your daily life is as good as possible. But treatments can also cause side effects. Let your doctor or nurse know how you are feeling and about any symptoms. If you have symptoms in between your check-ups tell your doctor or nurse as soon as possible.

Dealing with your feelings

We discuss the emotional impact of prostate cancer and ways to deal with things.

[Find out more](#)

References

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List of references