

Advanced prostate cancer



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This fact sheet is for men who have been diagnosed with prostate cancer that has spread outside the prostate to other parts of the body (advanced or metastatic prostate cancer). It explains your test results and gives an overview of the treatments for advanced prostate cancer. If you would like more detailed information about any of the treatments included in this fact sheet, please read our individual treatment fact sheets in our Tool Kit information pack.

This fact sheet does not include information about localised or locally advanced prostate cancer. For information on these stages of prostate cancer read our Tool Kit fact sheets, **Localised prostate cancer** and **Locally advanced prostate cancer**. For information on cancer that has come back after treatment, read our booklet, **Recurrent prostate cancer**.

What is advanced (metastatic) prostate cancer?

Advanced prostate cancer is cancer that has spread from the prostate gland to other parts of the body. It is also called metastatic prostate cancer. This is when tiny prostate cancer cells move from the prostate to other parts of the body through the blood stream or lymphatic system.

Prostate cancer can spread to any part of the body but it most commonly spreads to the bones and the lymph nodes (sometimes called lymph glands). More than four out of five men (80 per cent) with advanced prostate cancer will have cancer that has spread to the bones. The lymph nodes are part of the body's immune system and carry fluid called lymph around the body. There are lymph nodes throughout the body, including in the groin and pelvic area, near the prostate.

If you are diagnosed with advanced prostate cancer you may be offered treatment which can often keep your cancer under control for several years. It is not possible to cure cancer that has spread to other parts of the body.

Advanced prostate cancer can cause symptoms, which may be the first sign that something is wrong for some men. Symptoms will depend on where the cancer has spread to, but can include bone pain or problems passing urine. There are treatments available to manage symptoms (see page 6). However, not all men diagnosed with advanced prostate cancer will have symptoms.

If you are not sure whether your prostate cancer is advanced, speak to your doctor or nurse. They can explain your test results and talk to you about your treatment options.

What tests are used to diagnose advanced prostate cancer?

If you have been diagnosed with advanced prostate cancer, you may have had some or all of the following tests. You may not have needed to have all of the tests described here.

- **A PSA test**

This test measures the level of a protein called prostate specific antigen (PSA) in your blood. PSA is produced by normal cells in the prostate and also by prostate cancer cells, wherever they are in the body.

- **A digital rectal examination (DRE)**

The doctor or nurse feels the surface of the prostate gland through the wall of the back passage (rectum). They are feeling for any hard or irregular areas that may be a sign of cancer.

- **A prostate biopsy**

Small amounts of tissue are removed from different areas of the prostate gland using thin needles. The tissue samples are sent to a laboratory to be looked at under a microscope to check for any cancer. You may not need to have a prostate biopsy if your PSA level is very high and your bone scan shows that your cancer has spread.

- **A bone scan**

This scan checks whether the cancer has spread to the bones.

- **A magnetic resonance imaging (MRI) or computerised tomography (CT) scan**

These scans take pictures of the body to find out whether the cancer has spread, and where to. An MRI is sometimes used to check any cancer in the bones, and you may not need to have a bone scan. You may not need to have an MRI or CT scan if your bone scan shows that your cancer has spread to the bones.

- **Other blood tests**

An alkaline phosphatase (ALP) test is another blood test which may help to show how much the prostate cancer is affecting your bones. An ALP test can also be used to see how well the treatment is working if the cancer has spread to your bones.

You can read more about tests used to diagnose prostate cancer in our Tool Kit fact sheet,



How prostate cancer is diagnosed.

What do my test results mean?

The results of all of your tests help to give your doctor an overall picture of your cancer. They can use the results to get an idea of how aggressive the cancer is likely to be and how far it has spread.

PSA level

All men have some PSA in their blood, and the level of PSA naturally rises as men get older. A raised PSA level may show that there is a problem with your prostate. You may have had a PSA test which showed that you had a raised PSA level, and then had further tests which diagnosed your prostate cancer.

The PSA test is also used, alongside other tests, to monitor your prostate cancer once you have started treatment. A continuous rise in your PSA level while you are on treatment may suggest that your cancer is growing more quickly.

Gleason score

If you have had a biopsy, a doctor called a pathologist will look at the samples of tissue taken from your prostate under a microscope.

The pathologist looks at the patterns made by the cancer cells and gives them a grade from 1 to 5. This is called a 'Gleason grade'.

There may be more than one grade of cancer in the biopsy samples. The grades of the most common pattern and the pattern with the highest grade are added together to give a final 'Gleason score'.

For example, if the biopsy samples show that:

- most of the cancer is grade 3, and
- the highest grade of cancer seen is grade 4, then
- the Gleason will be 3 + 4, and the Gleason score will be 7.

A Gleason of 4 + 3 also gives a Gleason score of 7, but shows that the cancer is slightly more aggressive. This is because the most common pattern found is graded first. So, a Gleason of 3 + 4 has more cancer graded as 3, whereas a Gleason of 4 + 3 has more cancer with the higher grade of 4.

Most men with prostate cancer will have a Gleason score between 6 and 10. The higher the Gleason score, the more likely the cancer is to grow more quickly and spread.

If your other tests show that the cancer has spread, you may not need to have a biopsy to measure your Gleason score.

Staging

Staging is a way of recording how far the cancer has spread. The most common method is the TNM (Tumour-Nodes-Metastases) system.

- The T stage measures the tumour.
- The N stage measures whether cancer has spread to the lymph nodes.
- The M stage measures whether cancer has spread (metastasised) to other parts of the body.

T stage

The T stage shows how far the cancer has spread in and around the prostate gland. This is measured by a DRE alone or a DRE and a MRI scan.

N stage

The N stage shows whether the cancer has spread to the nearby lymph nodes. This is measured using an MRI or CT scan.

NX The lymph nodes were not measured.

N0 The lymph nodes do not appear to contain cancer.

N1 The lymph nodes appear to contain cancer.

If your scan results suggest that your cancer has spread to the lymph nodes (N1), it may be treated as locally advanced or advanced prostate cancer. This will depend on a number of factors including the results of your M stage (see below) and which lymph nodes are affected.

The N stage may not be measured if the results of other tests show that your cancer has spread to your bones.

M stage

The M stage shows whether the cancer has spread (metastasised) to other parts of the body, such as the bones. This is measured using a bone scan. An MRI scan may sometimes also be used to look at any cancer in the bones.

MX The spread of the cancer was not measured.

M0 The cancer has not spread to other parts of the body.

M1 The cancer has spread to other parts of the body.

You will be diagnosed with advanced prostate cancer if your cancer has spread to other parts of the body (M1).

Talk to your doctor or nurse if you have any questions about the tests you have had or your diagnosis. For more detailed information about diagnosing prostate cancer read our Tool Kit fact sheet, **How prostate cancer is diagnosed**.



What are my treatment options?

This section gives you a summary of the treatment options for men who have been diagnosed with advanced prostate cancer.

You can read more about what each treatment involves, the advantages and disadvantages and the possible side effects in our **Tool Kit** fact sheets. You can also call our Specialist Nurses on our confidential helpline.



Before you start treatment

Before you start your treatment, make sure you know:

- what the treatment involves
- the possible side effects (see below)
- the advantages and disadvantages
- how your treatment will be monitored, and
- whether any other treatment options are available as part of a clinical trial (see page 6).

You can also discuss your treatment with your partner or family and bring them along to your appointments. It can sometimes be hard to take everything in. A friend or relative can also listen to what the doctor says or make notes for you.

Hormone therapy

Hormone therapy is the standard first treatment for advanced prostate cancer. Prostate cancer needs the male hormone testosterone to grow. Hormone therapy stops testosterone from reaching the cancer, causing the cancer to shrink.

Hormone therapy will not get rid of the cancer but it can often keep the cancer under control for several years. It will treat all prostate cancer cells whether they are in the prostate gland, or have spread to other parts of the body. Hormone therapy may also help to control symptoms such as bone pain and problems passing urine. Most men with advanced prostate cancer will need hormone therapy for as long as it is keeping the prostate cancer under control.

There are three main types of hormone therapy treatment for prostate cancer: injections, surgery and tablets.

• Injections

These stop the body producing testosterone. You will have the injection at your GP surgery or hospital. There are several different types of injections. Luteinizing hormone-releasing hormone (LHRH) agonists are the most common injections. You may have these every month or every three months.

• An operation called an orchidectomy

This removes either both testicles, or just the parts that make testosterone. You may find the idea of this alarming, but it is as effective as LHRH agonists and means you won't have to have regular injections. However, unlike injections, it cannot be reversed.

• Tablets called anti-androgens

These stop the testosterone reaching the cancer cells. These are taken every day. You may have them on their own, before having injections, or together with LHRH agonists or an orchidectomy.

If you have recently been diagnosed with advanced prostate cancer, you will usually be offered either injections or an orchidectomy to begin with.

If you have LHRH agonists you may also be given anti-androgens before and after the first injection. This is to stop the body's normal reaction to your first injection, which is to produce more testosterone.

You will have regular PSA tests which will help to check how well your treatment is working. If your PSA level falls, this usually suggests your treatment is working.

You can read more about hormone therapy and how it is given in our Tool Kit fact sheet,



Hormone therapy.

What are the side effects of hormone therapy?

Like all treatments, hormone therapy can cause side effects and it is important to discuss these with your doctor or nurse before you start any treatment. If you know what side effects to expect, it can make it easier to cope with them.



You can also call our Specialist Nurses on our confidential helpline.

Side effects of hormone therapy are caused by lowered testosterone levels. The most common side effects are listed below. Hormone therapy affects each man differently, and you may not get all of these side effects. There are ways to manage them.

The risk of getting each side effect depends on which hormone therapy you are taking and how long you take it for. In most cases, side effects will last for as long as you are on hormone therapy.

The most common side effects of hormone therapy include:

- loss of sex drive and erection problems
- hot flushes
- tiredness (fatigue)
- weight gain
- loss of muscle strength
- swelling and tenderness in the breast area (gynaecomastia)
- thinning of the bones (osteoporosis)
- a risk of heart disease and diabetes
- changes to your mood, and
- problems with concentration and memory.

 You can read more about the side effects and how to manage them in our booklet, **Living with hormone therapy: a guide for men with prostate cancer**.

How will I know if my hormone therapy is working?

You will have regular PSA tests to check how well the hormone therapy is working. Your doctor or nurse will be able to tell you how often you will have a PSA test, and if you will need any other tests. A continuous rise in your PSA may suggest that your hormone therapy is no longer working so well.

For most men with advanced prostate cancer, hormone therapy works very successfully to control the cancer. However, it is difficult for your doctor to say exactly how long the treatment will work for, because this will depend on how far the cancer has spread and how well it responds to treatment. Over time, the behaviour of the cancer cells may change and your cancer may start to grow again.

You should let your doctor or nurse know if any symptoms, for example bone pain or urinary problems, get worse, or if you develop any new symptoms. There are treatments available to manage symptoms, and your doctor or nurse can also support you in coping with them. New symptoms may also be a sign that your hormone therapy is no longer as effective.

If your hormone therapy is no longer controlling your cancer as well, there are still other treatments available. You can read more about this in our Tool Kit fact sheet, **Treating prostate cancer after hormone therapy**.



What other treatments are available?

There are other treatments that can help to control the cancer. There are also treatments to relieve symptoms such as bone pain.

Treatments to control the cancer

More hormone therapy

You may start taking anti-androgen tablets alongside your injections.

There are other forms of hormone therapy that you may also be able to take alongside your current hormone therapy. These include steroids and oestrogens.

 You can read more about these treatments in our Tool Kit fact sheet, **Treating prostate cancer after hormone therapy**.

Chemotherapy

Chemotherapy uses anti-cancer drugs to kill the cancer cells. It cannot cure prostate cancer, but it can shrink it and slow its growth. Chemotherapy may help some men with advanced prostate cancer to live longer. Chemotherapy can also help relieve any symptoms you might have. It is an option for men whose cancer is no longer responding to hormone therapy.

 You can read more in our Tool Kit fact sheet, **Chemotherapy**.

Clinical trials and new treatments

Clinical trials are a type of medical research study that aim to find new improved ways of preventing, diagnosing and treating illnesses. There are clinical trials looking at new treatments for men with advanced prostate cancer. There are also trials to find out whether existing treatments work better in new combinations or doses. Clinical trials can be a way of having newer treatments that are not yet available on the NHS.

If you would like to find out about taking part in a prostate cancer clinical trial ask your doctor or specialist nurse. You can read more about clinical trials in our Tool Kit fact sheet, **A guide to prostate cancer clinical trials**.



There are new treatments for advanced prostate cancer.

- Abiraterone (Zytiga®) is a new type of hormone therapy. It is suitable for men who have already had both hormone therapy and chemotherapy which are no longer working.
- Cabazitaxel (Jevtana®) is a new type of chemotherapy. It is suitable for men who have already had hormone therapy and another chemotherapy.

These treatments are licensed in the UK. However, cabazitaxel is not widely available on the NHS. Abiraterone is available on the NHS. Speak to your doctor about whether these are suitable for you. You may be able to access them or other new drugs by taking part in a clinical trial.

You can read more about new treatments for advanced prostate cancer and how to get them on our website, **prostatecanceruk.org**

Treatments to relieve symptoms

Advanced prostate cancer can cause symptoms, such as bone pain. Hormone therapy may help to control these symptoms, but if it is no longer working as well, there are other treatments available to manage symptoms. Chemotherapy may also help to manage symptoms.

If you have bone pain, it can be well managed with the right treatments. You should not have to accept pain as a part of having cancer. If you do have any pain, let your doctor or nurse know.

Pain-relieving drugs

There are different kinds of pain-relieving drugs to manage pain from prostate cancer. These include mild pain-relieving drugs such as paracetamol and non-steroidal anti-inflammatory drugs such as ibuprofen, and stronger drugs called opioids which include morphine and codeine.

You can read more about these and other treatments for pain in our Tool Kit fact sheet, **Pain and advanced prostate cancer**.



Radiotherapy

A low dose of radiotherapy can be used to shrink the cancer and reduce symptoms. This is sometimes called palliative radiotherapy.

There are two types of radiotherapy to reduce symptoms:

- external beam radiotherapy (EBRT), and
- a type of injectable radiotherapy called radioisotopes.

You can read more about palliative radiotherapy in our Tool Kit fact sheet, **Radiotherapy for advanced prostate cancer**.



Bisphosphonates

These are drugs that are used to treat bone pain caused by the cancer. If the cancer has spread to the bones, it damages them and makes them weaker. Bisphosphonates bind to the damaged areas of bone, slowing down the damage caused by the cancer and relieving pain. You can take them for as long as they work for you.

You can read more about bisphosphonates in our Tool Kit fact sheet, **Bisphosphonates**.



What is my outlook?

After a diagnosis of advanced prostate cancer, many men will want to know how successful their treatment is likely to be in controlling their cancer. This is sometimes called your outlook or prognosis. No one will be able to tell you exactly what your outlook will be, as every cancer is different. While it is not possible to cure advanced prostate cancer, hormone therapy may control it for several years.

When hormone therapy stops working, there are other treatments available to keep the cancer under control for a further period of time. The aim of all these treatments is to control the cancer for as long as possible without making you feel too unwell from the side effects of the treatment. They also help to manage the symptoms of advanced prostate cancer.

Not everyone will want to know about their outlook, but if you do, speak to your doctor. They will be able to talk to you about your individual situation.

It can be very difficult living with the uncertainty of a diagnosis of cancer, but there is support available if you need it.

Where can I get support?

If you have been diagnosed with prostate cancer, there is support available. It can be an overwhelming time and you may experience a range of emotions. Your family may also find it difficult, and this section may be helpful to them.

You will be given a main contact at the hospital, sometimes called a key worker. This might be a specialist nurse or another member of the team looking after you. They should be able to answer any questions or concerns you might have, as well as providing support. You and those close



to you can also speak to one of our Specialist Nurses by calling our confidential helpline.

They can help you to understand your diagnosis, treatment options and the emotional effects of cancer.



You and your family may find that talking to someone with similar experiences helps. Our support volunteers are all men and women personally affected by prostate cancer, either as a man with prostate cancer or a family member. They are trained to listen and offer support over the telephone. Call our Specialist Nurses on our confidential helpline to arrange to speak to a volunteer.

If you have access to the internet, you and your family can join our online community on our website at **prostatecanceruk.org**. You can share your experiences with other men and their families. There are also prostate cancer support groups across the country, where you and your family can meet other people affected by prostate cancer. You can find details on our website or ask your nurse.

Hospices provide a range of services including treatment to manage symptoms, emotional and spiritual support, practical and financial advice and support for families. Hospices do not just provide care for those at the end of their life. Some provide day centres offering services such as complementary therapy or support. Your GP, doctor or nurse at the hospital, or district nurse can refer you to a hospice service. You can find out more about hospice services from Help the Hospices and Marie Curie Cancer Care (see page 10).



If you have been diagnosed with advanced prostate cancer, you may be worried about practical issues such as work and money, help with transport or around the house. There is support available, and you can read more about this in our booklet, **Living with and after prostate cancer: A guide to physical, emotional and practical issues**.

Questions to ask your doctor or nurse



You may find it helpful to keep a note of any questions you have to take to your next appointment.

What type of hormone therapy are you recommending for me and why?

What are the side effects?

What are the advantages and disadvantages?

How often will you monitor my cancer and treatment?

What other treatments are available if the cancer starts to grow again?

Are there any clinical trials that I could take part in, at this hospital or a different one?

If I have a question, who should I contact?

Where is my nearest support group?

More information

British Association for Counselling and Psychotherapy

www.itsgoodtotalk.org.uk

Telephone: 01455 883300

Provides information about counselling and details of therapists in your area.

Cancer Black Care

www.cancerblackcare.org.uk

Telephone: 020 8961 4151

Provides information and support to all people affected by cancer and raises awareness of cancer in black and minority ethnic communities.

CancerHelp UK

<http://cancerhelp.cancerresearchuk.org>

Freephone: 0808 800 4040

(9am-5pm, Mon-Fri)

Part of Cancer Research UK, Cancer Help provides information about all types of cancer and a database of cancer clinical trials.

Healthtalkonline

www.healthtalkonline.org

Watch, listen to, or read personal experiences of men with prostate cancer and other medical conditions.

Help the Hospices

www.helpthehospices.org.uk

Telephone: 020 7520 8200

Provides information about hospice care, including a database of hospice and palliative care providers in the UK.

Macmillan Cancer Support

www.macmillan.org.uk

Freephone: 0808 808 00 00

(9am-8pm, Mon-Fri)

Provides practical, financial and emotional support for people with cancer, their family and friends.

Maggie's Cancer Caring Centres

www.maggiescentres.org

Telephone: 0300 123 1801

Cancer information and support centres throughout the UK where people affected by cancer can drop in to access information and support services.

Marie Curie Cancer Care

www.mariecurie.org.uk

Freephone: 0800 716 146

(9am-5.30pm, Mon-Fri)

Runs hospices throughout the UK and provides a nursing service for patients in their own home.

NHS Choices

www.nhs.uk

Provides information and advice about medical conditions, and information on NHS health services in your area.

UK Prostate Link

www.prostate-link.org.uk

Guide to reliable sources of prostate cancer information.

About us

Prostate Cancer UK fights to help more men survive prostate cancer and enjoy a better life.

This fact sheet is part of the Tool Kit. You can order more Tool Kit fact sheets, including an  **A-Z of medical words**, which explains some of the words and phrases used in this fact sheet.

All of our publications are available to download and order from the website. You can also order printed copies by calling **0800 074 8383** or emailing **literature@prostatecanceruk.org**

At Prostate Cancer UK, we take great care to provide up-to-date, unbiased and accurate facts about prostate cancer. We hope these will add to the medical advice you have had and help you to make decisions. Our services are not intended to replace advice from your doctor.

References to sources of information used in the production of this fact sheet are available at **prostatecanceruk.org**

This publication was written and edited by:
Prostate Cancer UK's Information Team

It was reviewed by:

- Wendy Ansell, Macmillan Urology Nurse Specialist, St Bartholomew's Hospital, London
- Nicola James, Nurse Consultant, Prostate Cancer, Chesterfield Royal Hospital NHS Foundation Trust, Chesterfield
- Rob Jones, Senior Lecturer and Honorary Consultant in Medical Oncology, The Beatson West of Scotland Cancer Centre, Glasgow
- Sean Vesey, Consultant Urological Surgeon, Southport and Ormskirk NHS Hospitals Trust, and Royal Liverpool and Broadgreen University Hospitals NHS Trust, Southport
- Debbie Victor, Urology Cancer CNS, Royal Cornwall Hospitals NHS Trust, Truro
- Prostate Cancer Voices
- Prostate Cancer UK Specialist Nurses

Tell us what you think

If you have any comments about our publications, you can email:

literature@prostatecanceruk.org

or write to the Information Team at:

Prostate Cancer UK
100 Cambridge Grove
London W6 0LE



**Speak to our
Specialist Nurses**

0800 074 8383*

prostatecanceruk.org

Donate today – help others like you

Did you find this information useful? Would you like to help others in your situation access the facts they need? Every year, 40,000 men face a prostate cancer diagnosis. To help us continue providing free information, you could make a donation of any amount. Please call us on **020 8222 7666**, visit **prostatecanceruk.org/donations** or text **PROSTATE** to **70004****

There are many other ways to support us. For more details please visit:
prostatecanceruk.org/get-involved

**You can donate up to £10 via SMS and we will receive 100% of your donation. Texts are charged at your standard rate. For full terms and conditions and more information, please visit prostatecanceruk.org/terms



Prostate Cancer UK

London

Cambridge House
100 Cambridge Grove
London W6 0LE

info@prostatecanceruk.org
020 8222 7622

Glasgow

Unit F22-24 Festival Business Centre
150 Brand Street
Glasgow G51 1DH

scotland@prostatecanceruk.org
0141 314 0050



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The helpline is open Mon - Fri 10am - 4pm, Wed 7pm - 9pm

*Calls are recorded for training purposes only.

Confidentiality is maintained between callers and Prostate Cancer UK.

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