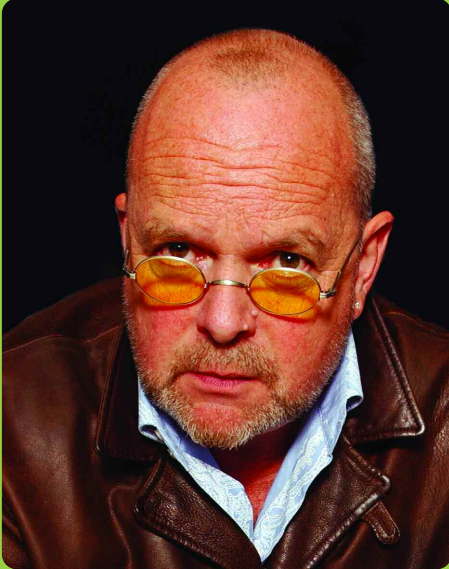




James Whale Fund  
for Kidney Cancer

## Understanding Kidney Cancer

A patient information guide from the  
James Whale Fund for Kidney Cancer



These people have all  
suffered from kidney  
cancer and continue  
to lead fulfilling lives.  
We hope this booklet  
will help you to do  
the same.

## **2 GETTING A DIAGNOSIS**

- The symptoms of kidney cancer
- How doctors diagnose kidney cancer

## **6 HAVING TREATMENT**

- Staging and grading kidney cancers
- Discussing treatment options
- What are my chances?
- Surgery
- Biological therapies
- Newer biological treatments
- Other treatments

## **16 LIVING WITH KIDNEY CANCER**

- Feelings
- Day-to-day living
- Money matters
- Support
- Self-help

## **19 WHERE TO FIND MORE INFORMATION**

## **20 GLOSSARY**

## **22 NOTES**

The James Whale Fund for Kidney Cancer does not supply medical advice. The information provided in this booklet is for educational purposes only and is not a substitute for professional care. It should not be used for diagnosing or treating health problems. If you have, or suspect you may have a health problem you should contact your doctor.

Front cover: James Whale, Nicholas Owen and Rose Woodward,  
Co-founder of the Kidney Cancer Patient Support Network.

You can visit the Kidney Cancer Support Network forum at  
[www.kidneycancersupportnetwork.co.uk](http://www.kidneycancersupportnetwork.co.uk)

By the time you read this, you (or someone close to you) will have probably seen a doctor and had some tests.

You may have sought help or advice because you were experiencing one of the symptoms of kidney cancer.

Or you may have been diagnosed with kidney cancer following a scan for something completely different.

This booklet will help you understand what is likely to happen next.

- It will tell you about the investigations the doctors might carry out.
- It will explain the different treatments available as well as the possible side-effects of each.
- It will suggest some questions you might like to ask your doctors so that you can decide on the course of action that's right for you.
- And it will tell you where you can get further information and support.

## GETTING A DIAGNOSIS

### The symptoms of kidney cancer

The most common symptom is **blood in the urine**. Doctors call this **haematuria**. It may come and go. Sometimes you won't be able to see it, but it can still be detected by a urine test. Most people with blood in their urine do not have kidney cancer. It can be a sign of an infection, kidney stones, prostate problems or bladder cancer. However, it should always be investigated to find out what has caused it. The sooner kidney cancer is detected, the easier it is to treat.

### Typical symptoms

- Blood in the urine
- Tiredness
- Weight loss and/or loss of appetite
- Running a persistent temperature and sweating heavily especially at night
- Persistent low back pain

Most kidney cancers are too small to feel but if you feel a **lump or mass** in the area of your kidneys you should tell your doctor straight away.

You should also see your doctor about any **persistent low back pain**.

There are other symptoms which can be more general and can also be caused by many other conditions (see box).

Sometimes **abnormal red blood cell counts** and **high blood pressure** can be symptoms of kidney cancer.

In the early stages of kidney cancer there may be no obvious symptoms. Many kidney cancers are found simply by chance when someone is being given a scan for another reason.

### How doctors diagnose kidney cancer

#### At your GP's

Some initial tests will probably be carried out by your family doctor. He or she will examine you and ask for a **urine sample**. This will be analysed to see if it contains blood. You

may also be asked for a **blood sample**. This will be tested to see how well your kidneys are working.

Your GP may then refer you to a hospital specialist for further tests. There are special guidelines for GPs to help them decide who needs to be referred urgently.

### At hospital

The specialist will want to know about your **medical history** and **symptoms**. If anyone else in the family has had kidney cancer you should mention this. You will have more **blood** and **urine tests**.

The doctor will also want to look at your kidneys. An **ultrasound scan** can show up changes in the kidneys which could be due to a cyst or tumour. This is a painless procedure which is done in the hospital scanning department and takes only a few minutes. You lie on your back and gel is spread on your stomach. A small device which produces sound waves is rubbed over the area. The echoes are turned into a picture by a computer.

Another test that can show up growths in the kidneys or urinary system is called an **IVU** or **IVP**. It is done in the hospital X-ray department and takes about an hour. A dye is injected into a vein in your arm and a doctor watches on a screen as it travels through the kidneys. The dye may make you feel hot and flushed for a little while, but the feeling gradually disappears. You should be able to go home as soon as the test is over.

Your doctor might want to carry out a **cystoscopy** to look inside your bladder, because it is part of the same system as your kidneys. The procedure can be done under local or

### More information

[www.jameswhalefund.org](http://www.jameswhalefund.org)

[www.cancerhelp.org.uk](http://www.cancerhelp.org.uk)

general anaesthetic. A fine tube with a light is passed up your urethra and into your bladder where it acts like a telescope.

If the initial investigations confirm you have kidney cancer, you will need more tests to help doctors see if it has spread and how best to treat it. However, some of the following tests may also be used when your doctor is still trying to determine whether you have kidney cancer or not:

### A CT scan

When you have a CT scan – often referred to as a CAT scan because it is short for computerised axial tomography – the scanning machine takes a series of pictures from different angles. The images are put together by a computer to give a detailed image of the inside of your body. The machine is shaped rather like a ring doughnut. You lie on a couch which slides backwards and forwards through the hole. The radiographer cannot stay in the room with you during the scanning but will be able to see you on a tv screen and talk to you through an intercom. You may be given an injection of dye into a vein to help blood vessels show up more clearly. A CT scan is painless but takes longer than an X-ray. Some people feel a little claustrophobic during a scan. If you think you might, tell the radiographers before the day of your appointment.

### Biopsy

Doctors can usually make a confident diagnosis from a CT Scan alone. Occasionally a biopsy will also be carried out. A thin needle is put through the skin and muscle into the kidney to remove a small sample of tissue. This is then examined under a microscope to check for signs of cancer.

## Typical tests

- CT or CAT scan
- Biopsy
- MRI
- Bone scan
- Chest X-ray

## MRI

This is similar to a CT scan but uses magnetic resonance imaging instead of X-rays to build up a detailed picture of the inside of your body. It can be used to check the size and extent of a tumour, as well as seeing whether or not the cancer has spread. You may be given an injection of dye into a vein to help blood vessels show up more clearly. During the test you have to lie very still on a couch inside a long tube for about 30 minutes. It is painless but very noisy and can make people feel a little claustrophobic. You should be given earplugs or headphones.

## Bone scan

You might be asked to have a bone scan to see whether the cancer has spread to your bones. If so, you will be injected with a mildly radioactive material and then asked to wait for a couple of hours while it travels through the blood and collects in the bones. Areas where there is damage to the bone will show up as 'hot spots'. These aren't necessarily the result of cancer. If you have arthritis, for instance, this will show up on the scan.

## Chest X-ray

A chest X-ray may be carried out to check your general health and make sure that you are fit enough to have certain treatments or surgery. It will also be used to rule out cancer spread to the lungs or chest bones.

You will be asked to go back to hospital for the results of your tests. This may take a little while and you will probably feel worried and upset during this time. Is there anyone you can share your feelings with? Is there a clinical

## Questions you may want to ask your doctor

- What tests are you going to do?
- What are you looking for?
- What will happen and how long will it take?
- Will it be painful or uncomfortable?
- Will there be any after-effects?
- Can I bring someone with me?
- How long will the results take?
- Who will give me the test results?
- Will they show if I have kidney cancer?
- Will they show if the cancer has spread?

nurse specialist you can talk to? It might be helpful to contact a support group and talk to someone who has been in your shoes. There are some useful numbers on page 19.

## HAVING TREATMENT

Before your doctors can discuss treatment options with you they need to know what kind of cancer you have and how far it has progressed. The most common form of kidney cancer is **renal cell carcinoma** or RCC for short. There are several different sub-types of RCC. The most common of these is **clear cell**.

This booklet concentrates on RCC although some of the information should be helpful to any kidney cancer patient. More information about other types of kidney cancer – including **Wilms' Tumour** which affects young children – can be obtained from our website **[www.jameswhalefund.org](http://www.jameswhalefund.org)** or from Cancerbackup or Cancer Research UK (see p19).

### Staging and grading kidney cancers

Doctors grade cancers by looking at cells under a microscope. Cancers are generally given one of three grades. The grade helps to indicate how quickly or slowly a cancer is likely to grow and spread. Grade 1 or low-grade cells are usually slow-growing and less likely to spread. Grade 3 or high-grade cells are likely to grow more quickly and are more likely to spread.

Staging is used to describe how big a cancer is and how far it has already spread.

The TNM system is generally used.

- T** plus a number stands for the size of the tumour.
- N** plus a number stands for any nearby lymph nodes the cancer has spread to.
- M** plus a number refers to places elsewhere in the body where the cancer has spread.

Your doctor will combine these figures to give an overall staging. eg T2 No Mo

**Stage 1** The cancer is confined to the kidney and is less than 7cm in size

**Stage 2** The cancer is bigger than 7cm but still confined to the kidney

**Stage 3** The cancer has started to spread outside the kidney

**Stage 4** The tumour has either spread to nearby organs or to other parts of the body further away

When discussing your treatment options, your doctor will also take into account how well you are overall.

### **Discussing treatment options**

Ideally you will be treated in a cancer unit by a team of specialists. They will discuss your treatment with you. The team will include a urologist who specialises in surgery and an oncologist who specialises in other ways of treating cancer. Preferably, both will have experience of treating kidney cancer.

Other members of the team may include a nurse specialist, a dietician, a physiotherapist, an occupational therapist and a psychologist or counsellor.

Your doctors will tell you which treatment they think would be best for you. Sometimes they may offer you a choice of treatments. In any case, you should be sure you have been given enough information – and understood it – before you give permission for the treatment to start. Don't be embarrassed about asking people to explain things again. And remember to ask about any aspects that are worrying you. You should be told:

- What type of treatment the doctors are advising
- How and when this would be carried out
- The advantages and disadvantages of this type of treatment
- Any possible other treatments that might be available
- Any significant risks or side effects of the treatment

It may be useful to write down a list of questions to take with you to the appointment. It is also a good idea to have a relative or friend with you when you are discussing your treatment options. They will be able to take notes or help you remember what was said. If you feel you can't make a decision straightaway, ask for more time to decide.

You may want a second opinion, especially if you feel your doctor does not have enough experience in treating kidney cancer or if you are told little treatment is available. Most doctors will be willing to refer you to another specialist but it may take a little while to organise. As this may delay the start of your treatment you need to feel sure it will be worthwhile.

If the treatment you are being offered aims to cure your cancer, you may find the decision to go ahead relatively easy. But if, instead, the aim of the treatment is to control the cancer for a period of time it may be more difficult to decide.

You might want to think about your quality of life while you are having treatment. Will you have to travel back and forwards to hospital? What will the side-effects be?

As well as talking things over with the people who mean most to you, you may find it helpful to talk to a counsellor or a specialist nurse. If you choose not to have treatment you can still be given help to control any symptoms you have. This is called palliative care.

### **What are my chances?**

Being told you have kidney cancer is always a shock. People react in different ways. Some want to find out as much as they can about their treatment and their long-term prospects. Others don't want to think about the future, preferring to take each day as it comes without worrying about what may or may not lie ahead.

As doctors know only too well, it can be very difficult to predict what will happen because every patient is an individual. Of course, the earlier your cancer is detected and the sooner treatment begins, the better your chances of long-term survival. Even if your cancer has spread, making it more difficult to treat, it is possible for the symptoms to be kept well under control for years. And in some rare cases patients may go into remission for no apparent reason.

There are statistics about average survival rates for people diagnosed with different stages of

### **Medical specialists**

- Specialist Nurse
- Dietician
- Physiotherapist
- Occupational Therapist
- Psychologist
- Oncologist
- Urologist

kidney cancer. You can look at these on [www.cancerhelp.org.uk](http://www.cancerhelp.org.uk) if you choose to. If you do, bear in mind that these are averages and will not tell you how well you will do. Some patients, originally warned that their prospects of survival were poor, have lived for much longer and had a much better quality of life than expected.

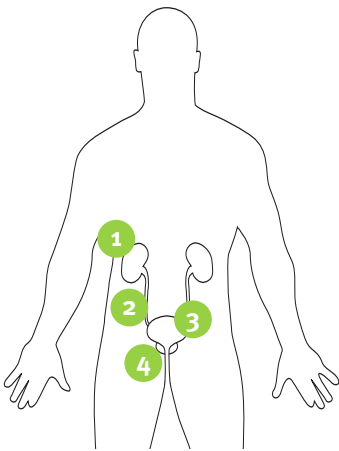
### Surgery

Surgery to remove part or all of the kidney is usually the first thing doctors consider and it can be a cure if the cancer is at an early stage. Even some more advanced cancers can be cured if all the cancer can be removed. However, removing a kidney is a major operation so you need to be fit enough to cope and recover afterwards. That's why this treatment may not be possible for everyone.

Removing part of a kidney is called a **partial nephrectomy**. It means that some working kidney is left behind. Specialist surgeons now treat many small tumours this way if possible.

During a **radical nephrectomy** the whole kidney and the surrounding fatty tissue, the adrenal gland, and nearby lymph nodes are removed. You can live perfectly well with just one working kidney, but if both kidneys are removed or not working you will need dialysis for the rest of your life.

The surgeon usually makes a cut between the lower ribs on the side of a tumour. This is called open surgery. Sometimes it is possible to use keyhole surgery instead. This is called a **laparoscopic nephrectomy**. The operation is carried out using several small incisions or cuts rather than one large incision. There may be some advantages to having keyhole surgery. For example, you may experience less pain



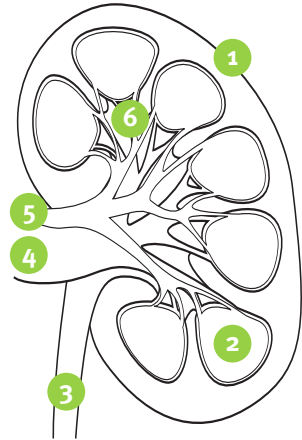
- 1 Kidney
- 2 Ureter
- 3 Bladder
- 4 Urethra

after the operation, need a shorter stay in hospital and have smaller scars. However, keyhole surgery – like any operation – has some risks, so you should discuss the options with your specialist before surgery.

After the operation you will be given an intravenous drip of fluid and salts until you can eat and drink normally. Tubes will drain excess fluid from your wound to assist healing. These will be taken out before you go home. You will probably have a catheter fitted to drain your urine into a bag. This is usually taken out after a day or two.

Most people go home between four to ten days after their operation depending on the type of surgery they had. The time it takes for you to feel fit enough to get back to leading a normal active life will vary. It may help to talk to your doctor about this.

Doctors have been researching less invasive ways of removing kidney tumours. **Cryotherapy** freezes the tumour. **Radio-frequency ablation (RFA)** and **high intensity focussed ultrasound (HIFU)** kill the tumour with heat. These approaches maybe useful if your tumour is small, or when open or keyhole surgery to remove your kidney is not an option The big advantage is that these techniques can be done using probes through the skin so you don't have to have open surgery. However, no-one yet knows if they work as well.



- 1 Cortex
- 2 Medulla
- 3 Ureter
- 4 Renal vein
- 5 Renal artery
- 6 Calyces

## Drug treatments

- Interferon alpha-2a (Roferon-A® or IntronA®)
- Interleukin-2 or Aldesleukin (Proleukin®)
- Sunitinib (Sutent®)
- Bevacizumab (Avastin®)
- Medroxyprogesterone (Provera®)

## Biological therapies (also known as immunotherapy)

This approach stimulates the body's own immune system to attack the cancer cells. It uses man-made copies of substances made naturally by the body. These include interferon alpha and interleukin 2. They are used to shrink the cancer and reduce the symptoms it is causing.

### Interferon alpha-2a (Roferon-A® or IntronA®)

is usually given three times a week by an injection under the skin using a very fine needle. You or a relative can be taught to do this at home using a pen-injection device or a pre-filled syringe.

You can arrange for a nurse to visit you at home to help you manage the first few times and give advice on managing any side-effects. These can be similar to flu symptoms: chills, fever, headaches, and aches and pains in your back, joints and muscles. Taking paracetamol half an hour before an injection and then every six hours until the symptoms subside often helps. Other side-effects include nausea, loss of appetite and tiredness. The side-effects tend to lessen as the treatment continues.

### Interleukin-2 or aldesleukin (Proleukin®)

stimulates white blood cells called T lymphocytes. It can be given as an injection under the skin or by a drip into a vein. The side-effects are similar to those of interferon but likely to be worse and vary depending on the dose.

The most common side-effects include chills, fever, headache, aches and pains, nausea and vomiting and loss of appetite. The therapy may also cause changes to the pattern of your

heartbeat, fluid on the heart or lungs, or problems such as depression or confusion. This is why it is usually only given to patients in specialist cancer centres where doctors and nurses can help them manage the side-effects.

You might be offered one of these biological therapies as part of a research trial. You can get more information about clinical trials from Cancer Research UK (see p19).

### **Newer biological treatments**

Cancer researchers have been working to find new ways of stopping kidney cancers growing. One of the most promising advances has been the development of tyrosine kinase inhibitors.

**Tyrosine kinase inhibitors** such as **sunitinib** (Sutent®) and **sorafenib** (Nexavar®) block the effects of tyrosine kinase, a protein which is part of the signalling system that tells cells when to divide and grow. These treatments also starve the tumour by stopping the development of a blood supply.

In the UK, sunitinib and sorafenib were originally approved for the treatment of advanced kidney cancer only after interferon or interleukin has failed to help. Now they can be prescribed as the first course of treatment for people with advanced kidney cancer.

Sunitinib comes in tablets. You usually take one 50mg a day for four weeks, followed by two weeks off. Sorafenib is usually taken as two 200mg tablets twice a day for as long as the treatment is helping. In trials, the most common side-effects included fatigue, stomach upsets from diarrhoea to nausea and vomiting, skin discoloration, an increase in blood pressure and loss of taste and appetite. Many of these side effects can be controlled with medication.

You can find more information about sunitinib and sorafenib in the kidney cancer questions section on the **Macmillan** website.

Drugs that are used to block the blood supply to a tumour and stop it spreading are called **antiangiogenesis agents**. Thalidomide is one of them.

Another drug being tested is **bevacizumab** (Avastin®). This is a type of **monoclonal antibody** (MAB). MABs recognise abnormal proteins on the outside of cancer cells. They can then target the cancer cells and kill them.

### Other treatments Embolisation

This is a minor procedure compared to surgery. The aim is to cut the blood supply to the kidney and shrink a tumour in order to control it or to make it easier to remove surgically. Tiny pieces of a special sponge are injected into the artery that leads to the kidney, cutting off the supply of nutrients and oxygen to the tumour.

### Radiotherapy

Radiotherapy uses high-energy rays to destroy cancer cells while harming normal cells as little as possible. It can be used to shrink a kidney cancer and so control symptoms. It can also be used if the cancer has spread to other areas such as the bone.

Treatment is given in the hospital radiotherapy department and will be tailored to you. Some people have treatment from Monday to Friday for several weeks. Others may need only one or two sessions. Side-effects can include fatigue and nausea and sore skin. They take a while to build up and usually persist for a while after the treatment has finished. The specialist

## Questions you might like to ask

- Where will I have my treatment?
- What will it involve?
- How long will it take?
- How will it affect me?
- What help will I get to deal with side-effects?
- Will I get ever get back to normal or will there be some long-term effects?
- Will I be able to go back to work?
- What is the aim of this treatment?
- Will the treatment cure my cancer?

(a clinical oncologist) will be able to tell you what to expect and how to cope.

### Chemotherapy

This is the use of anti-cancer drugs to destroy cancer cells. The drugs may be given as tablets or, more likely, by injection into a vein. You may be offered chemotherapy as part of a trial of new drugs or in combination with biological therapy. Different types of kidney cancer respond to different treatments – chemo is used less often for renal cell cancer than transitional cell cancer, for instance.

Chemo causes your blood count to fall so you will be more prone to infections and tire easily. You may also feel sick, be sick or lose your hair. Some drugs make your mouth and throat sore. Ask your doctor or nurse what to expect. There are drugs you can take to stop you feeling sick and mouthwashes you can use to prevent ulcers and the symptoms should stop when the treatment does. Your hair should grow back once the treatment is over.

### Hormone therapy

Sometimes kidney cancer that has come back responds to treatment with **medroxyprogesterone** (Provera®). Don't take it on an empty stomach as it can irritate the stomach lining. Side-effects may include water retention, weight gain, indigestion or nausea and sleeplessness.

### Vaccines

Cancer vaccines are designed to get the body's own immune system to fight cancer. Research is going on into vaccines that will stop or slow down advanced kidney cancer, or reduce the risk of the cancer coming back after surgery.

All drugs used to treat cancer can affect fertility. If you are prescribed drugs they may only affect your ability to have children while you are taking them. However, with newer treatments the long-term effects may not yet be known, so this is an important issue to discuss with your doctor before you start treatment.

## **LIVING WITH KIDNEY CANCER**

### **Feelings**

If someone tells you that you have cancer it can be hard to take everything in. And it can be doubly hard if you are being told that your cancer has already spread so far it cannot be cured, or that a cancer you thought had gone has come back.

You will probably go through a whole range of emotions. Shock and fear. Sadness and anger. Disbelief. Numbness. You might find yourself thinking: why me? Or: this can't be happening to me. There is no right or wrong way to feel – everyone reacts differently. Some people want to share their feelings and worries with their partner, their family or close friends. Others prefer to come to terms with the news first, before talking to others.

It's very common to wonder if things you did or didn't do in the past are to blame for your getting ill. But it isn't usually possible to tell exactly what caused a person's cancer and you may have to accept this. However, some people find they feel much less helpless and more in control if they learn as much as they can about the cancer itself and the ways it can be treated.

Even if your cancer cannot be cured, there are ways of slowing it down or stopping it altogether for a time. The treatments can also help reduce or take away any symptoms you have been getting.

### **Day-to-day living**

Make sure you get help to feel as well as possible. Ask your doctor or nurse about referral to a Macmillan nurse. Macmillan nurses specialise in helping cancer patients. They are experts at controlling symptoms and often liaise between patients, relatives, GPs and the hospital to improve quality of life for the whole family. Some are qualified counsellors. Marie Curie nurses and healthcare assistants also provide support at home. For more information see p19.

The body can manage perfectly well with one kidney. But it makes sense to look after the one you have left. So cut down on the amount of salt in your diet. Eat healthily. Aim for more fresh fruit and vegetables and less protein.

Protein-rich foods include meat, fish, eggs and dairy products. If you are a smoker, try to stop. Keep alcohol consumption to a minimum and drink plenty of water. And don't take large doses of Vitamin C supplements.

### **Money matters**

A Macmillan nurse or your GP will be able to advise you about the grants that are available. These can be for mobility aids or to help with heating costs or household expenses related to your illness. A Macmillian nurse will also help you claim any benefits you are entitled to. Many hospital departments also have a social worker who can provide helpful information.

### **Questions you might like to ask**

- Will the treatment stop the cancer growing? Or spreading?
- What are the risks of this treatment?
- What are the advantages of this treatment?
- What will happen if I don't have this treatment?
- Will I be able to manage with just one kidney?
- What happens if my other kidney stops working?
- What is the risk of getting cancer in the other kidney?

## Support

### Family and friends

People who are close to you may find it difficult to discuss your illness. And you may be afraid that if you talk to people about how you really feel they will be upset, or disappointed at your lack of stoicism, or embarrassed because they don't know what to say. But it is important to be able to express your feelings when you need to. It can also be difficult talking to children about cancer. How much should you tell them? How honest should you be? **Macmillan** and **CancerHelp UK** have some useful advice.

### Other support

Sometimes it can be easier to talk things through with someone outside the family. This could be a specialist adviser or someone who has gone through a similar situation and knows how you are feeling. The James Whale Fund for Kidney Cancer can put you in touch with a volunteer to talk to or you can join the forum at [www.jameswhalefund.org](http://www.jameswhalefund.org). You could also call the **Macmillan CancerLine 0808 808 2020**. If you leave a message out of hours someone will call you back.

### Self-help

Regular exercise can help you feel better both physically and emotionally. Ask your doctor or nurse what kind of exercise would be best. Many people find that alternative therapies – such as massage, aromatherapy, meditation or visualisation – can also lift the spirits, ease tension and restore a feeling of well-being. You can find out if any of these therapies are available near you by contacting **New Approaches to Cancer**, a UK charity (see p19).

## WHERE TO FIND MORE INFORMATION

**Cancer Research UK** is the largest cancer research organisation in the world. One of its websites is CancerHelp UK, a free information service about cancer and cancer care for people with cancer and their families.

**[www.cancerhelp.org.uk](http://www.cancerhelp.org.uk)**

**Macmillan Cancer Support** helps people living with cancer and their family, friends and carers find a way through the maze of cancer support and information in the UK.

**[www.macmillan.org.uk](http://www.macmillan.org.uk)**

**Call CancerLine 0808 808 2020**

**Textphone 0808 808 0121**

**Marie Curie Cancer Care** runs hospices throughout the UK and provides a nationwide Marie Curie nursing service.

**[www.mariecurie.org.uk](http://www.mariecurie.org.uk)**

**Call 020 7599 7777**

**New Approaches to Cancer** promotes the benefits of using complementary therapies alongside conventional medical treatments.

**[www.anac.org.uk](http://www.anac.org.uk)**

**Call 0800 389 2662**

## GLOSSARY

### Adjuvant therapy

A treatment given in addition to the main treatment (for example, radiotherapy as well as surgery) to try to prevent a cancer from coming back.

### Advanced cancer

This usually means a cancer that has spread from where it started to another part of the body. 'Locally advanced' cancer usually means the cancer has grown outside the organ that it started in and into nearby body tissues.

### Angiogenesis

Growth of blood vessels. Growing cancers can attract new blood vessels to grow towards them so that they can get their own blood supply.

### Biological therapy

Treatment that uses natural body substances or drugs made from natural body substances to treat cancer.

### Biopsy

A piece of body tissue taken so that the cells can be looked at under a microscope.

### Catheter

Tube that is passed into the body to drain fluid.

### Cells

Every part of the body is made up of specialized, individual cells. Cancer starts with one cell becoming cancerous.

### Clear margins

After a cancer has been surgically removed the tumour is checked to make sure it is surrounded by a border of tissue that has no cancer cells. This is called a 'clear margin'. Removing this border as well as the cancer lowers the risk of the cancer coming back.

### Combination therapy

Using two or more types of treatment eg surgery and chemotherapy or chemotherapy and radiotherapy.

### Cystectomy

Surgical removal of the bladder.

### Cystoscopy

A bladder test. A surgeon puts a tube into the bladder and uses it to look inside the bladder and urethra to check if there is anything wrong.

### Diagnosis

Finding out what is wrong.

### Dialysis

An artificial way of filtering waste products and excess water from your blood when your kidneys can't.

### Haematuria

The presence of blood in the urine.

### Lymph nodes or glands

Glands which fight infection and filter body fluid (lymph).

### Metastases or secondaries

Areas of cancer spread.

### Nephrectomy

Surgical removal of a kidney. Either radical or partial. [Gr nephros, a kidney].

### Oncology

The study and treatment of tumours.

### Palliative treatment

Treatment given to control symptoms rather than to cure.

**Positron Emission Tomography (PET)**  
a diagnostic test.

### Primary cancer (Primary tumour)

Where the cancer started. The type of cell that has become cancerous will be the primary cancer - for example, if a biopsy from the liver or lung contains cancerous kidney cells, then the primary cancer is kidney cancer.

### Prognosis

The likely outlook for someone with a disease.

### Quality of life

This means looking at how a treatment is affecting your life, not just the effect on your cancer.

### Recurrence

Cancer that has come back again after treatment.

### Remission

If a cancer is in remission, there is no sign of it on scans or when the doctor examines you. Doctors use the word 'remission' instead of cure when talking about cancer because they cannot be sure that there are no cancer cells at all in the body.

### Tumour

Another word for a cancerous lump.

### Transitional Cell Carcinoma (TCC)

A type of cancer that develops in the lining of the bladder, urethra and renal pelvis.

### Urology

The study and treatment of the urinary tract in women and the urogenital system in men.



# The help button for kidney cancer patients



Click on [www.jameswhalefund.org](http://www.jameswhalefund.org) to discover a wealth of information on kidney cancer for patients and carers. Speak to carers and patients, join a forum to swap experiences, visit our on-line shop and much more...

*The UK's leading specialist kidney cancer charity*

# James Whale Fund for Kidney Cancer

The Fund was set up in 2006 by broadcaster James Whale who lost a kidney to cancer six years earlier. Our mission is to help reduce the harm caused by kidney cancer by increasing knowledge and awareness, providing patient information and by supporting research into the causes, prevention and treatment of the disease.

## Help our cause

The Fund's ability to achieve its aims is dependant on the support it receives from the general public. If you would like to make a donation, you can do so in the following ways:

**Make a donation** online by visiting [www.jameswhalefund.org](http://www.jameswhalefund.org)

**Send a cheque** made payable to 'James Whale Fund' to  
James Whale Fund for Kidney Cancer, 46-48 King Street Cambridge CB1 1LN

**Make a credit or debit card payment** (except Diners) on the phone,  
by calling **01799 585033**.

If you would like to offer your support in other ways, we'd be very pleased to hear from you.

The Kidney Cancer Support Network, with financial assistance from the James Whale Fund for Kidney Cancer provides a patient forum which allows patients and carers to exchange information and offer support.

[www.kidneycancersupportnetwork.co.uk](http://www.kidneycancersupportnetwork.co.uk)

A large text version of this document is available.  
Please contact the James Whale Fund for Kidney Cancer for copies.

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