

Understanding secondary cancer in the liver



About this booklet

This booklet is about secondary cancer in the liver. It is for anyone who has cancer that has spread to the liver from somewhere else in the body. There is also information for carers, family members and friends.

The booklet explains what secondary cancer in the liver is and how it is treated. It also covers ways of controlling symptoms and coping with the emotional impact.

This booklet does not have information about cancer that started in the liver. This is called primary liver cancer. We have another booklet about this called [Understanding primary liver cancer: Hepatocellular carcinoma or hepatoma](#).

We hope this booklet helps you deal with some of the questions or feelings you may have.

We cannot give advice about the best treatment for you. You should talk to your doctor, who knows your medical history.

How to use this booklet

This booklet is split into sections to help you find what you need. You do not have to read it from start to finish. You can use the [contents list](#) on page 3 to help you.

It is fine to skip parts of the booklet. You can always come back to them when you feel ready.

There are details of [other organisations that can help](#).

Quotes

In this booklet, we have included quotes from people who have had secondary cancer in the liver, which you may find helpful. These are from people who have chosen to share their story with us. To share your experience, visit macmillan.org.uk/shareyourstory

For more information

If you have more questions or would like to talk to someone, call the Macmillan Support Line free on [0808 808 00 00](tel:08088080000), 7 days a week, 8am to 8pm, or visit macmillan.org.uk

If you would prefer to speak to us in another language, interpreters are available. Please tell us, in English, the language you want to use.

If you are deaf or hard of hearing, call us using Relay UK on **18001 0808 808 00 00**, or use the Relay UK app.

We have some information in different languages and formats, including audio, easy read, Braille, large print, interactive PDFs and translations. To order these, visit macmillan.org.uk/otherformats or call [0808 808 00 00](tel:08088080000).

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What is cancer?

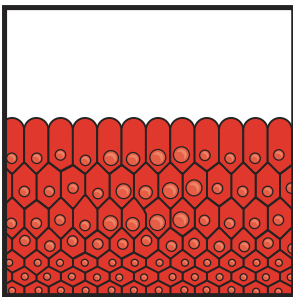
Our bodies are made up of tiny building blocks called cells. Inside every cell is a set of genes. Genes are the instructions the cell needs to work properly.

The instructions send signals to cells to grow and divide and make new cells. This is how our bodies grow and heal. Over time, cells become old or damaged. When this happens, signals tell the cell to stop working and die.

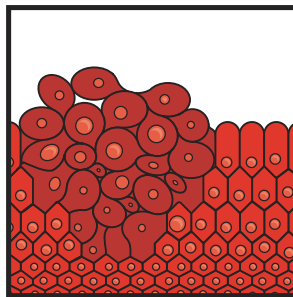
Sometimes genes in the cell can develop changes. If a gene is changed, may not give the correct instructions anymore. A change in a gene is called a gene variant or mutation.

Gene variants in a cell may stop the cell working normally. Cancer may develop if cells like this multiply in an abnormal way and grow out of control. Over time, these cells can grow into a lump called a tumour.

Abnormal cells forming a tumour



Normal cells



Cells forming a tumour

Not all tumours are cancer. Doctors can tell if a tumour is cancer by taking a small sample to look for cancer cells. This is called a biopsy.

Tumours that are not cancer are called benign. Benign tumours cannot spread anywhere else in the body. But they can cause problems if they grow and press on nearby organs.

Tumours that are cancer are called malignant. Malignant tumours can grow into nearby tissue and spread to other parts of the body.

Cancer can spread from one place (the primary site) to another through the blood or [lymphatic system](#). When cancer spreads and grows somewhere else, it is called a secondary cancer or metastasis.

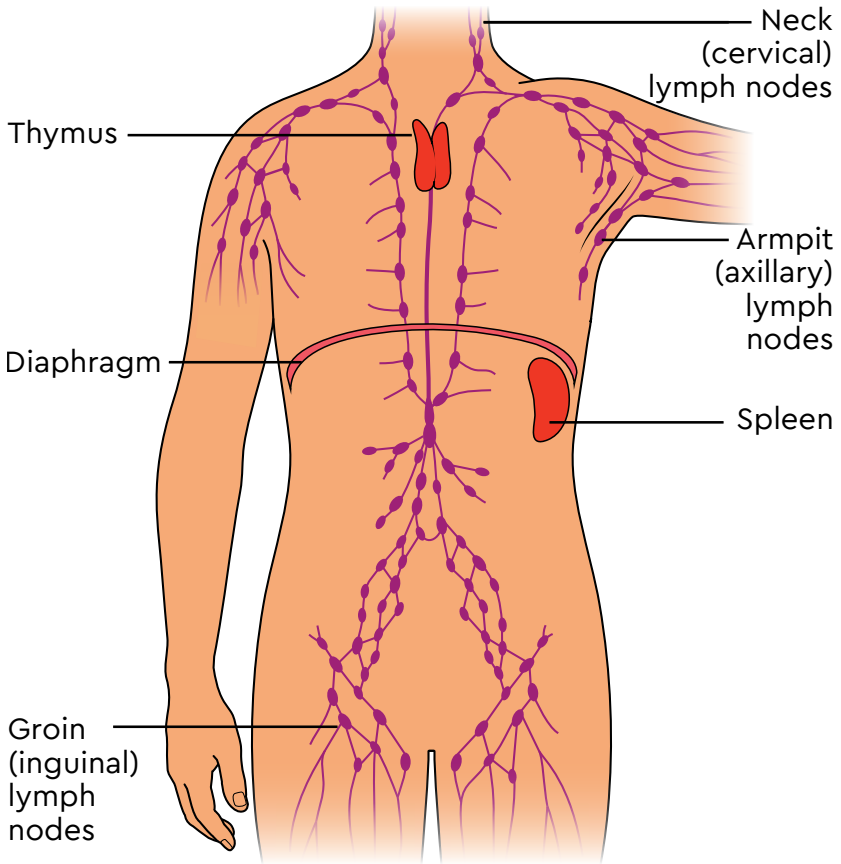
Cancer can start in any type of cell. This includes tissue or skin cells and cells that form the lining of the organs. It can also start in stem cells in the bone marrow. Stem cells make blood cells. Cancer that starts in stem cells does not cause a tumour. Instead, the stem cells create abnormal blood cells that behave differently from healthy blood cells.

The lymphatic system

The lymphatic system helps protect us from infection and disease. It is made up of fine tubes called lymphatic vessels. These vessels connect to groups of small lymph nodes throughout the body. The lymphatic system drains lymph fluid from the tissues of the body before returning it to the blood.

Lymph nodes are sometimes called lymph glands. They filter bacteria (germs) and disease from the lymph fluid. When you have an infection, some lymph nodes may swell as they fight the infection.

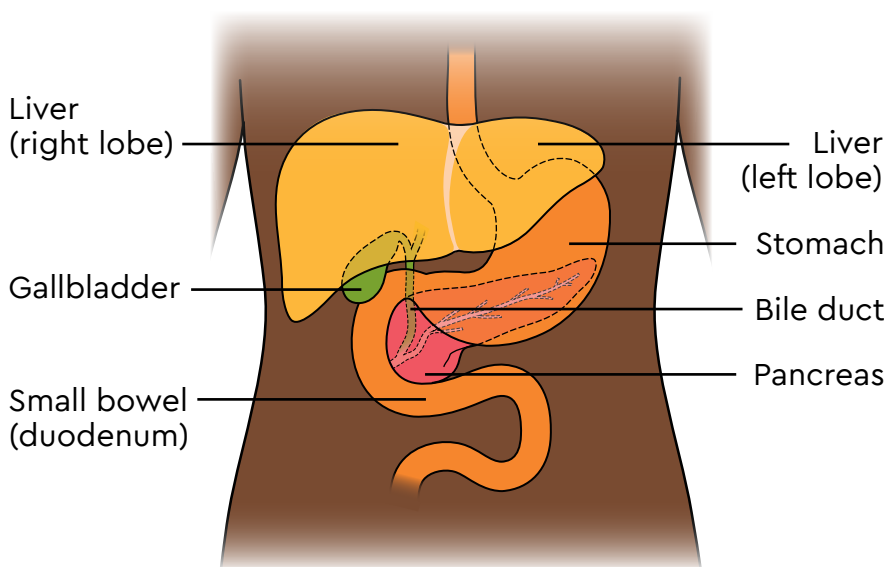
The lymphatic system



The liver

The liver is the biggest organ in the body. It is in the upper part of the tummy (abdomen) on the right-hand side, under the lower ribs. It is divided into 2 lobes.

The liver and surrounding organs



What the liver does

The liver does many important things for the body:

- It stores sugars and fats so they can be used for energy.
- It breaks down harmful substances so they cannot harm other parts of the body.
- It makes proteins that help the blood to clot. This prevents bleeding and maintains the balance of fluid in the body.
- It makes bile. Bile is a yellow fluid that helps break down fats so the body can absorb them. Bile travels from the liver to the gallbladder and small bowel through a tube called the hepatic duct.

The blood supply to the liver comes from 2 places:

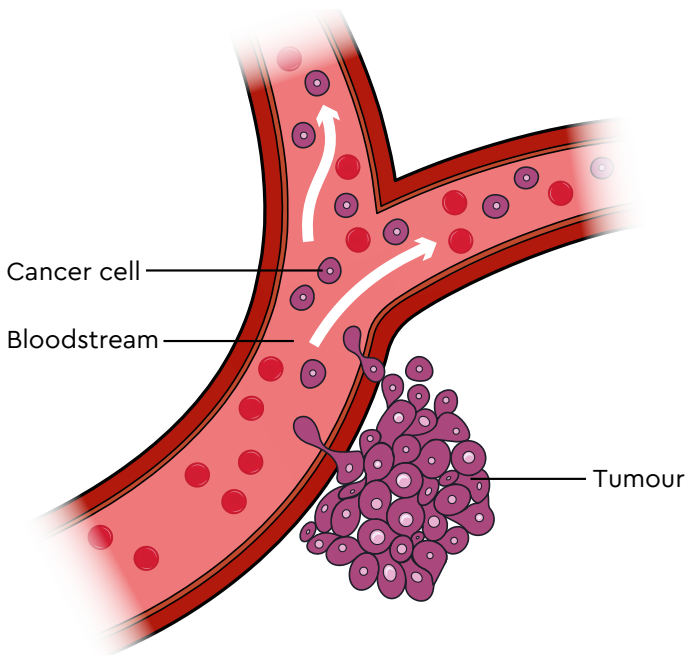
- the hepatic artery – this takes blood full of oxygen away from the heart
- the hepatic portal vein – this brings blood full of nutrients away from the digestive system.

The liver is good at repairing itself. It can work well even when only a small part is working normally. If a part of the liver is removed, the remaining liver can usually grow to replace it.

Secondary cancer in the liver

The place where a cancer starts in the body is called the primary site. Sometimes cells break away from the primary cancer. These cancer cells are carried in the bloodstream or [lymphatic system](#) to another part of the body. They may stay in that part of the body and make a new tumour. If this happens, it is called a secondary cancer or metastasis.

Cancer cells entering the bloodstream



Secondary cancer in the liver is when cancer cells spread to the liver from a primary cancer in another part of the body. It is also called secondary liver cancer.

Any type of cancer can spread to the liver. But some types of cancer are more likely to than others. These include:

- bowel cancer
- breast cancer
- cancer of the pancreas
- stomach cancer
- oesophageal cancer
- lung cancer
- melanoma
- neuroendocrine tumours (NETs) – tumours that start in neuroendocrine cells in organs such as the stomach, bowel and lungs.

If you have secondary liver cancer, it is best to read this information along with our [information for the primary cancer you have](#).

Usually, people who get secondary liver cancer already know they have cancer. But sometimes secondary liver cancer is found before the primary cancer is diagnosed. Sometimes the primary cancer cannot be found. This is called a cancer of unknown primary (CUP). We have more information about this in our booklet [Understanding cancer of unknown primary \(CUP\)](#).

Sometimes cancer can start in the liver. This is called primary liver cancer. Primary liver cancer is rare in the UK. Secondary liver cancer is much more common. We have more information about primary liver cancer in our booklet [Understanding primary liver cancer](#) and at macmillan.org.uk/liver-cancer

Finding out you have secondary cancer in the liver

This information is written for people who have already been diagnosed with secondary cancer in the liver.

We have more information about:

- symptoms of secondary cancer in the liver
- tests to diagnose secondary cancer in the liver.

You can find this information at [macmillan.org.uk/secondary-liver-cancer](https://www.macmillan.org.uk/secondary-liver-cancer)

Being diagnosed with secondary cancer in the liver can cause many different emotions. There is no right or wrong way to feel. You may have been worrying about having secondary cancer for a while. Or your diagnosis might have been unexpected. You may feel shocked, angry or frightened about the future. These feelings may become easier to manage over time and as you start making decisions and plans. We have [information about coping with difficult feelings](#).

You may be worried about telling people and about what treatment options you will have. You might choose to spend some time reading about the cancer, or you may prefer to wait until you see your cancer doctor. Do what feels right for you.

If you need support, you can contact our cancer support specialists on 0808 808 00 00. They will be able to talk to you about what has happened and help answer any questions you have.

Your data and the cancer registry

When you are diagnosed with cancer, some information about you, your diagnosis and your treatment is collected by a cancer registry.

The information is used to help understand cancer in the UK better. This is important for planning and improving health and care services. It can be used to ensure that people living with cancer get the best possible care and support.

Hospitals automatically send information to the cancer registry. There are strict rules about how the information is stored, accessed and used. Information about health is sensitive, so by law it has to be kept under the highest levels of security.

If you have any questions, talk to your doctor or nurse. If you do not want your information included in the registry, you can contact the [cancer registry](#) in your country to opt out.



Planning treatment for secondary cancer in the liver

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Treatment overview

Treatment for secondary liver cancer usually aims to control the cancer for as long as possible and reduce any symptoms.

Drug treatments that can treat cancer wherever it is in the body are often used for secondary liver cancer. They include:

- chemotherapy
- targeted therapy
- immunotherapy
- hormone therapy.

There are also treatments that directly treat the tumour in the liver. They include:

- surgery
- ablation
- embolisation
- radiotherapy.

Some treatments are used to relieve the symptoms of the cancer. These are called [supportive or palliative treatments](#).

The treatment you have depends on:

- where the cancer started – what the primary cancer is
- the parts of the liver that are affected
- whether there is cancer in other parts of the body.

“It is a challenge to keep on top of my treatment. I have learned to keep notes from appointments, get copies of my scans and ask about all the treatments available to me. ”

Heather, diagnosed with secondary cancer in the liver

Drug treatments

Chemotherapy

Chemotherapy is the most common treatment for secondary liver cancer.

Doctors may use it:

- to try to control the cancer
- to relieve symptoms
- before liver surgery, to try to shrink the cancer – this might make an operation more successful
- after liver surgery, to reduce the risk of the cancer coming back in that area.

Targeted therapy

Targeted therapy drugs are sometimes used to treat secondary liver cancer. They target specific things that make cancer cells different from normal cells and that help them to survive. Targeted therapy drugs may be used with other treatments, such as chemotherapy and surgery.

Immunotherapy

Immunotherapy drugs stimulate the immune system to fight cancer cells. They are usually given on their own. They may be used if the primary cancer started:

- in the lungs (non-small cell lung cancer)
- in the bowel
- as a type of skin cancer called melanoma.

Hormonal therapy

Doctors sometimes use [hormonal therapy](#). This is most common for cancer that started in the breast or prostate. But hormonal therapy drugs can also be used to treat other cancers that depend on hormones to grow.

Treatments given directly to the liver

Surgery

Only a small number of people can have [surgery for secondary liver cancer](#). It is usually only possible for bowel cancers or neuroendocrine tumours (NETs) that have spread to the liver. But it may sometimes be used for other types of primary cancer. Your doctor will tell you if surgery is an option for you.

For surgery to be possible, the surgeon needs to be able to remove all the cancer in the liver. There also needs to be enough liver left behind for you to stay well afterwards. Your doctor can tell you more about this.

Sometimes you may have surgery with another treatment, such as ablation. Or you may have surgery in stages.

In very rare circumstances, doctors might consider a liver transplant. This type of surgery is very complex and there are extremely strict guidelines. It is rarely suitable or possible.

Tumour ablation

[Ablation](#) uses heat, alcohol or electrical pulses to destroy cancer cells. Doctors may use it when the cancer has spread to the liver from the bowel. It may be used for people who are not well enough for surgery.

Embolisation

[Chemoembolisation \(TACE\)](#) is when you have chemotherapy directly into a blood vessel going to the liver, and the blood supply to the tumour is cut off. Cutting off the blood supply is called embolisation. This is rarely used to treat secondary liver cancer.

[Radioembolisation](#) works in a similar way. It uses radiotherapy instead of chemotherapy to destroy cancer cells. It is sometimes called selective internal radiotherapy (SIRT).

Radiotherapy

Sometimes doctors use a type of radiotherapy that closely targets tumours in the liver. This is called [stereotactic ablative radiotherapy \(SABR\)](#).

Radiotherapy can also be used to ease symptoms such as pain. This is called palliative radiotherapy. You may have this treatment if the cancer has spread to another part of the body, such as the bones.

Supportive or palliative treatments

Doctors use supportive or palliative treatments to help control symptoms and improve quality of life. Your cancer doctor can refer you to a palliative care team. This includes doctors and nurses who specialise in controlling symptoms. We have more information in our booklet [Coping with advanced cancer](#).



How your treatment is planned

After your test results, you and your doctor start to talk about your treatment. Your doctor usually meets with other specialists to get their opinions too.

Multidisciplinary team (MDT) meeting

A team of specialists meet to talk about the best treatment for you. They are called a multidisciplinary team (MDT).

The MDT reviews national treatment guidelines or the latest evidence for the type of cancer you have. If you have any treatment preferences, your doctor will tell them about this.

The MDT will usually include:

- a hepatologist – a doctor who treats liver problems
- a surgeon who specialises in operating on liver cancers
- a cancer doctor (oncologist) – a doctor who uses radiotherapy, chemotherapy and other anti-cancer drugs to treat people with cancer
- an interventional radiologist – a doctor who uses scans and x-rays to give treatments such as ablation or embolisation
- a clinical nurse specialist – a nurse who gives information about cancer, and support during treatment
- radiologists – doctors who look at scans and x-rays to diagnose problems
- pathologists – doctors who look at cells or body tissue under a microscope to diagnose cancer.

It may also include:

- a palliative care doctor or nurse – someone who helps with symptom control
- a dietitian – someone who gives information and advice about food and food supplements
- a physiotherapist – someone who gives advice about exercise and mobility
- an occupational therapist (OT) – someone who gives information, support and aids to help people with tasks such as washing and dressing
- a psychologist – someone who gives advice about managing feelings and behaviours
- a counsellor – someone who is trained to listen to people's problems and help them find ways to cope.

Talking about your treatment plan

After the MDT meeting, you will usually meet with your cancer doctor and nurse. They will talk to you about your treatment plan. It can help to write down your questions before you meet with them. You may want to ask a family member or friend to come with you. They can help remember what is said and talk with you about it afterwards. You need to know as much as possible before you can make any treatment decisions.

Your cancer doctor should explain:

- the aim of the treatment – whether it is to cure the cancer or control it
- the benefits of the treatment
- the disadvantages of the treatment – for example, the risks and side effects
- any other treatments that may be available
- what may happen if you do not have the treatment.

Cancer treatments can be complex. It can also be hard to concentrate on what you are being told if you are feeling anxious. If the doctor says something you do not understand, ask them to explain it again.

Most people worry about the side effects of treatment. Your doctor or nurse will explain how side effects can be controlled and what you can do to manage them. They can also tell you if your treatment is likely to cause any late effects and how these can be managed.

You may need more than meeting with your doctor or nurse to talk about your treatment plan.

Making treatment decisions

You and your doctor can decide together on the best treatment plan for you. Your doctor is an expert in the best treatments. But you know your preferences and what is important to you. You can decide how involved you want to be in your treatment plan.

Sometimes doctors need to review a treatment plan. This may be when more information about the cancer becomes available – for example, when the doctor knows the results of surgery to remove the cancer. It may mean making more decisions with your doctor.

Choosing between treatments

Doctors sometimes ask you to choose between different treatments. This is usually when 2 treatments work equally well.

It can help to talk to your family or friends about your treatment options. Your doctor or nurse can help you with your decision. You do not usually need to decide straight away.

You could write a list of benefits and disadvantages for each treatment. When choosing a treatment, you may want to think about:

- how long you need to have it for
- how it may affect your everyday life
- how much time you will need to spend in hospital
- the different side effects and how they are likely to affect you.

Your doctor or nurse may give you printed information or show you videos about your treatment options. They may also show you web-based tools to help you make your decision – these are called decision-making aids.

We have more information in our booklet [Making treatment decisions](#).

Second opinion

A second opinion is an opinion from a different doctor about your treatment. If you think you want a second opinion, talk to your specialist doctor or GP first. Tell them your concerns or ask them to explain anything you do not understand. This might help reassure you.

If you still want a second opinion, you can ask your specialist doctor or GP to arrange it. They are usually happy to do this. You may have to travel to another hospital to get a second opinion. Getting a second opinion could delay your treatment. Check with your doctor if this delay could be harmful to you.

If the doctor you see for the second opinion gives you the same advice, this can reassure you. Sometimes they give you other treatment options to think about.

We have more information about getting a second opinion at [macmillan.org.uk/second-opinion](https://www.macmillan.org.uk/second-opinion)

Giving your permission (consent)

Doctors need your permission (consent) before you have any treatment. They will give you all the information you need to make your decision. We explain this in our section on [talking about your treatment plan](#).

You can give consent in writing when you sign a form that your doctor gives you, agreeing to a treatment. Or it can be a spoken (verbal) agreement with your doctor. Your doctor records your consent in your patient notes.

You may decide not to have treatment even when your doctor advises you to have it. If you refuse treatment, your decision must be respected. But your doctor needs to make sure you have all the information you need to make your decision. You need to understand all your treatment options and what will happen if you do not have the treatment. Always talk to your doctor about any concerns you have, so they can give you the best advice.

“ I wrote down everything I was feeling all through my treatment in a little notebook. It was a way of getting my emotions out of my system. I read it back sometimes and remember how things were. ”

Michael, diagnosed with bile duct cancer

Clinical trials

Clinical trials are a type of medical research involving people. They are important because they show which treatments are most effective and safe. This helps healthcare teams plan the best treatment for the people they care for.

Trials may test how effective a new treatment is compared to the current treatment used. Or they may get information about the safety and side effects of treatments.

Some trials help answer questions about treatments we already use. They may test whether combining treatments is more effective. Or they may research different ways to give a treatment so it works better or causes fewer side effects.

Clinical trials also research other areas of cancer care. These include diagnosis and managing side effects or symptoms.

We have more information about clinical trials on our website. Visit [macmillan.org.uk/clinical-trials](https://www.macmillan.org.uk/clinical-trials)



Taking part in a clinical trial

Your cancer doctor or specialist nurse may talk to you about taking part in a clinical trial. Or you could ask them if there are any trials suitable for you.

Joining a trial is always your decision. If you join and then change your mind, you can leave at any time. You do not have to give a reason. Your healthcare team will support you whatever you decide. You will always have the standard treatment for the type and stage of cancer you have.

Not all hospitals have the expertise or resources to take part in certain trials. This means for some trials you may have to travel to a different hospital.

A research nurse or doctor will give you information about the trial. You can ask them any questions you have. It is important to understand what is involved before you agree (consent) to take part. They will explain the possible benefits and any possible risks of the trial

Clinical trials are designed with safety measures to keep any risks to you as low as possible.

Some trials involve collecting blood samples, or tissue samples from a biopsy. This often happens as a standard part of your treatment. But your research nurse or doctor will explain if they need to take extra samples for the trial.

Your samples can only be stored and used for research if you give your permission. Your name is removed from the samples before they are used. This means you cannot be identified.



Treating secondary cancer in the liver

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Chemotherapy

Chemotherapy is a common treatment for secondary liver cancer. It uses anti-cancer (cytotoxic) drugs to destroy cancer cells. The drugs damage cells as they grow and divide. This means they can affect normal cells as well as cancer cells. This is what causes side effects.

The chemotherapy drugs you have will depend on where in your body the cancer started. For example, secondary liver cancer that has spread from the bowel is treated with different drugs from secondary liver cancer that has spread from the breast.

Chemotherapy cannot cure the cancer, but it is often used to:

- shrink the cancer
- slow the growth of the cancer
- relieve symptoms.

A small number of people may have chemotherapy to try to:

- shrink tumours in the liver so they can be removed by surgery
- reduce the risk of the cancer coming back after surgery to remove it.

We have more information about [surgery for secondary liver cancer](#).

How chemotherapy is given

Chemotherapy is usually given into a vein (intravenously) or taken by mouth as tablets.

Your doctor or nurse will tell you how you will have chemotherapy.

You usually have chemotherapy on 1 or more days, followed by a rest period of a few weeks. This is called a cycle of treatment. The rest period lets your body recover from the side effects before you start your next treatment cycle.

Your doctor or nurse will tell you how many cycles of treatment you will have.

Some people with secondary liver cancer may have a treatment called [chemoembolisation](#). This is sometimes called TACE (trans-arterial chemoembolisation).

In rare situations, some people have a treatment called [chemosaturation with melphalan](#).

Side effects

This information describes the main side effects that may be caused by having chemotherapy into a vein or as tablets. If you are having chemotherapy directly into the liver, the side effects will be different. The side effects depend on which chemotherapy drugs you have. Different drugs cause different side effects.

Some side effects are mild and easy to treat. Others can be harder to manage but can often be reduced or helped in some way. Most side effects stop or slowly go away after chemotherapy ends.

Chemotherapy can also make you feel better by relieving the symptoms of the cancer. Your doctor or nurse will tell you about the side effects you may have.

Some common side effects of chemotherapy include:

- risk of infection
- bruising and bleeding
- anaemia
- feeling tired
- feeling sick (nausea)
- diarrhoea.

We have more information about possible side effects over the next few pages. We also have more information about chemotherapy in our booklet [Understanding chemotherapy](#).

Risk of infection

This treatment can reduce the number of white blood cells in your blood. These cells fight infection. If your white blood cell count is low, you may be more likely to get an infection. A low white blood cell count is called neutropenia. We have more information at [macmillan.org.uk/infection](https://www.macmillan.org.uk/infection)

An infection can be very serious when the number of white blood cells is low. It is important to get any infection treated as soon as possible. If you have any of the following symptoms, contact the hospital straight away on the 24-hour number:

- a temperature above 37.5°C
- a temperature below 36°C
- you feel unwell, even with a normal temperature
- you have symptoms of an infection.

Symptoms of an infection include:

- feeling shivery and shaking
- a sore throat
- a cough
- breathlessness
- diarrhoea
- needing to pass urine (pee) often, or discomfort when you pass urine.

It is important to follow any specific advice your cancer treatment team gives you.

Your white blood cell count will usually return to normal before your next treatment. You will have a blood test before having more treatment. If your white blood cell count is low, your doctor may delay your treatment for a short time, until your cell count increases.

Bruising and bleeding

This treatment can reduce the number of platelets in your blood. Platelets are cells that help the blood to clot.

If the number of platelets is low, you may bruise or bleed easily. You may have:

- nosebleeds
- bleeding gums
- heavy periods
- blood in your urine (pee) or stools (poo)
- tiny red, brown or purple spots that may look like a rash
 - these spots can be harder to see if you have black or brown skin.

If you have any unexplained bruising or bleeding, contact the hospital straight away on the 24-hour number. You may need a drip to give you extra platelets. This is called a platelet transfusion.

Anaemia (low number of red blood cells)

This treatment can reduce the number of red blood cells in your blood. Red blood cells carry oxygen around the body. If the number of red blood cells is low, this is called anaemia. You may feel:

- very low in energy
- breathless
- dizzy and light-headed.

If you have these symptoms, contact the hospital straight away on the 24-hour number. You may need treatment for anaemia. If you are very anaemic, you may need a drip to give you extra red blood cells. This is called a blood transfusion.

Sore mouth and throat

This treatment may cause a sore mouth and throat. You may also get mouth ulcers. This can make you more likely to get a mouth or throat infection. Use a soft toothbrush to clean your teeth or dentures in the morning, at night and after meals.

Contact the hospital straight away on the 24-hour number if:

- your mouth or throat is sore, or affecting how much fluid you can drink or food you can eat
- your mouth, tongue, throat or lips have any blisters, ulcers or white patches.

They can give you advice, and mouthwash or medicines to help with the pain or to treat any infection. Follow their advice and make sure you:

- drink plenty of fluids
- avoid alcohol and tobacco
- avoid food or drinks that irritate your mouth and throat.

We have more information on our website. Visit macmillan.org.uk/mouth-problems

Feeling tired (fatigue)

Feeling tired is a common side effect of this treatment. It is often worse towards the end of treatment and for some weeks after it ends. Try to pace yourself and plan your day so you have time to rest. Gentle exercise, like short walks, can help you feel less tired.

If you feel sleepy, do not drive or use machinery.

We have more information that you may find useful in our booklet [Coping with fatigue \(tiredness\)](#).

Feeling sick

Your doctor, nurse or pharmacist will prescribe anti-sickness drugs to help prevent or control sickness. Take the drugs exactly as they tell you to, even if you do not feel sick. It is easier to prevent sickness than to treat it after it has started.

If you feel sick, take small sips of fluid often and eat small amounts regularly. It is important to drink enough fluids. If you continue to feel sick, or if you are sick (vomit) 1 to 2 times in 24 hours, contact the hospital on the 24-hour number as soon as possible. They will give you advice. They may change your anti-sickness treatment. Let them know if you still feel sick.

Diarrhoea

This treatment may cause diarrhoea. Diarrhoea means passing more stools (poo) than is normal for you, or having watery or loose stools. You may also have stomach cramps. If you have a stoma, it may be more active than usual.

If you are passing loose stools 3 or more times a day and this is not normal for you, contact the hospital as soon as possible on the 24-hour number. Follow the advice they give you about:

- taking anti-diarrhoea medicines
- drinking enough fluids to keep you hydrated and to replace lost salts and minerals
- any changes to your diet that might help.

They might also ask you for a specimen of your stool to check for infection.

Changes to your taste

Some foods may taste different or have no taste. Try different foods to find out what tastes best to you. You may also get a bitter or metallic taste in your mouth. Your doctor, nurse or pharmacist can give you advice. It might help to try:

- sucking sugar-free sour or boiled sweets
- eating cold foods
- eating sharp-tasting fresh fruit.

Taste changes usually get better after treatment ends. We have more information about coping with changes to taste at macmillan.org.uk/mouth-problems

Hair loss

Some chemotherapy drugs may cause hair loss. Some people lose all their hair, including eyelashes and eyebrows. Other people only lose some hair, or find that it becomes thinner. It depends on the chemotherapy drugs you are having. Your doctor or nurse can tell you more about what to expect.

If you lose some hair, it should start to grow back within 3 to 6 months after treatment finishes. It may grow back straighter, curlier, finer or a slightly different colour than it was before. Your nurse can give you advice about coping with hair loss and how to look after your scalp.

Some chemotherapy departments may offer scalp cooling to reduce hair loss during chemotherapy. We have more information in our booklet [Coping with hair loss](#).

Numb or tingling hands or feet (peripheral neuropathy)

This treatment may affect the nerves in your fingers and toes. This can cause numbness, tingling or pain in your hands or feet. This is called peripheral neuropathy. You might find it hard to do fiddly tasks such as fastening buttons or tying shoelaces. We have more information at macmillan.org.uk/peripheral-neuropathy

If you have these symptoms, always tell your doctor, nurse or pharmacist. They sometimes need to change the drug or the dose of the drug. The symptoms usually improve slowly after treatment ends. But for some people they continue and are a long-term side effect of treatment.

Contraception

Your doctor, nurse or pharmacist will advise you not to get pregnant or make someone pregnant while having this treatment and for some time afterwards. The drugs may harm a developing baby. It is important to use contraception to prevent pregnancy. Follow their advice about:

- what types of contraception to use
- how long after treatment you should continue to use contraception.

Sex

It is possible that small amounts of chemotherapy may be passed on through vaginal fluids or semen. If you have sex in the first few days after treatment, your cancer team will usually advise using condoms or a dental dam to protect your partner.



Chemosaturation with melphalan

This treatment is given in very rare circumstances. You may have it to treat a type of advanced eye cancer called uveal melanoma that has spread to the liver. There are extremely strict guidelines for using this treatment.

It involves giving very large doses of the chemotherapy drug melphalan directly into the liver (chemosaturation). The drug is given through the main artery that supplies the liver (hepatic artery).

Doctors then redirect the blood flow from the liver to the rest of the body. Blood leaving the liver is taken out of the body, filtered by a machine to remove the chemotherapy drug, and returned through a vein in the neck.

The aim is to give high doses of the drug without causing side effects in the rest of the body. High doses of chemotherapy given into a vein (intravenously) can cause serious side effects in other parts of the body. For example, it can reduce the number of blood cells in your blood and cause problems such as infection and bleeding.

The full name of this treatment is melphalan chemosaturation with percutaneous hepatic artery perfusion and hepatic vein isolation. Your cancer doctor or specialist nurse can give you more information about it.

Surgery for secondary liver cancer

It may be possible to remove the affected part, or parts, of the liver with surgery. This operation is called a liver resection. There are not usually any long-term side effects after a liver resection. This is because the remaining liver can grow bigger and work as it did before. This takes about 4 to 6 weeks. You do not need to be in hospital while this happens.

In very rare circumstances, doctors might consider a liver transplant. This is an operation to remove the liver and replace it with a healthy one from a donor. There are extremely strict guidelines for this type of complex surgery in secondary liver cancer. So it is very rarely suitable or possible.

Liver resection is most commonly used to remove liver tumours that have spread from a primary cancer in the bowel. Sometimes liver resection is used for tumours that have spread from other primary cancers.

Liver resection is a major operation that takes 3 to 4 hours. It is done by a specialist liver surgeon (hepatobiliary surgeon).

Liver resection may not be possible if:

- the cancer has also spread to other parts of your body
- your general health means you may not cope with a major operation
- lots of tumours are spread across both lobes of the liver
- the rest of the liver is not healthy.

You may have [chemotherapy](#) before surgery. This is to shrink the tumour, or tumours, and make surgery safer and more successful. You usually have the operation 4 to 6 weeks after chemotherapy. This gives your liver time to recover from the effects of chemotherapy.

You may have chemotherapy after surgery. This is to reduce the risk of the cancer coming back. You usually have this treatment about 4 to 6 weeks after surgery. This gives your liver time to recover from the operation.

Talk to your cancer doctor about whether surgery may be helpful for you.

Staged liver resection

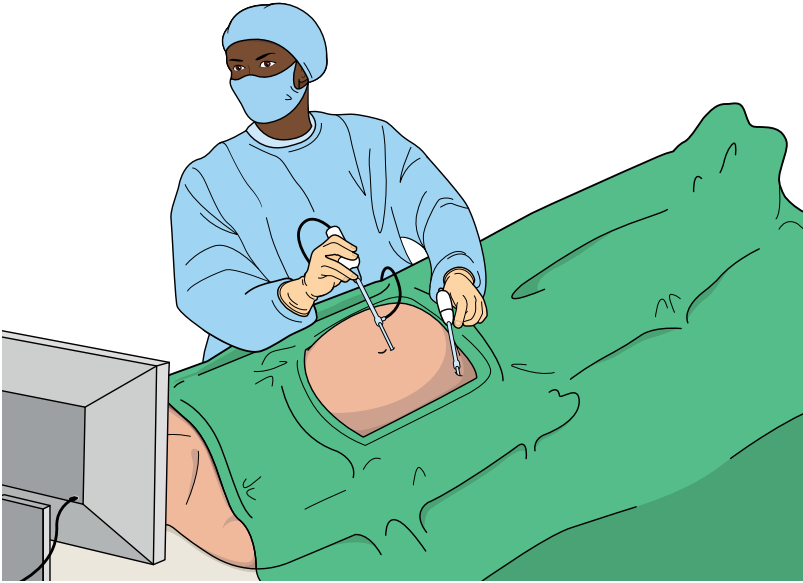
This is when the liver is removed (resected) in 2 stages. In the first operation, part of the liver is removed. After 1 week or more, you have a second operation to remove more of the liver. This gives the liver some time to grow before the second operation.

Keyhole (laparoscopic) surgery

In some situations, people have a liver resection using keyhole (laparoscopic) surgery.

The surgeon uses a laparoscope to see inside your tummy area (abdomen). This is a thin tube with a tiny camera at the end. It sends pictures to a video screen. The surgeon puts the laparoscope into the tummy through a small cut in the skin.

Laparoscopy



During this operation, the surgeon makes several small cuts (incisions) instead of 1 big cut. They usually need to make about 3 small cuts (5mm long) and 2 or 3 bigger cuts (12mm long) in your tummy. They sometimes remove part of the liver through a cut in the lower part of the tummy.

The main advantage of this type of surgery is that it leaves much smaller wounds. This means you have less pain after the operation and a faster recovery.

Portal vein embolisation (PVE)

Some people have a portal vein embolisation (PVE) before a liver resection. This is usually done when surgery is possible, but there might not be enough liver remaining afterwards to work properly.

The main blood vessel that carries blood to the liver is called the portal vein. A PVE blocks a branch of this vein. This blocks the blood flow to the part of liver that will be removed. The blood is redirected to the healthy part of the liver, which encourages it to grow. This can make sure enough liver remains after surgery for it to work properly.

You usually have a PVE in the x-ray department. You have a local anaesthetic injection to numb an area of your tummy. The doctor uses an ultrasound scan to find the area of the portal vein that supplies blood to the part of the liver with the tumour or tumours. They make a small cut in your skin just below your ribcage, on the right side of your tummy. They then gently push a fine tube (catheter) into the portal vein. When the catheter is in place, the doctor injects special glue or very small metal coils into it. This blocks the blood supply to that part of the liver.

A PVE usually takes 1½ to 2 hours. You may feel some gentle pushing as the doctor inserts the catheter. Tell them if you feel any pain or discomfort so they can give you painkillers. You usually stay in hospital overnight after this treatment.

When the liver has grown enough, you have a liver resection. This usually takes 3 to 6 weeks. You may have more scans of your liver during this time.

Before your operation

If you smoke, try to stop smoking before your operation. This will help reduce your risk of problems, such as a chest infection. It will also help your wound heal after the operation. Your GP can give you more advice. We have more information about stopping smoking at [macmillan.org.uk/stop-smoking](https://www.macmillan.org.uk/stop-smoking).

You will have tests to make sure you are well enough to cope with the operation. You usually have these a few days before your operation, at a pre-assessment clinic. They include tests on your heart and lungs.

At a clinic or when you are admitted to hospital, you will meet a member of the surgical team and a specialist nurse. They will talk to you about the operation. You may also meet the doctor who gives you the anaesthetic. They are called an anaesthetist.

Tell the surgical team if you have any questions or concerns about the operation. If you think you might need help when you go home, tell the nurses as soon as possible. This will give hospital staff time to help you make plans.

You will usually be admitted to hospital on the morning of your operation. You will be given special compression stockings (TED stockings) to wear during and after the operation. This is to prevent blood clots forming in your legs.

Enhanced recovery

Some hospitals have an enhanced recovery programme for certain types of surgery. Enhanced recovery programmes aim to reduce the time you spend in hospital and help you to recover as quickly as possible.

For example, you may be given a diet plan to follow and exercises to do before surgery. You may also be given supplement drinks.

This is to make sure you are as healthy as possible. It is sometimes called prehabilitation.

After surgery, the nurses will get you out of bed and encourage you to start drinking and eating as soon as possible. Research has shown that this can help improve your recovery time.

After your operation

After a liver resection, you will be in intensive care or a high-dependency unit for about 24 hours. This is normal after major operations.

There is a risk the liver may bleed after surgery. The doctors and nurses will monitor you carefully for bleeding. Your nurse will check your pulse and your blood pressure regularly.

Moving around

The nurses will encourage you to start moving around as soon as possible. They will usually help you get out of bed the day after your operation or sooner. While you are in bed, it is important to move your legs regularly and do deep-breathing exercises. This helps prevent chest infections and blood clots. Your physiotherapist or nurse will show you how to do the exercises.

Drips and drains

For a short time after the operation, you may have some of the following:

- A drip going into a vein in your arm or neck. This is called an intravenous infusion. It gives you fluids until you can eat and drink again. It can also give you painkillers and other medications.
- 1 or more drainage tubes coming from your wound if you have had open surgery. These drain away fluids, such as blood. They are removed when the fluid has reduced.
- A fine tube that passes down your nose and into your stomach or small intestine. This is called a nasogastric tube. It drains fluids from your stomach so that you do not feel sick. You may need it for several days.
- A small, flexible tube in your bladder. This is called a catheter. It drains urine (pee) into a bag. This means you do not have to get up to pass urine. You usually only have a catheter for a couple of days.

Pain

There are effective ways to prevent and control pain after surgery. For the first few days, you are usually given painkillers through a pump. This gives you a constant dose of the painkillers.

You may be given painkillers:

- through a thin tube in your back (epidural)
- into a vein
- into the muscle close to your wound.

You may have a button you can press to give yourself an extra dose of painkillers if needed. This is called patient-controlled analgesia (PCA). It is set so that you cannot have too much painkiller.

When you no longer need painkillers through a pump, you can take them as tablets. Tell your nurses and doctors if you have pain. They can give you the dose of painkillers that is right for you.

Your wound

For the first few days after surgery, you may have a dressing over your wound or wounds. The nurses will check your wound regularly to make sure it is healing well. You usually have stitches that dissolve. If not, a nurse may need to remove your stitches or staples after 10 days. They can do this in your own home or at your GP surgery.

Always tell your doctor if your wound becomes hot or painful, or starts to leak fluid. These are possible signs of infection. If this happens after you go home, contact the hospital straight away.



Going home

Most people can go home from hospital:

- 2 to 3 days after keyhole surgery for a smaller liver resection
- 4 to 5 days after keyhole surgery for a bigger liver resection
- 5 to 7 days after open surgery, where you have 1 large wound.

Some people might be able to go home earlier. Recovery is different for everyone. Your doctor will talk to you about when you will be able to go home.

You will need painkillers for a few weeks after surgery. It may take up to 3 months after a resection before you start getting back to normal. For at least 8 weeks, you need to avoid lifting heavy loads, such as shopping or laundry. You will also need to avoid activities such as vacuuming and gardening. This is to give your wound time to heal. Your specialist will tell you when you should be able to drive again.

Make sure you get enough rest and eat well. This will help your recovery.

Your liver specialist will advise you not to drink alcohol for a period of time. How long this is depends on your individual situation. This is to protect the liver while it is growing to replace the tissue that was removed.

Gentle exercise, such as regular short walks, will help give you more energy. You can gradually do more as you recover. It is usually fine to have sex when you feel ready. To begin with, you may be too tired or your sex drive may be low. This should improve with time.

Some people take longer than others to recover. It depends on your situation, so do not put pressure on yourself.

You will have a check-up at the outpatient clinic. Your doctor will ask you about your recovery and talk to you about the results of your operation. This is a good time for you to tell them about any problems you have had. Remember that if you are unwell or worried about anything, you can contact your doctor or nurse before your appointment.

Hormonal therapy

Hormones are produced naturally in the body. They act as chemical messengers and affect the growth and activity of cells. Hormones are made by many different organs and glands in the body. Together, these are called the endocrine system.

Hormonal therapy works by changing how certain hormones are produced or behave in the body. Hormonal therapy is most commonly used to treat breast cancer and prostate cancer.

There are different types of hormonal therapy. The type used depends on the type of cancer. You usually have hormonal therapy as tablets or injections. The side effects depend on which drug you have.

General side effects include:

- tiredness
- headaches
- feeling sick
- muscle and joint aches
- loss of interest in sex (low libido).

We have more information about different hormonal therapy drugs and their side effects on our website. Visit [macmillan.org.uk/hormonal-therapy](https://www.macmillan.org.uk/hormonal-therapy)



Targeted therapy and immunotherapy drugs

Targeted therapy drugs target differences between cancer cells and normal cells.

Immunotherapy drugs use the immune system to find and attack cancer cells.

Where the cancer started in your body (the primary site) will affect:

- whether targeted or immunotherapy drugs are suitable for you
- which types of treatment you may have.

For example, if you have bowel cancer that has spread to the liver, you may have targeted therapy drugs that are used to treat bowel cancer. Some drugs commonly used to treat advanced bowel cancer include cetuximab, bevacizumab or encorafenib. Your doctor will explain which drug may work best for you.

If you have breast cancer that has spread to the liver, you may have targeted therapy drugs that are used to treat breast cancer. This will depend on whether the cancer cells have certain receptors. For example, a targeted drug called trastuzumab is used to treat HER2 positive breast cancer.

If you have melanoma that has spread to the liver, you may have immunotherapy drugs used to treat melanoma. Some drugs commonly used to treat advanced melanoma include pembrolizumab, nivolumab and ipilimumab. These drugs may also be used to treat other cancers that have spread to the liver, including non-small cell lung cancer. Your doctor will explain which drug may work best for you.

Targeted therapy

Before doctors can give you some types of targeted therapy drug, they need to test the cancer cells. This is to find out whether the drug is likely to work for you.

You may have targeted therapy drugs on their own or with chemotherapy. You may have them:

- as an injection into a vein (intravenously)
- by mouth (orally)
- as an injection under the skin (subcutaneously).

Side effects of targeted therapy

Each person's reaction to cancer treatment is different. Some people have very few side effects and others have more. Your doctor, nurse or pharmacist will tell you about the possible side effects of the drugs they give you.

Always tell your doctor, nurse or pharmacist about the side effects you have. They can give you drugs to help control side effects and advice about managing them.

Some common side effects of targeted therapy include:

- tiredness
- diarrhoea
- feeling sick
- an itchy rash or dry, sensitive skin
- sore and red palms of hands and soles of feet
- high blood pressure
- muscle or joint pain
- thyroid changes.

We have more information about targeted therapy drugs at [macmillan.org.uk/targeted-therapies](https://www.macmillan.org.uk/targeted-therapies)

Immunotherapy

Some immunotherapy drugs can be used to treat secondary liver cancers that have spread from the:

- bowel (colorectal cancers)
- lung (non-small cell lung cancers)
- skin (melanoma).

Some immunotherapy drugs commonly used to treat these cancers include pembrolizumab, nivolumab and ipilimumab.

You have these drugs as a drip (infusion) in the outpatient clinic.

Side effects of immunotherapy

Some common side effects of immunotherapy are:

- diarrhoea
- tiredness
- a skin rash.

Because of the way immunotherapy drugs work, they can sometimes cause the immune system to attack other parts of the body. This is not common. But if it happens, it can cause serious side effects in parts of the body including the lungs or lining of the bowel. Because of this, immunotherapy may need to be stopped. You may need to take steroids to suppress your immune system.

Your doctor or nurse will explain the side effects of immunotherapy drugs to you. It is very important to tell them about any side effects you get.

We have more information on immunotherapy drugs at macmillan.org.uk/immunotherapy



Tumour ablation

Tumour ablation means destroying the tumour by applying heat, alcohol or electrical pulses directly to it. It is most commonly used to treat cancer that has spread to the liver from the bowel or breast. But sometimes it is used for other types of cancer. It may also be offered as part of a [clinical trial](#). Your cancer doctor can explain whether this type of treatment may be suitable for you.

Doctors may use ablation in combination with other treatments, such as [chemotherapy](#).

Ablation is most often used to treat small tumours when surgery is not possible. It is also sometimes done during [surgery](#). Some people have ablation more than once.

If your doctor thinks ablation may help you, they can refer you to a hospital that does this treatment. Ablation treatments are only available in some specialist hospitals, so you may have to travel for treatment.

Types of ablation

Types of ablation include:

- microwave ablation (MWA)
- radiofrequency ablation (RFA)
- percutaneous ethanol injection (PEI)
- irreversible electroporation (IRE).

What happens during ablation?

You usually have ablation under a general anaesthetic. The doctor puts a fine needle through the skin over the liver and into the centre of each tumour. They use a CT scan to guide them to the tumours.

Radiofrequency and microwave ablation produce heat, which passes through the needle and into the tumour.

Irreversible electroporation uses a high-voltage current to destroy tumours. It does not heat the nearby tissue. So it is useful for tumours that are close to blood vessels or bile ducts.

After ablation, you may need to stay in hospital overnight. You will have 1 to 3 tiny holes in your tummy area (abdomen). These usually heal quickly. You usually have a CT scan a few weeks after ablation to check how well it has worked.

Percutaneous ethanol injection (PEI)

Sometimes a type of ablation called percutaneous ethanol injection (PEI) is used to treat secondary liver cancer. Percutaneous means given through the skin.

You have PEI in the hospital scanning department. The doctor gives you a local anaesthetic to numb the area. They use an ultrasound scan to help guide a needle through the skin and into the tumour. The doctor injects pure alcohol (ethanol) through the needle into the tumour. The alcohol destroys the cancer cells.

You usually need several treatments, depending on the number of tumours and their size. If the tumour grows again, you can have the treatment again.

Side effects of tumour ablation

The side effects of tumour ablation are usually mild and may last up to 1 week. Your doctor or nurse will tell you more about the side effects of the type of ablation treatment you are having.

You may have pain in the liver area. You can control this by taking regular painkillers. Other side effects include:

- a fever (high temperature)
- tiredness
- feeling generally unwell.

These side effects happen because the body is getting rid of the cells that have been destroyed. Try to drink plenty of fluids and get enough rest. Your doctor or nurse may ask you to contact the hospital if your temperature:

- does not go back to normal after a few days
- goes above 38°C.

These may be signs that you have an infection.

Embolisation

Embolisation is a way of blocking the blood flow to the cancer in the liver. A substance is injected into a blood vessel in the liver that goes to the cancer. This reduces the supply of oxygen and energy to the cancer, which can make it shrink or stop growing.

You may have embolisation on its own. This is called trans-arterial embolisation or TAE. Or you may have it with:

- chemotherapy – this is called chemoembolisation or trans-arterial chemoembolisation (TACE)
- radiotherapy – this is called radioembolisation or selective internal radiotherapy (SIRT).

Embolisation treatments are not commonly used to treat secondary liver cancer. They are not suitable for everyone. They may be given as part of a [clinical trial](#).

Trans-arterial embolisation (TAE)

Trans-arterial embolisation (TAE) is also called hepatic artery embolisation. It can be used to shrink neuroendocrine tumours (NETs) in the liver.

You may be offered this treatment for the following reasons:

- You have NETs in your liver and surgery is not an option. This may be because you do not want surgery or are not well enough for an operation, or because of where the NETs are.
- Other treatments for the NETs have not helped.
- The NETs are producing a lot of hormones that are causing symptoms.

We have more information about NETs on our website at macmillan.org.uk/nets

Chemoembolisation (TACE)

You are more likely to have chemoembolisation (TACE) if you have secondary liver cancer that has spread from the bowel.

Chemoembolisation uses a combination of 2 treatments:

- chemotherapy into a blood vessel going to the liver
 - this is to destroy the cancer cells
- embolisation to block the blood vessels in and around the cancer
 - this stops the cancer cells from getting the nutrition and oxygen they need to grow.

How chemoembolisation is given

Before treatment, the nurse or doctor usually gives you a mild sedative to help you relax. They then inject some local anaesthetic into the skin at the top of your leg (groin) to numb the area.

After this, the doctor makes a tiny cut in the skin. They put a fine tube called a catheter through the cut. This goes into a blood vessel in your groin called the femoral artery. The doctor then passes the catheter along the artery until it reaches the blood vessel that takes blood to the liver. This is called the hepatic artery.

They also put a dye through the catheter into the blood vessel. This shows the blood supply on an x-ray and shows the doctor where the catheter is. This is called an angiogram.

After this, the doctor injects chemotherapy drugs or tiny beads coated with chemotherapy directly into the blood vessel going to the tumour (the hepatic artery). You usually then have an injection of an embolising substance to block this blood vessel. This cuts off the blood supply to the tumour or tumours in the liver (embolisation).

You may need to stay in hospital for 1 to 2 nights after chemoembolisation.

DEB-TACE

Some hospitals use beads that gradually release chemotherapy and also block the blood vessels. This treatment is called DEB-TACE. DEB stands for drug-eluting bead.

The chemotherapy drug irinotecan may be given this way to treat bowel cancer that has spread to the liver. This treatment is called DEBIRI-TACE.

Side effects

Chemoembolisation can cause side effects such as:

- a high temperature and flu-like symptoms
- pain in the upper right side of the tummy area (abdomen)
- feeling sick (nausea)
- feeling very tired (fatigue).

You will be given anti-sickness drugs and painkillers until the side effects get better. This usually takes 1 to 2 weeks.

It is unusual for chemotherapy given in this way to cause side effects outside your liver. Serious complications are rare, but chemotherapy can damage the liver.

Your doctor, nurse or pharmacist will give you 24-hour contact numbers for the hospital. If you feel unwell or need advice, you can call at any time of the day or night. Save these numbers in your phone or keep them somewhere safe.

Radioembolisation (SIRT)

Radioembolisation uses radioactive beads to destroy cancer cells as well as the small blood vessels in and around the cancer. Damaging the blood supply may help shrink the cancer.

Radioembolisation is sometimes called selective internal radiotherapy (SIRT). Less commonly, it is called trans-arterial radioembolisation (TARE).

It may be used to treat secondary liver cancer that has spread from the bowel, if the secondary cancer:

- cannot be removed with [surgery](#)
- does not respond to [chemotherapy](#).

You may also have radioembolisation if chemotherapy and its side effects are causing you problems.

How SIRT is given

You usually stay in hospital overnight to have SIRT.

You have different tests before the treatment. This includes an angiogram, which is an x-ray that checks the blood vessels. You usually have this up to 2 weeks before SIRT. It shows the doctor where the SIRT beads should go when they are injected.

You are awake during SIRT. You might have medication to help you to relax and feel sleepy before it.

You have SIRT through a fine tube (catheter). Your doctor puts the catheter into an artery in the top of your leg (groin). They guide it through the artery into a blood vessel that takes blood to the liver. They then inject tiny radioactive beads (microspheres) through the catheter into this blood vessel.

The beads stick permanently in the small blood vessels in and around the liver tumour. They also give off radiation. This damages the cancer cells and destroys the small blood vessels in and around the tumour. Without a blood supply, tumours shrink and may die.

The radiation from each bead only affects tissue nearby. This reduces the risk of damage to healthy cells. The beads lose their radiation quickly. They stay in the liver permanently but are harmless.

There are some precautions you need to take for a short while after SIRT. These are to protect other people around you. Your doctors and nurses will explain this to you.

Side effects

Side effects can last for a few days and include:

- a high temperature and flu-like symptoms
- tummy pain
- feeling sick (nausea).

Your doctor will prescribe drugs to control these side effects until they go away. Serious complications are rare.

It takes about 1 to 4 months for liver tumours to shrink.

We have more information about SIRT at [macmillan.org.uk/sirt](https://www.macmillan.org.uk/sirt)



Stereotactic ablative radiotherapy (SABR)

Radiotherapy uses high-energy rays to destroy cancer cells. It is planned by a cancer doctor called a clinical oncologist. The person who gives you the radiotherapy is called a radiographer.

Stereotactic radiotherapy is a type of external radiotherapy. This means it is given from a machine outside the body. It is also sometimes called stereotactic body radiotherapy (SBRT). In this information we use the term stereotactic ablative radiotherapy or SABR for short.

SABR is available in specialist centres. Your cancer doctor can give you more information.

You may have SABR instead of [surgery](#) and other treatments such as [radiofrequency ablation](#). It is only used when the cancer has spread to a limited number of areas. You also have to be well enough to have it. SABR may help to keep the cancer under control for longer and delay treatment such as chemotherapy until it is needed.

Your treatment will be planned using a CT scan. You may also have an MRI scan or PET scan. We have more information about these scans on our website. Visit [macmillan.org.uk/tests-scans](https://www.macmillan.org.uk/tests-scans)

You may have small metal markers placed in or near your tumour. These are sometimes called fiducial markers. The markers help find the exact location of the tumour to make sure the treatment is given accurately.

You may also have markings made on your skin. These help the radiographers position you for treatment.

The radiotherapy machine delivers beams of radiotherapy from many different angles. This allows the radiographer to give a high dose of radiotherapy to the tumour, while giving only a low dose to surrounding tissues.

You may have only 1 treatment, or up to 8 treatments over 2 weeks. Your doctor or radiographer will explain how many sessions you need and over how many days.

Side effects

Possible side effects of SABR include the following:

- Feeling sick – you will be given anti-sickness tablets to control this.
- Discomfort or pain in the abdomen – your doctor can prescribe painkillers to take until this goes away.
- Tiredness – make sure you get plenty of rest, but try to do some gentle exercise as well.

Changes to the skin in the treated area – the skin might become dry or itchy. It may also become red if you have white skin or darker if you have black or brown skin. The radiographers will tell you how to look after your skin.

Some side effects can happen months or years after treatment has finished. These are called late effects. Your doctor will explain about these.

We have more information about SABR on our website. Visit [macmillan.org.uk/sabr](https://www.macmillan.org.uk/sabr)



Radiotherapy to treat symptoms

Radiotherapy can also be used if the cancer has spread to another part of the body. The aim is to relieve symptoms.

For example, if the cancer has spread to the bones, radiotherapy can help relieve the pain. This is usually given as a single treatment. The main side effect is tiredness. Other side effects are usually mild. Your cancer doctor, specialist nurse or radiographer will tell you what to expect.

You have the treatment as an outpatient in the hospital radiotherapy department. The radiographer positions you on the treatment couch. When you are in the correct position, they leave the room for a few minutes and you are given the treatment. You can talk to the radiographer through an intercom while you have your treatment.

We have more information about having radiotherapy in our booklet [Understanding radiotherapy](#).

Controlling symptoms

Treating the cancer will often improve your symptoms. Other treatments can also help control symptoms. This is sometimes called palliative treatment or supportive care.

Your doctor may refer you to a palliative care team, who are experts in controlling symptoms. You may have support from a palliative care team while having your cancer treatment. They will support you and your family. The team often includes a doctor and nurses. They often work closely with a local hospice and can visit you and your family at home.

Pain

If the cancer stretches the layer of tissue surrounding the liver (capsule), it may cause pain. Some people get pain in the right shoulder. Doctors sometimes call this referred pain. It can happen if the liver stimulates the nerves below the diaphragm. The diaphragm is the sheet of muscle under the lungs. The nerves below the diaphragm connect to nerves in the right shoulder.

There are different types of painkillers your doctor can give you. If your pain is not controlled, tell your doctor or nurse as soon as possible. They can change the dose or give you a different painkiller that works better for you. Make sure you take painkillers regularly and as your doctor has prescribed.

Strong painkillers often cause constipation. Your doctor can prescribe a laxative for you. Eating foods containing fibre and drinking plenty of fluids will also help.

You may find our booklet [Managing cancer pain](#) helpful. We also have more information on our website. Visit macmillan.org.uk/pain

Sometimes drugs called steroids can relieve pain by reducing swelling around the liver. You usually take them for a few weeks or months. We have more information about steroids at macmillan.org.uk/steroids

Tiredness and weakness (fatigue)

Tiredness is a common symptom of cancer in the liver. It may be caused by:

- the cancer itself
- its treatment
- symptoms or side effects.

You may feel you do not have the energy to do everyday activities. Try to pace yourself. Save your energy for the things that matter to you and that you enjoy. Make sure you get enough rest. But try to balance this with some physical activity, such as short walks. We have more information you may find useful in our booklet [Physical activity and cancer](#).

Tiredness also makes it harder to concentrate. If you have important things to do, try to do them when you feel less tired. We have more information and tips to help you cope with tiredness in our booklet [Coping with fatigue \(tiredness\)](#).

Loss of appetite

Some people lose their appetite. This might be a symptom of the cancer or side effect of treatment. If the liver is bigger, it can press on the stomach and make you feel full quickly.

It may help to eat small, frequent meals or snacks instead of 3 meals a day. Ask your nurse or a dietitian for advice. They can give you food or drink supplements. Your doctor may prescribe medicines called steroids to help improve your appetite.

We have more information in our booklet [Eating problems and cancer](#).

Feeling sick (nausea)

Sickness may be caused by:

- cancer in the liver changing the chemical balance of the blood
- the liver being bigger and pressing on the stomach
- the cancer treatment
- some types of drugs, such as painkillers.

Your doctor can give you anti-sickness tablets to help with nausea. There are different types available. Tell your doctor if the tablet you are taking is not working. They can give you another type that works better for you. Your doctor may give you steroids to reduce sickness.

You can order our booklets and leaflets for free.
Visit orders.macmillan.org.uk or call [0808 808 00 00](tel:08088080000).



Extremes in body temperature

The liver makes a lot of the body's heat. Cancer in the liver can sometimes cause changes in body temperature. You may feel:

- hot and sweat more often than usual
- cold and shivery.

If you notice these symptoms, talk to your doctor. There may be medicines that can help.

Hiccups

If your liver is pressing on the nerve that leads to the diaphragm, you may have hiccups. The diaphragm is the sheet of muscle under the lungs that separates the chest from the abdomen.

There are medicines that can help reduce or stop hiccups. Your doctor can prescribe these for you.

Itching

If you have itching, tell your doctor about it. The treatment they give you depends on the cause of the itching. Itching may be caused by:

- jaundice
- cancer treatment
- medication.

Your doctor or nurse can prescribe lotions or medicines that can help reduce itching. If itching is affecting your sleep, tell your doctor. Here are some tips to help you cope with itching:

- Try not to scratch. It can damage your skin and make the itching worse.
- Wear loose clothing made of natural fibres, such as cotton. Avoid scratchy fabrics, such as wool.
- If possible, keep the temperature around you cool. Use slightly warm water when you bathe or shower.
- Dry your skin by patting rather than rubbing.
- Apply non-scented moisturisers (emollients) after a shower or bath.
- If caffeine, alcohol and spices make the itching worse, try to cut down or avoid them.



Follow-up care

You will have regular contact with your doctor or specialist nurse. They will monitor your health and treat any symptoms caused by the cancer. You may have scans or blood tests to check the cancer or the effects of any treatment.

Your follow-up appointments are a good time to talk to your cancer doctor and specialist nurse about any worries or problems you have. But if you are worried or notice any new symptoms between appointments, contact your cancer doctor or specialist nurse for advice.

Looking after yourself

There are things you can do to manage symptoms and side effects.

Coping with tiredness

After treatment you are likely to feel very tired. You may also still be coping with some side effects. It is important to take care of yourself and allow your body time to recover. Make sure you get enough rest and eat well. Ask family or friends to help. This can save you energy for the things you want to do.

Tiredness can make it harder to concentrate or be interested in what is going on around you. Try to pace yourself. Plan important things for when you are likely to feel less tired. Try to rest before them.

We have more information on coping with tiredness in our booklet [Coping with fatigue \(tiredness\)](#).

Eating well and keeping active

Eating well and keeping active can help you feel better and more in control. We have more information you may find helpful in our booklets:

- [Healthy eating and cancer](#)
- [Physical activity and cancer](#)

A healthy, balanced diet may help you stay strong or get stronger. If your appetite is poor, ask your GP, cancer doctor or nurse if they can refer you to a dietitian. They can suggest ways to build up your diet. We also have more information that may help if you have symptoms or side effects that are making eating difficult in our booklet [The building-up diet](#).

Keeping active can improve symptoms such as tiredness (fatigue), poor appetite, constipation and weak muscles. It can also help reduce stress and help you sleep better.

Physical activity is safe if you have secondary liver cancer. You should start slowly and gradually build up the amount that you do. Ask your GP, cancer doctor or nurse for advice before you start any type of exercise. You may need to avoid some types of physical activity.

You can order our booklets and leaflets for free.

Visit orders.macmillan.org.uk or call [0808 808 00 00](tel:08088080000).



"When going through the cancer journey, people are often told to remain positive. I needed to focus on what that meant and how to achieve it. For me, it was to keep as active as possible. "

Ian, diagnosed with secondary liver cancer

Stopping smoking

If you smoke, talk to your doctor for advice on giving up.

We have more information on giving up smoking and tips to help you stop. Visit [macmillan.org.uk/stop-smoking](https://www.macmillan.org.uk/stop-smoking)

Complementary therapies

Some people use complementary therapies to help them relax. Your hospital or local support group may offer therapies such as relaxation or massage.

We have more information in our booklet [Cancer and complementary therapies](#).

Who can help?

Many people are available to help you and your family.

District nurses work closely with GPs and make regular visits to patients and their families at home if needed.

The hospital social worker can give you information about social services and benefits you may be able to claim, such as meals on wheels, a home helper or hospital fares. The social worker may also be able to arrange childcare for you during and after treatment.

In many areas of the UK, there are also specialist nurses called palliative care nurses. They are experienced in assessing and treating symptoms of advanced cancer. Palliative care nurses are sometimes called Macmillan nurses. But many Macmillan professionals are nurses who have specialist knowledge in a particular type of cancer. You may meet them at a clinic or in hospital.

[Marie Curie nurses](#) help care for people approaching the end of their lives in their own homes. Your GP or hospital specialist nurse can usually arrange a visit by a palliative care or Marie Curie nurse.

There is also specialist help available to help you cope with the emotional impact of cancer and its treatment. You can ask your hospital doctor or GP to refer you to a doctor or counsellor who specialises in supporting people with cancer and their families.

Our cancer support specialists on [0808 808 00 00](tel:08088080000) can tell you more about counselling and other services in your area.



Your feelings and relationships

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Your feelings

It is common to have many different feelings when you are told you have cancer. You may feel shocked, scared, depressed, guilty or angry. This can be difficult to cope with. Partners, family and friends may also have some of the same feelings.

We have more information about emotions on our website and in our booklet [How are you feeling? The emotional effects of cancer](#).

Your healthcare team will usually give you support. But you may feel you need more help. Talk to your cancer doctor, GP or specialist nurse. They can refer you to a specialist doctor, psychologist or counsellor who can help.

You can also call the Macmillan Support Line on [0808 808 00 00](tel:0808 808 00 00) and talk to one of our cancer support specialists.

Talking to family, friends or other people affected by cancer may help. For more information or for help finding local support groups, visit macmillan.org.uk/supportgroups Or talk to other people on our Online Community at macmillan.org.uk/community

There is more information about [other ways we can help you](#).

Relationships

Cancer and its treatment are stressful and may affect your relationships. Your experience of cancer may strengthen your relationships with people close to you. Or it may put a strain on relationships. Any problems usually improve over time, especially if you talk openly with each other.

We have more information about relationships online and in our booklets [Talking about cancer](#) and [Cancer and relationships: support for partners, families and friends](#).

If you are a family member or friend

If you know someone with cancer, you might find it hard to talk about the cancer or your feelings. You can support the person with cancer by listening and talking with them.

We have more information about supporting someone on our website and in our booklet [Talking with someone who has cancer](#).

If you are looking after a family member or friend with cancer, you may be a carer. We have more information and practical tips for carers on our website and in our booklet [Looking after someone with cancer](#).

Talking to children and teenagers

Deciding what to tell children or teenagers about cancer is difficult. It can be hard to know what to tell them, and you may be worried about upsetting them. It may be best to start by giving them small amounts of information, and then tell them more when they are ready. Use simple, straightforward language to explain what is happening. You can encourage them to talk to someone they trust, who can support them. They may also find support online.

We have more information in our booklet [Talking to children and teenagers when an adult has cancer](#).

You can order our booklets and leaflets for free.
Visit orders.macmillan.org.uk or call [0808 808 00 00](tel:08088080000).





Money and work

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Help with money and benefits

When you are affected by cancer, you may need help with extra costs. Or you may need support with money if you have to stop working. We have more information online about Statutory Sick Pay and benefits you may be entitled to. We also have information for carers in our booklets [Working with caring for someone with cancer and Help with the cost of cancer](#).

Benefits are payments from the government to people who need help with money. You can find out more about benefits and apply for them online. Go to:

- gov.uk if you live in England or Wales
- socialsecurity.gov.scot if you live in Scotland
- nidirect.gov.uk if you live in Northern Ireland.

The benefits system and other types of financial support can be hard to understand. Our money advisers can give you more information about benefits. Call the Macmillan Support Line on [0808 808 00 00](tel:08088080000). You can get information about benefits and other types of financial help from [Citizens Advice](#) if you live in England, Scotland or Wales, or [Advice NI](#) if you live in Northern Ireland.

Our booklet [Help with the cost of cancer](#) has lots more information .

Grants

You may be able to get some financial help from other charities, for example one-off grants. For further information, contact the Macmillan Support Line on [0808 808 00 00](tel:08088080000).

Insurance

If you have, or have had, cancer, you may find it hard to get certain types of insurance. We have information about insurance on our website. Visit macmillan.org.uk/insurance-cancer

We have more information about travel insurance in our booklet [Travel and cancer](#). Our Online Community forum on Travel insurance may also be helpful. Visit macmillan.org.uk/community



Work

You may not know how cancer will affect your work, now or in the future.

It is a good idea to talk to your manager or human resources (HR) department soon after you are diagnosed. This will help them to support you better.

Some people stop working during cancer treatment and for a while after, until they feel ready to go back. Others carry on working, sometimes with reduced hours or other changes to their job.

Your cancer doctor, GP or specialist nurse can help you decide whether you should stop working, and when and if you should go back to work.

Our booklets [Work and cancer](#), [Working while caring for someone with cancer](#) and [Self-employment and cancer](#) have more information that may be helpful. You can also find out more about your employment rights in our booklet [Your rights at work when you are affected by cancer](#).

We have more information about work and cancer on our website. Visit macmillan.org.uk/work.





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About our information

We provide expert, up-to-date information about cancer. And all our information is free for everyone.

Our information has the PIF Tick quality mark for trusted health information. This means our information has been through a professional and strong production process.

Order what you need

You may want to order more booklets or leaflets like this one. Visit orders.macmillan.org.uk or call us on [0808 808 00 00](tel:08088080000).

We have booklets about different cancer types, treatments and side effects. We also have information about work, financial issues, diet, life after cancer treatment and information for carers, family and friends.

Online information

All our information is also available online at macmillan.org.uk/information-and-support You can also find videos featuring stories from people affected by cancer, and information from health and social care professionals.

Other formats

We also provide information in different languages and formats, including:

- audiobooks
- Braille
- British Sign Language
- easy read booklets
- interactive PDFs
- large print
- translations.

Find out more at macmillan.org.uk/otherformats

If you would like us to produce information in a different format for you, email us at informationproductionteam@macmillan.org.uk or call us on [0808 808 00 00](tel:0808 808 00 00).

The language we use

We want everyone affected by cancer to feel our information is written for them.

We want our information to be as clear as possible. To do this, we try to:

- use plain English
- explain medical words
- use short sentences
- use illustrations to explain text
- structure the information clearly
- make sure important points are clear.

We use gender-inclusive language and talk to our readers as 'you' so that everyone feels included. Where clinically necessary we use the terms 'men' and 'women' or 'male' and 'female'. For example, we do so when talking about parts of the body or mentioning statistics or research about who is affected.

To find out more about how we produce our information, visit macmillan.org.uk/ourinfo



Other ways we can help you

At Macmillan, we know how a cancer diagnosis can affect everything, and we are here to support you.

Talk to us

If you or someone you know is affected by cancer, talking about how you feel and sharing your concerns can really help.

Macmillan Support Line

Our support line is made up of specialist teams who can help you with:

- emotional and practical support if you or someone you know has been diagnosed with cancer
- clinical information from our nurses about things like diagnosis and treatments from our nurse specialists
- welfare rights advice, for information about benefits and general money worries.

To contact any of our teams, call the Macmillan Support Line for free on [0808 808 00 00](tel:08088080000). Or visit macmillan.org.uk/support-line to chat online and see the options and opening times.

You can also email us, or use the Macmillan Chat Service via our website. You can use the chat service to ask our advisers about anything that is worrying you. Tell them what you would like to talk about so they can direct your chat to the right person. Click on the 'Chat to us' button, which appears on pages across the website. Or go to macmillan.org.uk/talktous

If you would like to talk to someone in a language other than English, we also offer an interpreter service for our Macmillan Support Line. Call [0808 808 00 00](tel:08088080000) and say, in English, the language you want to use. Or send us a web chat message saying you would like an interpreter. Let us know the language you need and we'll arrange for an interpreter to contact you.

Macmillan Information and Support Centres

Our Information and Support Centres are based in hospitals, libraries and mobile centres. Visit one to get the information you need and speak with someone face to face. If you would like a private chat, most centres have a room where you can speak with someone confidentially.

Find your nearest centre at macmillan.org.uk/informationcentres or call us on [0808 808 00 00](tel:08088080000).

Help with money worries

Having cancer can bring extra costs such as hospital parking, travel fares and higher heating bills. If you have been affected in this way, we can help. Please note the opening times may vary by service.

Financial advice

Our expert money advisers on the Macmillan Support Line can help you deal with money worries and recommend other useful organisations that can help.

Help accessing benefits

You can speak to our money advisers for more information. Call us free on [0808 808 00 00](tel:08088080000). Visit macmillan.org.uk/financialsupport for more information about benefits.

Help with work and cancer

Whether you are an employee, a carer, an employer or are self-employed, we can provide support and information to help you manage cancer at work. Visit macmillan.org.uk/work

Talk to others

No one knows more about the impact cancer can have on your life than those who have been through it themselves. That is why we help bring people together in their communities and online.

Support groups

Whether you are someone living with cancer or a carer, family member or friend, we can help you find support in your local area, so you can speak face to face with people who understand. Find out about support groups in your area by calling us or by visiting macmillan.org.uk/selfhelpandsupport

Online Community

Thousands of people use our Online Community to make friends, blog about their experiences and join groups to meet other people going through the same things. You can access it any time of day or night. Share your experiences, ask questions, or just read through people's posts at macmillan.org.uk/community

You can also use our Ask an Expert service on the Online Community. You can ask a money adviser, cancer information nurse or an information and support advisor any questions you have.

Macmillan healthcare professionals

Our nurses, doctors and other health and social care professionals give expert care and support to individuals and their families. Call us or ask your GP, consultant, district nurse or hospital ward sister if there are any Macmillan professionals near you.

Other useful organisations

There are lots of other organisations that can give you information or support. Details correct at time of printing.

Secondary cancer in the liver support organisations

Bowel Cancer UK

Tel [0207 940 1760](tel:02079401760)

www.bowelcanceruk.org.uk

Gives information and support to people affected by bowel cancer. For more details, contact:

England

Email admin@bowelcanceruk.org.uk

Scotland

Email scotadmin@bowelcanceruk.org.uk

Wales

Email walesadmin@bowelcanceruk.org.uk

Northern Ireland

Email niadmin@bowelcanceruk.org.uk

Breast Cancer Now

Helpline [0808 800 6000](tel:08088006000)

www.breastcancernow.org

Provides information and support for anyone affected by breast cancer. Specialist breast care nurses run the helpline. Also committed to fighting breast cancer through research and awareness.

Cancer of Unknown Primary (CUP) Foundation – Jo's Friends

www.cupfoundjo.org

Offers support and information to people affected by CUP, as well as supporting research.

Pancreatic Cancer UK

Support line [0808 801 0707](tel:08088010707)

www.pancreaticcancer.org.uk

Provides support and information via nurse led helpline, a discussion forum and by putting people in contact with each other.

Roy Castle Lung Cancer Foundation

Helpline [0333 323 7200](tel:03333237200)

www.roycastlele.org

Provides information and practical and emotional support for anyone affected by lung cancer.

General cancer support organisations

Cancer Black Care

Tel [0734 047 1970](tel:07340471970)

www.cancerblackcare.org.uk

Provides support for all those living with and affected by cancer, with an emphasis on Black people and people of colour.

Cancer Focus Northern Ireland

Helpline [0800 783 3339](tel:08007833339)

www.cancerfocusni.org

Offers a variety of services to people affected by cancer in Northern Ireland.

Maggie's

Tel [0300 123 1801](tel:03001231801)

www.maggies.org

Has a network of centres in many locations throughout the UK. Provides free information about cancer and financial benefits. Also offers emotional and social support to people with cancer, their family, and friends.

Penny Brohn UK

Helpline [0303 300 0118](tel:03033000118)

www.pennybrohn.org.uk

Offers physical, emotional and spiritual support across the UK, using complementary therapies and self-help techniques.

Tenovus

Helpline [0808 808 1010](tel:0808 808 1010)

www.tenovuscancercare.org.uk

Aims to help everyone in the UK get equal access to cancer treatment and support. Funds research and provides support such as mobile cancer support units, a free helpline, benefits advice and an online 'Ask the nurse' service.

General health information

Health and Social Care in Northern Ireland

www.northerntrust.hscni.net

Provides information about health and social care services in Northern Ireland.

NHS.UK

www.nhs.uk

The UK's biggest health information website. Has service information for England.

NHS Inform

Helpline [0800 22 44 88](tel:0800 22 44 88)

www.nhsinform.scot

NHS health information site for Scotland.

NHS 111 Wales

111.wales.nhs.uk

NHS health information site for Wales.

Counselling

British Association for Counselling and Psychotherapy (BACP)

Tel [0145 588 3300](tel:01455883300)

www.bacp.co.uk

Promotes awareness of counselling and signposts people to appropriate services across the UK. You can also search for a qualified counsellor on the 'Therapist directory' page.

Emotional and mental health support

Mind

Helpline [0300 123 3393](tel:03001233393)

www.mind.org.uk

Provides information, advice and support to anyone with a mental health problem through its helpline and website.

Samaritans

Helpline **116 123**

Email jo@samaritans.org

www.samaritans.org

Provides confidential and non-judgemental emotional support, 24 hours a day, 365 days a year, for people experiencing feelings of distress or despair.

Financial support or legal advice and information

Advice NI

Helpline [0800 915 4604](tel:08009154604)

adviceni.net

Provides advice on a variety of issues including financial, legal, housing and employment issues.

Citizens Advice

Provides advice on a variety of issues including financial, legal, housing and employment issues. Use its online webchat or find details for your local office by contacting:

England

Helpline [0800 144 8848](tel:08001448848)

www.citizensadvice.org.uk

Scotland

Helpline [0800 028 1456](tel:08000281456)

www.cas.org.uk

Wales

Helpline [0800 702 2020](tel:08007022020)

www.citizensadvice.org.uk/wales

Disability and Carers Service

Tel [0800 587 0912](tel:08005870912)

Textphone [0800 012 1574](tel:08000121574)

nidirect.gov.uk/contacts/disability-and-carers-service

Manages Disability Living Allowance, Attendance Allowance, Carer's Allowance and Carer's Credit in Northern Ireland. You can apply for these benefits and find information online or through its helplines.

GOV.UK

www.gov.uk

Has information about social security benefits and public services in England, Scotland and Wales.

Equipment and advice on living with a disability

British Red Cross

Tel [0344 871 1111](tel:03448711111)

www.redcross.org.uk

Offers a range of health and social care services across the UK, such as care in the home, a medical equipment loan service and a transport service.

Living Made Easy

Helpline [0300 123 3084](tel:03001233084)

www.livingmadeeasy.org.uk

Provides free, impartial advice about all types of disability equipment and mobility products.

Support for older people

Age UK

Helpline [0800 678 1602](tel:08006781602)

www.ageuk.org.uk

Provides information and advice for older people across the UK via the website and advice line. Also publishes impartial and informative fact sheets and advice guides.

LGBT-specific support

LGBT Foundation

Tel [0345 330 3030](tel:03453303030)

lgbt.foundation

Provides a range of services to the LGBT community, including a helpline, email advice and counselling. The website has information on various topics including sexual health, relationships, mental health, community groups and events.

OUTpatients

www.outpatients.org.uk

A safe space for anybody who identifies as part of the queer spectrum and has had an experience with any kind of cancer at any stage. Also produces resources about LGBT cancer experiences. OUTpatients runs a peer support group with Maggie's Barts.

Support for carers

Carers UK

Helpline [0808 808 7777](tel:0808 808 7777)

www.carersuk.org

Offers information and support to carers across the UK. Has an online forum and can put people in contact with local support groups for carers.

Advanced cancer and end of life care

Hospice UK

Tel [0207 520 8200](tel:0207 520 8200)

www.hospiceuk.org

Provides information about living with advanced illness. Also provides free booklets and a directory of hospice services in the UK.

Marie Curie

Helpline [0800 090 2309](tel:0800 090 2309)

www.mariecurie.org.uk

Marie Curie nurses provide free end of life care across the UK. They care for people in their own homes or in Marie Curie hospices, 24 hours a day, 365 days a year.

Cancer registries

The cancer registry is a national database that collects information on cancer diagnoses and treatment. This information helps the NHS and other organisations plan and improve health and care services. There is a cancer registry in each country in the UK. They are run by the following organisations:

England – National Disease Registration Service (NDRS)

www.digital.nhs.uk/ndrs/patients

Scotland – Public Health Scotland (PHS)

www.publichealthscotland.scot/our-areas-of-work/conditions-and-diseases/cancer/scottish-cancer-registry-and-intelligence-service-scris/overview

Wales – Welsh Cancer Intelligence and Surveillance Unit (WCISU)

Tel [0292 010 4278](tel:02920104278)
www.phw.nhs.wales/wcisu

Northern Ireland – Northern Ireland Cancer Registry (NICR)

Tel [0289 097 6028](tel:02890976028)
www.qub.ac.uk/research-centres/nicr/AboutUs/Registry

This image shows a single sheet of white paper with horizontal green ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Disclaimer

We make every effort to ensure that the information we provide is accurate and up to date but it should not be relied upon as a substitute for specialist professional advice tailored to your situation. So far as is permitted by law, Macmillan does not accept liability in relation to the use of any information contained in this publication, or third-party information or websites included or referred to in it. Some photos are of models.

Thanks

This booklet has been written, revised and edited by Macmillan Cancer Support's Cancer Information Development team. It has been approved by our Senior Medical Editor, Dr Paul Ross, Consultant Medical Oncologist.

With thanks to: Aileen Aherne, Advanced Clinical Practitioner; Dr Aloysious Aravinthan, Associate Professor and Honorary Consultant in Hepatology; Dr Michael Braun, Consultant Medical Oncologist; Caroline Langley, Clinical Nurse Specialist; Mr Hassan Malik, Consultant Hepatobiliary Surgeon; Dr Teik Choon See, Consultant Interventional Radiologist; Dr Amen Sibtain, Consultant Clinical Oncologist; Donna Traynor, Clinical Nurse Specialist; and Dr Esther Unitt, Consultant Gastroenterologist.

Thanks also to the people affected by cancer who reviewed this edition, and those who shared their stories.

We welcome feedback on our information. If you have any, please contact informationproductionteam@macmillan.org.uk

Sources

Below is a sample of the sources used in our secondary cancer in the liver information. If you would like more information about the sources we use, please contact us at informationproductionteam@macmillan.org.uk

National Institute for Health and Care Excellence (NICE). Metastatic malignant disease of unknown primary origin in adults: diagnosis and management. Clinical guideline [CG104]. Updated 26 April 2023. Available from: www.nice.org.uk/guidance/cg104 [accessed April 2023].

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Stewart CL, Warner S, Ito K, Raoof M, Wu GX, Kessler J, et al. Cytoreduction for colorectal metastases: liver, lung, peritoneum, lymph nodes, bone, brain. When does it palliate, prolong survival, and potentially cure? *Current Problems in Surgery*. 2018;55(9): 330–379. Available from: www.doi.org/10.1067/j.cpsurg.2018.08.004 [accessed March 2023].

Can you do something to help?

We hope this booklet has been useful to you. It is just one of our many publications that are available free to anyone affected by cancer.

They are produced by our cancer information specialists who, along with our nurses, benefits advisers, campaigners and volunteers, are part of the Macmillan team. When people are facing the toughest fight of their lives, we are here to support them every step of the way.

We want to make sure no one has to go through cancer alone, so we need more people to help us. When the time is right for you, here are some ways in which you can become a part of our team.

5 ways you can help someone with cancer

1. Share your cancer experience

Support people living with cancer by telling your story, online, in the media or face to face.

2. Campaign for change

We need your help to make sure everyone gets the right support. Take an action, big or small, for better cancer care.

3. Help someone in your community

A lift to an appointment. Help with the shopping. Or just a cup of tea and a chat. Could you lend a hand?

4. Raise money

Whatever you like doing you can raise money to help. Take part in one of our events or create your own.

5. Give money

Big or small, every penny helps. To make a one-off donation see over.

Please fill in your personal details

Mr/Mrs/Miss/Other

Name

Surname

Address

Postcode

Phone

Email

Please accept my gift of £
(Please delete as appropriate)

I enclose a cheque / postal order /
Charity Voucher made payable to
Macmillan Cancer Support
OR debit my:

Visa / MasterCard / CAF Charity
Card / Switch / Maestro

Card number

Valid from

Expiry date

Issue no

Security number

Signature

Date / /

Do not let the taxman keep your money

Do you pay tax? If so, your gift
will be worth 25% more to us –
at no extra cost to you. All you
have to do is tick the box below,
and the tax office will give 25p
for every pound you give.

☐ I am a UK tax payer and
I would like Macmillan Cancer
Support to treat all donations
I make or have made to
Macmillan Cancer Support in the
last 4 years as Gift Aid donations,
until I notify you otherwise.

I understand that if I pay less Income Tax
and/or Capital Gains Tax than the amount of
Gift Aid claimed on all my donations in that
tax year it is my responsibility to pay any
difference. I understand Macmillan Cancer
Support will reclaim 25p of tax on every £1 that
I give.

Macmillan Cancer Support and our trading
companies would like to hold your details in
order to contact you about our fundraising,
campaigning and services for people affected
by cancer. If you would prefer us not to use
your details in this way please tick this box. ☐

In order to carry out our work we may need
to pass your details to agents or partners who
act on our behalf.

If you would rather donate online
go to macmillan.org.uk/donate



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Please cut out this form and return it in an envelope (no stamp required) to: Supporter Donations,
Freepost RUCY-XGCA-XTHU, Macmillan Cancer Support, PO Box 791, York House, York YO1 0NJ

This booklet is about secondary cancer in the liver. This is cancer that has spread to the liver from somewhere else in the body. It is for anyone who has been diagnosed with secondary cancer in the liver. There is also information for carers, family members and friends.

The booklet explains what secondary cancer in the liver is and how it may be treated. It also has information about emotional, practical and financial issues.

At Macmillan we know cancer can disrupt your whole life. We'll do whatever it takes to help everyone living with cancer in the UK get the support they need right now, and transform cancer care for the future.

For information, support or just someone to talk to, call [0808 808 00 00](tel:0808 808 00 00) or visit macmillan.org.uk

Would you prefer to speak to us in another language? Interpreters are available. Please tell us in English the language you would like to use. Are you deaf or hard of hearing? Call us using Relay UK on [18001 0808 808 00 00](tel:1800108088080000), or use the Relay UK app.

Need information in different languages or formats? We produce information in audio, interactive PDFs, easy read, Braille, large print and translations. To order these, visit macmillan.org.uk/otherformats or call our support line.



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