

Chemotherapy for lung cancer



Introduction

If you or someone you care for has lung cancer and chemotherapy is a possible treatment, then it's almost certain that you will have a lot of questions.

We have produced this booklet in partnership with lung cancer experts and people affected by lung cancer to help you make positive, informed choices about your care and treatment. Use this booklet along with the information provided by your healthcare team.

Remember that healthcare professionals are only too happy to answer your questions and help you with things that may be unclear or causing you concern.

We hope that this booklet answers most of your questions about chemotherapy. If you would still like to talk to someone about this, call our free and confidential [Ask the nurse](#) service on: **0800 358 7200** or email: lungcancerhelp@roycastle.org

You can also contact one of the many support organisations available in our [Living with lung cancer](#) booklet. Order a copy by calling us on: **0333 323 7200** (option 2), or look on our website: www.roycastle.org/useful-contacts

We would like to acknowledge Peter Maguire, who features on the front cover, for his help in producing this booklet.

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What is chemotherapy?

Chemotherapy is a treatment for cancer. It uses (cytotoxic) drugs to kill cancer cells.

The chemotherapy drugs are carried by the bloodstream throughout your body. The drugs affect cells in your body that are in the process of dividing and growing, both healthy cells and cancerous ones. However, healthy cells are able to repair themselves, unlike cancer cells which do not recover.

Healthy cells that naturally divide often include those in:

- the bone marrow (where blood cells are made)
- the hair follicles
- the lining of the mouth and bowel

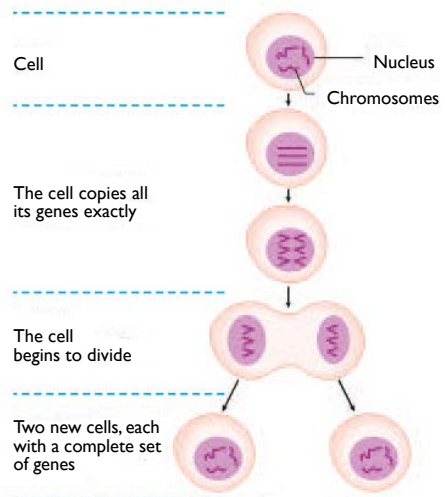
The growth of cancer cells is not well controlled, so they multiply continually (although not always faster than healthy cells do). Chemotherapy treatment can interrupt and reverse this process.

The cell cycle

Cells go through several steps, or phases, as they divide.

These steps make up the cell cycle.

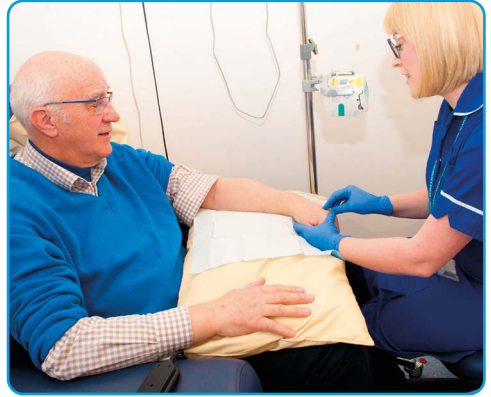
Some drugs affect cells at different phases of the cycle, for example when they are preparing to divide, or at the time the cell splits into two.



Understanding chemotherapy for lung cancer

What is chemotherapy? *continued*

Most types of chemotherapy for lung cancer are given directly into a vein through a drip (intravenously). This means the drugs travel through your bloodstream, reaching cancer cells wherever they are in the body. These are known as systemic treatments. There are also some types of chemotherapy that are given by mouth as a tablet.



How do doctors decide which treatments to recommend?

Lung cancer is diagnosed by taking a sample of tissue (*a biopsy*) from a suspected cancer site and examining it under a microscope. These tests can confirm that it is lung cancer, as well as finding out which type it is:

- small cell lung cancer (SCLC)
- non-small cell lung cancer (NSCLC)

Non-small cell lung cancer is much more common than small cell, with more than eight out of ten cases (80-85%) diagnosed as this type.

After biopsy results are known, a group of healthcare professionals, known as a multidisciplinary team (MDT), will talk about your case. They will recommend the treatment most likely to bring the greatest benefit with the fewest risks or side effects. Your cancer doctor will discuss all options with you.

Their treatment recommendations will be based on several factors, including:

- the type (*pathology*) of lung cancer you have (found through a biopsy)
- the size, position and spread of your lung cancer (*stage*) (found through scans and X-rays)
- your general health, medical history, and how you will cope with treatment

Understanding chemotherapy for lung cancer

How do doctors decide which treatments to recommend? *continued*

When doctors evaluate the extent of a person's cancer (size and spread), they refer to it using a *staging system*. The most common uses a numbering scale, with stage 1 referring to the least developed cancer, and stage 4 to the most advanced.

- **stage 1** – the cancer is small and in one area of the lung (*localised*)
- **stages 2 and 3** – the cancer is larger and may have grown into the surrounding tissues, and there may be cancer cells in the lymph nodes (*locally advanced*)
- **stage 4** – the cancer has spread to another part of the body (*secondary or metastatic cancer*)

If you have non-small cell lung cancer, your biopsy sample - or sometimes a blood test - may also be checked for certain changes in the cancer's genes, sometimes called biomarkers or mutations. These tests can show whether a newer treatment, such as a targeted therapy, might be suitable for you. Not everyone will need or benefit from these treatments, but if your cancer has one of these changes, your doctor will talk to you about your options.

You will be offered the best standard treatment available that current research shows is likely to work best for you. This will be unique to you and your needs. This is why you may meet other people with the same cancer as you who are having different treatments.

It may also help explain why you may not be getting a treatment you have heard about in the news or have read about online if you are a member of any social network patient groups. Some precision medicines are designed to treat specific targets in some lung cancers and will only be given to you if your lung cancer has those targets. Other people may receive a particular treatment because they are taking part in a clinical trial.

Your doctor will tell you about any suitable clinical trials at any point in your care if they believe you might be eligible, but you can also ask or search for them yourself. Taking part in a trial is always your choice.

Understanding chemotherapy for lung cancer

How do doctors decide which treatments to recommend? *continued*

Before any treatment starts, your cancer doctor will tell you about any risks, benefits and side effects of any chemotherapy. You will be asked to sign a treatment consent form to confirm that you have had this discussion and understood it. Only sign it once you feel your questions have been answered to your satisfaction and you are happy to proceed with the proposed treatment.

When might doctors recommend monitoring instead of treatment?

If tests show that your lung cancer isn't active (not dividing or growing), your doctor may recommend monitoring it for now. This is sometimes called 'watch and wait', but it doesn't mean 'doing nothing'. They may then decide to start or restart chemotherapy if the cancer becomes active once again.

Although this may make you anxious and worry that the doctor isn't doing anything, it helps you avoid unnecessary treatment and side effects. Once your body is exposed to a particular chemotherapy drug, it is unlikely to be as effective if used to treat you again in the future. This approach helps make sure that the widest possible range of treatments remains available to you over time.



Understanding chemotherapy for lung cancer

When and why is chemotherapy used?

Depending on your situation, your MDT may recommend chemotherapy on its own or with other treatments such as surgery, radiotherapy or immunotherapy. Its purpose will vary depending on your needs:

- before surgery or radiotherapy (neoadjuvant chemotherapy): *to shrink the tumour and make it easier to treat*
- after surgery (adjuvant chemotherapy): *to destroy any cancer cells left behind and help prevent the cancer from coming back*
- around the time of surgery (perioperative chemoimmunotherapy): *chemotherapy and immunotherapy before to shrink the tumour, followed by immunotherapy afterwards, to reduce the risk of the cancer returning*
- with radiotherapy (chemoradiotherapy): *concurrent treatment for lung cancers that can't be removed with surgery, or if surgery is considered too risky*
- to control symptoms and improve quality of life (palliative chemotherapy or palliative radiotherapy): *used when a cure is not possible, to ease problems such as breathlessness or pain and help people live longer*
- as ongoing treatment (maintenance treatment): *given after an initial course of chemotherapy or other drugs, to help keep the cancer under control for as long as it is working and side effects are manageable*



Understanding chemotherapy for lung cancer

While surgery is usually recommended for early stage lung cancer, it may not be possible in some cases. This might be because the tumour is in a difficult location (like near blood vessels in the centre of your chest) or because surgery could be too risky (for example, if you have poor lung function).

When and why is chemotherapy used? *continued*

There are lots of different chemotherapy drugs available to treat lung cancer. Some types of lung cancer are best treated using one drug on its own (*single agent* or *monotherapy*), and depending on your type of lung cancer, this may be what is recommended for you.

Other types respond best using a combination of two or more drugs (combination therapy). The different drugs attack cancer cells in different ways or at different points in the cell's growth cycle, which can make treatment more effective overall.

Not all lung cancers respond well to chemotherapy and some people may be offered immunotherapy on its own or a targeted therapy. Some types of lung cancer respond better to a combination of chemotherapy and immunotherapy.



For more information, please see our *Immunotherapy for lung cancer* and *Mutation driven lung cancer and its treatment* booklets online at www.roycastle.org/lung-cancer-booklets or call us for a printed copy on 0333 323 7200 (option 2).

Understanding chemotherapy for lung cancer

Chemotherapy for small cell lung cancer

If you have small cell lung cancer (SCLC), chemotherapy is usually the first type of treatment you receive. This is because SCLC can grow and spread quickly, and has often spread outside the lung when the lung cancer is detected. It often responds well to chemotherapy.

Chemotherapy works systemically and can help relieve symptoms, slow the cancer's growth, and help you live longer. Radiotherapy may also be given after or concurrently (together) with chemotherapy to help control the cancer more effectively.

In some circumstances, you may be recommended a combination of chemotherapy with an immunotherapy drug.

There are a variety of chemotherapy drugs for small cell lung cancer. The most common first treatment is a combination of etoposide and one containing platinum (cisplatin or carboplatin).

After your first course of chemotherapy, your doctors may suggest other treatments if the cancer comes back or doesn't respond to treatment. These might include:

Topotecan, which may be used on its own

A combination of three drugs: Cyclophosphamide, doxorubicin (Adriamycin®) and vincristine, known as the CAV regimen

If you are receiving both chemotherapy and immunotherapy, the chemotherapy may stop while immunotherapy continues. This decision will be based on how you are responding to the treatment.



For more information, please see our *Understanding your small cell lung cancer* booklet online at www.roycastle.org/lung-cancer-booklets or call us for a printed copy on 0333 323 7200 (option 2).

Understanding chemotherapy for lung cancer

Chemotherapy for non-small cell lung cancer

Non-small cell lung cancer (NSCLC) has three common sub-types:

- squamous cell carcinoma
- adenocarcinoma (non-squamous)
- large cell carcinoma (non-squamous)

The type and extent (stage) of your NSCLC will help doctors decide which treatments to recommend, one of which may be chemotherapy. Chemotherapy may be offered to you as a treatment on its own or with other treatments as described below.

Chemotherapy with immunotherapy

Increasingly, people with advanced, non-squamous NSCLC, whose cancer is not treatable with targeted therapies, may be offered chemotherapy in combination with an immunotherapy drug as their first treatment. For others, immunotherapy may be used on its own.

If this stops working, or the lung cancer comes back, chemotherapy may be used on its own. Your cancer doctor will speak to you about what options you may have.

Chemotherapy as the only systemic treatment

Chemotherapy can be used on its own to treat less advanced non-small cell lung cancer with the intent to cure the disease. It may also be used to manage symptoms of more advanced lung cancer.

You may be offered chemotherapy in combination with radiotherapy (if you are fit enough) if lung cancer surgery is not suitable for you, and your type of cancer means that a targeted therapy or immunotherapy drug is likely to be less effective.

The most commonly used chemotherapy for people with NSCLC contains platinum (cisplatin or carboplatin) with pemetrexed, vinorelbine, gemcitabine or paclitaxel.

Understanding chemotherapy for lung cancer

Chemotherapy for non-small cell lung cancer *continued*

Chemotherapy with lung surgery

Lung surgery may be offered with the intent to remove all the cancer and cure the disease. If so, doctors may also speak to you about additional systemic treatments before or after your surgery that may improve your overall outcomes.

A combination of chemotherapy and immunotherapy before your surgery is called neoadjuvant treatment. This treatment is intended to kill any cancer cells that may already have spread into your bloodstream reducing the chance of the cancer coming back. It can also reduce the size of the tumour meaning you may be able to have a smaller operation.

If you have surgery for lung cancer and all the cancer cells are removed, you may still be offered chemotherapy after your operation. This is called adjuvant treatment. For some people, this may then be followed by immunotherapy.

Your MDT may suggest perioperative chemoimmunotherapy. This means having chemotherapy and immunotherapy before surgery, and more immunotherapy afterwards. The aim is to make the tumour smaller so surgery is easier, and to lower the risk of the cancer returning.

If you have surgery and some cancer cells remain, your doctor may suggest further treatment. This could be chemotherapy, radiotherapy, or sometimes both together, which is known as chemoradiotherapy.



For more information, please see our *My lung surgery* booklet online at www.roycastle.org/lung-cancer-booklets or call us for a printed copy on 0333 323 7200 (option 2).

Understanding chemotherapy for lung cancer

Chemotherapy for non-small cell lung cancer *continued*

Maintenance treatments

After a first course of systemic treatment finishes, doctors usually stop any further treatment unless the cancer becomes active again.

However, in some circumstances, people can receive ongoing chemotherapy with one drug on its own without the platinum-based agent. This is called maintenance chemotherapy. The treatment may include immunotherapy.

Your cancer doctor may consider you for maintenance therapy if:

- you have non-squamous non-small cell lung cancer
- your cancer has got smaller or remained stable at the end of your first systemic treatment
- you have been coping well with few side effects

Research has shown that maintenance therapy gives better outcomes for these people, helping to continue to slow down the growth of their lung cancer and keep any symptoms under control for longer.

If you are receiving a combination maintenance treatment, doctors may stop the chemotherapy part of the treatment while continuing with the immunotherapy component.

This treatment may cause some skin reactions, and treatment with a steroid such as dexamethasone is recommended. The vitamin supplements folic acid and B12 are also used to help reduce the toxicity of the drug.

Ongoing treatment would likely be given intravenously once every three weeks. Treatment would continue until the cancer gets worse, at which point other options, including best supportive care, would be considered.

Preparing for chemotherapy

Preparing for chemotherapy

Where will I go for chemotherapy treatment?

Chemotherapy is usually given as an outpatient in a chemotherapy day unit. However, some chemotherapy treatment requires a stay in hospital. Some chemotherapy drugs come in a tablet version and can be taken at home.

Not every hospital provides chemotherapy, so your treatment might be at a different site. Check with your doctor or nurse that you have the right contact details for where you'll be treated and note them at the back of this booklet.

Ideally there would be one point of contact in the MDT who will co-ordinate this for you and handle responses from all members of the team managing your treatment, although this is not always possible.

Chemotherapy day unit

Most chemotherapy day units are open Monday to Friday. You can usually make an appointment time to suit both you and your chemotherapy department. If you are receiving your chemotherapy at a day unit, it will normally be given directly into a vein through a drip (intravenously). A chemotherapy nurse will care for you while you are receiving your chemotherapy.

TOP TIP

A hand-held electric fan may help keep you cool and breathe more easily if the treatment area is stuffy.

Hospital stay

Most chemotherapy treatment does not require an overnight stay. However, some chemotherapy drugs have to be given very slowly, often with fluids given directly into a vein, through a drip, before and after receiving the drug. This can take up to 12 hours, and you need to be closely monitored by a chemotherapy nurse during this time.

Your cancer doctor may also want you to stay in hospital to monitor how you react to the drug you have been given.

Preparing for chemotherapy

What tests will I have before chemotherapy starts?

Your blood will be tested before, during and after treatment to check your white blood cells (cells that fight infection), haemoglobin (the part of red blood cells that carries oxygen) and platelets (cells that clot the blood) are within safe levels.

This is called your blood count. If your blood count is too low you might get a blood transfusion, dose reduction, or delay in your treatment.

The blood sample will also check if your blood biochemistry is within normal limits. This will include checking your kidney and liver function, and the levels of essential minerals such as sodium, potassium and magnesium. Doctors need to know your blood test results to make sure they give you the right treatment.

You can usually have your flu, pneumococcal and COVID-19 vaccinations before your chemotherapy starts. If it is due after your treatment starts, check with your cancer doctor.

You may also be advised to take vitamin D supplements.

Dental care

You may find it helpful to have a dental check-up before starting treatment, if possible. Avoid non-urgent dental procedures during chemotherapy as healing may be slower and infection risk higher. Always let your dentist know you are receiving cancer treatment. Speak to your oncology team before any urgent dental procedures.

TOP TIP

Wear comfortable clothing with either short or loose sleeves when you go for your chemotherapy. Take your slippers with you.

Preparing for chemotherapy

How much chemotherapy will I need?

The amount of chemotherapy you will need will be unique to you and your cancer doctor will talk to you about it before any treatment starts. However, there are some general things common to most people's treatment.

Because cancer cells have periods of being active (dividing and multiplying), and inactive (when they are unaffected by chemotherapy drugs), chemotherapy is given in a series of doses followed by rest periods.

The repeated patterns of doses of chemotherapy and rest periods are known as chemotherapy cycles. A course of treatment will be made up of several cycles. Giving a course of treatment in this way maximises its effectiveness, its purpose being to kill more leftover cancer cells each time.

“*And as it turned out, after three cycles of chemo the main tumour in my lung had gone from the size of a grapefruit to the size of a grape and I realised the chemo was obviously doing its job.*”

Craig

Working in cycles also gives your body time in between to recover from any side effects that you may have experienced. How often you have each cycle, and how long your chemotherapy treatment lasts altogether, depends on many factors including:



- the type of chemotherapy drugs used
- why you are receiving chemotherapy
- how the cancer cells respond to the drugs
- how your body copes with any side effects from the drugs

Preparing for chemotherapy

How much chemotherapy will I need? *continued*

Here is a sample course of treatment showing four cycles of three weeks, with treatments on the first day of each cycle:

| | Cycle 1 | Cycle 2 | Cycle 3 | Cycle 4 | |
|---------------------------------|---------|---------|---------|---------|--|
| Cisplatin 75mg/m ² | ★ | ★ | ★ | ★ | |
| Pemetrexed 500mg/m ² | ○ | ○ | ○ | ○ | |
| Treatment dates | 1 May | 22 May | 12 June | 31 June | |
| Weeks | 1 – 3 | 4 – 6 | 7 – 9 | 10 – 12 | |

Treatment days 
 Rest days 

Courses of treatment could have more cycles, or fewer, and use different chemotherapy drugs with more or less time in between treatment days. Your cancer doctor or chemotherapy nurse will make sure you understand the course of treatment that is best for you.

I am frightened of needles – what should I do?

It is not unusual to be frightened of needles and nursing staff have many ways of helping people to feel less anxious. Tell them if you are feeling nervous before you start your treatment. There are also creams available to numb your skin, so you hardly feel anything.

Feeling sick, or even being sick, at the thought of treatment, or perhaps the sight or smell of hospitals, is called anticipatory nausea and vomiting. It can be successfully helped with relaxation techniques, counselling and medication. Ask your cancer doctor or lung cancer nurse specialist about what might work best for you.

Preparing for chemotherapy

What actually happens when I get my chemotherapy?

When you arrive for your appointment, you will be welcomed by a chemotherapy nurse, who will go over your personal details. They will then check your height and weight to work out your body mass index (BMI) - an important way of helping to monitor your general health. Your chemotherapy dose is usually based on your body surface area (BSA), which is calculated from your height and weight.

Your temperature and blood pressure will also be checked so the nurse can be sure you are well enough to get your treatment.

While receiving your chemotherapy, you will likely be in an armchair or reclining chair, or sitting propped up on a hospital bed.

Nearly all chemotherapy for lung cancer is given into a vein (intravenously), usually on the back of your hand or forearm. Some centres prefer veins in the lower arm. A small plastic needle (cannula) is put into the vein and attached to a drip.

Some people have chemotherapy given to them through a PICC line as this can be easier for them than finding a vein each time they go for treatment. PICC stands for peripherally inserted central catheter. The line would be put into a vein in your arm under local anaesthetic. Some people receive their treatment through a portacath or a Hickman line.

You will be given anti-sickness medicines, through the drip or as tablets, before starting the chemotherapy. Once the chemotherapy is finished, you will be given tablets to take at home to prevent any sickness over the following few days.

Receiving chemotherapy

Receiving chemotherapy



Receiving chemotherapy

Some chemotherapy treatments take quite a long time, so remember to take something to keep you occupied during it such as a book, magazine or portable music player with earphones. There will be other people receiving chemotherapy at the same time as you, so there is often an opportunity to chat with other patients.

“ I expected to have to lie still in bed for the whole day, but actually, even with the drip in, I was able to wander down to the day room and watch telly. ”

Eileen

Can I bring a relative or friend with me?

Policies may vary since the COVID-19 pandemic. Each treatment centre is different, so check with your own chemotherapy day unit before your appointment if someone can come with you.

Receiving chemotherapy



Can I drive after receiving chemotherapy?

It is best not to drive to your first chemotherapy appointment. Chemotherapy affects people in different ways and side effects are unpredictable. While you may end up being safe to drive after all, don't take a chance.

If you need help with travelling, your lung cancer nurse specialist or chemotherapy nurse may be able to help arrange transport for you.

Can I eat or drink while I get my chemotherapy?

Yes, you will be encouraged to drink plenty and eat as normal while receiving your chemotherapy. Snacks and drinks will be supplied by the hospital. If you have brought a friend or relative with you, they will have to bring their own refreshments.

Receiving chemotherapy

“Although the hospital staff may arrange refreshments for you, take two flasks with you, one for tea or coffee and one for chilled juice so you can have something to drink when you want.”

Samantha

Can I travel while having chemotherapy?

Many people ask about going on holiday or travelling while they are having chemotherapy. Before making any plans, talk to your cancer team. They can advise you on the best time to travel, whether you need vaccinations, and what precautions to take. This will help make sure your trip is safe and enjoyable.

My mouth is sore – is this normal?

Chemotherapy drugs affect fast-dividing cells, and, as the lining of the mouth has cells like this, it is not uncommon for people to get a sore mouth, including mouth ulcers.

Having good oral hygiene is important. Keep your mouth clean and fresh, regularly brushing your teeth or dentures with a soft toothbrush. It may be a good idea to visit your dentist for a check-up before your treatment starts.

If you have white patches inside your mouth or on your tongue you may have a fungal mouth infection called thrush. This is quite common, and you should speak to your GP or hospital who will prescribe an anti-fungal medicine to treat it.

**TOP
TIP**

Drinking pineapple juice can ease the pain of mouth ulcers.

Receiving chemotherapy

Chemotherapy side effects

All cancer treatments can cause side effects, and most people having chemotherapy will experience some of them.

In most cases, these side effects are manageable with support from your team and improve over time. Always talk to your cancer doctor or lung cancer nurse specialist about any side effects, as they can often help you relieve them.

Do the side effects ease with time?

Some side effects will ease with time, but it is very important to tell your medical team what is happening with you. They may be able to make changes to your treatment that could reduce the side effects or stop them getting worse over time. Everyone is different. Some experience more side effects than others, and some side effects may last longer.

If you are going to feel sick, it is usually within the first week after treatment. White blood cells and platelets reach their lowest point 10 to 15 days after treatment. Often the only sign that this has happened is a feeling of tiredness when even the smallest task might feel like a chore. This is also the time when you are most at risk of picking up infections.

In general, side effects usually begin to reduce by the third week after chemotherapy, and you should start to feel better. This is your body recovering in time for the next treatment.

Unfortunately, some side effects, for example, tiredness, bad taste in the mouth and tingling in the fingers and toes, may continue for some time after treatment. If you are at all worried about this, speak to your chemotherapy nurse.

Receiving chemotherapy

Practical advice for managing side effects

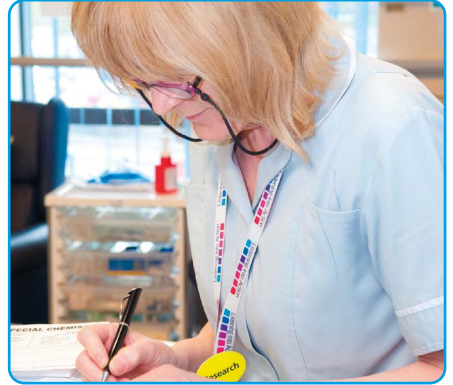
| | |
|----------------------------------|---|
| Feeling or being sick | Powerful anti-sickness medicines can often help. Take the tablets your hospital team gives you as prescribed. If they don't work, let your cancer doctor know as there are usually alternatives. |
| Extreme tiredness (fatigue) | This is common. Rest when you need to, but gentle regular exercise can help reduce tiredness. If you feel breathless, your legs ache, or you are concerned about how tired you feel, contact your GP or hospital team. |
| Hair thinning and hair loss | Chemotherapy is likely to affect your hair to some extent. Some drugs, such as etoposide, paclitaxel and docetaxel can cause total hair loss. Although this can be distressing, it is temporary. If you notice your hair starting to fall out, try wearing a hairnet at night and a hat/scarf during the day. Avoid over-brushing and using hair colourants or rollers. Most hospitals can advise on wigs and headwear. |
| Fever and low white blood count | Chemotherapy affects your immune system, so you are at higher risk of infections. Stay away from people with obvious infections (such as flu, chickenpox or shingles). Contact your hospital team straight away if you develop a temperature above 37.5°C. |
| Rash and dry, itchy skin | Skin changes are common during chemotherapy. You may notice dryness, rashes or itching. Use unperfumed moisturisers and avoid hot baths or harsh soaps as these can dry the skin further. Wear loose, cotton clothing to reduce irritation. If your rash is painful, widespread, or blistering, contact your hospital team. |
| Sex, contraception and fertility | Chemotherapy can temporarily or permanently affect fertility. It is important to use reliable contraception during treatment, as chemotherapy drugs can harm an unborn baby. Some people notice changes in their sex drive or experience discomfort during sex. Your hospital team can provide support with sexual wellbeing and advise on fertility preservation before treatment. |

Receiving chemotherapy

Infection of the blood (neutropenic sepsis)

You are at an increased risk of getting an infection of the blood (neutropenic sepsis) when you are receiving chemotherapy. This can be very serious and needs to be treated straight away.

It is very important that you look out for the following:



- a temperature either below 36°C or above 37.5°C
- uncontrollable shivering or sweating
- a very sore throat
- sickness and diarrhoea
- a change in your mental state, such as confusion or disorientation
- fast breathing
- fast heart rate
- dizziness

TOP TIP

Keep a digital thermometer at home.

You might not have any symptoms other than an increased temperature. If you feel at all unwell, check your temperature with a thermometer.

If you have any of the above symptoms please contact the hospital straight away, using the dedicated treatment helpline number given to you, which you can write down at the back of this booklet.

Receiving chemotherapy

“

I kept a diary between chemo sessions. It gave me great comfort during treatment to read back about the previous session and how things got better.

Val”

Should I change my diet while I'm having chemotherapy?

It is quite common to lose your appetite while having chemotherapy and your sense of taste may also be affected. You could find that you have a metallic taste in your mouth or perhaps no taste at all. However, if you are concerned that you are not eating or drinking enough, tell your cancer doctor, as there are dietary supplements available on prescription.

The following tips may help to make foods taste better:

- seasonings will help to add flavour to your food
- marinating food before cooking may help improve flavour, as may pickles and adding sauces to cold meats
- sharp tasting foods such as fruit juices and fresh pineapple will leave a refreshing taste in your mouth. However, avoid grapefruit as it can interfere with some chemotherapy drugs
- fizzy drinks or lemon (or other fruit) teas may provide a pleasant tasting change from tea and coffee
- cold food sometimes tastes better than hot food
- avoid strong smelling and fried foods
- eat small meals and snacks regularly throughout the day, rather than large ones only at mealtimes
- avoid drinking too much liquid before eating, as this will fill you up

You will be given a dedicated treatment helpline contact number to phone if you experience difficulties with side effects. This number should be used at times when it may be difficult to contact your lung cancer nurse specialist or cancer doctor, such as during the night or at the weekend. There is space at the back of this booklet to write down phone numbers.

Receiving chemotherapy

How do the doctors know if the chemotherapy is working?

It isn't always easy to tell how well chemotherapy is working. However, your doctors will usually check after two or three rounds (cycles) of treatment. This is often done using a CT scan (a special scan that shows detailed images inside the body), and sometimes with an MRI or PET scan.

If you are getting radiotherapy at the same time as chemotherapy, the scan is usually done shortly after completion of treatment. Your doctor will tell you when this is likely to happen for you. This allows the combination of treatments to finish working and the scan to be more accurate.

You may notice that the treatment is working if your symptoms have improved, for example, you are less breathless or are not coughing as much. Your treatment will usually carry on as long as the chemotherapy is helping to control the cancer and you're managing the side effects well.

Sometimes there will be no change in the state of your tumour when the CT scan has been done. However, the growth of the tumour may have been stopped or slowed by chemotherapy. This is sometimes called 'stable disease', which means the cancer has not grown or spread. This is a positive response, especially if you feel better. Chemotherapy may continue to delay the growth for some time.

What if the chemotherapy isn't working well for me?

How well different chemotherapy treatments work varies from person to person. Treatment may work for a while then stop, not work at all, or cause serious side effects. Your doctors will always assess what is happening for you and consider options such as lowering the dose of chemotherapy. They may also change other medications to help you tolerate the chemotherapy better, such as using anti-emetic drugs to help with feeling sick.

If there is evidence that your cancer is not responding to the treatment, or you are not coping well with it, then the healthcare professionals involved in your care will consider stopping the treatment and talk to you about further options that may be available to you. This may or may not be a different chemotherapy drug.

Receiving chemotherapy

What if the chemotherapy isn't working well for me? *continued*

Before deciding to go ahead with any further chemotherapy, ask your doctor about any risks, benefits and side effects that you might expect. They will also be able to tell you about the aim of any suggested treatment, how effective it is likely to be, and your chance of getting better.

Some people are able to cope with and respond to several courses of chemotherapy, but others can find it hard going. You will need to base your decision on your own experience of treatment so far, and what your doctor says. Depending on your individual situation, they may or may not recommend further chemotherapy.

Even if it is an option, you may still decide that further chemotherapy does not offer enough benefits to outweigh possible risks or unwanted side effects. This is entirely your decision. Talking through your options with family and friends can help you work out what is best for you.

If you decide against any further chemotherapy, or your doctor recommends that you stop, treatment options would then concentrate on managing any symptoms of your cancer. This treatment option is known as *best supportive care* or *palliative care*. It also involves psychological, social and spiritual support for you and your family or carers.

At any point during your treatment, you can ask your cancer doctor about any clinical trials that may be available to you. Getting into a trial is often based on being able to meet some very specific criteria. Your cancer doctor will be able to tell you if you are eligible.

If you would like to check what clinical trials are available, have a look at:

- UK Clinical Trials Gateway
<https://beartofresearch.nihr.ac.uk>
- Cancer Research UK
www.cancerresearchuk.org/about-cancer/find-a-clinical-trial

After chemotherapy finishes

How will I feel after treatment ends?

Once you have finished treatment you may be anxious that you are no longer attending the chemotherapy department. You may have been going for several months and suddenly your routine has changed. This can make you feel a bit worried and low, which is a normal reaction. However, over time, these feelings should ease.

How will I be followed up?

After your chemotherapy has finished, you may have a scan to find out how your cancer has responded to the treatment. Your cancer doctor will then speak to you about the results and whether or not you would benefit from further treatment. If your cancer has responded well to the treatment, you may not need more treatment straight away.

You will then have regular check-ups with your oncology team to make sure your cancer hasn't become active again. This may include blood tests, scans or X-rays. If you have any problems or notice new symptoms in between your appointments, let your cancer doctor know as soon as possible.

In general, cancer patients will have these regular checks until they show no evidence of new disease (or relapse) for five years, at which point they will be discharged from their cancer doctor's care. If they show the cancer has come back, the process of deciding on the best course of action will start, exploring treatment options or best supportive care.

If you have any problems or worries in between your appointments, contact your lung cancer nurse specialist. You don't have to wait until your next clinic appointment.

Questions to ask your doctor or lung cancer nurse

Before choosing chemotherapy as a treatment option, you should understand the expected benefits, side effects, and risks.

Ask your cancer doctor or lung cancer nurse specialist these questions at your next visit. Learn as much as you can about your treatment and get an idea of the expected outcome.

- 1 What type of chemotherapy will I be getting?
- 2 What is the aim of the chemotherapy?
- 3 Are there other types of treatment that could be suitable for me instead of chemotherapy?
- 4 What are the risks and side effects of the chemotherapy I will be having? How do these compare with the risks and side effects of other treatments?
- 5 How long will I have to wait before starting treatment?
- 6 Where will the treatment take place? How do I get there? Is there car parking or public transport?
- 7 Can I bring a relative or friend with me when I have my chemotherapy?
- 8 How will I know if the chemotherapy is working?
- 9 How will the chemotherapy be given (for example, by drip or tablets)? How often will I need it, and for how long?
- 10 Where will I go for the chemotherapy?
- 11 What can I do to prepare for treatment and reduce the chance of side effects?
- 12 Will I need to change my lifestyle in any way?
- 13 If this chemotherapy doesn't work, are there other treatments I can get?
- 14 Are there any clinical trials I would benefit from?

Keep a note of the answers to your questions

Keep a note of the answers to your questions

Keep a note of important phone numbers and addresses

Lung cancer nurse specialist:

Chemotherapy nurse:

Dedicated treatment helpline and emergency phone numbers:

About our lung cancer information

We follow established quality standards and production principles to make our information trustworthy and easy to read. It is evidence based, following national clinical guidelines and best practice for managing lung cancer.

We believe information that is clear, accurate, evidence-based, up to date, and easy to use helps people become better informed and more involved in their health and care.

Our information is written either by our information team or by lung cancer experts. We have a panel of lung cancer experts made up of doctors, nurse specialists and other health professionals involved in the treatment and care of people affected by lung cancer. These people help us on a voluntary basis. You can find out about our Expert Panel at: www.roycastle.org/expertpanel

This booklet has been published in partnership with Lung Cancer Nursing UK.



Our information is also reviewed by members of our Reader Panel (made up of people who have experience of lung cancer). This makes sure our lung cancer information meets their needs. You can find out about our Reader Panel at: www.roycastle.org/ways-to-give/become-a-charity-advocate/

You can find references to sources of information within this booklet at: www.roycastle.org/sources

If you have suggestions for new publications or additions or improvements to our existing range of booklets and factsheets, please let us know at: info@roycastle.org

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Roy Castle Lung Cancer Foundation is the charity that gives help and hope to people affected by lung cancer. The charity has two aims – supporting people living with lung cancer and saving lives.

Supporting people living with lung cancer

Working closely with lung cancer nurses, we provide information, run lung cancer support groups and offer telephone and online support.

Saving lives

We fund lung cancer research, campaign for better treatment and care for people who have lung cancer, and raise awareness of the importance of early diagnosis. Our lung cancer prevention work helps people to quit smoking and encourages young people not to start smoking.

Contact us

For more information, call our Lung Cancer Information and Support Services:
0333 323 7200 (option 2)
or visit our website: www.roycastle.org

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Information and Support Services

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Expect Better



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booklets and support,
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