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 most 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/usefulcontacts

How treatments and other healthcare services are provided is likely to be affected by the coronavirus (COVID-19) pandemic. Your medical team will make sure you know about any national or local variations to what is described in this booklet. They will work in ways to keep you safe while getting the best possible service.

We would like to acknowledge Peter Maguire, who features on the front cover, for his support in helping us to produce this booklet.
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Understanding chemotherapy for lung cancer

What is chemotherapy?
Chemotherapy is a way of treating cancer with drugs. These drugs are used to kill cancer cells in your body, and are described as *cytotoxic*.

The chemotherapy drugs are carried by the bloodstream throughout your body. This is sometimes called systemic treatment. The drugs affect cells in your body that are in the process of dividing and growing, both normal 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.

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.
Most types of chemotherapy for lung cancer are given directly into a vein through a drip (intravenously). However, there are some types of chemotherapy that are given as a tablet.

**How do doctors decide on the best treatment?**

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 in fact lung cancer, as well as putting it within two main groups:

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

NSCLC makes up most of the cases of lung cancer (around 87% in the UK), and has three common sub-types:

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

These cancer types are broadly treated the same way. After the biopsy results are known, a group of healthcare professionals, known as a multidisciplinary team (MDT), will talk about your case. They will work out what is the best treatment option for you, one that is most likely to have the greatest benefits and the fewest risks or side effects.

They will also take into account the outcomes of any scans and X-rays you have had that show the size and location of the cancer, and your general health and medical history. Your cancer doctor will then talk through treatment options with you.
Another important factor in deciding on the best treatment is knowing how much cancer there is, and if it has spread. When doctors evaluate the extent of a person’s cancer, 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).

Where a systemic treatment is best, the first drug used with someone to treat their cancer is known as first-line treatment. Historically, people’s first-line systemic treatment has been chemotherapy. However, nowadays, this is not always the case as more is understood about lung cancer and other treatments are now available that weren’t available even a few years ago.

Having said that, chemotherapy is a proven treatment for many cancers with a long track record of evidence-based research and trials. It remains a mainstay of lung cancer treatment and will be offered on the basis of it being the best treatment option available. However, not all types of lung cancer respond to chemotherapy.

Depending on their type of lung cancer, some people may be offered immunotherapy or a targeted therapy drug. Increasingly, people can receive a combination of chemotherapy and immunotherapy as their first-line treatment.
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 are happy to proceed with the proposed treatment.
What does the chemotherapy do?
Depending on a person’s particular medical circumstances, the MDT may have chosen chemotherapy as a treatment on its own, or with surgery or radiotherapy (concurrent treatment), to:

- remove any undetectable cancer cells that may still exist after successful surgery for lung cancer, or to help prevent recurrence (adjuvant chemotherapy)
- treat early stage or locally advanced inoperable lung cancer in combination with radiotherapy (chemoradiotherapy)
- reduce symptoms, such as breathlessness, and extend length of life when a cure is not possible (palliative chemotherapy)
- attempt to shrink the tumour before surgery or radiotherapy (neo-adjuvant chemotherapy)

Early-stage lung cancer may be inoperable because of the location of your tumour (if it has grown around blood vessels in the centre of your chest), or because having an operation may be thought to be too risky (if you have poor lung function, for example).

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).

Other types respond best using a combination of two or more drugs (combination therapy). This is because those cancer cells can be killed in more than one phase of the cell cycle, and each drug targets one of the phases. This approach kills as many cancer cells as possible in one go.

Chemotherapy is also often given in combination with an immunotherapy drug.
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, and responds well to chemotherapy.

Treating it systemically with chemotherapy usually leads to relief of symptoms and longer survival. Radiotherapy may be given after chemotherapy to try to stop the cancer coming back.

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

In some circumstances, chemotherapy may be given in combination with atezolizumab, an immunotherapy drug.

Other drugs that may be used as further treatment (second or third line) after initial chemotherapy, include:

- topotecan, used on its own
- a combination of cyclophosphamide, doxorubicin (Adriamycin®) and vincristine in what is known as the “CAV” regime

Please see our Understanding your small cell lung cancer booklet for more information about SCLC. Order a copy by calling us on 0333 323 7200 (option 2).
Chemotherapy for non-small cell lung cancer

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

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

Chemotherapy on its own
Chemotherapy can be used to treat non-small cell lung cancer (NSCLC). It may be used as the only treatment, as a treatment before or after surgery, or to manage symptoms of advanced lung cancer.

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, you may be offered either chemotherapy on its own or in combination with radiotherapy (if you are fit enough).

If you have had surgery for lung cancer and all the cancer cells have been removed, you may still be offered chemotherapy afterwards (adjuvant chemotherapy). However, if you have had surgery and cancer cells remain, your cancer doctor will talk to you about whether you should have radiotherapy and/or chemotherapy (chemoradiotherapy).

The most commonly used chemotherapy for people with NSCLC contains platinum (cisplatin or carboplatin) with pemetrexed, vinorelbine, gemcitabine or paclitaxel.
Your cancer doctor may use a variety of chemotherapy drugs to treat your lung cancer either as a first treatment after diagnosis or if it comes back (called a relapse). Second- or third-line treatments may be different chemotherapy drugs, targeted therapies or immunotherapy drugs, with or without chemotherapy.

**Maintenance chemotherapy**

After a first course of chemotherapy finishes, doctors usually stop any further chemotherapy 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-line chemotherapy 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.

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

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.

Your treatment may or may not be at your local or usual hospital as not every hospital provides a full range of cancer treatments. Make sure you have the correct address and contact information for each place you may be getting treatment. There is space on page 30 of this booklet to write this down, so ask your cancer doctor, lung cancer nurse specialist or chemotherapy nurse.

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, but this may not be the case.
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.

**How will my treatment be planned?**

The chemotherapy treatment your cancer doctor recommends will depend on several factors. These include:

- the type (*pathology*) of lung cancer you have
- the size, position and spread of your lung cancer (*stage*)
- your general health and how you will cope with treatment

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 and this is why you may meet other people with the same cancer as you who are having different chemotherapy 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.

Tests may show that your lung cancer is not active, that is, not dividing and growing. Because chemotherapy only affects active cells, your doctor may decide as part of your treatment plan that actively monitoring your cancer is the best option. This is sometimes referred to as “watch and wait”, but this is not the same as “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 means you avoid unnecessary treatment with potential side effects. Also, once your body and system are 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.

**What tests will I have before chemotherapy starts?**

Before you start chemotherapy you will have CT scans. CT stands for *computerised tomography*. This procedure uses multiple X-rays and a computer to create detailed, three-dimensional images of the inside of the body. They are carried out by trained operators called radiographers. The results of these tests will help cancer doctors to plan your treatment.

You may have an injection of a contrast dye that help give clearer images on the scans. It may give you a strange feeling to begin with, but it doesn’t hurt and goes away quickly.
Your blood will be checked before treatment and regularly during and after treatment, to see if your white cells (cells that fight infection), haemoglobin (cells that carry oxygen), and platelets (cells that clot the blood) are normal.

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 (kidney and liver function) is within normal limits. Doctors need to know your blood test results to make sure they give you the right treatment.

You would most likely be able to 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.

**TOP TIP**

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

**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 and more leftover cancer cells each time.

Working in cycles also gives your body time in between to recover from any side effects 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

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

<table>
<thead>
<tr>
<th></th>
<th>Cycle 1</th>
<th>Cycle 2</th>
<th>Cycle 3</th>
<th>Cycle 4</th>
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<tbody>
<tr>
<td><strong>Caspiatin 75mg/m²</strong></td>
<td>▲</td>
<td>▲</td>
<td>▲</td>
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<tr>
<td><strong>Pemetrexed 500mg/m²</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>Treatment dates</strong></td>
<td>1 May</td>
<td>22 May</td>
<td>12 June</td>
<td>31 June</td>
</tr>
<tr>
<td><strong>Weeks</strong></td>
<td>1 – 3</td>
<td>4 – 6</td>
<td>7 – 9</td>
<td>10 – 12</td>
</tr>
</tbody>
</table>
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.

“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

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* and can be very successfully helped with relaxation techniques, counselling and medication. Ask your cancer doctor or lung cancer nurse specialist about what might work best for you.

**Receiving 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 how well you are doing during your treatment, and may be used to calculate the amount of chemotherapy drugs you need.

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. A small plastic needle (*cannula*) is put into the vein and attached to a drip.

Some people have chemotherapy give 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.

You will be given anti-sickness medicines, through the drip or as tablets, before starting the 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.

Once the chemotherapy is finished you will be given tablets to take at home to prevent any sickness over the following few days.

“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?
It is usually the case that you can bring a relative or friend with you, particularly to your first hospital appointment. They may be able to sit with you and keep you company while you receive your chemotherapy. Each treatment centre is different, so check with your own chemotherapy day unit before your appointment if someone can come with you.
Can I drive after receiving chemotherapy?
It is best not to drive to at least 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.

“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

Does chemotherapy have side effects?
All forms of cancer treatment have side effects of one sort or another. Most people have some side effects from having chemotherapy.

However, in most cases, these are manageable and ease with time. It is important to talk through any side effects with your cancer doctor or lung cancer nurse specialist as they will be able to help.
### Common side effect

<table>
<thead>
<tr>
<th>Side Effect</th>
<th>Practical Advice</th>
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</thead>
<tbody>
<tr>
<td>Feeling or being sick</td>
<td>There are very powerful anti-sickness drugs that can help reduce sickness in most patients. Remember to take the tablets for sickness that the hospital has given you. If they don’t work, let your cancer doctor know, as there is usually an alternative.</td>
</tr>
<tr>
<td>Extreme tiredness</td>
<td>This is normal. Although it is important to rest, a small amount of regular exercise will also help reduce your tiredness. If you feel breathless, your legs ache or you are concerned that you feel too tired, ask your GP or hospital team for advice.</td>
</tr>
<tr>
<td>Hair thinning and hair loss</td>
<td>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. Don’t brush your hair too much or use hair colourants/rollers. Most hospitals will be able to give you advice on how to get a good quality wig and which scarves work best.</td>
</tr>
<tr>
<td>Fever and low white blood count</td>
<td>It is important to realise that you are at higher risk than normal of getting an infection which your body can’t fight on its own because your immune system is affected by the treatment. Therefore, if anyone you know has an obvious infection, such as the flu, chickenpox or shingles, it is best to stay away.</td>
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</table>
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 over the lining of your mouth or 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.

**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 treated straight away. It is very important that you look out for the following:

- temperature 37.5°C or higher
- 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
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 on page 30 of this booklet.

**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.

> 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 meal times.

• 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 end of page 30 for you to write down the phone numbers.
How do the doctors know if the chemotherapy is working?
It can be difficult to measure exactly how well it is working, although usually an assessment will be made at some point during your treatment (usually after two to three courses of chemotherapy). Usually this will be done by CT scan and occasionally by MRI or PET scan.

If you are getting radiotherapy at the same time as chemotherapy, the scan is usually done around two months after completion of treatment. This allows the combination of treatments to finish working and the scan to be more accurate.

You may notice yourself that the treatment is working if your symptoms have improved, for example, you are less breathless or are not coughing as much.

Your treatment is likely to continue for as long as there is evidence that your cancer is responding to the chemotherapy and you are not having side effects that you can’t cope with.
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 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 have a positive effect on your cancer for a period of time then stop, it may not work at all, or it may cause you to have serious side effects.

Your doctors will 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.

Before deciding to go ahead with any further chemotherapy, ask your doctor about any risks, benefits and side effects 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. 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 – www.bepartofresearch.nihr.ac.uk
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 a number of months and suddenly your routine has changed. This can make you feel a bit worried and low, and this is normal. 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 I get the chemotherapy, how often, 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?

**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 allows people to 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/readerpanel

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

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. Our patient grants offer some financial help to people affected by lung cancer.

**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](http://www.roycastle.org)

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Cotton Exchange Building,

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Liverpool, L3 9LQ

**Email:** foundation@roycastle.org

**Information and Support Services**

98 Holm Street,

Glasgow, G2 6SY

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**Expect Better**

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