

The diagnosis and treatment of lung cancer

**Understanding NICE guidance –
information for people with lung cancer,
their families and carers, and the public**

February 2005



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Understanding NICE guidance – information for people with lung cancer, their families and carers, and the public

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About this information

This information describes the guidance that the National Institute for Clinical Excellence (called NICE for short) has issued to the NHS on lung cancer. It is based on 'Lung cancer: the diagnosis and treatment of lung cancer' (NICE Clinical Guideline No. 24), which is a clinical guideline produced by NICE for doctors, nurses and others working in the NHS in England and Wales. Although this information has been written chiefly for people with lung cancer, it may also be useful for family members, those who care for people with lung cancer and anyone interested in lung cancer or in healthcare in general.

Clinical guidelines

Clinical guidelines are recommendations for good practice. The recommendations in NICE guidelines are prepared by groups of health professionals, people representing the views of those who have or care for someone with the condition, and scientists. The groups look at the evidence available on the best way of treating or managing a condition and make recommendations based on this evidence.

There is more about NICE and the way that the NICE guidelines are developed on the NICE website (www.nice.org.uk). You can download the booklet 'The guideline development process – an overview for stakeholders, the public and the NHS' from the website, or you can order a copy by phoning the Department of Health Publications Order Line on 0870 1555 455 (quote reference number N0472).

What the recommendations cover

NICE clinical guidelines can look at different areas of diagnosis, treatment, care, self-help or a combination of these. The areas that a guideline covers depend on the topic. They are laid out in a document called the scope at the start of guideline development.

The recommendations in 'Lung cancer: the diagnosis and treatment of lung cancer' (NICE Clinical Guideline No. 24), which are also described here, cover the full range of care that should be available from the NHS to adults who have lung cancer, or whose doctors think they may have lung cancer. They include how the diagnosis should be made and the treatments that should be offered at different times.

The guideline does **not** look at:

- mesothelioma (a type of cancer affecting the lining of the lung)
- cancer that starts in a different part of the body and then spreads to the lungs
- children.

The information that follows tells you about the NICE guideline on lung cancer. It doesn't attempt to explain lung cancer or its treatments in detail. NHS Direct is a starting point to find out more. Phone NHS Direct on 0845 46 47, or visit the website (www.nhsdirect.nhs.uk). For more details see 'If you want more information about lung cancer' on page 34.

If you have questions about the specific treatments and options covered, talk to your doctor or nurse, or another health professional, depending on what you want to know.

How guidelines are used in the NHS

In general, health professionals in the NHS are expected to follow NICE's clinical guidelines. But there will be times when the recommendations won't be suitable for someone because of his or her specific medical condition, general health, wishes or a combination of these. If you think that the treatment or care you receive does not

match the treatment or care described in the pages that follow, you should talk to your doctor or nurse.

You have the right to be fully informed and to share in making decisions about your healthcare, and the care you receive should take account of your individual needs.

Reading this booklet

If you are reading this booklet because you are worried you might have lung cancer, remember that there may be other explanations for your symptoms.

If you have been told you have lung cancer, you may be feeling worried about your treatment and what will happen to you. Your specialist lung cancer nurse and other health professionals caring for you will be able to talk to you about your concerns and feelings about the diagnosis.

This booklet covers all treatments that can be offered to people with lung cancer. Not all of them will be right for you – the best treatment depends on exactly what type of cancer you have, and on your symptoms and general health.

Lung cancer

Lung cancer happens when some of the cells in the lungs start to multiply in an uncontrolled way. They form a growing area called the primary cancer or primary tumour. This can cause symptoms such as a persistent cough, coughing up blood, and shortness of breath.

There are two main types of lung cancer, which are called:

- small-cell lung cancer
- non-small-cell lung cancer (the main types are called squamous cell carcinoma, adenocarcinoma and large-cell carcinoma).

The different types of lung cancer develop in different ways, and the treatments given for them are also different.

Like other cancers, lung cancer can spread to other parts of the body. This is because cells can break off from the primary tumour and be carried around the body in the blood or lymphatic system (the lymphatic system is a network of tubes similar to blood vessels that drain fluid from the body tissues and eventually return it to the blood). The cancer cells can settle somewhere else in the body and grow into what's called a secondary cancer. Depending on

where they are, secondary cancers can cause problems such as pain in the bones, headaches, nausea or vomiting.

Information about lung cancer

If you have lung cancer, or you are having tests to see if you have lung cancer, your doctor, specialist nurse and other health professionals caring for you should explain the tests you have, and what the results mean. They should also tell you about the treatments that could be helpful, and give you information that you can look at or listen to again once you are home. The format of the information should be suitable for your particular circumstances – you may be offered leaflets, tapes or videos depending on your needs.

The information you get should help you become as involved in all the decisions about your treatment and care as you want to be. Your doctor and specialist nurse or other health professional should discuss this with you and give you opportunities to make your wishes clear.

Some of the medical words and terms used in this booklet are explained on pages 36–39.

Deciding whether you need tests for lung cancer

The next few sections cover what should happen if you go to see your doctor with symptoms that could be explained by lung cancer. The explanations are grouped into:

- the symptoms that mean you should be sent for a chest X-ray to see what's happening ('Having an urgent chest X-ray', below)
- what should happen based on the results of an X-ray ('Seeing a specialist after the results of the chest X-ray', on page 9)
- the symptoms that mean you should see a chest specialist straight away, without waiting for the results of an X-ray to be sent to your GP. In this case, the specialist will arrange the chest X-ray ('Seeing a specialist straight away', on page 10).

Having an urgent chest X-ray

If you have been coughing up blood, you should be offered an urgent appointment for a chest X-ray to check for signs of lung cancer.

You should also have a chest X-ray if you have any of the following without a clear reason or for longer than 3 weeks:

- coughing
- pain in your chest or shoulder or both
- shortness of breath
- unexpected weight loss
- abnormal sounds in your chest when a doctor listens through a stethoscope
- hoarse voice
- a change in shape of the ends of your fingers, known as clubbing
- symptoms that could be explained by cancer that has spread to other places (for example, pain in the bones)
- signs that you might have cancer in the lymph glands (commonly called just 'the glands') in your neck or above your collar bone.

Seeing a specialist after the results of the chest X-ray

If there are signs of possible lung cancer on your chest X-ray, you should be offered an urgent appointment with a member of a lung cancer multidisciplinary team – usually with a doctor who is a chest specialist. The lung cancer multidisciplinary team is a group of specialist health professionals who work together in a coordinated way to make sure a person with

possible lung cancer gets good and consistent care.

Even if your chest X-ray is normal, your doctor should offer you an appointment with a member of the lung cancer multidisciplinary team if he or she still suspects that you may have lung cancer.

Seeing a specialist straight away

There are some circumstances where your doctor should offer you an urgent appointment with a chest specialist without waiting for the results of a chest X-ray. He or she will do this if you have any of these symptoms:

- you've been coughing up blood for more than 3 weeks and you're over 40 and a smoker or an ex-smoker
- your face, neck or both are swollen by pressure from blocked veins
- your breathing sounds noisy and harsh (the medical name for this is stridor).

Diagnosing lung cancer

If your chest X-ray shows you could have lung cancer or the doctor at the hospital clinic thinks that you may have lung cancer, you will be

offered further tests to find out more. The tests may show you do not have lung cancer. If you do have the disease, the tests will show what type it is, and help your doctors decide on the best treatments to offer you.

Having a CT scan

If your X-ray shows you might have lung cancer, or your specialist suspects you have lung cancer, you should be offered another test called a CT scan. CT stands for computed tomography, and this test uses X-rays to form images of 'slices' through the body. You might be given an injection of a special dye that helps give a clearer picture of the blood vessels. As well as looking at the lungs, the CT scan should cover the liver and the adrenal glands (which are on top of the kidneys), because lung cancer often spreads first to these areas. The images from a CT scan can help the doctor decide what further tests you need (see below). The CT scan can also help doctors to find out how big the cancer is and how much it has spread – see 'Finding out how advanced the cancer is' on page 14.

Having a bronchoscopy and biopsy

If there are signs of cancer in the central part of your chest, you should normally be offered a test

called a bronchoscopy. If you're going to have a bronchoscopy, you should have a CT scan first.

Bronchoscopy involves looking down into the breathing tubes (which are called bronchi) in the lungs with a special piece of equipment that's passed through the nose or mouth into the windpipe (see page 36 for more details). The doctor will probably want to remove a tiny part of the affected area so that it can be checked for cancer under a microscope in the laboratory. This is called a bronchial biopsy.

If you don't want or can't have a bronchoscopy and biopsy and there are signs of possible cancer in the central part of your lung, you should be offered what's known as sputum cytology. This involves sending a sample of sputum (phlegm) away to the laboratory so that any cells from the lung in it can be checked under the microscope for signs of cancer. Sputum cytology is less reliable than bronchoscopy, so it is used only if bronchoscopy is not possible.

Other types of biopsy

If there are signs of cancer nearer to the edges of the lung, you should be offered another type of biopsy (called a percutaneous transthoracic needle biopsy) rather than a bronchoscopy. This involves passing a special needle through the

skin of the chest – under a local anaesthetic – and into the lung to remove a small piece of the lung. This is done while the person is having a CT scan (or other type of scan) to help the doctor to guide the needle to the tumour.

If you're not able to have the biopsies described above or you've had one (or more) but it didn't give a clear answer, you should have a surgical biopsy. This is an operation under a general anaesthetic where an opening is made in the chest so that the surgeon can get to your lung and remove a small piece of it.

If there are signs that the cancer has spread outside the lung, it may be easier to take a sample from these other places than from the lung itself. In this case, you should be offered this.

If you still do not have a diagnosis

If it still hasn't been possible to take a biopsy, or one has been taken but it didn't give any information, there are some circumstances where you may be offered a test called a PET scan. PET stands for positron emission tomography. A PET scan can show areas where there is an active cancer or inflammation in the body.

Finding out how advanced the cancer is (staging)

If cancer is found, it's important to try to find out some information about the type of cancer it is and how advanced it is (how far it has spread) because this affects the sort of treatments you will be offered. The medical term for this is staging. Cancers are said to be at certain stages depending on their size and whether they have spread to nearby places or to other places in the body.

Non-small-cell lung cancer

If you have non-small-cell lung cancer, the CT scan will usually also provide information for staging purposes. But because it doesn't always give enough information on its own, some people may also go on to have a PET scan or other type of scan. In some instances, the doctors may prefer to check whether the cancer has spread while they are doing an operation to remove the primary tumour (see 'Surgery to remove the cancer' on page 16). They will discuss this with you.

If your doctor suspects the cancer has spread to the lymph glands in your chest, or a PET scan shows this might have happened, you should be

offered a biopsy so that samples of tissue from the lymph glands can be checked. If the cancer has spread to other parts of your body (or it has probably spread) you may not need to have a biopsy.

MRI is another type of scan sometimes used for staging lung cancer. MRI stands for magnetic resonance imaging. It's another way of obtaining images of what's happening inside the body.

If there are signs that the cancer may have spread to the brain, you should be offered an MRI or a CT scan.

If there are signs that the cancer may have spread to the bones, you should be offered an X-ray first of all. If nothing shows up, you should be offered either a bone scan or an MRI.

Small-cell lung cancer

If the tests have shown that you have small-cell lung cancer, you should be offered a CT scan of your chest, liver and adrenal glands. You should also have other tests that provide information about your condition. These are:

- an assessment of how well you are in general and how the cancer is affecting your daily life
- blood tests that provide information about the effects of the cancer in the body.

Treatments for non-small-cell lung cancer

The most suitable next steps for you will depend on the stage of the cancer. Your doctor will discuss this with you.

Surgery to remove the cancer

If the CT and PET scans show your cancer has not spread outside the affected lung, you should normally be offered surgery to remove the cancer unless there are reasons why an operation might not be suitable (for example, if you have another medical condition that makes surgery dangerous for you). You should also normally be offered surgery if the cancer has spread to the chest wall. The aim of surgery is to get rid of the cancer completely.

Sometimes this is done by removing the whole of one lung (which is called pneumonectomy), and sometimes it is done by removing part of one lung (called lobectomy). The exact operation will depend on where the cancer is and how well your lungs are working. If a patient's lungs aren't working well, a smaller part of the lung will usually be removed, to leave as much of the lung as possible. There is also some research going on to see whether radiotherapy might be

a suitable alternative to surgery for these patients whose lungs aren't working well – your doctor will discuss this with you if it is an option.

During the operation, samples of cells should be taken from the lymph glands near the lungs, so that they can be checked for signs of cancer.

Having other treatments with surgery

Chemotherapy involves giving people medicines that kill cancer cells (see page 37). If you're having surgery to try to remove the cancer, you should not normally be offered a course of chemotherapy before the operation unless you are taking part in a clinical trial. If this is the case, your doctor will discuss this with you before asking whether you want to take part in the trial.

After the operation, you should be offered chemotherapy if the surgery has completely removed the cancer. The aim is to destroy any cancer cells that might still be in the body. There are advantages and disadvantages to this chemotherapy and these should be explained to you before you make a decision about whether to go ahead with it.

Radiotherapy uses X-rays or other forms of radiation to target and destroy cancer cells. Radiotherapy isn't recommended before surgery for people with lung cancer, because there isn't

any evidence that it improves the results of surgery. Radiotherapy isn't usually recommended after surgery either, but it may be offered to you if your doctors haven't been able to remove all the tumour in the operation.

You should not be offered chemotherapy combined with radiotherapy after surgery unless you are taking part in a clinical trial. If this is the case, your doctor will discuss this with you before asking whether you want to take part in the trial.

Other types of treatment if surgery is not possible

Radical radiotherapy

If there is a reason that surgery is not possible for you, and you have a small tumour that has not spread or has spread only to the nearby lymph glands, you may be offered radiotherapy to try to cure the cancer. This is called radical radiotherapy. You may also be offered radical radiotherapy if your cancer has spread to other lymph glands in the chest and to parts of the body near the lungs, if the area that needs to be treated is not too big.

Before you have radiotherapy, you should have breathing tests to check how well your lungs are

working (these are called pulmonary function tests). If these show that your lungs aren't working well, you should still be able to have the radiotherapy so long as only a small part of the lung needs to be treated.

You may be offered a type of radiotherapy known as CHART. CHART stands for continuous hyperfractionated accelerated radiotherapy, and it is an intensive way of giving radiotherapy, so that the treatment is completed in a shorter time. You have more than one treatment a day, for around 2 weeks (sometimes the radiotherapy is given on weekdays only, but it may be given every day). If CHART isn't available in your area, you will be offered 'standard' radiotherapy, which usually means having 32–33 daily treatments over 6½ weeks, or 20 daily treatments over 4 weeks.

Radiotherapy and chemotherapy for cancer that's spread inside the chest

If your cancer has spread to other lymph glands in the chest and your doctors are recommending radical radiotherapy instead of surgery, you should be offered chemotherapy as well as radiotherapy – one after the other. This is called sequential chemoradiotherapy.

If you don't want or can't have chemotherapy, you should be offered CHART if it is available in your area.

Chemotherapy for cancer that has spread to other parts of the body

If your lung cancer is large or has spread to lymph glands some distance away or to other places in the body, surgery and radical radiotherapy are not useful. If you are generally well, chemotherapy may help control the disease and improve your symptoms.

The most usual treatment is with a combination of one of the anti-cancer medicines known as third-generation drugs (docetaxel, gemcitabine, paclitaxel or vinorelbine) and a medicine containing platinum (either carboplatin or cisplatin). Your specialist should talk to you about the differences between the medicines so that together you can decide which combination would be most suitable for you. If a medicine containing platinum is likely to cause serious side effects, you may be offered chemotherapy with a third-generation drug on its own.

After chemotherapy, the cancer may start to grow again (this is called relapse) and it may spread to nearby places or to other parts of the body. If this happens and you are reasonably active, your doctor may suggest a second course of chemotherapy (with docetaxel), to help your symptoms.

Treatments for small-cell lung cancer

After the cancer has been staged, you should be offered combination chemotherapy with several anti-cancer medicines (one of which should contain platinum). You should normally be offered four to six cycles of the chemotherapy if it seems to be working. Each cycle takes 3–4 weeks, depending on which chemotherapy medicines you are receiving.

If your cancer has not spread outside the lung and nearby lymph nodes, you will be offered radiotherapy to the chest, either while you are having chemotherapy or afterwards. If you have secondary cancers outside the lung and the chemotherapy shrinks the main cancer and the secondary cancers disappear completely, your doctor should consider whether chest radiotherapy might help to stop the primary cancer from growing again. This radiotherapy should be given over 3–5 weeks.

If the cancer is contained in one lung and the treatment seems to have worked well, your doctor should discuss with you whether a treatment called PCI might be helpful. PCI stands for prophylactic cranial irradiation, which is radiotherapy to the brain that aims to stop the cancer cells from developing there.

If you have already had chemotherapy and it shrank the main cancer and secondary cancers (or they completely disappeared), you should be offered another course of chemotherapy if the cancer starts growing again.

Help with pain, discomfort and other possible effects of the cancer

If you experience symptoms such as breathlessness, pain or discomfort, you should be offered an appointment as soon as possible with a health professional who can help. The specialist health professionals who work together to help reduce people's symptoms are called the palliative care team.

If you're short of breath

If you're finding it hard to breathe, your doctor should consider whether radiotherapy might help to ease this. If the breathlessness is happening because the cancer is blocking one of the large airways, a procedure to remove some of the cancer might be helpful. This would be done using equipment passed down the throat and into the airway.

If the cancer is pressing on the airway and this is making it hard to breathe, your doctor should think about whether a stent might help make your breathing easier. A stent is a piece of tubing that can be inserted to strengthen tubes in the body – such as the airways – to help keep them open.

Your healthcare team should also offer other types of help and support for breathlessness. You should be given the opportunity to learn how to control your breathing and some strategies to help you cope with the effects of breathlessness. This may be done at a breathlessness clinic.

There may be other treatments that can help if you are still short of breath despite these treatments. Your doctor should consider other things that may help, depending on your individual circumstances.

If the breathlessness is caused by a build up of fluid (pleural effusion)

With lung cancer, fluid can sometimes build up around the lungs and press on them, making it hard to breathe. The build-up of fluid is called a pleural effusion. If you have a pleural effusion that is causing you problems, you should be offered treatment to remove the fluid. This will be done under local anaesthetic, by drawing the

fluid away with either a needle and syringe or a drain through the chest wall. A chest drain is usually removed after 2–3 days.

If this helps with your breathlessness, you should be offered something called talc pleurodesis. In a pleural effusion, the fluid builds up between your lung and the wall of your chest. A chemical called talc is injected between these layers (usually through chest drain), to seal them together so that fluid can't build up there again.

If you're coughing or coughing up blood

If you're coughing or coughing up blood, your doctor should consider whether radiotherapy might help with it. An opioid medicine such as codeine or morphine may also help with a troublesome cough.

There may be other treatments that can help if you are still coughing despite these treatments. Your doctor should consider other possible treatments, depending on your individual circumstances.

If your voice is hoarse

If the cancer is affecting the nerves that work your voicebox (larynx), your voice may keep

going hoarse, quiet or both. If this is happening, you should be offered an appointment with an ear, nose and throat doctor who can give you and your healthcare team some advice about what to do.

If the cancer is blocking one of the major blood vessels

Sometimes the cancer can press onto and block a major blood vessel in the upper chest called the superior vena cava. The face, neck and arms can become puffy and swollen as a result. If you have this, you should be offered radiotherapy and chemotherapy if appropriate given the type and stage of the cancer and your health in general.

If the blockage is having serious effects, or if you've had other treatment but it hasn't helped, your doctor should consider putting a stent (a piece of strong tubing) into the superior vena cava. This would help keep the blood vessel open and give you some relief straight away.

If you have chest pain

If you have pain in your chest because of the cancer, your doctor should consider whether radiotherapy might help with it.

If the cancer is pressing on the spinal cord

If the cancer is pressing on the spinal cord, it can cause pain, a feeling of weakness in an area of the body, or a loss of feeling in an area of the body. It can also affect the ability to control the bladder and bowels. If you have any of these symptoms, you should contact your doctor urgently. You should be treated with radiotherapy and medicines called steroids as soon as possible. Surgery is sometimes possible.

After this treatment, you should see a specialist physiotherapist. He or she should assess your symptoms and work with you to find ways of using movement and exercise to help.

You should also see the occupational therapist. This is a health professional who specialises in helping people carry on with their daily lives by providing adapted or specialised equipment if it's needed.

If the cancer has spread to the brain

If the cancer has spread to your brain, your doctor should discuss with you whether steroids and radiotherapy could help your symptoms.

If cancer has spread to the bones

If the cancer has spread to your bones, this can be painful. If painkillers aren't working well, you should be offered a single dose of radiotherapy to help ease the pain.

Other effects of cancer

If you are having other problems because of the cancer – for example, if you've lost weight or lost your appetite, you have trouble swallowing or you have depression, you should be offered appointments with other health professionals who have training and expertise in these areas. These should include people with specialist knowledge and experience of helping people with problems caused by cancer.

Follow-up appointments after treatment

When you finish your treatment, you and members of your healthcare team should agree a plan for your future appointments and check-ups, called a follow-up plan. Details of this plan should be given to your GP.

If you have had surgery or radiotherapy to try to stop the cancer

If you have had surgery or radical radiotherapy to try to cure the cancer, you should see a member of the multidisciplinary team for up to 9 months afterwards to check for any problems related to the treatment.

After this time, you will still have regular follow-up appointments. If you've had surgery, these appointments will normally stop after 5 years, unless there are clear reasons for carrying on with them.

If you've had radiotherapy or chemotherapy to help ease the effects of the cancer

If you've had radiotherapy or chemotherapy to help ease the effects of the cancer, you should see your doctor 1 month after the treatment has finished. You may be offered a chest X-ray during this time.

Seeing the nurse rather than the doctor

When you've had your treatment, you may be given the chance to have nurse-led care if you want it. This would involve seeing a specialist nurse regularly rather than a hospital doctor.

Giving up smoking

If you smoke, you should be encouraged to stop particularly if you have have been offered radical treatment. This is because people who have given up smoking are less likely to have problems related to their treatment for lung cancer.

Your opinions and experiences of lung cancer treatment

Your opinions and experiences are important. Knowing about them can help health professionals to improve the services they offer to people with lung cancer and their families and carers. You should be given the opportunity to pass them on. If any changes to services are made as a result of surveys of patients' views, you should be told about them.

How health professionals should work together

There is a section in the NICE guideline that covers how health services should be organised so that health professionals can provide the best care for people with lung cancer. These general recommendations are described in the box below.

The organisation of health services

- Where lung cancer is a possible diagnosis, the person should be offered an appointment to see a health professional who belongs to a team specialising in the care of people with lung cancer. This team is known as a multidisciplinary team because it is made up of different types of health professional. Usually, the person will be offered an appointment to see a chest specialist first.
- If lung cancer seems likely, the person's case should be discussed at a meeting of the lung cancer multidisciplinary team.
- If a doctor has asked for a person to have a chest X-ray for some other reason and lung cancer has been spotted as a result, a copy of the X-ray report should be sent to

someone in the lung cancer multidisciplinary team (usually the chest specialist). The multidisciplinary team should have procedures in place so that these patients are followed up and so the person's GP knows that there's a problem.

- 'Early diagnosis' clinics can see people quickly if lung cancer is suspected, but they aren't yet available in all areas. Doctors should offer people appointments at these clinics if possible. If lung cancer is suspected at a visit to an early diagnosis clinic, you would normally have your tests done within about a week.
- All cancer units and centres should have at least one specialist nurse who has knowledge and expertise in caring for people with lung cancer. He or she should:
 - see people before and after diagnosis
 - provide support and advice throughout treatment, and make people aware of other sources of advice and support
 - help with communicating information between the health professionals who see and care for the person in hospital and those who provide care while the person is at home.
- All health services caring for people with lung cancer should be able to send people for urgent PET scans.

- People should have their treatment without unnecessary delay, in line with the recommendations from the Department of Health and the Welsh Assembly Government (that is, within 31 days of the decision to treat the person and within 62 days of the person being referred to the specialist).
- If there's little chance that the cancer can be cured but the person has no severe symptoms, he or she can choose either to wait until the cancer starts to cause problems before having radiotherapy to help ease them, or to have radiotherapy straight away.
- People with lung cancer should receive support and treatments to relieve their symptoms in line with the NICE guideline called 'Improving supportive and palliative care for adults with cancer' (see page 35).
- In general, the public needs to be better informed about the symptoms and signs of possible lung cancer (these are listed on page 9). Professionals working in this area should coordinate their efforts so that the public gets clear and helpful advice.

Where you can find more information

If you need further information about any aspects of lung cancer or the care that you are receiving, please ask your doctor, nurse or other member of your healthcare team. You can discuss the NICE guideline on lung cancer with them, especially if you aren't sure about something in this booklet.

If you want to read the other versions of this guideline

There are four versions of this guideline:

- this one
- the full guideline, which contains all the details of the guideline recommendations and how they were developed, and information about the evidence on which they were based
- a version called the NICE guideline, which lists all the recommendations on lung cancer
- the quick reference guide, which is a summary of the main recommendations in the NICE guideline for health professionals. This has been sent to GPs and to specialist doctors who treat patients with lung cancer.

All versions of the guideline are available from the NICE website (www.nice.org.uk/CG024). This version and the quick reference guide are also available from the Department of Health Publications Order Line – phone 0870 1555 455 and give the reference number(s) of the booklets you want (N0826 for this version, N0827 for this version in English and Welsh, and N0825 for the quick reference guide).

If you want more information about lung cancer

NHS Direct may be a good starting point for finding out about lung cancer. You can call NHS Direct on 0845 46 47 or visit the website (www.nhsdirect.nhs.uk). The section on lung cancer lists organisations that are NHS Direct Information Partners, and can provide more information.

There may be support groups for people with lung cancer in your area. Your doctor or nurse should be able to give you more details. Information about local groups may also be available from NHS Direct or your local library or Citizens Advice Bureau.

If you want to know more about NICE

For further information about the National Institute for Clinical Excellence (NICE), you can visit the NICE website (www.nice.org.uk). At the NICE website you can also find information for the public about other guidance that may be relevant for people with lung cancer:

- Improving Supportive and Palliative Care for Adults with Cancer – the Manual. (March 2004). Available from www.nice.org.uk/cs/gsp

Copies can also be ordered from the Department of Health Publications Order Line (phone 0870 1555 455). Quote reference number N0474 for the supportive and palliative care cancer service guidance, and N0475 for a version for the public in English and Welsh.

Words and terms used in this booklet

Advanced cancer: How advanced the cancer is depends on the type of cancer it is, how big it is and how much it has spread (see 'Stage').

Biopsy: Taking a tiny piece of tissue from an area in the body so that it can be tested – which in this case means checking for cancer cells under the microscope.

Bronchoscopy: Using a narrow, flexible tube containing numerous fibreoptic light cables to look down into the lung. The tube is passed through the mouth or nose under local anaesthetic into the windpipe, and the moving images can be seen on a TV screen in front of the doctors. A biopsy may be taken at the same time, through a channel in the tube, using tiny pincers at the end of the tube.

CHART: A way of giving radiotherapy where the patient has more than one treatment a day. The course of treatment lasts around 2 weeks instead of between 4 and 7 weeks. CHART stands for continuous hyperfractionated accelerated radiotherapy.

Chemoradiotherapy: Radiotherapy and chemotherapy given together.

Chemotherapy: Treatment with medicines designed to kill cancer cells. Most chemotherapy medicines are injected into a vein, but some are taken as tablets. Usually you are given the medicines either as an inpatient or as an outpatient, then have a break of 3 or 4 weeks before the next round of treatment (called a cycle) begins again.

CT scan: A type of scan that uses X-rays to get images of inside the body – the images show ‘slices’ through the body. CT stands for computed tomography.

Local spread: If a cancer has spread locally, this means that it has spread to places near to the main cancer (such as the nearby lymph glands) but it hasn’t spread to different parts of the body (see ‘Metastasis’).

Lymph gland (or lymph node): Area of the lymph system that filters out particles and cells (including cancer cells if they’re there) from the lymph fluid.

Lymph system: A network of tiny tubes in the body that collects fluid (known as lymph) from tissues, filters it and returns it to the blood.

Metastasis: The process of cancer spreading to different places around the body. The cancers that develop are called metastases or

secondaries, but they're still related to the main cancer (so if lung cancer spreads to the bone, the cancer in the bone is described as 'secondary to lung cancer', not as bone cancer).

MRI: A way of getting an image of inside the body using magnetism instead of X-rays. Like CT scans, the images show 'slices' through the body. MRI stands for magnetic resonance imaging.

Multidisciplinary team: A team of different types of health professional – such as doctors, nurses and physiotherapists – who specialise in caring for people with particular medical conditions. A person with lung cancer would see several different members of a lung cancer multidisciplinary team.

Oncology: To do with cancer. For example, the oncology specialist nurse works with people with cancer.

PET scan: A way of looking at what is happening in different parts of the body. Unlike CT and MRI scans, PET scans do not give a picture of what the area looks like, but they can give a good idea of whether there's an active cancer present. PET stands for positron emission tomography.

Radiotherapy: Using X-rays and other forms of radiation to target and destroy cancer cells. Some patients have radiotherapy instead of

surgery, to try to cure the cancer. This is called radical radiotherapy, and the treatment is divided up into small doses that are given over many days. It may be given after surgery or at the same time as chemotherapy. Some patients have palliative radiotherapy, where the dose is given on one or a few days only, to relieve symptoms.

Stage: The stage of a cancer is a way of describing the type of cancer it is, how far it has spread locally (near the original tumour), and whether it has affected the lymph nodes or spread to other parts of the body.



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