SIGN

Scottish Intercollegiate Guidelines Network

NHS Quality Improvement Scotland

for patients

lung cancer

ISBN 978 1 905813 10 0
First published 2007

What is this booklet about?

This booklet is for you if:

- you are worried that you may have lung cancer; or
- you have already been diagnosed with lung cancer.

Your family, friends and carers may also find it useful.

It is based on the recommendations from a national clinical guideline on how to look after patients with lung cancer.

It explains:

- what lung cancer is;
- what the symptoms are;
- how it is diagnosed; and
- how it is treated.

We have listed details of support organisations, where you can get more information at the end of the booklet.

We have explained the medical terms used in this booklet on page 39,

What is lung cancer?

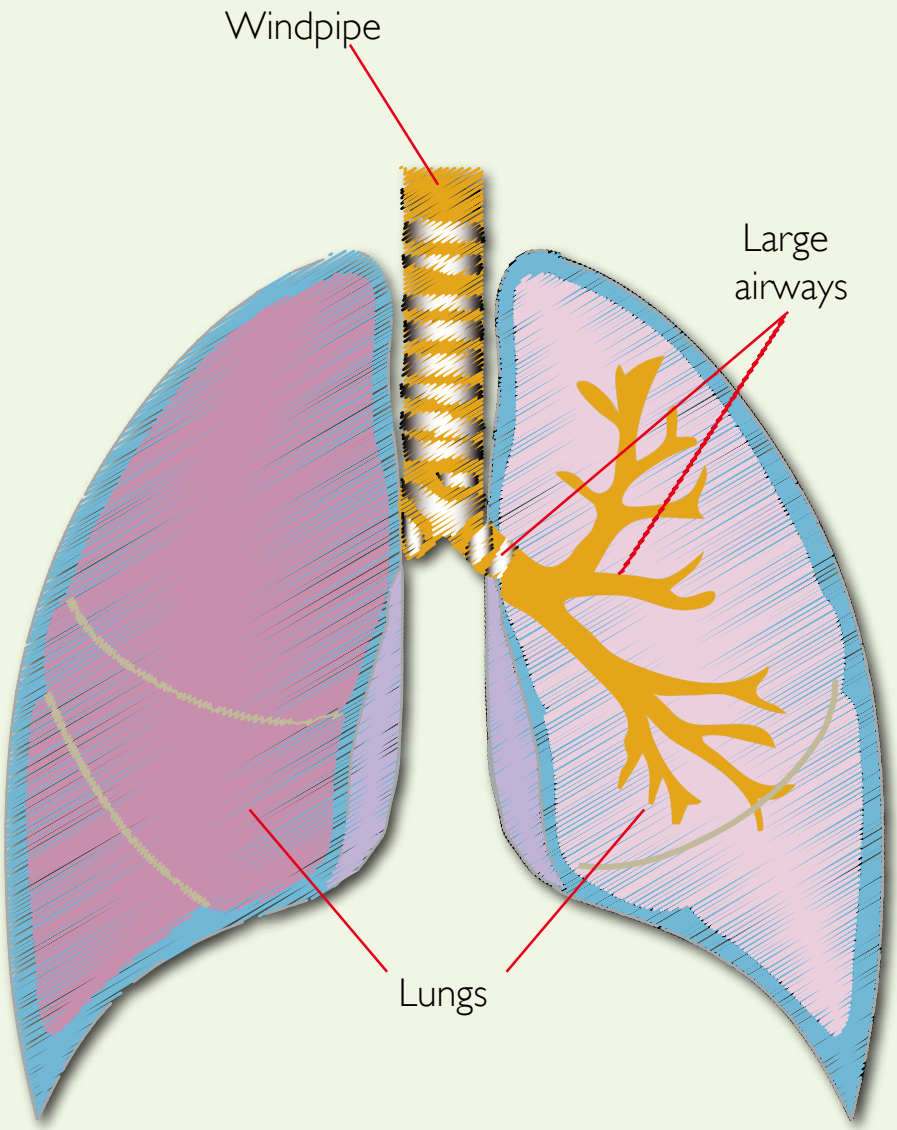
Lung cancer happens when the cells in your lungs start to grow in an uncontrolled way and form tumours. Tumours are lumps of tissue made up of abnormal cells.

There are two main types of lung cancer.

- **Small cell lung cancer** (a type of cancer made up of small round cells in the lungs).
- **Non-small cell lung cancer** (cancer which grows in cells other than small cells inside the lungs).

These two types of lung cancer develop differently and are also treated differently. You can find out more about how they can be treated on pages 19 and 21.

Sometimes lung cancer can spread to other parts of your body. Cancer cells can break away from the tumour in your lung and travel around your body in your blood or lymphatic system. The cancer cells can travel to other organs and grow into what are called secondary cancers.


Windpipe
Large airways
Lungs

Symptoms and diagnosis

What are the symptoms of lung cancer?

The symptoms of lung cancer can include:

- coughing up blood;
- a persistent cough;
- breathlessness;
- wheezing;
- hoarseness;
- chest or shoulder pain;
- tiredness; and
- weight loss.

You may only experience one or two of these symptoms. Since we all may experience these symptoms from time to time, it can sometimes be difficult for your GP to diagnose lung cancer.

If you have had any of these symptoms for more than three weeks and your GP does not know why, they should arrange for you to have a chest X-ray at hospital to check for signs of lung cancer.

If you have been coughing up blood and your GP can find no obvious reason for this, they should refer you to hospital for a chest X-ray as soon as possible.

You can ask the person doing the X-ray how long you are likely to wait for the results of your chest X-ray.

What if my doctor thinks I have lung cancer?

If your GP suspects that you have lung cancer after seeing the results of your chest X-ray, he or she will arrange for you to be seen at the hospital by a chest doctor (consultant respiratory physician). This doctor will do some more tests to check if you have lung cancer. Your GP can give you an idea of how long you are likely to wait to see a chest doctor. Ideally, this should be within two weeks.

Your GP should refer you to a chest doctor, without waiting to see your X-ray results, if you:

- are older than 40 and a smoker or ex-smoker and you are coughing up blood;
- have a swollen neck or face; or
- have severe breathing problems.

This will be a difficult time for you and your family. You may have many questions. Your GP and other healthcare staff can offer you support and can answer any questions you may have. They can listen to your concerns and should give you information about diagnosis, tests and treatments. This may include:

- giving you information leaflets such as this one;
- arranging for other healthcare staff to give you information; and
- giving you details of websites that give information and support.

What tests will I have at hospital?

First you will have an ordinary X-ray and a longer X-ray called a computed tomography (CT) scan. The CT scan takes a series of X-rays to build up a picture of your lungs. These will show your doctors and healthcare team if there are any parts of your lungs that do not look normal. The CT scan will not be able to tell if the cause is lung cancer.

If the doctor thinks that you might have lung cancer, they will take a sample of tissue from your lung. This is called a biopsy. There are different ways of doing this, depending on which part of your lung the biopsy is taken from. The doctors will send this tissue sample to the laboratory to be looked at under a microscope to see if there are cancer cells in your lung.

You may have tissue samples taken in the following ways:

Bronchoscopy

The doctor or a specially-trained nurse passes a thin tube through your nose or mouth and into your lungs. This is a minor, though slightly uncomfortable, procedure that takes about 20 minutes. You will not have to stay in hospital overnight. You are likely to have a bronchoscopy if the central part of your lung is affected.

Percutaneous fine-needle aspiration (FNA) biopsy

The doctor uses a CT scan or ultrasound (using sound waves) to guide a needle through your chest and into your lung to remove a small piece. You are likely to have this type of biopsy if the edges of your lungs are affected. You may need to stay in hospital overnight for this.

Mediastinoscopy

The doctor puts a tube into your chest, through a cut above your breastbone, to see the area between your lungs and nearby lymph nodes. This is a small surgical procedure which means you need a general anaesthetic. You usually need to stay overnight in hospital for this.

Laboratory staff have to prepare your tissue sample before checking for cancer cells, so they cannot give you the results of your tests straight away. Your healthcare team can tell you when you are likely to get your results. If you have any questions about this, your healthcare team will be happy to answer them.

Do I have lung cancer?

Your biopsy results will show whether or not you have lung cancer. If you do, the results will show if you have **small cell lung cancer** or **non-small cell lung cancer.** Different treatments are used for each type of cancer. We have explained these treatments on page 19 and 21.

Sometimes the results of a biopsy are not clear and don't tell the hospital staff if you have lung cancer. If this happens, the tests shown on page 12 can tell if there is cancer in your body.

What happens if I have lung cancer?

If you have lung cancer, your doctor will want to find out if or how far the cancer has spread from your lungs to other parts of your body. This is known as 'staging'. Staging helps to make sure that you get the best treatment. For example, it may affect when you have any planned major surgery if the cancer has already spread. Your doctor will usually tell you what stage your cancer is at. If you have not been told and want to know, you can ask any of the people looking after you to tell you.

What will staging involve?

If you are fit enough, your doctor will do some tests to stage your lung cancer. He or she may also need to take tissue samples from other parts of your body. Your doctor will explain to you what is involved and why you may need these tests. The tests you might have are listed in the table on page 12.

Tests for staging lung cancer	
CT scan	This scan takes a series of X-rays to build up a picture of your lungs. This shows where the cancer is.
Ultrasound	Sound waves are used to make a picture of your body which shows where the cancer is.
Magnetic resonance imaging (MRI)	This type of scan uses magnetism to show where the cancer is.
Bone scan	A small amount of harmless radioactive material is injected into your blood. The radioactive material tends to collect in areas where there is cancer in your bones. This will be picked up by the camera.
Positron emission tomography (PET)	A small amount of radioactive drug is injected into your blood. This scan traces the radioactive drug and shows where the cancer is and how far it has spread.
Thoracoscopy	A camera inside a thin tube is used to look inside your chest to show where the cancer is.

Your doctor will have a meeting with the team who are looking after you to discuss the results of your tests.

What are the stages of lung cancer?

The two different types of cancer have different stages. We have explained these below.

Stages of small cell lung cancer

Small cell lung cancer is staged as ‘limited’ or ‘extensive’. ‘Limited’ means that it is only in one lung. ‘Extensive’ means that is has spread to other parts of your body.

Stages of non-small cell lung cancer

Non-small cell lung cancer has four stages – one to four. These tell you how much it has spread to other parts of your body. Stage four is the most widely spread, or advanced.

Stages of non-small cell lung cancer	
Stage 1	The cancer is only in your lungs and is not in any of your lymph glands (part of the immune system which helps your body fight infection).
Stage 2	
Stage 2A	The cancer is small but cancer cells have spread to the lymph glands nearest to your affected lung.
Stage 2B	The cancer is slightly larger and has spread to the lymph glands nearest your affected lungs. Or, the cancer cells have spread to another area such as your chest wall.

Stage 3	
Stage 3A	Cancer cells have spread to the lymph glands furthest away from your affected lung. Or, the cancer is in the lymph glands nearest to your affected lung, and cancer cells have spread to either your chest wall or the middle of your chest.
Stage 3B	The cancer cells have spread to the lymph glands in the other side of your chest or to the lymph glands above your collarbone. Or, there is more than one tumour in your lung. Or, the tumour has grown into another area in your chest such as your heart or gullet. Or, there is fluid around your lungs that contains cancer cells.
Stage 4	The cancer has spread to another part of your body such as your liver or bones.

What treatment will I need?

Your treatment will depend on the type of lung cancer you have. Often when people are diagnosed with lung cancer, it has already spread and treatment focuses on improving your symptoms and quality of life rather than curing the disease. Your doctor can explain all your treatment options and answer any questions you may have.

Who will care for me during my treatment?

You will be looked after by a team of staff. The team will include:

- doctors;
- nurses;
- pharmacists;
- physiotherapists;
- radiographers;
- occupational therapists; and
- dietitians.

Your team will listen to you and answer any questions at any time during your treatment.

They are there to help you cope with the effects cancer can have on all areas of your life (emotional and so on). They will meet regularly to discuss and plan your care. If you have any questions, do not be afraid to ask a member of the team looking after you. It often helps to make a list of questions for your doctor and to take a close friend, carer or relative with you. You may find it easiest to talk things through with the lung cancer clinical nurse specialist who is looking after you.

Treatment for small cell lung cancer

Surgery

Surgery is not usually used to treat small cell lung cancer as the cancer will often have spread to other parts of your body.

Chemotherapy

Chemotherapy can help to control your symptoms, increase your quality of life and gives you the highest chance of living longer.

Your treatment will probably be made up of a medicine containing platinum and a medicine called etoposide.

Chemotherapy drugs get into your bloodstream and can attack any cancer cells that have spread beyond your lung. You will have chemotherapy at hospital but will not have to stay overnight for this.

If you have limited small cell lung cancer, chemotherapy is the most important treatment and should be given to you with radiotherapy.

You will receive chemotherapy in a series of sessions with a rest period after each one. Each session of chemotherapy and rest period is known as a cycle. You will probably be given three to six cycles of chemotherapy.

If you had chemotherapy and it worked, you may be considered for more chemotherapy if the cancer starts to grow again. This can help you to live longer. Your doctor will discuss this with you and give you information to help you decide if you want to have more chemotherapy.

Treatment for non-small cell lung cancer

Surgery

If you have stage 1 or 2 non-small cell lung cancer, surgery may be the best option for you. Surgery offers you the highest chance of living longer. Surgery is not for everyone – your doctor will decide whether you are suitable for this. For example, you may have another medical condition which makes having surgery dangerous. Your doctor will discuss this with you.

During your operation, the surgeon will try to remove all of the cancer. The surgeon will either remove part of your lung (lobectomy) or remove all of one lung (pneumonectomy). This depends on where your cancer is. Your operation may be done by open surgery (where the surgeon will make a large cut in your chest) or video-assisted thoracic surgery. This is when the surgeon makes a small cut in your chest and uses a camera to guide the operation.

Chemotherapy uses anti-cancer drugs to kill cancer cells. You will not be given chemotherapy or chemoradiation (chemotherapy and radiotherapy given together) before your surgery unless you have chosen to take part in a clinical trial. Your doctor will discuss this with you.

After you have the operation to remove the cancer you may be considered for chemotherapy. This may be given to reduce the chance of the cancer coming back and your doctor should discuss whether or not having chemotherapy is right for you.

If all of your tumour has been removed by surgery, you will not need radiotherapy. Your doctors may consider giving you radiotherapy if surgeons have not been able to remove all of the tumour during your operation.

Radiotherapy

If you have stage 1 or 2 non-small cell lung cancer and are not well enough to have an operation you may be offered radiotherapy instead. Radiotherapy uses X-rays or other forms of radiation to kill the cancer cells.

If you have stage 3A or 3B non-small cell lung cancer and your tumour is growing, you should also be offered radiotherapy.

If possible, you should be offered a radiotherapy treatment called CHART (continuous hyperfractioned accelerated radiotherapy). With CHART you will be asked to stay in hospital to get radiotherapy three times a day over 12 days. CHART is not available everywhere in Scotland but your doctor may be able to refer you to a centre that offers it. If you cannot be offered CHART, your doctor will discuss the other options with you.

Radiotherapy on its own, or along with chemotherapy may cure some patients. It can be helpful in improving symptoms in all patients, even if a cure is not possible.

Chemotherapy

If you are not able to have surgery or radiotherapy, you have the option to have chemotherapy instead. Chemotherapy uses anti-cancer drugs which kill the cancer cells that have spread beyond the lung.

If you have stage 3B or 4 non-small cell lung cancer, you may be considered for chemotherapy with a medicine containing platinum. This can help control your symptoms and improve your chances of living longer.

The number of chemotherapy cycles you have should be no more than four if you have advanced non-small cell lung cancer. We have explained what a cycle is on page 19.

If you had chemotherapy and it worked, you may be considered for more chemotherapy with a medicine called docetaxel if the cancer starts to grow again. This is given to help you live longer and improve your quality of life. Your doctor will check to see if you are well enough to have this.

Other treatments for lung cancer (small cell and non-small cell)

Combined treatments

If surgery, radiotherapy and chemotherapy are used together, this can help some patients with both small cell lung cancer and non-small cell lung cancer to live longer.

Combining treatments can also cause more side effects. You can ask the people looking after you about these side effects and discuss the best combination of treatments with them.

Endobronchial and vascular treatments

Endobronchial treatments are sometimes used to treat lung cancer found in the windpipe (trachea) or the large airways (bronchi, see the diagram on page 4). They may also be used to treat early-stage lung cancers. They are used when tumours block your airways and cause you to cough up blood or make you breathless. You may have these if other treatments have failed.

Endobronchial treatments may include the following:

Prophylactic cranial radiotherapy	This is radiotherapy to your brain to try and stop the cancer cells from growing there. You may be offered this if you have limited small cell lung cancer and treatment with chemotherapy has worked well.
Photodynamic therapy (PDT)	PDT uses laser or another light source along with a light-sensitive drug to kill cancer cells in your body. If you are not fit enough to have surgery to treat early-stage lung cancer, you may be offered this.
Stenting	Sometimes a tumour next to your vena cava blood vessel (the major blood vessel in your chest wall) grows and blocks your blood flow. If this happens, your doctors may consider putting a piece of tubing (stent) into your blood vessel to keep it open.

There are only a few centres in Scotland currently able to offer these treatments. If you need any of these treatments, you will be referred to one of these centres to have it.

Palliative radiotherapy

If your lung cancer gives you painful symptoms, you may be given low doses of radiotherapy known as palliative radiotherapy. This may ease your pain and ease painful symptoms such as a cough or shortness of breath that are troubling you. While a cure is unlikely, palliative radiotherapy can help you to live longer.

This kind of radiotherapy can range from one or two treatments to daily treatments over two to three weeks. You can find out more about this from the people looking after you.

Will I receive palliative care?

You should be offered specialist palliative care at various times during your treatment. It should be available to anyone in the hospital or in the community whether or not you are having treatment with chemotherapy, radiotherapy, surgery or are taking part in a clinical trial.

Palliative care can help to control your pain and discomfort and ease any suffering. Your palliative care team will offer support to you and your family to give you the best quality of life. It will not be unusual for you and your family to have many fears and concerns about your lung cancer. Your palliative care team can provide comfort and support. They will listen to your concerns and talk to you about them.

At home, your GP and district nurse will provide your palliative care. They may also ask a Macmillan nurse to visit you. If you are in hospital, you should be able to see a specialist in palliative medicine or a member of a specialist palliative care team if you need or want to.

What will happen after my treatment is finished?

What if treatment has cured my cancer?

When your treatment has finished, you and your healthcare team should arrange regular check-up appointments. You should be offered follow-up appointments with a clinical nurse specialist.

What if I have decided not to continue with treatment?

You may decide not to go ahead with your cancer treatment. You and your consultant will plan how you will be cared for. You can decide which healthcare professionals should be involved and how much you want to be looked after in hospital or at home by staff working in the community. It is likely that more of your care will be provided by a specialist palliative care team. They will help to control any pain and discomfort you may be suffering. They will provide comfort and support to you and your family.

What if I smoke?

If you are a smoker, you may consider giving up smoking. There are lots of organisations that can help you to stop smoking. Your GP or practice nurse will be able to give you details of your local smoking cessation service. You will find other sources of support on page 31.

Organisations that can help you to stop smoking

ASH Scotland
8 Frederick Street
Edinburgh
EH2 2HB
Phone: 0131 225 4725
Website: www.ashscotland.org.uk
E-mail: ashscotland@ashscotland.org.uk

ASH Scotland is the leading voluntary organisation campaigning for effective laws to control tobacco and provides an expert information service.

QUIT

Ground floor
211 Old Street
London
EC1V 9NR
Phone: 0800 002 200 (9am to 9pm, Monday to Friday).

QUIT is a charity which aims to offer practical support to people who want to stop smoking.

Smokeline

Website: www.canstopsmoking.com
Phone: 0800 84 84 84 (best time to phone, 12pm to 12am).

For advice and support on giving up smoking

Support and help

Where can I find out more?

You and your family may find it helpful to talk to people who have gone through a similar experience. Many organisations offer support groups for people with lung cancer and their families. They also provide information for patients and their families and friends. Contact details for some of these organisations are given below.

Your GP, practice nurse or district nurse will also be able to give you contact numbers for local voluntary organisations who can help you and your family.

Cancer support organisations

Cancerbackup Scotland

Suite 2, Third Floor
Cranston House
104/114 Argyle Street
Glasgow
G2 8BH
Phone: 0141 223 7676 or 0808 800 1234 (best time to phone 9am to 8pm, Monday to Friday).
Website: www.cancerbackup.org.uk

Cancerbackup aim to help people live with cancer. Experienced and qualified cancer nurses staff the information service.

CLAN Cancer Support

CLAN House
Caroline Place
Aberdeen
AB25 2TH
Phone: 01224 647 000
Freephone: 0800 783 7922
Website: www.clanhouse.org

Provides information and support to cancer patients and their families. Covers Grampian, Orkney and Shetlands.

Macmillan Cancer Support (Scotland)

Osborne House
1-5 Osborne Terrace
Edinburgh
EH1 2DP
Phone: 0131 346 5346 or 0808 808 2020 (best time to phone 9am to 10pm, Monday to Friday).
Website: www.macmillan.org.uk

This is a UK charity which supports people with cancer and their families with specialist information, treatment and care.

Maggie's Centres Scotland

Maggie's Centre Edinburgh
The Stables
Western General Hospital
Edinburgh
EH4 2XU
Phone: 0131 537 3131

Maggie's Centre Glasgow
The Gatehouse
Western Infirmary
10 Dumbarton Road
Glasgow
G11 6PA
Phone: 0141 330 3311

Maggie's Centre Dundee
Ninewells Hospital
Tom McDonald Avenue
Dundee
DD2 1ZV
Phone: 01382 632 999

Maggie's Centre Highlands
Raigmore Hospital
Old Perth Road
Inverness
IV2 3UJ
Phone: 01463 706 306

Maggie's Centre Fife
Victoria Hospital
Kirkcaldy
KY2 5AH
Phone: 01592 643 355

Website: www.maggiescentres.org.uk

Maggie's provides practical, emotional and social support to people with cancer, their family and friends. Built alongside NHS cancer hospitals and staffed with professional experts, Maggie's Centres are warm and welcoming, full of light and open space, with a big kitchen table at their heart.

Marie Curie Cancer Care (Scotland)
29 Albany Street
Edinburgh
EH1 3QN
Phone: 0131 456 3700
Website: www.mariecurie.org.uk

This charity is dedicated to caring for people affected by cancer and to improving their quality of life through caring services, research and education.

Tak Tent Cancer Support Scotland

Flat 5
30 Shelley Court
Gartnavel Complex
Glasgow
G12 OYN
Phone: 0141 211 0122 (best time to phone 10am to 3pm, Monday to Friday).
Website: www.taktent.org
E-mail: tak.tent@care4free.net

This group promotes the care of cancer patients, their families and friends. It provides practical and emotional support, information and counselling.

The Roy Castle Lung Cancer Foundation

Rothesay House
134 Douglas Street
Glasgow
G2 4HF
Phone: 0871 220 5434
Free lung cancer phone helpline 0800 358 7200 (best time to call 9am to 5pm, Monday to Friday).
Website: www.roycastle.org

The foundation provides a wide-ranging support, information and advocacy service for people affected by lung cancer.

Mental health organisations

Depression Alliance
3 Grosvenor Gardens
Edinburgh
EH12 5JU
Phone: 0131 467 3050
E-mail: info@dascot.org
Website: www.depressionalliance.org

Depression Alliance Scotland provides information and support for people in Scotland who have depression.

Mental Health Foundation (Scotland)
Merchant's House
30 George Square
Glasgow
G2 1EG
Phone: 0141 572 0125
E-mail: Scotland@mhf.org.uk
Website: www.mentalhealth.org.uk

The Mental Health Foundation helps people prevent, cope with and recover from mental health problems. They provide a range of factsheets on mental health issues including anxiety and depression.

Scottish Association for Mental Health (SAMH)

Cumbrae House
15 Carlton Court
Glasgow
G5 9JP
Phone: 0141 568 7000 (best time to phone 2pm to 4.30pm, Monday to Friday).
E-mail: enquire@samh.org.uk
Website: www.samh.org.uk

This association gives patients and carers information on all aspects of mental health.

Organisations for carers

Carers Scotland

91 Mitchell Street
Glasgow
G1 3LN
Phone: 0141 221 9141
Free carers line 0808 808 7777 (best time to phone Wednesday and Thursday 10am to 12pm and 2pm to 4pm).
E-mail: info@carerscotland.org
Website: www.carersonline.org.uk

Carers Scotland provides information and advice to carers on all aspects of caring.

Crossroads Scotland

24 George Square
Glasgow
G2 1EG
Phone: 0141 226 3793
Website: www.crossroads-scotland.co.uk

Crossroads Scotland provides practical support to carers.

Useful websites

DIPex (Database of individual experiences)
Website: www.dipex.orgfmain.asp

DIPex is a website that reports on a wide variety of personal experiences of health and illness. People can watch, listen to or read interviews, find reliable information on treatment choices and where to find support. The site includes information on lung cancer.

Department of work and pensions

Website: www.dwp.gov.uk

The DWP website can give you details on entitlements to various benefits.

Glossary

Biopsy - a sample of tissue.

Bronchi - large tubes that lead to your lungs, sometimes called airways.

Bronchoscopy - this procedure takes a sample of tissue from your lungs. A thin tube is passed through your nose or mouth and along the tubes that lead to your lungs.

Chemoradiation - chemotherapy and radiotherapy given together.

Chemotherapy - a treatment which uses anti-cancer drugs to kill cancer cells.

Computed tomography (CT) scan - a scan which takes a series of X-rays to build up a picture of your lungs.

Cycle - a session of chemotherapy followed by a rest period.

Docetaxel - an anti-cancer drug used to treat non-small cell lung cancer.

Etoposide - an anti-cancer drug used to treat small cell lung cancer.

Lobectomy - removing part of your lung.

Lymph - fluid collected from tissues in the body. This fluid carries useful material around your body and takes unwanted material away from your body tissue to prevent infection.

Lymph gland or node - part of your lymphatic system which helps your body to fight infection.

Lymphatic system - a network of tiny tubes in the body that collects fluid known as lymph from tissues. It then filters it and returns it to the blood.

Magnetic resonance imaging (MRI) - a scan using magnetism, instead of X-rays, to build up a picture of your lungs.

Mediastinoscopy - a procedure which takes a tissue sample from your lungs. A tube is put into your chest through a cut in your chest bone.

Palliative care - care given to patients who have a life-threatening illness where the main goal is to improve quality of life rather than provide a cure.

Palliative radiotherapy - shrinks tumours or stops cancer cells from growing while reducing pain and relieving other cancer symptoms.

Percutaneous fine needle aspiration - a procedure used to take a tissue sample from your lungs. CT or ultrasound is used to guide a biopsy needle through your chest and into your lung.

Pneumonectomy - an operation to remove all of one lung.

Positron emission tomography (PET) - a scan which can show where your cancer is.

Photodynamic therapy (PDT) - treatment using a laser or another light source along with light-sensitive drugs to kill cancer cells.

Prophylactic cranial radiotherapy - radiotherapy given to the brain.

Radiotherapy - a treatment which uses X-rays or other forms of radiation to kill cancer cells.

Stenting - when a piece of tubing, called a stent, is put into a blood vessel to keep it open.

Thoracoscopy - a procedure which uses a camera inside a tube to examine the inside of your chest.

Trachea - your windpipe.

Tumour - lumps of tissue made up of cancer cells.

Ultrasound - when high-energy sound waves are passed through your body to make echoes which are displayed on a screen to show pictures of your body.

Vena cava - the main blood vessel that returns blood from your body to your heart.


Notes


Notes


Notes


Notes


Notes

The Scottish Intercollegiate Guidelines Network (SIGN) writes guidelines which give advice to doctors, nurses, surgeons, physiotherapists, dentists, occupational therapists and patients about the best treatments that are available.

We write them by working with doctors, nurses and other NHS staff and with patients, carers and members of the public. The guidelines are based on the most up-to-date medical evidence. You can download copies of our guidelines from our website, www.sign.ac.uk.

Other formats

If you would like a copy of this leaflet in another language or format, such as large print, please phone Karen Graham, Patient Involvement Officer, on 0131 718 5108, or e-mail her at karen.graham2@nhs.net

This booklet is based on a clinical guideline issued to all NHS staff.

The guideline was developed by SIGN, the Scottish Intercollegiate Guidelines Network. It is based on the most up-to-date published evidence.

You can download the full clinical guideline from the SIGN website at www.sign.ac.uk/pdf/sign80.pdf. You can also find a short version at www.sign.ac.uk/pdf/qrg80.pdf.

If you have any comments about this booklet, please contact:

SIGN Executive, 28 Thistle Street
Edinburgh EH2 1EN

Phone: 0131 718 5090 • Fax: 0131 718 5114
Website: www.sign.ac.uk