

# Diagnosing Lung Cancer

## A Quick Guide

### Contents

This is a brief summary on 'Diagnosing lung cancer' from our website. You will find more detailed information on there. In this information there are sections on

- Lung cancer tests
- Further tests for lung cancer
- Lung cancer research
- Questions for your doctor

You can view this information in a larger print on our website.

### Lung cancer tests

Usually you begin by seeing your GP, who will ask you about your general health and examine you. They may ask you to breathe into a small machine that measures how much air you breathe in and out. Your GP will then refer you to hospital for any X-rays or other tests you need. A chest X-ray will check for anything that looks abnormal in your lungs.

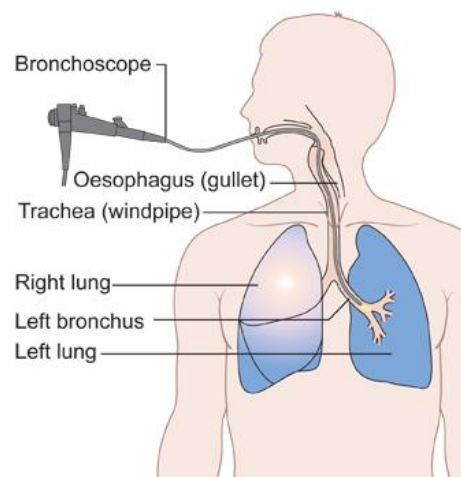
### Hospital tests

At the hospital the doctor will ask about your medical history and your symptoms. They will then probably arrange for you to have some more tests.

You may have a CT scan that takes X-rays through sections of your body.

A test called a bronchoscopy looks at the inside of the airways. The doctor puts a narrow, flexible tube called a bronchoscope down your throat or nose and into the airway. You usually have this under local anaesthetic. But you may have a sedative or general anaesthetic. The doctor can take a sample of tissue (a biopsy) using the bronchoscope.

### Diagram of a bronchoscopy



You may have an endobronchial ultrasound scan, which combines a bronchoscopy with an ultrasound scan. The ultrasound can help to show the size of a tumour and whether cancer has spread into any lymph nodes. The doctor can also pass a hollow needle down the tube to take an ultrasound guided sample of cells (a biopsy) from any enlarged lymph nodes or any lung tissue that looks abnormal.

### **Biopsy through the skin**

For this test, the doctor uses a thin needle to take samples of lung cells to examine under a microscope. The doctor will ask you to hold your breath for a moment while they put the needle through the skin into the lung. The test can be uncomfortable but should only take a few minutes.

### **Neck lymph node biopsy**

If a CT scan shows changes in the lymph nodes in the neck, you may need to have a sample of cells taken from the nodes. Your doctor uses a fine needle to do this. They may use an ultrasound scan to check that the needle is in the right place.

### **Further tests for lung cancer**

If your tests show that you have lung cancer, you may need further tests. The further tests show if the cancer has spread and can help your doctor decide on the best treatment. These tests may include an endoscopic ultrasound scan. The scan can help to show the size of the cancer and whether it has spread into any lymph nodes. The doctor can also pass a hollow needle down the tube to take an ultrasound guided sample of cells (a biopsy) from any enlarged lymph nodes or any lung tissue that looks abnormal.

You may have keyhole surgery (thoracoscopy) to take a sample of cells from the lung. The doctor puts a thin tube into a cut in the side of your chest. Through the tube, the doctor looks for anything abnormal and can take tissue or fluid samples. Or you may have a mediastinoscopy. The doctor puts the tube through a small cut at the base of the neck and into an area in the centre of your chest called the mediastinum.

Other possible tests are a bone scan, a CT scan, a PET-CT scan, an MRI scan or a liver ultrasound scan.

### **After the tests**

Your doctor will ask you to go back to the hospital when your test results have come through. This may take a few days. It is a very anxious time for most people. While you are waiting it may help to talk to your specialist nurse, or a close friend or relative about how you feel. Or you may want to contact a cancer support group to talk to someone who has been through the same experiences. You can also find online support forums and chat rooms.

### **Lung cancer research**

There are several areas of active lung cancer research. Trials and studies are looking into causes, screening, treatments and living with lung cancer. Cancer Research UK are committed to making a difference to people with lung cancer. Our research was behind some of the drugs that have had the biggest impact on treating this disease – including cisplatin, carboplatin, pemetrexed and etoposide. Lung cancer research continues to be a priority for Cancer Research UK.

### **Research into diagnosis and staging**

Research is looking at tests to try and improve the diagnosis and staging of lung cancer. Staging means how large the cancer is and whether it has spread. It is important for doctors to know the stage of the cancer because the stage affects which treatment is appropriate.

Doctors are looking at various new types of test to see if they can diagnose lung cancer more quickly and stage it more accurately. The tests include

- DNA tests
- Protein tests
- Looking inside the airways using ultrasound
- Scans such as newer types of MRI scans, CT scans, and PET scans

## What to ask your doctor about lung cancer tests

- Which tests are you going to do?
- What are you looking for?
- Will the tests show whether I have cancer and how reliable are they?
- Is there anything I have to do beforehand to prepare for the tests?
- Are any of the tests painful?
- Do any of the tests have after effects?
- Can I have all the tests as an outpatient or do I have to come into hospital?
- Can I choose whether to have medicine to make me drowsy or a general anaesthetic for any of the tests?
- Can I bring someone with me when I have the tests?
- How long will it take to get the results of the tests?
- Who will give me the test results?

**For more information**, visit our website <http://www.cruk.org/cancerhelp>

You will find a wide range of detailed, up to date information for people affected by cancer, including a clinical trials database that you can search for trials in the UK. Our information is based on the best current scientific evidence and reviewed regularly by leading clinicians and experts in health and social care.

For answers to your questions about cancer call our Cancer Information Nurses on 0808 800 4040 9am till 5pm Monday to Friday.

Adapted from Cancer Research UK's Patient Information Website CancerHelp UK in July 2014. CancerHelp UK is not designed to provide medical advice or professional services and is intended to be for educational use only. The information provided through CancerHelp UK and our nurse team is not a substitute for professional care and should not be used for diagnosing or treating a health problem or disease. If you have, or suspect you may have, a health problem you should consult your doctor. Copyright Cancer Research UK 2014. Cancer Research UK is a registered charity in England and Wales (1089464), Scotland (SC041666) and in the Isle of Man (1103)