

Having a lung biopsy in the interventional radiology (IR) department

This information sheet has been given to you to help answer some of the questions you may have about having a lung biopsy. If you have any questions or concerns, please do not hesitate to speak to a doctor or nurse caring for you.

What is a lung biopsy?

A lung biopsy is a procedure in which a small sample of an abnormal area of lung is removed with a fine needle. It is performed under local anaesthetic and with the help of imaging equipment, such as a computed tomography (CT) scanner or ultrasound that help to locate the abnormal area as accurately as possible. The sample is then examined under a microscope.

What are the benefits of having a lung biopsy?

Having a biopsy will help your doctor to make a correct diagnosis so that you can get suitable treatment.

What are the risks of having a lung biopsy?

- There may be bruising or a small swelling around the biopsy area due to bleeding into the skin. This should not be painful and will heal.
- Air may leak out of your lung. This is called a pneumothorax. If this happens you may feel short of breath, cough or experience some chest pain. You may not need any treatment at all, but rarely, people require the insertion of a small drain to relieve the pneumothorax. This may mean that you need to stay in hospital overnight.
- You may cough up some blood. This is quite common and may last for four to six hours. Rarely, it is more serious. Your doctor can give you more information about this.

Are there any alternatives?

No. A lung biopsy is the only way for your doctor to get the information needed to make a correct diagnosis and treat your illness.

Who will be performing the biopsy?

A specially trained doctor called an interventional radiologist will perform the biopsy.

Giving my consent (permission)

We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves.

If you would like more information about our consent process, please speak to a member of staff caring for you.

How can I prepare for the procedure?

- In most cases you can come into hospital, have a lung biopsy and go home the same day. You will need to arrange for an adult to take you home by car or taxi.
- You will need to have a blood test about one week before the lung biopsy to check that your blood clotting is normal. This test is necessary as there is increased risk of bleeding after a procedure if your clotting tests are abnormal. Your doctor or clinical nurse specialist will tell you about this test and how to arrange it when they recommend the lung biopsy.
- Please let us know if you are taking any antiplatelet medicines (for example, aspirin, clopidogrel) or any medicines that thin the blood (for example, warfarin, rivaroxaban), as these may need to be withheld temporarily before the procedure. Call the interventional radiology department for advice as soon as you get your appointment letter. Call 020 7188 5573 (for Guy's Hospital) or 020 7188 5477 (for St Thomas' Hospital).
- Let your doctor know about any medicines you are taking. Take your other medicines as normal, unless your doctor or nurse tells you not to.
- Do not eat or drink anything (except water) for six hours before the procedure. You can drink water up to two hours before the procedure.
- If you are having the biopsy while you are staying in hospital, your nurse will help you to prepare.

What happens before the lung biopsy?

Please arrive 30 minutes before your appointment time. After you have arrived at the IR Department, you will be checked by a radiology nurse and given a hospital gown to wear. A cannula (small plastic tube) will be put into your arm. This means that we can give you a sedative during the procedure, if you need it.

You will be given the opportunity to ask the interventional radiologist any questions you have. You will need to sign a consent form before the biopsy can take place.

What happens during the lung biopsy?

The procedure is done using CT (computerised tomography), ultrasound or x-ray. This allows the radiologist to see detailed images of your chest.

You will be asked to lie on your front or on your back depending on where the biopsy is to be taken from. The radiographer will help you to find the most comfortable position that you can, so that you remain as still as possible during the biopsy.

Your skin will be cleaned with an antiseptic fluid and draped with sterile towels. Local anaesthetic is injected around the area from where the biopsy will be taken. This numbs the area, so you should not feel any pain.

Once the area is numb a thin needle is introduced into the lung in stages. The needle position is checked with a scan each time it is moved. When you have a scan taken you may be asked to hold your breath. **It is important that you try to take the same 'depth' of breath each time, and also that you don't cough during the procedure.**

The radiologist uses a special needle to remove a small piece of lung tissue or some fluid. Once the radiologist is satisfied that an adequate sample has been obtained, the needle is withdrawn. You will then have a final short scan to check for an air leak and then the procedure is completed. The sample is sent to the laboratory for examination. The wound site is cleaned and a dressing put over it.

Will I feel any pain?

The examination should be pain free, though occasionally when a biopsy is being taken it may hurt. The position in which you will be asked to lie during the biopsy may be uncomfortable for a short period. If you experience any pain during the procedure, please tell the nurse looking after you and pain relief can be given to you.

What happens after the lung biopsy?

After the biopsy you will stay in the recovery unit. You will need to stay in bed for four to five hours, or as instructed by the nurse. You will be asked to lie on your side or on your back for two to three of these hours to help the healing process. Your blood pressure, pulse and temperature will be checked at regular intervals and a clip on your finger will measure the oxygen levels in your blood. This is not painful.

We will provide light refreshment, such as tea or coffee, a sandwich and some fruit. If you have any special dietary requirements, you may wish to bring some food and drink with you.

The nurse will tell you when you can get up and move around.

If you had the biopsy as a day case patient, you will be able to go home. You will need a responsible adult to take you home by car or taxi. We do not recommend that you use public transport as it is unsafe if you feel unwell.

If you are staying in the hospital and there are no problems, you will be taken back to your ward after about half an hour.

When will I receive the results?

The results will take about seven to ten working days. You will need to make an appointment to see the doctor that referred you in order to pick up your results. If your referring doctor is based at Guy's and St Thomas', you can make an appointment before you leave the hospital.

If I am a day patient, what do I need to do after I go home?

You should rest for the remainder of the day, and possibly the next day, depending on your recovery.

- Have someone to stay with you overnight.
- Eat and drink normally.
- Take your usual pain relief, as prescribed, if you have any pain.
- Continue with your normal medication as prescribed.
- Keep a regular check on the biopsy site.
- Shower no sooner than 24 hours after the procedure, and bath no sooner than 48 hours after the procedure.

Please rest at home for a minimum of 24 hours. Do not go to work or school on the day after the procedure. Always follow the advice and instructions that the doctors and nurses have given you.

What if I have a problem at home?

If you experience severe chest pain, shortness of breath or if you cough up a large volume of blood, **go to your nearest Emergency Department (A&E) immediately.**

Please contact the interventional radiology department on **020 7188 5573** at Guy's or **020 7188 5477** at St Thomas', Monday to Friday, 9am to 5pm, if you need advice.

If you feel you need urgent medical attention or are worried about anything outside of our normal opening hours, please contact your GP, NHS Direct /111 or go to your nearest Emergency Department (A&E).

Contact us

If you have any questions or concerns, please contact the IR Department on **020 7188 5576** at Guy's or **020 7188 5479** at St Thomas', Monday to Friday, 9am to 5pm.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) **e:** pals@gstt.nhs.uk

t: 020 7188 3514 (complaints) **e:** complaints2@gstt.nhs.uk

Language and accessible support services

If you need an interpreter or information about your care in a different language or format, please get in touch:

t: 020 7188 8815 **e:** languagesupport@gstt.nhs.uk

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

t: 111

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk

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