



Having a lung biopsy at the Whittington hospital

Information for patients

What is a CT guided needle lung biopsy?

- This is a procedure (test) where a small sample(s) of tissue (biopsy) is taken from your lungs for analysis. This helps the doctor to find out more about the health of your lungs.
- A radiologist (a doctor who specialises in diagnosing and treating medical conditions and diseases using medical images) uses a computed tomography (CT) scan to guide the needle to the area where the biopsy will be taken.

Why do I need this test?

- Your hospital doctor has suggested that you have this test after discussion with a radiologist.
- Your doctor will explain why they think you need this test and how it will benefit you. You can then decide if you want to go ahead with the test.

What happens if I don't have the test?

- Your doctor may not have all the information needed to make a diagnosis (assessment). This may affect the type of treatment he or she can suggest for you. If this is the case, you can discuss this with your doctor.

Are there any alternatives?

- Some patients may have a bronchoscopy (where a long narrow tube is passed through the nose or mouth to reach the lungs) or a surgical procedure to reach the lung tissue. Please ask your hospital doctor if you want to know more about alternative treatment choices.

Female patients

- If you are pregnant, or think you may be pregnant, please tell us before the scan. We need to know whether you may be pregnant because the scan involves small amounts of radiation.

How do I prepare for the test?

- On the day of the test, please eat a light breakfast and continue taking any prescribed medication as normal, unless we have given you any different or specific instructions.



- You will need to stay in hospital after the biopsy for two to four hours to make sure you are well enough to go home.
- Please bring an overnight bag with you to hospital, as you may need to stay overnight (for example if there are any complications or we need to monitor you). We will discuss this with you when your appointment is made.

What happens during the procedure?

- A radiographer will ask you to lie on a bed that will move through the scanner.
- They will place a marker on your skin. A marker can be any small metallic object such as a paperclip. The marker shows up in the scan and allows us to guide the needle to the best area for the biopsy.
- The skin is then cleaned with antiseptic solution and numbed with a local anaesthetic. A biopsy needle is carefully inserted into the lung to take the biopsy. To make sure they have taken a good sample, this part of the test may be repeated two or three times.

How long does the procedure take?

- The procedure usually takes 30-45 minutes. This includes the set-up time and the time to take the biopsy.

Will it hurt?

- The local anaesthetic used to numb the area may sting for a few seconds. Once the area is numb, you may feel pressure from the biopsy needle as it takes the sample, but you should not feel any pain.

Are there any risks?

- All medical procedures carry some risk, with the possibility that complications may happen. **This procedure is considered low risk.**
- Sometimes a deflated lung (pneumothorax) can occur when air leaks from the lung and gets trapped between the lung and the chest wall. A small pneumothorax will not normally need treatment and will heal in a few days.
- If the air leak is large, a small tube (called a chest drain) may be inserted into the chest wall to suck out the trapped air and you may need to stay in hospital overnight for observation.
- Some patients may cough up a small amount of blood during or after the procedure. This is usually nothing to worry about and should stop after a short amount of time.
- Very rarely, major complications can happen, and patients can need intensive medical support. Your doctors will assess you prior to the procedure to make sure you are fit and well enough to have the procedure.



- The amount of radiation used is kept to a minimum.
- We strongly believe that the benefits of the procedure far outweigh any risks to your health. If you have any concerns about this, please contact the imaging department and a radiographer will call you back and answer your questions.
- It is possible that the results will not give your consultant enough information to make a diagnosis. If this happens, we may need to repeat the CT guided needle lung biopsy or recommend an alternative procedure called a bronchoscopy.

What happens afterwards?

- We will take you back to the ward so you can rest and be monitored.
- After 1-2 hours you can begin to eat and drink as usual.
- You will have a chest X-ray 1 hour after the biopsy. If this is normal you can go home. If there are any complications, we may ask you to stay in hospital overnight.

Anticoagulation medication

- If you are taking any medications that thin your blood, for example aspirin, heparin, warfarin, clopidogrel or apixaban, please contact us before your appointment. These medications increase the risk of bleeding, so your medication will need to be reviewed.

Consent

- We aim to make sure that every patient is fully informed about the risks and benefits of a procedure or treatment.
- Before you have the biopsy, the radiologist will ask you to sign a consent form. This records your agreement to have the procedure. Please make sure that you understand the risks and benefits of the procedure and that it has been explained to you before you give your consent. Please ask if you have any questions.

Getting the results

- The results of your biopsy will not be available immediately. They will be sent to the doctor who is looking after you in hospital.
- They will discuss the results with you at your next clinic appointment, or over the phone if necessary, though your doctor may prefer to give you your results in person.

Cancelling your appointment

- Please contact us if you have any questions about the procedure. If you are unable to attend your appointment for any reason, please let us know in advance. We can then give your appointment to another patient and arrange a new appointment for you.



Contacts

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Where is the CT scanner?

Imaging Department

3rd Floor,
The Whittington Hospital,
Magdala Avenue,
London N19 5NF

Patient advice and liaison service (PALS)

If you have a compliment, complaint or concern please contact our PALS team on 020 7288 5551 or whh-tr.PALS@nhs.net

If you need a large print, audio or translated copy of this leaflet please email whh-tr.patient-information@nhs.net. We will try our best to meet your needs.

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