

## COMPUTED TOMOGRAPHY (CT) GUIDED LUNG BIOPSY

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### Introduction

We have received a request from your referring doctor for you to have a CT guided lung biopsy. This leaflet is designed to give you some information about the CT procedure, to help you prepare for your biopsy and to give you some idea of what to expect when you attend.

Your doctor has decided that this is the appropriate examination to investigate your condition. Any alternatives should have already been discussed with you.

### What is a biopsy?

Other tests you have had, such as a chest x-ray or a CT scan of your chest, have shown an abnormal area or shadow. From these tests it is not possible to say what the abnormality is.

A biopsy is a way of taking a small piece of tissue from the abnormal area using a special needle and examined under a microscope.

### What are the benefits from having a biopsy?

A biopsy is the best way to get tissue from an abnormal area that is in your lungs. Looking at the sample under a microscope will give a lot more information.

### Who will do the biopsy?

The biopsy will be taken by a radiologist who is a doctor who specialises in using x-ray and scanning equipment and in interpreting x-rays. The biopsy will be done using the CT scanner to locate the precise area to take the sample from.



## How do I prepare for the biopsy?

You will attend a pre-assessment clinic to be examined by a specialist nurse, have bloods collected for further routine tests, to have the procedure explained to you, to have any of your questions answered and to sign a consent form. If you are taking any blood thinning medication (i.e warfarin) please inform the specialist nurse at your pre-assessment visit.

## On the day of the biopsy

On the day of the scan **do not eat for 4 hours before your biopsy**. If you are taking aspirin, warfarin or Clopidogrel you will have already been asked to stop five days before the biopsy. Please take any other medication as normal.

## What happens when I arrive in the department?

Please report to the reception desk where your personal details will be checked to ensure our records are up to date. The radiologist will explain the procedure. If you have any questions about the procedure, ask the radiologist at this time.

## What happens during the biopsy?

You will be shown to a changing room and asked to remove your clothes to the waist and put on a gown. You will then be escorted into the scan room where you will meet the CT team that will be looking after you. At this point the radiologist will check your consent form and answer any questions that you have. The procedure will be explained to you and you will be asked to lie on the CT scanner table. You may need to lie on your back or front, depending on where the area being investigated is. The radiologist uses the CT scanner to decide on a suitable point to take the sample from and marks this point on your skin with a pen.

Everything will be kept as clean as possible and the radiologist will wear sterile gloves. Your skin will be cleaned with antiseptic and some of your chest covered with a sterile towel. Your skin will be numbed with a local anaesthetic at the place where the biopsy needle will be inserted. More scans will be taken to confirm that the correct area has been marked and then the biopsy needle will be inserted.



The radiologist will usually need to take several samples from the same place to be sure they have enough tissue and then a final scan of the area will be taken to check for any complications.

### **Will it hurt?**

Most biopsies do not hurt. When the local anaesthetic is injected it stings a little to start with but then the area should become numb. Later when the biopsy needle is inserted you may feel the sensation of something passing into your body but it is generally so quick that it is not very uncomfortable at all. When the biopsy is taken, the needle that is used makes a sharp snapping sound.

### **How long will it take?**

Every patient is different but it usually takes approximately 30 minutes from start to finish. You will need to lie still for this time on the CT scanner table.

### **What happens after the scan?**

You will be taken to the Day Surgery Unit and the nurses will perform routine checks of your pulse, breathing and blood pressure to make sure there are no problems. Usually you will need to stay for 3 – 4 hours after the biopsy. Before you go home you will have a chest x-ray to check for any air leaks.

### **Are there any risks?**

CT guided lung biopsy is a very safe procedure, but there are a few risks and complications that can arise, as with any medical procedure. The main risk is of causing an air leak (pneumothorax) into the space between the lung and inner chest wall.

A small air leak after a lung biopsy is fairly common and in most cases should not cause any problems. Usually a small leak will get better on its own. If a large air leak occurs then the air will need to be drained either with a needle, or by putting a small tube through the skin,

There is also a risk of the needle causing some bleeding in your lung. If this happens then you will cough up some blood. If you are coughing up a lot of blood, you will need to stay in hospital for observation, until it improves. If you start coughing up a lot of blood, become short of breath or have severe chest pain when you have gone home you should contact your GP or come to the A+E department at the hospital.



All X-ray procedures involve exposure to radiation in varying amounts. We are all exposed to small amounts of radiation from the atmosphere throughout our lives. Any amount of diagnostic radiation can add slightly to the normal risk of developing cancer. In all X-ray examinations, the amount of radiation is kept to the minimum necessary. Unfortunately, one in three of us are liable to develop a cancer at some stage during our lives, so the added risk from this test is very small indeed. This risk has to be balanced against the possibility.

### **If you are pregnant**

**It is essential that any woman who is pregnant, or might be pregnant, should notify the Radiology Department in advance.** You might not be able to have this examination and some other procedure might have to be adopted.

### **How do I get my results?**

The doctor who asked for the test will see you again in clinic to discuss the results of the biopsy.

### **If you have any questions**

If you have any questions about the CT scan, please ring the department on 0161 922 6653 between 9am and 5pm, Monday to Friday or write in the box provided and bring this leaflet with you.

### **Source**

In compiling this information leaflet, a number of recognised professional bodies and accredited good practice guidelines have been used.



Should you have a visual impairment, this leaflet can be made available in bigger print or on audiotape. If you require either of these options, please ring 0161 922 6652.

**Language, Interpretation and Patient Support Service (LIPS):**

If you require an interpreter to assist your appointment, please ask an appropriate family member to contact our central booking office between **Monday to Friday 8am to 5pm** on **0161 922 6991** to arrange this for you.

語言翻譯及病者支持服務 (LIPS)

如果閣下需要翻譯員在您的預約當日幫助您的話 請找一名合適的家庭成員 **0161 922 6991** 聯絡本中央預約辦事處來您您安排 我們的辦公時間是星期一至星期五 上午 8 時至下午 5 時

**Językowo Tłumaczeniowa Usługa Pomocy dla Pacjenta ( Language, Interpretation and Patient Support Service LIPS):**

Jeśli potrzebujesz pomocy tłumacza w trakcie swojej wizyty, proszę poprosić odpowiedniego członka rodziny o skontaktowanie się z Centralnym Biurem Zamówień (*Central Booking Office*), w celu zorganizowania tłumacza pomiędzy poniedziałkiem a piątkiem w godzinach od **08:00 - 17:00** pod numerem **0161 922 6991**.

لینگوئج، انٹرپریٹیشن اینڈ پشٹ سپورٹ سروس (Lips)

اگر آپ کو اپنی اپائنٹمنٹ کے لئے مترجم کی مدد کی ضرورت ہو تو براہ مہربانی اپنے خاندان کے کسی موزوں فرد سے کہیں کہ وہ ہمارے سنٹرل بنگ آفس سے پیر سے جمعہ 8.00 بجے صبح سے 5.00 بجے شام کے دوران 0161 922 6991 پر فون کر کے اس کا بندوبست کریں۔

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