Further sources of information

Patient Advice and Liaison Service (PALS) – To make comments or raise concerns about the Trust’s services, please contact PALS. Ask a member of staff to direct you to the PALS office or:
   t: 020 7188 8801 at St Thomas’   t: 020 7188 8803 at
Guy’s  e: pals@gstt.nhs.uk

Knowledge & Information Centre (KIC) – For more information about health conditions, support groups and local services, or to search the internet and send emails, please visit the KIC on the Ground Floor, North Wing, St Thomas’ Hospital.
   t: 020 7188 3416

Language support services – If you need an interpreter or information about your care in a different language or format, please get in touch using the following contact details.
   t: 020 7188 8815  fax: 020 7188 5953

NHS Direct – Offers health information and advice from specially trained nurses over the phone 24 hours a day.
   t: 0845 4647  w: www.nhsdirect.nhs.uk

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

Pleural (lung) biopsy
by video-assisted thoracoscopy
A patient’s guide
Introduction
You have been referred for a pleural (lung) biopsy using video-assisted thoracoscopy. This guide aims to answer any questions that you or your family and friends might have about the procedure and your recovery.

What is a video-assisted thoracoscopy (VATS)?
A video-assisted thoracoscopy (VATS) is a procedure which allows the surgeon managing your care to examine the lungs and pleural space (between the lungs and the chest wall), and take samples of the tissue. The examination is performed with the use of a small camera, which enables the surgeon to be more thorough.

How is it done?
A VATS procedure is performed under a general anaesthetic. Once you are asleep, the lung that the surgeon needs to examine is collapsed in order to create a space between the chest wall and the lung. Your breathing will be supported by the other lung, which will be assisted by a ventilator.

The surgeon typically makes one to four small cuts (1 to 1.5 inches long) in the side of your chest wall. Through one of these small holes, a thin, rigid tube with a camera and light at the end of it, called an endoscope, is inserted into the pleural space.
Will I have a follow-up appointment?
You will be invited to come back to the outpatient department for your results and for further management. This will usually be a week after you are released from hospital.

Contact details
If you have any questions or concerns about your procedure, or about anything you have read in this booklet, please contact your nurse case manager on 020 7188 1020 (Monday to Friday, 9am to 5pm).

To bleep your nurse case manager, call the hospital switchboard on 020 7188 7188 and ask for the bleep desk. Ask for bleep number:

2322 for Rebecca Myatt
2786 for Sophia Holden
2893 for Jason Simons

The camera enables the surgeon to:
- examine the lungs, the lining of the chest wall (pleura) and other structures in the chest cavity.
- take samples of the lung and the lining of the chest cavity.

After samples are taken, the lung is re-inflated and the incisions (cuts) are closed.

What are the benefits and risks of having the procedure?
The samples taken during your procedure are sent to the laboratory for examination. These will help your surgeon to diagnose your lung condition and decide on the best treatment plan.

All the risks involved with the procedure will be discussed with you in more detail before you are asked to sign a consent form with your consultant.

Pre-admission service at Guy’s
If your hospital appointment is at Guy’s hospital, you will also attend the thoracic pre-admission clinic in advance of your admission date. At the pre-admission clinic, you will meet your consultant and the nurse case manager who will prepare you for and support you through your surgery. Patients who do not attend the pre-admission clinic will meet with the consultant and nurse on the day of their procedure.

The consultant will examine you and ask questions about your present symptoms and past medical history. He/she will explain the procedure to you and the risks, benefits and alternative investigations before asking you to sign a consent form. The consent form indicates that
you agree to the operation being performed and understand what is involved.

The thoracic nurse case manager will explain your operation in greater detail and will advise you of the care you will be given after the procedure. He/she will also perform a physical examination to ensure that you are well enough to have the operation. The examination will most likely include:

**Chest x-ray** – This will look at the size and shape of your heart and the general condition of your lungs.

**Electrocardiogram (ECG)** – This measures the electrical activity of your heart, for example the rate and rhythm.

**Blood tests** – Blood samples are taken to identify your blood group and to assess how certain organs, such as the liver and kidneys, are working within your body.

**MRSA screening** – Methicillin Resistant Staphylococcus Aureus (MRSA) is a particular type of bacteria which is resistant to many, but not all antibiotics. Around one in three people in the UK carry MRSA on their skin or in their nose. Healthy people may not even be aware that they have MRSA. However, if the bacteria gets into the body through a surgical wound, it can cause serious infection.

Screening for MRSA is done by taking swabs from your nose, throat and perineum area.

**General observations** – Your temperature, pulse, blood pressure, oxygen levels, height and weight are recorded.

procedure. Where possible, try to put measures in place to assist you when you return from hospital.

During your first week at home, you will not be able to do much. We advise that you have someone at home with you during this time. If this is not possible, please inform your nurse case manager as soon as possible so that we can help you to make arrangements.

**Managing your pain**

You will be given painkillers to take home with you. You should take them regularly to allow you to cough and breathe deeply without discomfort. When you are ready to cut down on the amount of tablets you are taking, reduce the strongest painkiller first, either by missing a dose in the middle of the day, or by taking one tablet instead of two for each dose. If your pain remains well controlled, continue to take the other painkillers for the next day or two, and then reduce the next strongest painkiller. Leave the night dose until last, as this helps to ensure a good night’s sleep. After you have phased out the strongest painkillers, you can then start to reduce the others.

**Constipation**

Constipation can occur following surgery. This is due to the effects of the anaesthetic and painkillers slowing down normal bowel function. You will be sent home with laxatives to help you to go to the toilet more regularly. Try to drink plenty of fluids and eat a well balanced diet, with added fruit and fibre.

**Driving and daily life**

You should not drive for at least one week following the procedure and you should take at least two weeks off work.
bloodstream via a cannula (usually in your arm). You will be shown how to do this. The pump has been specially programmed to prevent overdosing. If you still need strong painkillers after the PCA is removed, these can be given as tablets.

- **Paracetamol**: You will also be given regular paracetamol, providing you are not allergic to it.

**Personal hygiene**
You may require some help with your personal hygiene in the first few days. The nurses are available to assist you if necessary.

**Mobilisation**
You will be encouraged to get out of bed and do some gentle exercises the day after your VATS biopsy. The physiotherapists and nurses will help you carry out your exercises regularly.

You will also be given a small injection of enoxaparin (a blood-thinning medicine) to help prevent blood clots from forming in your legs.

**Going home**
Typically, you should expect to remain in hospital for three to five days. The doctors and nurses will assess your progress daily and let you know when you are expected to be fit enough to go home.

**Arranging help**
Before you come in for your operation, you should try to think about how you will manage at home after the

---

**Medicines check**
Please bring a copy of your prescriptions with you to the clinic. If this is not possible, please bring with you all the medicines you are currently taking, including over-the-counter and herbal medicines, inhalers, eye drops, creams and patches. You will also need to bring these medicines with you when you are admitted to hospital (preferably in their original containers).

If you are taking any blood-thinning medications (also called anti-platelet medicines or anticoagulants) such as aspirin, clopidogrel or warfarin, you will normally be asked to stop these in advance of your admission.

You should also inform us of any allergies you may have.

**What will happen on the day of my procedure?**
- You will not be able to eat or drink for around six hours before the procedure. This is to reduce the risk of you inhaling food while you are under anaesthetic.
- You will wear an identity band attached to your wrist or ankle. You will also need to wear a red alert band if you are allergic to any substance.
- You will be asked to wear a theatre gown and you will be fitted with some elasticated (TED) stockings to reduce the risk of deep vein thrombosis.
- The doctor will draw an arrow on the side of your chest that the procedure is to be performed on.
• You will be accompanied to the anaesthetic room by a nurse, where monitoring equipment will be attached to your chest. This will monitor your heart rate, blood pressure and blood oxygen supply during the procedure.
• You will be asked to breathe some oxygen through a mask.
• A plastic tube (cannula) will be inserted into a vein in your arm and you will be given an injection to make you go to sleep. The procedure is then performed as described earlier in the leaflet.
• A urinary catheter may be inserted. This will be done when you are asleep.

What happens after the operation?

After the procedure, you will wake up in the recovery room. You will have a cannula in your arm so that we can give you fluids and medicines, such as antibiotics. You should also expect to be wearing an oxygen mask over your nose and mouth until your oxygen levels have returned to normal. It is important that you take deep breaths and cough, as this will help to keep your lungs free from infection.

The nurses will look after you and monitor your condition. They will also check the drainage and air bubbling in your chest drain if you have one, and assess your levels of pain.

Some patients experience nausea (feeling sick) as a result of the anaesthetic. If you feel nauseous or dizzy, please tell one of the nurses.

Once you have recovered from the anaesthetic and are comfortable, you will be transferred to the ward.

Looking after your chest drain

Following the procedure, you may have a chest drain in place. This is used to drain air and fluid from the pleural space in between the lung and the chest wall. The chest drain may be attached to suction, which helps your lung to re-expand more quickly but restricts your mobility for a short time.

Any fluid removed from the pleural space is collected in a bottle attached to the chest drain. You will need to keep the chest drain bottle in an upright position, below waist height. If the bottle falls over or becomes disconnected, you should tell the nurse immediately.

The chest drain will be removed when there is no air bubbling and fluid has almost stopped draining. The time this takes varies amongst individual patients. When the drain is removed, a stitch, which is already in the chest wall, is used to seal the wound. After five days the practice/district nurse will usually remove the stitch.

Pain management

All operations will cause some pain. The nursing staff will regularly assess your level of pain and minimise it where possible. Different methods of pain control can be used so it is important that you tell the nursing staff how severe the pain is. When the pain is well controlled, you are able to breathe deeply and move more effectively, which helps you to recover more quickly.

Methods of pain control used include:

• **Patient controlled analgesia (PCA).** PCA is a form of ‘on demand’ pain relief. By pressing a button, you can activate a pump which sends a small dose of a strong painkiller into your