

Respiratory medicine

# Nebulised antibiotic assessment

## Information for patients, relatives and carers

### Introduction

This leaflet has been designed to give you information about **nebulised antibiotic assessment**. We hope it answers some of the questions that you or those who care for you may have. It is not meant to replace the discussion between you and your medical team. It aims to help you understand more about what is discussed. If you have any questions about the information below, please call us at the Lung Function Labs (see Useful contacts, below).

### Nebulised antibiotic assessment

This test makes sure nebulised antibiotics will be safe for you to take. We do it when your doctor decides they might be the right treatment for you.

Patients with conditions like bronchiectasis can be very prone to repeated chest infections caused by a bacteria called pseudomonas.

This can be damaging to your lungs long term. It can also lead to frequent hospital visits if normal antibiotics are not effective at clearing the infection. Sometimes your doctors may want you to try inhaled antibiotics as a different way of treating the infection.

In some patients, the inhaled drugs can cause some chest tightness. This is why we give you a test dose of medication in the lung function lab. We want to know about this tightness and make sure it does not happen when you take nebulised antibiotics at home.

If you do get chest tightness, we can give you another nebulised medication, called salbutamol, before giving the antibiotics.

The test will last about 90 minutes.

### What to expect on the day

You will be seen by a member of the respiratory physiology team. These are healthcare professionals who help diagnose and treat patients with lung disease and breathing problems.

We start by checking:

- your recent medical history to make sure it is safe to perform the tests
- your height and weight so that we can interpret the results correctly

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You will perform the tests using a mouthpiece attached to the measuring equipment. You will also wear a nose clip so that no air can pass through your nose. This is to make sure that we measure all the air that you breathe.

We will normally ask you to perform each test a minimum of three times. This makes sure the results are consistent. You will be able to rest in between the measurements.

We will always ask for your verbal consent before performing any tests.

The test has 3 stages.

## Stage one – spirometry

This test looks at:

- the volume of air you can exhale
- the speed at which you can exhale

The respiratory physiologist will ask you to blow as fast and as long as possible into a device called a spirometer. This test usually takes about 15 minutes.

It is important we get accurate and reliable readings. We will not be able to move onto stage two if we cannot get good repeatable measurements or if your values are below a set point.

## Stage two – inhaling medication solution

Once we have repeatable spirometry measurements in stage one, we will start the main part of the nebuliser assessment.

If you regularly use salbutamol nebulisers or inhalers at home, we will give you a dose of this first.

Immediately after this, we will give you an antibiotic solution to inhale using the same nebuliser, until the full dose has finished.

## Stage three – repeating spirometry measurements

After the nebuliser has finished, you will wait for 15 minutes before repeating the spirometry manoeuvres. This is how we can monitor for any changes in the values you achieve.

We monitor you to check that the values do not fall by 20% or more during the time you are with us.

During this period, you may experience some symptoms such as wheezing and coughing. This is normal and will often go away by itself while we wait to repeat the spirometry measurements.

After 30 minutes, we will repeat spirometry for a second time to be sure that your values are similar to what you achieved at the start of testing. If this is the case, and you feel well, the test is over, and you are free to go.

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If the spirometry values do not match, or you are still experiencing symptoms such as cough, wheeze or chest tightness, we may give you some salbutamol via the nebuliser to improve these symptoms.

We will then wait another 20 minutes to allow the salbutamol to take effect and repeat the spirometry again. The results and symptoms should have improved at this point, and you will be free to go.

We will pass your results to your doctor. They will decide about your treatment. Someone will contact you to teach you how to prepare the medication for use.

## How do I prepare for the test?

**Please make sure you know which hospital to come to. This will be on your appointment letter.**

To get the best possible results, we ask that you:

- do not smoke on the day of the test
- do not drink alcohol for at least four hours before the test
- do not do heavy exercise at least 30 minutes before the test
- **do** wear loose and comfortable clothing on the day of the test

If you take inhalers, we are happy for you to continue taking these as you would normally, as this will better mimic your situation at home. However, if you already use salbutamol nebulisers, and can do so, please avoid using these the day of the test.

**If you are unsure about your medications, please contact the Lung Function Lab for further advice.**

If your doctor has given you a prescription or any medication specifically for this test, please bring these with you.

## Side effects

These tests are very safe and there are rarely any issues after testing. As mentioned before, you may get some chest tightness from the inhaled antibiotic. You may also get some light headedness from the spirometry test itself.

These side effects will only usually last as long you are with us and should not affect you after testing is over.

## Useful contacts

Your appointment letter will tell you which hospital the test is booked at. The telephone numbers for each site are listed below.

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Lung Function Lab numbers:

Hammersmith Hospital

020 3313 2352

St Mary's Hospital

020 3312 6022

If you need to change your outpatient appointment with the doctor/nurse you need to call the outpatient booking office on 020 3313 5000.

For information about accessing our hospital sites, including public transport and parking information, please visit the Trust's website: [www.imperial.nhs.uk](http://www.imperial.nhs.uk)

### **If you smoke, have you considered quitting?**

**Smokefree** – support and advice for those looking to stop smoking: [www.nhs.uk/smokefree](http://www.nhs.uk/smokefree)

## How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any **suggestions** or **comments** about your visit, please either speak to a member of staff or contact the patient advice and liaison service (**PALS**) on **020 3312 7777** (10.00 – 16.00, Monday to Friday). You can also email PALS at [imperial.pals@nhs.net](mailto:imperial.pals@nhs.net) The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street  
London W2 1NY

Email: [ICHC-tr.Complaints@nhs.net](mailto:ICHC-tr.Complaints@nhs.net)

Telephone: **020 3312 1337 / 1349**

## Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team: [imperial.communications@nhs.net](mailto:imperial.communications@nhs.net)

## Wi-fi

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