

## Respiratory medicine

# Histamine challenge test

## Information for patients, relatives and carers

### Introduction

This leaflet has been designed to give you information about **histamine challenge test** and 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 but aims to help you understand more about what is discussed. If you have any questions about the information below, please contact us.

### The histamine challenge test

The test is designed to help diagnose asthma by testing how 'sensitive' your airways are. Histamine is a substance found naturally within your body. It causes the airways to tighten up in patients with asthma (who have hyperactive airways). For this test you will inhale increasing doses of histamine. At each stage we will check to see if your airways react.

The duration of the test will be about 90 minutes. There are three stages to this test:

### Stage one – spirometry

This test looks at the volume of air you are able to exhale and 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 fifteen (15) minutes.

It is important to obtain accurate and reliable readings. If we are unable to get good repeatable measurements or if your values are below a set point, we will not be able to move on to the next stage.

### Stage two – inhaling histamine solution

Once we have good repeatable spirometry measurements in stage 1 we will start the histamine challenge test. We are looking for a 20% drop in your lung function.

There are five cycles, each taking approximately 3 minutes. We have very strict criteria as to when to terminate the test and will do so as soon as you reach that point.

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This stage will involve you inhaling histamine solution via a nebuliser for 2 minutes. You will then wait for 30 seconds before performing spirometry. We will repeat spirometry again after 90 seconds and 3 minutes respectively. We will then proceed to a slightly higher dose of histamine.

The stage is completed once we have observed a 20% reduction in your lung function or all the histamine concentrations have been inhaled.

### Stage three - recovery

The Physiologist will give you Salbutamol via a nebuliser. They will then ask you to wait for 20 minutes before repeating spirometry. This is to ensure that your breathing is back to normal before you leave the hospital.

### Preparation for the test

**Please check your appointment letter to ensure you know which hospital to attend.**

To get the best possible results please do not:

- smoking for at least six hours prior to the test
- consume caffeinated drinks (chocolate, tea, coffee, cola etc.) at least four hours prior to the test
- take alcohol for at least four hours prior to the test
- do heavy exercise on the day of the test
- wear loose and comfortable clothing on the day of the test

We ask that prior to the test **you must not use your inhalers and/or medications** for the time period below:

Medication (Trade name)	Stop from (before appointment)
Atrovent	6 hours
Bricanyl, Salamol Easibreathe, Salbutamol Easihaler, Ventolin	8 hours
Alvesco, Clenil, Duoresp Spiromax, Flutiform, Fostair, Pulmicort, Sereflo, Seretide, Sirdupla, Symbicort, Qvar	12 hours
Braltus, Incruse ellipta, Relvar ellipta, Spiriva Respimat, Spiriva Handihaler	24 hours
Aminophylline, Phyllocontin, Uniphyllin	24 hours
Antihistamine tablet (e.g. Cetirizine, Fexofenadine)	72 hours
Montelukast	4 days

**If you are unsure about your medications, please contact the lung function laboratory for further advice.**

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## Additional information

These tests are very safe and there are rarely any issues after testing. As with all medication there is a risk of side effects (very rarely). These include: Feeling sick, stomach pains, dizziness, tiredness, itchy eyes, runny nose, sore or irritated throat, chest tightness, breathlessness and cough / wheeze. Such side effects usually last for a few hours only with no long-lasting impact on your breathing.

## Useful contacts

### **Lung Function Laboratory:**

St Mary's Hospital            020 3312 6022

Charing Cross Hospital    020 3311 7180

Hammersmith Hospital    020 3313 2352

Monday to Friday, 09:00 to 17:00

### **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)

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## 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 3313 0088** (Charing Cross, Hammersmith and Queen Charlotte's & Chelsea hospitals), or **020 3312 7777** (St Mary's and Western Eye hospitals). 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

Wi-fi is available at our Trust. For more information visit our website: [www.imperial.nhs.uk](http://www.imperial.nhs.uk)

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