

INFORMATION FOR PATIENTS

Mannitol bronchial challenge test

The Mannitol challenge is a test to determine if your airways are oversensitive. Over sensitivity can be caused by inflammation and is a feature of asthma. Your doctor has requested this test which will be performed in the Respiratory department.

Mannitol is a naturally occurring sugar commonly used as an ingredient in tablets. When inhaled by people with oversensitive airways, Mannitol causes the airways to narrow. This is monitored using a simple breathing test.

Airway narrowing can cause breathlessness, chest tightness, cough or wheeze. If any of these occur it will be short-lived, and any effect will be quickly reversed with a salbutamol inhaler. Mannitol will not have any effect on the airways of people who do not have over sensitive airways.

What will happen during the test?

During the challenge, Mannitol is inhaled as a powder in increasing doses from an inhaler. A simple breathing test is performed after each dose.

Before your test

In preparation, please stop taking the following medication for the length of time shown on the following table:

Time to withhold	Medication
6 to 8 hours	Sodium Cromoglycate, Nedocromil sodium.
8 hours	Salbutamol, Ventolin, Salamol, Terbutaline, Bricanyl, Easi-breathe
12 hours	Beclomethasone, Clenil, Qvar, Budesonide, Pulmicort, Fluticasone, Flixotide, Kelhale, Soprobec, Ipratropium Bromide, Atrovent.
24 hours	Seretide, Fostair, Luforbec, Symbicort/DuoResp Spiromax, Flutiform, Oxis, Formeterol, Serevent, Salmeterol, Duaklir, Fobumix.
24 hours	Theophylline, Uniphyllin, Neulin, Slo-phyllin, Aminophylline, Phyllocontin.
72 hours	Tiotropium Bromide, Spiriva, Braltus, Anora Ellipta, Trimbrow, Trelegy, Incruse Ellipta, Spiolto Respimat, Tiogiva, Acopair.
72 hours	Antihistamines e.g., Cetirizine, Zyrtec, Chlorphenamine, Piriton, Fexofenadine, Loratadine, Ilaxten, Acrivastin, Neoclarityn.
96 hours	Montelukast, Singulair.

If you feel you are too breathless without any of these then you must take them and contact the department.

If you are taking any inhaled medications or allergy medications that are not listed in the table, please contact the department as soon as possible in order to discuss whether they need to be stopped. Please continue to take all other prescribed medication as normal and bring a list of your current medications

Before attending for your test, please:

- Do not do any vigorous exercise on the day of the test.
- Avoid all caffeinated drinks or food (i.e., chocolate) on the day of the test.
- Do not wear any tight clothing that may restrict your breathing.
- Do not smoke for at least six hours.
- Avoid eating a heavy meal for two hours.
- Do not drink alcohol for four hours.

Please contact the department if you have experienced any of the following:

- Current or recent chest infection (within the last two weeks).
- Recent eye, stomach or chest surgery.
- Heart attack within the last month.
- Attended an Emergency Department in the last four weeks.
- Chest pain on the day of your test.
- Currently pregnant / breast feeding.

Please allow approximately 90 minutes for this appointment.

Results

The results will go to your doctor who will explain them to you at your next clinic visit. Please note that you may not be given the results on the day of your test.

What if I need hospital transport?

You will need to arrange transport by telephoning the following numbers between 7am and 9pm, Monday to Saturday (please use the number for the area you live):

- Nottinghamshire: 0345 266 9662
- Derbyshire: 0300 300 3434
- Lincolnshire: 0848 357 1556.

If the appointment given is not suitable, please contact the department as soon as possible.

Contact details

Respiratory department: 01623 672259.

King's Mill Hospital	Newark Hospital
Mansfield Road	Boundary Road
Sutton in Ashfield	Newark
Notts	Notts
NG17 4JL	NG24 4DE

Further sources of information

NHS Choices: www.nhs.uk/conditions

Our website: www.sfh-tr.nhs.uk

Patient Experience Team (PET)

PET is available to help with any of your compliments, concerns or complaints, and will ensure a prompt and efficient service:

King's Mill Hospital: 01623 672222

Newark Hospital: 01636 685692

Email: sfh-tr.PET@nhs.net

If you would like this information in an alternative format, for example large print or easy read, or if you need help with communicating with us, for example because you use British Sign Language, please let us know. You can call the Patient Experience Team on 01623 672222 or email sfh-tr.PET@nhs.net.

This document is intended for information purposes only and should not replace advice that your relevant health professional would give you. External websites may be referred to in specific cases. Any external websites are provided for your information and convenience. We cannot accept responsibility for the information found on them. If you require a full list of references for this leaflet, please email sfh-tr.patientinformation@nhs.net or telephone 01623 622515, extension 6927.

To be completed by the Communications office
Leaflet code: PIL202512-05-BCT
Created: January 2018 / Revised: December 2025 /
Review Date: December 2027