Monoclonal antibody treatment for asthma

We have sent you this factsheet because you are on the waiting list for monoclonal antibody treatment.

This is an additional, injection-based, biologic treatment for your asthma, on top of your usual inhalers and tablets. This was discussed with you in one of your appointments with your doctor.

We are sending this information to help answer any questions you might have. If you have any further questions, please ask your nurse or doctor.

What are biologics?

Biologics are a group of drugs used to help with uncontrolled difficult asthma which is not responding to maximal treatment with inhalers and/or tablets. They work in different ways and are tailored to each individual.

We will decide which treatment is suitable for you based on the results of your previous blood tests.

The treatments are in injection form only. They are given at different frequencies, from fortnightly to monthly to every two months, depending on the medication chosen. When we decide on the best treatment, we will consider these practicalities.

There are two 'types' of asthma that can be treated by biologic injections: allergic asthma and eosinophilic asthma.

People with allergic asthma can have biologic treatment by injection if:

- they have a positive skin prick test in reaction to certain airborne allergens, AND
- their blood test results show raised immunoglobulin (IgE, antibodies in the immune system).

People with **eosinophilic asthma** have raised eosinophils (a type of white blood cell involved in allergies) on blood tests (and sometimes in sputum or biopsies). These eosinophils are believed to cause the inflammation involved in the development of asthma symptoms.

Starting your treatment

We will send you a letter to let you know the date of the start of your treatment. We will try to book you in with plenty of time to make arrangements for work or your daily routine.

For your first few appointments, we will 'trial' the treatment with you to see whether it works for you.

What to expect at your first injection or infusion appointment

Please book in at the respiratory centre reception desk to let us know that you are here.

A clinic nurse will call you in when it is time for your appointment and you will have various tests. You will be familiar with spirometry (blowing into a machine) and measurement of fractionated exhaled nitric oxide (FENO). There will also be a number of questionnaires to give us an idea of your current status before you start the treatment.

A member of the medical team will ask you to sign a consent form and give you an opportunity to ask any questions about the treatment.

Some injection medications will be prepared in the room. Others are pre-filled syringes or pre-made bags of solution which are ready to use. This will depend on the type of drug you need. Some of the drugs, once made up, have to be used (or thrown away). This is why it is important to let us know in plenty of time if you cannot make the appointment.

Your first three appointments for injections or infusions of any of the biologic drugs will last for two hours each. You will need to stay for the full two hours and you will be observed in the clinic room for any reactions.

Before you leave the clinic you will be told who to contact if you have a delayed reaction. If you have a reaction and need to go to a GP or hospital for treatment, please tell them that you have had this treatment

You will need to come back in after two, four or eight weeks, depending on the treatment. Please book your next appointment in at reception before you leave. This will ensure that we are expecting you and have prepared your medication in time for your appointment.

After the trial period

When you have finished your trial, we will discuss whether it is best to carry on with the treatment. If you continue with the treatment, you may be able to have your treatment at home in the long run.

It is very important that you come to your follow-up appointments. If your symptoms have not improved after the trial and we decide that it is best not to continue, your doctor will discuss the alternatives with you.

Follow-up appointments

There are two types of follow-up appointments:

- Follow-up appointments while we are assessing whether the treatment will work for you
 - You will need to come in for your first few appointments as explained above. We will observe you for 30 to 60 minutes depending on
 - your reaction. If you are having an intravenous infusion, we will need to observe you for 30 to 60 minutes after the normal saline has been flushed through.
- Follow-up appointments once we have seen that the treatment is working
 These will be scheduled on different days of the week. We will let you know about any
 changes. The appointment will last for about 30 minutes. We will not need to do as many
 assessments as during the trial.

Will the treatment definitely work?

We cannot guarantee this, but we have chosen the treatment because we think there is a good chance the treatment will improve things.

Decisions about whether the treatment is working (and/or working 'well enough') will be made either at the end of the trial, or in some cases part way through (to allow us to try other treatments rather than persisting with something that doesn't work).

These decisions will be made by a multi-disciplinary team, with input from your doctor, and taking your views into account. NHS England have strict criteria which we need to follow to continue with the treatment.

Changing or cancelling your appointment

If you need to move your appointment to a different date please contact the respiratory centre on **023 8120 4325** and leave a message if necessary.

Please do not contact patient services or the 'Choose and book' service, as we will not be able to note your changes.

Risks and side effects

The most common side effects of monoclonal injections are:

- redness at the injection site
- discomfort at the injection site
- headaches

Some people may have a fever and abdominal pain. It is also common to feel tired on the day of the injection.

Omalizumab

In very rare cases (an estimated 0.1 to 0.2% of cases), Omalizumab treatment can cause anaphylaxis (a severe and potentially life-threatening allergic reaction). This is most common during the first three injections, but can occasionally happen when someone has been having the treatment for a long time.

Reslizumab

Risks and side effects of Reslizumab include:

- muscle pain, known as myalgia
- anaphylaxis

Mepolizumab

Risks and side effects of Mepolizumab include:

- upper abdominal (tummy) pain
- reaction to the injection
- back pain
- eczema
- fever
- headache
- allergic reactions
- increased risk of infection
- a stuffy nose

Benralizumab

Risks and side effects of Benralizumab include:

- fever
- headache
- allergic reactions, which may be delayed
- sore throat

After your injections, we will observe you to check for any signs of a reaction to the treatment, especially after each of your first three injections.

Travel

Your immune system may be less effective during your treatment, so you may be more likely to pick up infections. If you are planning to travel abroad, please speak to your doctor. They will be able to advise you.

Alternative treatments

This is an additional treatment to manage difficult asthma. You will need to continue with your current inhaled therapies.

If you have concerns about this treatment, please discuss these with your doctor.

Useful links

If you have any questions or concerns, please speak to your doctor or the asthma and allergy nurses in the clinic. They will also be able to give you more information about the specific treatment you are having at the clinic.

Asthma UK website www.asthma.org.uk/

Omalizumab

bnf.nice.org.uk/drug/omalizumab.html

Reslizumab

bnf.nice.org.uk/drug/reslizumab.html

Mepolizumab

public.gsk.co.uk/search-results.html?_charset_=utf-8&q=mepolizumab&%3Acq_csrf_token=undefined

Benralizumab

www.medicines.org.uk/emc/product/8918

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