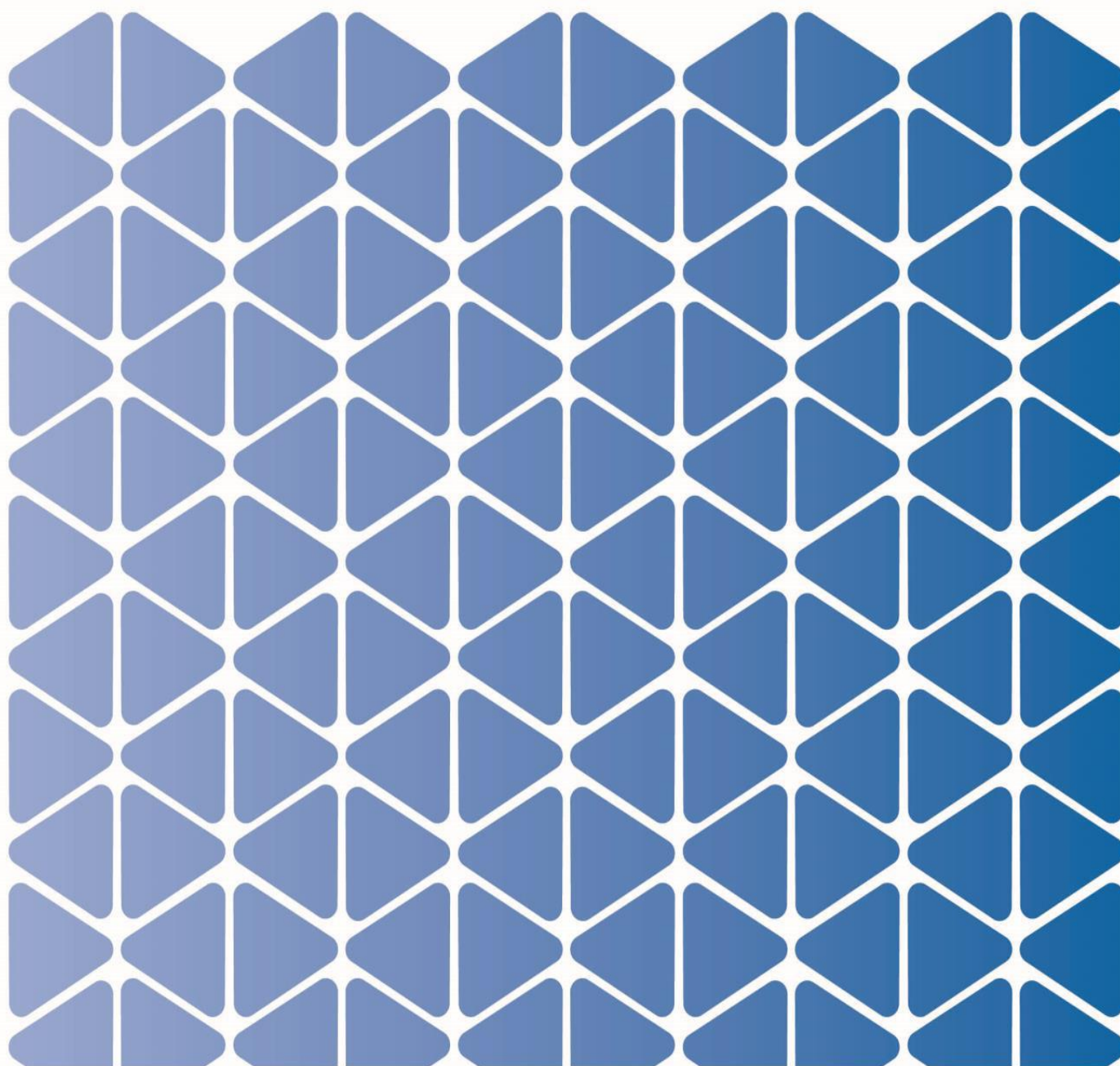


PATIENT INFORMATION

# Allergen Immunotherapy



## **Allergen Immunotherapy**

Allergen Immunotherapy is sometimes called desensitization. We will refer to it in this information booklet as 'immunotherapy'.

This information booklet only focusses on environmental airborne allergies like pollen and house dust mite allergy. There are separate information sheets on food immunotherapy.

Immunotherapy may be given in hospital by injection or by under the tongue (the sublingual route). The choice of therapy depends on a number of factors which will be considered by your child's allergy team and your preferences. Please take time to read this information booklet that describes what immunotherapy is, how it is given, the common side-effects, and what to be aware of after each treatment dose.

If you have any further questions, please contact the Allergy Team on the contact details at the end of this information.

### **What is Immunotherapy?**

Immunotherapy is a way of 'teaching' the immune system to tolerate allergic triggers and improves symptom severity and reduces rescue medication use.

### **Which conditions can immunotherapy help with?**

We can use immunotherapy for people who suffer with severe seasonal allergic rhinoconjunctivitis ('hayfever'), to grass and birch pollen. We can also treat people with severe house dust mite allergy and occasionally those with pet allergies such as dog, cat and horse.

Most allergic rhinitis or allergic rhino conjunctivitis symptoms can be controlled with medication. However, if these treatments are not effective then we may discuss immunotherapy with those patients who are eligible.

It is also possible to treat people who have had severe allergic reactions to bee/wasp venom.

Immunotherapy can induce symptom remission for five years, however it is not a cure. Other treatment for allergic rhinitis/allergic rhinoconjunctivitis will still have to be taken.

## How does immunotherapy work?

Immunotherapy injections and the sublingual preparation alter the way in which the immune system reacts to a particular substance. By giving small amounts of that substance at regular intervals, tolerance increases. The end result is that you become "immune" to the substance, so that you can tolerate it with fewer or no symptoms.

Immunotherapy is specific to one substance. In other words, if you have injections for grass pollen allergy, it will not affect your allergy to birch pollen or house dust mite for example. Immunotherapy works better in individuals who are only allergic to one or two different things because the reduction in symptoms is more obvious.

## Who can have it?

- Immunotherapy works in both children and adults and is available for children over the age of six years.
  - Children and young people with dangerous allergic reactions to bees or wasps, involving difficulty in breathing or change in level of consciousness.
  - Children and young people with allergic rhinitis who have a positive skin test or specific blood test to the particular substance they are treated to
- and:**
- When a full trial of treatment of all first line medications over a season has been inadequate (long-acting antihistamines, specific intranasal steroids, Montelukast & eye drops)
- and:**
- are willing to comply with three years of treatment, and/or regular hospital visits and follow up.
- and:**
- have well controlled asthma

## Who Can't have it?

- Children and young people with poorly controlled asthma
- Those who have not maintained first line medication use
- People with allergies to substances in the treatment
- Those with very severe eczema
- Children and young people with autoimmune conditions
- Young women who are pregnant

## How effective is immunotherapy?

About 3 out of 4 patients with **hay fever** experience significant improvement with immunotherapy usually seen in the second pollen season. Most of the time

symptoms are reduced rather than abolished and some medications are often still required. The effectiveness improves each year that treatment continues. Initial improvement with house dust mite treatment is seen within 14 weeks.

In **bees and wasps** allergy (hymenoptera) the protection against further dangerous allergic reactions to stinging insects varies between 80 and 95%.

## How is immunotherapy given?

There are two forms of immunotherapy available. These will also be discussed with you:

1. **Subcutaneous injection** – Also known as ‘SCIT’. The extract is injected under the skin of the upper arm. The injections are uncomfortable and may sting a little. You or your child will then have to remain in Children’s Clinic for 1 hour after each injection. The injections given are of incremental strength until the maintenance dose has been reached. Injection immunotherapy is not available for children with asthma. The number of injections given depends upon the allergen in question:
  - For grasses and tree pollen immunotherapy the course comprises five injections, each given 7-14 days apart prior to the pollen season **for three years**. The effectiveness increases each year. Injections are given between November and January.
  - For venom immunotherapy, the course is usually one injection per week for 12 weeks followed by one injection per month *for three to five years*. There are a few different treatment regimens available that will be discussed with you
2. **Sublingual (under the tongue)** – also called ‘SLIT’ - A tablet or drops of solution are placed under the tongue every day and left to dissolve. They take about 1-2minutes to fully dissolve. This can be self-administered at home although your child will have their first dose in hospital and been observed for an hour afterwards. The treatment is taken **every day** for three years.

## What are the side-effects?

**For injectable immunotherapy** (SCIT) the most usual side-effects are itchiness or soreness at the site of injection which may persist for several hours. However, severe allergic reactions can occur. The child or young person will be observed for an hour following each injection in case signs and symptoms of hypersensitivity should develop. These may comprise rash, swelling, faintness, difficulty in breathing, change in level of consciousness or anaphylaxis. If these symptoms occur, then they will be managed with treatment in hospital.

**For sublingual immunotherapy (SLIT)** the most usual side effects are an itchy mouth or palate, but this usually disappears after the first few weeks of treatment. For some children and young people, antihistamines need to be taken just before each dose to reduce these symptoms. There is a rare condition called Eosinophilic Oesophagitis (EOE) that may be induced or exacerbated in some individuals.

If either of these treatments worsen any asthma or eczema, then we will stop treatment. Both types of immunotherapy may exacerbate any underlying autoimmune diseases.

### **How long will the benefit last for?**

There are only a few long-term studies of how long the benefit of treatment lasts after the treatment is stopped. They suggest most people report improved symptoms for at least three years after stopping treatment. "Anecdotal experience" suggests that the benefit often lasts a lot longer, and that returning allergies are often milder than that experienced originally.

### **Additional information**

- 1. It is essential that you and your child attends all their appointments. They also need to be well at the time of their first immunotherapy visit.** If they are unwell, we will need to postpone their visits. If they are having the subcutaneous course this may impact upon the number of injections they need, as if a child misses a dose, we often need to give a lower dose than usual and increase the overall number of injections they will have.
- 2. If your child is having injectable immunotherapy, they should avoid a heavy meal for two hours before their injection. They will also need to avoid strenuous exercise and hot baths for 24 hours following their injection.**
- 3. Flu vaccine – we cannot give the injectable immunotherapy within 14 days of the live nasal flu vaccine.**

### **What happens during the immunotherapy visit?**

On arrival your child will be seen by an allergy nurse who will take your child's temperature, pulse and blood pressure and check they are well enough for the procedure. We will discuss any concerns you may have and obtain written consent to proceed with the treatment. Once your child has had their dose, then will observe your child for 1-2 hours or until they feel well enough to go home.

If your child experiences any reaction after leaving hospital, please telephone the Allergy Nurse Specialists or Riverbank Children's Ward, unless it is urgent in which case, seek help accordingly by contacting your GP or local Emergency Department (ED). Contact details will be given to you.

## **Are there any follow up appointments?**

Your child will be reviewed annually in allergy clinic, but we will also schedule telephone calls to see how your child is whilst undergoing immunotherapy treatment.

If we feel that treatment is not working and it is not helping your symptoms then we will discuss stopping treatment with you.

If you have concerns between clinic appointments, you are welcome to contact us too.

## **How do I get repeat prescriptions?**

For sublingual immunotherapy we ask you to contact us (by email or phone) when you have two to three weeks left of tablets or 3 months of the spray. This way we can monitor compliance to treatment and ensures we don't waste any unnecessary medications. We then ask you to pick up the medication from either Worcester Royal Hospital or Alexandra Hospital in Redditch, whichever is more convenient for you. This medication is not prescribed by GPs.

## **The Brit Registry**

We will also give you some information about taking part in some research about immunotherapy. The National Brit registry helps us monitor your child's symptoms and more information about this will be given at your clinic appointments. Taking part is optional.

## Quick summary of possible advantages and disadvantages of each treatment

	<b>Advantages</b>	<b>Disadvantages</b>
<b>Sublingual Immunotherapy SLIT</b>	<p>self-administer the medication at home</p> <p>Serious reactions are less common with SLIT</p>	<p>There are currently only two licensed products for SLIT</p> <p>The medication has to be taken every day for three years</p> <p>Adherence can be a problem</p>
<b>Subcutaneous Immunotherapy SCIT</b>	<p>You don't have to take a daily treatment</p> <p>Four to five injections per year</p> <p>Adherence to programme usually very good</p> <p>Very effective treatment</p>	<p>SCIT is potentially painful and more invasive</p> <p>There is more risk of anaphylaxis and generalised allergic reactions</p> <p>Some lifestyle limitations on days of injections and missed school</p>

**If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.**

### **Patient Experience**

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

### **Feedback**

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

### **Patient Advice and Liaison Service (PALS)**

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

### **How to contact PALS:**

**Telephone Patient Services: 0300 123 1732 or via email at: [wah-tr.PALS@nhs.net](mailto:wah-tr.PALS@nhs.net)**

### **Opening times:**

The PALS telephone lines are open Monday to Friday from 8.30am to 4.00pm. Please be aware that you may need to leave a voicemail message, but we aim to return your call within one working day.

If you are unable to understand this leaflet, please communicate with a member of staff.