

Allergen immunotherapy (AIT) is often recommended for treatment of allergic rhinitis (hay fever) or rhinoconjunctivitis, most commonly due to allergy to pollen, dust mite and animal dander. This treatment may sometimes also benefit allergic asthma, (although it is not suitable when asthma is poorly controlled). AIT may be chosen when symptoms are severe and the allergen is difficult to avoid. It may be recommended when medications don't help, if they result in adverse side effects, when people prefer to avoid medications if they can. There is some evidence to suggest that managing allergic rhinoconjunctivitis in this way may reduce the incidence of developing asthma in young people.

AIT changes the way the immune system reacts to allergens, by switching off allergy. AIT involves the regular administration of allergen extracts, usually over a period of 3 (up to occasionally 5) years. The aim is to create tolerance to allergens, with fewer or no symptoms. If treatment is successful there will be less need for medication, with, in the best cases, no medication needed at all. Three years of AIT can result in at least five to ten years of benefit. Symptoms may sometimes return after this time, and patients may choose to have a repeat AIT course if desired.

There are two different forms of AIT:

- **Subcutaneous** immunotherapy (SCIT) is given by regular monthly injections (just under the skin) using a very fine needle which is generally well tolerated. Most people with allergic rhinoconjunctivitis are allergic to several allergens and up to three allergens can be mixed in one syringe with one particular form of SCIT (*allergoids*, see below). In some cases, clinicians may recommend administering up to two injections at each visit to treat allergy to multiple (up to 6) inhalants. SCIT must be administered at a doctor's surgery or hospital. The currently available SCIT products in NZ are not registered for use with MedSafe, so have not been assessed by MedSafe for safety and efficacy. They are available under section 29 of the medicines act on a named patient basis.
- **Sublingual** immunotherapy (SLIT) is given by drops or tablets, which must be taken daily to be effective. Patients sometimes experience transient mouth or abdominal symptoms when receiving this form of AIT. Normally only one allergen is treated with SLIT. The evidence for a long-lasting effect from SLIT is not as strong. SCIT is daily treatment and is taken at home. Compliance with SLIT is often much lower than with SCIT. There are SLIT tablets registered with MedSafe for treatment of House Dust mite allergy (Actair®) and grass allergy (Oralair®).

Decisions about initiation of AIT will generally be made by a specialist in the area. Currently no SCIT or SLIT products for inhaled allergens are funded in New Zealand. However, some regional health boards in NZ do fund immunotherapy for defined children with allergic rhinitis or rhinoconjunctivitis.

Families should be recommended to see a doctor who has allergy training. Allergy NZ has a specialist list including GPs with allergy training (www.allergy.org.nz). [link to [Allergy specialists and other useful contacts](#)]

Resources for health professionals

The Australasian Society of Clinical Immunology and Allergy (ASCI) has published an Allergen Immunotherapy (AIT) guide for health professionals:

https://www.allergy.org.au/images/stories/pospapers/ASCI_AIT_Guide_2019.pdf

Of note, this document largely relates to the use of native immunotherapy preparations such as Alustal® (which is not currently available). Currently much SCIT in NZ is given as an allergoid immunotherapy product such as Clustek®, which does allow mixing of allergens and which may have an improved safety profile.

E-learning about immunotherapy is also available to health professionals: <https://immunotherapy.ascia.org.au/>

A patient handout explaining immunotherapy is available on <https://www.allergy.org.au/patients/allergy-treatment/immunotherapy>

There is also an FAQ: <https://www.allergy.org.au/patients/allergy-treatment/allergen-immunotherapy-faqs>

EAACI Guidelines on Allergen Immunotherapy: House dust mite-driven allergic asthma (May 2019)

<https://onlinelibrary.wiley.com/doi/full/10.1111/all.13749>