

# A double blind randomized placebo controlled study on the efficacy of intralymphatic immunotherapy in the treatment of grasspollen induced allergic rhinitis.

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In this study we will compare the effect of intra nodal allergen injection with grass pollen to the intra nodal injection with placebo on symptom scores of allergic rhinitis (hay fever) in grass allergic patients.

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	Allergic conditions
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON39544

### Source

ToetsingOnline

### Brief title

ILIT

### Condition

- Allergic conditions
- Upper respiratory tract disorders (excl infections)

### Synonym

Allergic rhino-conjunctivitis, hayfever

### Research involving

Human

## Sponsors and support

**Primary sponsor:** HagaZiekenhuis

**Source(s) of monetary or material Support:** Stichting wetenschappelijk onderzoek KNO Den Haag

## Intervention

**Keyword:** Allergy, Grass, Immunotherapy, Lymphenode

## Outcome measures

### Primary outcome

Primary study outcome measure will be the level of allergic symptoms (VAS score) following intra nasal grass pollen provocation in patients treated with Alutard grass pollen compared with the results for patients treated with placebo.

### Secondary outcome

changes in allergic skin prick test reactivity pre and post immunisation between the groups

changes in serologic allergy tests pre and post immunisation between the groups

changes in serum IgE and Ig4 levels pre and post immunisation between the groups

changes in cellular infiltrates in the nasal mucosa pre and post immunisation between the groups

## Study description

### Background summary

Allergic rhinitis is a globally occurring disease with a still increasing incidence. The mainstay of treatment is aimed at symptom reduction using local or systemic medication. A second treatment modality consists of immunotherapy in which symptom reduction is achieved by modulating the immune

system. Current immunotherapy protocols make use of intradermal injection or sublingual allergen application. These protocols necessitate prolonged participation of patients for up to three years. This gives rise to a high amount of therapy drop out / failure.

A new approach to allergen sensitisation using a shorter strategy of allergen application will improve therapy results and overall costs. Intralymphatic application of allergens is such a new strategy with promising results.

## **Study objective**

In this study we will compare the effect of intranodal allergen injection with grass pollen to the intranodal injection with placebo on symptom scores of allergic rhinitis (hay fever) in grass allergic patients.

## **Study design**

25 patients suffering from allergic rhinitis to grass pollen will receive 3 consecutive intranodal injections with grass pollen (Alutard) in the groin region. These injections will be given once a month. 25 patients in the control group will receive placebo injections in a similar fashion. Prior to allergen injections the level of allergic complaints will be scored using an intranasal provocation test. Two months after final injection a similar intranasal provocation test will be performed. Differences in allergen provocation reactivity (VAS scores) in pre and post immunotherapy nasal provocation tests, will be compared between the groups.

## **Intervention**

allergen provocation tests  
blood samples  
nasal biopsy  
intranodal groin injection

## **Study burden and risks**

All participating patients will undergo extra tests which are not directly related to the standard treatment protocol for immunotherapy. The extra tests consist of one additional allergic skin test, intranasal allergen provocation twice and one additional blood sample. These tests can give rise to mild local allergic reactions (itching of the skin, redness and / or swelling of the skin, sneezing and itching of nose / eyes). More invasive tests are biopsy of the nasal mucosa which can cause minor nose bleeds in some cases and can be treated with minimal discomfort. The intranodal injection in the groin area can cause mild local skin reactions. Systemic allergic reactions (anaphylactic shock, asthma exacerbation) to allergen provocation have been sporadically reported. However in literature no such effect has been reported in the case of intranodal

injection. To prevent the occurrence of these effects patients with instabel asthma will be excluded from participation. Furthermore allergic sensitization will be performed at the department of radiology. This department is by nature triggered to detect and if necessary treat allergic systemic reactions (anaphylaxis due to contrast allergy).

## Contacts

### Public

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### Scientific

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## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

Sensibilisation to grass pollen

age between 18 and 50 years old

Informed consent

## Exclusion criteria

No informed consent  
instable or steroidtherapy dependent atopic astma  
rhinosinusitis  
nasal polyps  
vasomotore rhinitis  
immunosuppressive medication  
immuondeficiency (IgG-IgA deficiency, HIV-AIDS)  
pregnancy or nursing  
participation in other medical study  
history of desensibilisation therapy  
Significant cardiovascular disease  
Severe impaired renal function  
Hypersensitivity to aluminiumhydroxid  
Children until age of 18  
Blood donation within previous 30 days  
Surgery within the previous 30 days  
Use of investigational drugs within previous 90 days  
Mastocytosis  
Hypertension  
Active infectious disease  
Significant hepatic disease  
Significant renal disease  
Significant hematological disorder  
Significant pulmonary disease  
Moderate or severe asthma  
Autoimmune disease  
History of malignancy.  
Contraindicated medications were immunosuppressive agents, beta-blockers, ACE-inhibitors, and tricyclic antidepressants.

## Study design

### Design

Study phase:	3
Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)

Control:	Placebo
Primary purpose:	Treatment

## Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	07-11-2011
Enrollment:	50
Type:	Actual

## Medical products/devices used

Product type:	Medicine
Brand name:	Alutard SQ 1000 SQ-U /ml
Generic name:	Alutard
Registration:	Yes - NL outside intended use

## Ethics review

Approved WMO	
Date:	25-05-2011
Application type:	First submission
Review commission:	METC Leiden-Den Haag-Delft (Leiden)
	metc-ldd@lumc.nl

Approved WMO	
Date:	13-10-2014
Application type:	Amendment
Review commission:	METC Leiden-Den Haag-Delft (Leiden)
	metc-ldd@lumc.nl

## Study registrations

## Followed up by the following (possibly more current) registration

No registrations found.

## Other (possibly less up-to-date) registrations in this register

No registrations found.

## In other registers

Register	ID
EudraCT	EUCTR2009-017761-36-NL
CCMO	NL28838.098.11