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Sublingual immunotherapy (SLIT) with grass pollen allergen for grass pollen induced rhinoconjunctivitis in children

Submission date 20/12/2005	**Recruitment status** No longer recruiting	[_] Prospectively registered [_] Protocol [_] Statistical analysis plan [X] Results [_] Individual participant data
Registration date 20/12/2005	**Overall study status** Completed	
Last Edited 17/08/2009	**Condition category** Eye Diseases	

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

NTR284

Study information

Scientific Title

Acronym
STARDROP

Study objectives
In comparison with placebo SLIT will lead to a clinical relevant symptom reduction in 6 to 18 years old children with a rhinoconjunctivitis due to grass pollen allergy.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Received from local medical ethics committee

Study design
Randomised triple blind placebo controlled parallel group trial

Primary study design
Interventional

Secondary study design
Randomised controlled trial

Study setting(s)
GP practice

Study type(s)
Treatment

Participant information sheet

Health condition(s) or problem(s) studied
Rhinoconjunctivitis, Grass pollen allergy

Interventions
Active treatment:
Oralgen® Grass Pollen (9.500 BU/ml), consists of a mixture of aqueous extracts of the pollen of five grass pollen species in a glycerinated isotonic phosphate buffered solution.

The following grass pollen species are included:
1. Phleum pratense: Timothy, (Timotheegras)
2. Dactylis glomerate: Orchard grass, (Kropaar)

3. Anthoxantum odoratum: Vernal grass, Sweet grass, (Reukgras)
4. Holcus lanatus: Velvet grass, (Echte witbol)
5. Lolium perenne: Ryegrass, Perennial grass, (Engels raaigras)

Other ingredients include sodium chloride, sodium dihydrogen phosphate, disodium hydrogen phosphate, glycerol and water.

Control treatment:
The placebo consists of the non-active excipients, as mentioned above. Placebo treatment group. The placebo consists of the non-active excipients, as mentioned above. Placebo treatment will be delivered in such a way that neither patients nor investigators or other research personnel can make a distinction between verum and placebo vials.

Dose schedule:
The treatment is divided in two phases: a dose escalation phase of 20 days, and a maintenance phase of 2 years. Treatment starts on day 1 with a single drop (one drop 0.05 ml = 475 BU); the dose is increased with one drop per day until day 20 (20 drops = l ml = 9.500 BU). The maintenance dose is 20 drops (= 9500 BU) twice weekly.

Intervention Type
Other

Phase
Not Specified

Primary outcome measure
The primary endpoint is the mean daily total symptom score as administered by the patient in the second year of treatment during the period May-August on the days at which grass-pollen counts exceeded a predefined cut-off level. This second year can be replaced by the first year outcomes depending on the resulting pollen counts (see below).

Cut-off level grass pollen count.
For each day during the period May-August the grass-pollen count will be determined using data from the station in Leiden. The median value of these pollen counts will be used as cut-off-level in this analysis. Subsequently for each study day it will be determined whether the actual pollen count was above or below the resulting cut-off-level.

Year of evaluation.
In case during the second year, in the period of May 15 until June 30, the mean daily seasonal grass pollen count is less than or equal to 25 pollen grains/m3, while this limit was exceeded for the first year, the first year diary outcomes will be considered as primary and will replace the second year diary outcomes.
The replacement for individual patients of the second year by the first year diary outcomes will also take place in case the diary during the second year is insufficiently completed (less than 50% of relevant days) while at the same time the first year is not a lost season.

Efficacy is measured by patient-assessed symptom scores.
Main allergic symptoms are considered to be the following: sneezing; itching nose; watery running nose; nasal blockage; itching eyes.
The intensity of these symptoms is subjectively assessed according to a grading scale: 0 = no complaints; 1 = minor complaints; 2 = moderate complaints; 3 = serious complaints; i.e. the

maximal score amounts to a value of 15.
The period of measurement will be May till August in the years 2002 and 2003; 2003 and 2004. During these periods symptom scores are assessed daily by the patient and recorded in the patient diary.

Secondary outcome measures
1. Investigator assessed symptom-scores during the planned visits in the flowering season
2. Number of medication free days
3. Rescue medication
4. Generic quality of life assessment with COOP/WONCA charts
5. Rhinitis specific quality of life assessment (Juniper)
6. Lower airway symptoms
7. Adverse-effects
8. Compliance

Overall study start date
01/09/2001

Completion date
01/09/2004

Eligibility

Key inclusion criteria
1. Age; between 6 and 18 years.
2. Patients known in general practice with documented clinical history of grass pollen allergy with moderate disease intensity as retrospectively derived from the use of symptomatic allergy medication during the previous grass pollen season i.e. regular use of cromoglycates as nasal spray and/or eye drops and/or regular use of anti-histamine tablets or sprays and/or limited use of local acting or systemically administered corticosteroids
3. Moderate grass pollen allergy as retrospectively derived from allergy symptom scores during the previous grass pollen season. Therefore, the following 5 symptoms are evaluated for the previous season:
3.1 Nasal blockage
3.2 Sneezing
3.3 Itching nose
3.4 Watery running nose
3.5 Itching eyes
The intention of each of these 5 symptoms is (subjectively) assessed by the patient according to a grading scale: 0 = no complaints; 1 = minor complaints; 2 = moderate complaints; 3 = serious complaints (maximal total value is 15). At conclusion the retrospective total value should amount at least a value of 5.
4. Positive grass pollen specific IgE Rast test i.e. RAST score = 2+

Participant type(s)
Patient

Age group
Child

Lower age limit

6 Years

Upper age limit
18 Years

Sex
Both

Target number of participants
204

Key exclusion criteria
1. Clinical history of severe asthmatic symptoms requiring inhalant therapy with daily pulmonary steroids during at least 3 months a year
2. Allergic sensitivity to epithelial, in case the domestic animal is present in the family home
3. The intention to subject the patient to surgery of the nasal cavity in the course of the study
4. Previous immunotherapy
5. Contraindications to sublingual immunotherapy ie:
5.1 Malignancies and serious disorders of the oral cavity
5.2 History of status asthmaticus and anaphylactic shock
5.3 Aggressively developing asthmatic symptoms
5.4 Serious chronic inflammations, chronic disorders associated with fever, particularly of the bronchial tubes
5.5 Irreversible, secondary changes in reactive organs (emphysema, bronchiectasis)
5.6 Autoimmune diseases and immunodeficiency
5.7 Concurrent therapy involving immunosuppressives
5.8 Systemic and collagen diseases
5.9 Tuberculosis of the lung and tuberculosis
5.10 Serious psychological disorders
5.11 Documented hypersensitivity to glycerol
5.12 Pregnancy
5.13 Use of beta-blockers
6. Inability to communicate in the Dutch language
7. Exposure to any investigational drug within 30 days of enrolment

Date of first enrolment
01/09/2001

Date of final enrolment
01/09/2004

Locations

Countries of recruitment
Netherlands

Study participating centre
Erasmus Medical Center,
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Sponsor information

Organisation
Artu Biologicals Europe B.V. (Netherlands)

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Sponsor type
Industry

ROR
https://ror.org/022w0b336

Funder(s)

Funder type
Charity

Funder Name
Foundation for the Prevention of Asthma (Stichting Astma Bestrijding [SAB]) (Netherlands)

Results and Publications

Publication and dissemination plan
Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/04/2007		Yes	No