# Further development and validation of the daily hay fever forecast by symptom monitoring using modern informationand communication technology

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1. To investigate whether the currently used hay fever forecast correlates with the symptoms that grass pollen allergic patients report directly using a new communication system that allows direct control, and whether the model can be improved.2....

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Allergic conditions
Study type	Observational non invasive

# Summary

### ID

NL-OMON30329

**Source** ToetsingOnline

#### **Brief title**

Development and validation of the daily hay fever forecast

### Condition

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

**Synonym** hay fever, rhinoconjunctivitis

**Research involving** Human

# **Sponsors and support**

### Primary sponsor: Astma Fonds Source(s) of monetary or material Support: Astma fonds

### Intervention

Keyword: Grass pollen, hay fever forecast, rhinoconjunctivitis, validation

### **Outcome measures**

#### **Primary outcome**

To develop and validate a multi-day hay fever forecast

#### Secondary outcome

1. To (re)validate the current hay fever forecast using modern communication

technology

2. To develop a system in which patients can enter daily symptom scores by

mobile telephone or the internet in order to obtain prompt and therefore more

reliable registration of symptoms.

# **Study description**

#### **Background summary**

Pollen allergy is an increasing problem, and among the airborne pollen, grass pollen are considered one of the main causes of pollen allergy in Europe. Hay fever forecasts that predict the symptoms patients can be expected to experience the next day are extremely important for the self management of these patients since it allows them to adjust their activities or medication use. This project aims to re-validate the current hay fever model and to develop a new multi-day hay fever forecast model.

#### **Study objective**

1. To investigate whether the currently used hay fever forecast correlates with

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the symptoms that grass pollen allergic patients report directly using a new communication system that allows direct control, and whether the model can be improved.

2. Development of a multi-day hay fever forecast based on the multi-day weather forecast and the grass pollen counts in previous years and the hay fever symptoms of patients.

3. Development and application of an ICT system for collection and recording of daily hay fever symptom scores.

### Study design

This study is an observational study in which symptom scores of patients will be recorded on a daily basis during grass pollen season. Patients will also be asked to fill in quality of life questionnaires (EQ-5d, RQLQ)and activity scores.

### Study burden and risks

#### Inclusion procedure:

patients will undergo a skin prick test and blood test to evaluate their allergic status, which is a procedure attended with minimal discomfort and risk for the patient. Some patients will have to undergo a nasal provocation score to evaluate their allergic complaints. Again, this procedure is attended with minimal risk and mild discomfort since patients are expected to develop only complaints of the nose and eyes, comparable with their hay fever complaints.

#### Study:

patients have to send in their symptom score on a daily basis; additionally, they will be asked once a week to send in additional symptom scores and to fill in a quality of life questionnaire during and after season. This will cause no discomfort or risk for the patient.

# Contacts

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# **Trial sites**

### **Listed location countries**

Netherlands

# **Eligibility criteria**

#### Age

Adolescents (12-15 years) Adolescents (16-17 years) Adults (18-64 years) Elderly (65 years and older)

### **Inclusion criteria**

rhinoconjunctivitis due to grass pollen allergy age between 14 and 60 living in Zuid Holland

### **Exclusion criteria**

pregnant or breastfeeding serious illness (e.g.malignancy, autoimmune disease, cardiovascular morbidity) asthma treated otherwise than B2 mimetics on demand disorders of the nose interfering with hay fever symptoms (nasal polyps, concha hypertrophia, septumdeviation exceeding 50%)

# Study design

### Design

Study type: Observational non invasive

Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Prevention

### Recruitment

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Recruitment status:	Recruitment stopped
Start date (anticipated):	01-03-2007
Enrollment:	80
Туре:	Actual

# **Ethics review**

Approved WMO	
Application type:	First submission
Review commission:	METC Leids Universitair Medisch Centrum (Leiden)

# **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 CCMO **ID** NL15230.058.06