

# Risk of deep venous thrombosis and pulmonary embolism in severe asthma

<b>Submission date</b> 09/11/2011	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 30/11/2011	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 29/10/2015	<b>Condition category</b> Respiratory	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Asthma is one of the most common long-term lung diseases. Most asthma can be controlled with inhaled corticosteroids and bronchodilators. Venous thromboembolism (VTE) is a serious, potentially fatal, condition where a blood clot forms in a vein. The aim of the study is to find out whether the risk of venous thromboembolism is increased in severe asthma and whether this is related to asthma severity and the use of corticosteroids.

### Who can participate?

Patients aged over 18 with asthma.

### What does the study involve?

The patients are asked to complete a questionnaire about their history of VTE, history of asthma and medication use. The results are then compared with a comparable reference general population. Because sex and age have a large influence on the incidence of VTE, the reference general population is matched by sex and age.

### What are the possible benefits and risks of participating?

There are no known risks to participants.

### Where is the study run from?

Academic Medical Centre, Amsterdam, The Netherlands  
Medical Centre Leeuwarden, Leeuwarden, The Netherlands  
Dutch high altitude Asthma Centre Davos, Switzerland  
The study is coordinated by the Academic Medical Centre Amsterdam

### When is the study starting and how long is it expected to run for?

December 2010 to May 2011

### Who is funding the study?

Dutch Asthma Foundation

Who is the main contact?

Mr C.J. Majoor

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## Contact information

### Type(s)

Scientific

### Contact name

Mr C Majoor

### Contact details

Meibergdreef 9

Amsterdam

Netherlands

1105 AZ

## Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

### Secondary identifying numbers

Astmafonds 3.2.11.021

## Study information

### Scientific Title

Risk of deep venous thrombosis and pulmonary embolism in severe asthma: an observational study

### Study objectives

1. The prevalence of venous thromboembolism (VTE) is increased in patients with severe asthma as compared to the general population
2. The prevalence of VTE increases with severity of asthma
3. Use of corticosteroids is associated with increased prevalence of VTE in patients with asthma

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

The questionnaire was qualified as no overburden for the patient. Therefore no Medical Ethics Committee approval was needed.

### Study design

Open label observational cross-sectional study

**Primary study design**

Observational

**Secondary study design**

Cross sectional study

**Study setting(s)**

Hospital

**Study type(s)**

Other

**Participant information sheet**

Not available in web format, please use the contact details below to request a patient information sheet

**Health condition(s) or problem(s) studied**

Asthma

**Interventions**

All patients will complete a questionnaire about:

1. History of deep venous thrombosis (DVT) and pulmonary embolism (PE)
2. History of asthma
3. Medication use

The results of all included patients will be compared with a comparable reference general population (Naess IA, et al. J Thromb Haemost 2007 April;5(4):692-9). Because sex and age have a large influence on the incidence of DVT and pulmonary embolism (PE), the reference general population will be matched to sex and age for all patients. The study population will be compared with the reference general population by indirect standardisation.

**Intervention Type**

Other

**Phase**

Not Applicable

**Primary outcome measure**

Cumulative number of first DVT and PE events during lifetime as compared to the sum of the expected cumulative hazards of first DVT and PE events from all patients in an age- and sex-matched general population

**Secondary outcome measures**

Hazard ratio for PE and DVT of of asthma associated factors (like oral and inhalational corticosteroids, atopy, duration of asthma, age of onset)

**Overall study start date**

01/12/2010

**Completion date**

01/05/2011

## Eligibility

### Key inclusion criteria

1. Age 18-88 years old
2. Patients recruited from outpatient clinics from the Academic Medical Centre Amsterdam, Medical Center Leeuwarden and the Dutch High Altitude Asthma Clinic, Davos, Switzerland
3. Confirmed diagnosis of asthma according to Global Initiative for Asthma (GINA) 2010 guidelines
4. Diagnosis of severe asthma according to the international consensus 2009 (IMI-UBIOPRED)

### Participant type(s)

Patient

### Age group

Adult

### Lower age limit

18 Years

### Upper age limit

88 Years

### Sex

Both

### Target number of participants

550 (275 mild/moderate asthma and 275 severe asthma patients)

### Key exclusion criteria

1. Severe co-morbidities that could interfere with coagulation (Including cancer, other severe inflammatory diseases and human immunodeficiency virus (HIV))
2. Severe psychiatric illness

### Date of first enrolment

01/12/2010

### Date of final enrolment

01/05/2011

## Locations

### Countries of recruitment

Netherlands

### Study participating centre

**Meibergdreef 9**  
Amsterdam  
Netherlands  
1105 AZ

## **Sponsor information**

### **Organisation**

Astmafonds (Netherlands)

### **Sponsor details**

Postbus 627  
Amersfoort  
Netherlands  
3800 AP

### **Sponsor type**

Research organisation

### **Website**

<http://www.astmafonds.nl/>

### **ROR**

<https://ror.org/00ddgbf74>

## **Funder(s)**

### **Funder type**

Research organisation

### **Funder Name**

Astmafonds (Netherlands) (ref: 3.2.11.021)

## **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