

# The effects of epidermal growth factor receptor inhibition on pulmonary arterial hypertension associated with systemic sclerosis

<b>Submission date</b> 01/02/2007	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 01/02/2007	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 06/02/2007	<b>Condition category</b> Circulatory System	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

**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**

# Study information

## Scientific Title

### Study objectives

As Epidermal Growth Factor Receptor (EGFR) plays a role in pathogenesis of both pulmonary arterial hypertension and systemic sclerosis, EGFR inhibition will lead to beneficial effects in disease course.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

Approval received from the Medical Ethics Review Committee of VU University Medical Centre.

### Study design

Phase II study, open-labelled trial

### Primary study design

Interventional

### Secondary study design

Single-centre

### Study setting(s)

Other

### Study type(s)

Treatment

## Participant information sheet

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

Sclerosis-associated Pulmonary Arterial Hypertension (SScPAH)

### Interventions

All participants will receive cetuximab at a loading dose of 400 mg/m<sup>2</sup> in week one, followed by a weekly dose of 250 mg/m<sup>2</sup> starting from week two, up to a total of 12 weeks.

### Intervention Type

Drug

### Phase

Phase II

### Drug/device/biological/vaccine name(s)

Cetuximab

**Primary outcome measure**

Safety: recorded by assessment and documentation in the Case Report Form (CRF) file of adverse events and toxicity (physical examination [with special attention to skin toxicity], laboratory data) at pre-treatment, treatment visits (week one to 12), and follow-up (six months, 12 months).

**Secondary outcome measures**

Efficacy: measured by effects on six minute walk test, stroke volume, changes in High Resolution Computed Tomography (HRCT), N-Terminal B-type Natriuretic Peptide (NT-pro-BNP).

**Overall study start date**

01/01/2007

**Completion date**

01/01/2010

**Eligibility****Key inclusion criteria**

A subject is eligible for inclusion in this study only if all of the following criteria apply:

1. Written informed consent
2. Systemic sclerosis
3. Pulmonary Arterial Hypertension (PAH) with a mean Pulmonary Arterial Pressure (PAP) of above 25 mmHg measured during rest
4. Pulmonary Vascular Resistance (PVR) above 300 dynes
5. Total Lung Capacity (TLC) more than 70%
6. New York Heart Association (NYHA) class III and/or six-Minute Walk Test (6-MWT) less than 80% predicted
7. Conventional PAH treatment and/or bosentan and/or sildenafil treatment
8. Stability on medication during the previous three months (defined as stable or decrease of 6-MWT after three months of treatment)

**Participant type(s)**

Patient

**Age group**

Not Specified

**Sex**

Both

**Target number of participants**

20

**Key exclusion criteria**

A subject will be excluded from this study in case of the following criteria:

1. Left ventricular dysfunction
2. Valvular heart disease
3. Pericardial constriction
4. Wedge pressure more than or equal to 15 mmHg

5. Chronic thromboembolic pulmonary hypertension
6. Uncontrolled sleep apnea
7. History of malignancies
8. Overt right heart failure
9. History or presence of skin ulcerations
10. Women Of Child-Bearing potential (WOCB) who are unwilling or unable to use contraceptives
11. Sexually active fertile man not using effective birth control if their partners are WOCB
12. Severe abnormality of the cornea
13. Inadequate haematologic function defined by an absolute neutrophil count less than 1,500/mm<sup>3</sup>, platelet count less than 80,000/mm<sup>3</sup> and haemoglobin level of less than 9 g/dL
14. Inadequate hepatic function defined by a total bilirubin level 1.5 times the Upper Limit of Normal (ULN) and ASpartate AminoTransferase (ASAT) levels 2.5 times ULN
15. Inadequate renal function defined by a serum creatinine level more than 1.5 times ULN (alternative: Cockcroft less than 50 ml/min)
16. Substances that inhibit CYP3A4 activity, such as rifampicin, phenytoin, ketoconazole, itraconazole

**Date of first enrolment**

01/01/2007

**Date of final enrolment**

01/01/2010

## Locations

**Countries of recruitment**

Netherlands

**Study participating centre**

VU University Medical Center

Amsterdam

Netherlands

1007 MB

## Sponsor information

**Organisation**

VU University Medical Centre (The Netherlands)

**Sponsor details**

Van der Boechorststraat 7

Amsterdam

Netherlands

1081 BT

**Sponsor type**

Hospital/treatment centre

**Website**

<http://www.vumc.nl/english/#http://www.vumc.nl/english/>

**ROR**

<https://ror.org/00q6h8f30>

## **Funder(s)**

**Funder type**

Hospital/treatment centre

**Funder Name**

VU University Medical Center (The 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