

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

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

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

Contact name
Dr A Boonstra

Contact details
VU University Medical Center
Department of Pulmonary Diseases
P.O. Box 7057
Amsterdam
Netherlands
1007 MB
+31 (0)20 444 4782
a.boonstra@vumc.nl

Additional identifiers

Protocol serial number
155/2006

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.

Primary study design

Interventional

Study design

Phase II study, open-labelled trial

Study type(s)

Treatment

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/m² in week one, followed by a weekly dose of 250 mg/m² 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(s)

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).

Key secondary outcome(s)

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).

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

Healthy volunteers allowed

No

Age group

Not Specified

Sex

All

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 /mm³, platelet count less than 80,000/mm³ 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)

ROR

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

Funder(s)

Funder type

Hospital/treatment centre

Funder Name

VU University Medical Center (The Netherlands)

Results and Publications

Individual participant data (IPD) sharing plan**IPD sharing plan summary**

Not provided at time of registration

