Effects of Temporary Inhibition of the Renin-Angiotensin System on future blood pressure and hypertensive organ damage in young prehypertensive adults

Submission date	Recruitment status No longer recruiting	Prospectively registered		
26/02/2007		☐ Protocol		
Registration date 26/02/2007	Overall study status Completed	Statistical analysis plan		
		[X] Results		
Last Edited 26/03/2021	Condition category Circulatory System	[] Individual participant data		

Plain English summary of protocol

Not provided at time of registration

Study website

http://www.tiresiastrial.nl

Contact information

Type(s)

Scientific

Contact name

Dr B van den Bogaard

Contact details

Academic Medical Centre
Department of Vascular Medicine
Meibergdreef 9 (room F4-255)
Amsterdam
Netherlands
1105 AZ
+31 (0)20 566 5981
B.vandenBogaard@amc.uva.nl

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

06/307, NL880 (NTR894)

Study information

Scientific Title

Effects of Temporary Inhibition of the Renin-Angiotensin System on future blood pressure and hypertensive organ damage in young prehypertensive adults

Acronym

TIResiAS

Study objectives

Hypertension can be prevented, or substantially delayed, by a temporary and early antihypertensive intervention with an Angiotensin Converting Enzyme (ACE) inhibitor in persons at high risk for future hypertension and hypertension related complications.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Not provided at time of registration

Study design

Randomised, placebo controlled, parallel group, double blinded, multicentre trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Not specified

Study type(s)

Treatment

Participant information sheet

Health condition(s) or problem(s) studied

Prehypertension

Interventions

Individuals are randomised to receive either lisinopril 10 mg daily for three weeks followed by a forced titration to lisinopril 20 mg daily or matched placebo for a period of one year. This is followed by two years of close observation without active treatment.

Intervention Type

Drug

Phase

Not Specified

Drug/device/biological/vaccine name(s)

Lisinopril

Primary outcome measure

Differences in ambulatory blood pressure between lisinopril and placebo two years after cessation of active treatment compared to baseline.

Secondary outcome measures

Differences in left ventricular mass (index) and microalbuminuria between lisinopril and placebo two years after cessation of active treatment compared to baseline.

Overall study start date

01/02/2007

Completion date

01/02/2011

Eligibility

Key inclusion criteria

Otherwise healthy persons aged 18 to 40 years with three cardiovascular risk factors or less and an average blood pressure of 130 - 139 systolic/below 90 mmHg diastolic and/or below 130 systolic/85 - 89 mmHg diastolic on two separate visits with an interval of one week and measured by a validated automatic blood pressure device.

Participant type(s)

Patient

Age group

Adult

Lower age limit

18 Years

Sex

Not Specified

Target number of participants

300

Key exclusion criteria

- 1. Previous antihypertensive treatment
- 2. Any chronic use of prescribed oral medication except oral contraceptives
- 3. An elevated baseline serum glucose (more than 7.0 mmol/L) or elevated serum creatinine (more than 95 ummol/L for women and more than 110 ummol/L for men)
- 4. Women with a wish to become pregnant in the treatment period

Date of first enrolment

01/02/2007

Date of final enrolment

01/02/2011

Locations

Countries of recruitment

Netherlands

Study participating centre

Academic Medical Centre

Amsterdam Netherlands 1105 AZ

Sponsor information

Organisation

Academic Medical Centre (AMC) (The Netherlands)

Sponsor details

Department of Vascular Medicine P.O. Box 22660 Amsterdam Netherlands 1100 DD

Sponsor type

Hospital/treatment centre

Website

http://www.amc.uva.nl/#http://www.amc.uva.nl/

ROR

https://ror.org/03t4gr691

Funder(s)

Funder type

Research organisation

Funder Name

The Netherlands Organisation for Health Research and Development (ZonMw) (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

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		11/08/2007	26/03/2021	Yes	No