Impact of 12 weeks oral niacin on endothelial function, lipid composition and cardiovascular biomarkers in patients with coronary artery disease: a prospective, randomized, doubleblind, placebo-controlled, monocentric clinical trial of phase IV

Submission date 13/01/2006	Recruitment status No longer recruiting	 Prospectively registered Protocol
Registration date 20/01/2006	Overall study status Completed	 [] Statistical analysis plan [X] Results
Last Edited 24/07/2014	Condition category Circulatory System	Individual participant data

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s) Scientific

Contact name Dr Ascan Warnholtz

Contact details

Johannes Gutenberg-University Mainz Department of Medicine II Langenbeckstr 1 Mainz Germany 55131

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers INEF

Study information

Scientific Title

Acronym INEF

Study objectives

Twelve weeks oral niacin therapy in addition to standard long-term coronary artery disease (CAD) medication improves flow dependent vasodilation (FMD) in patients suffering from CAD.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Ethics-commission of the country physicians chamber Rhineland-Palatinate (Ethik-Kommission der Landesärztekammer Rheinland-Pfalz)

Study design

Prospective placebo-controlled double-blind randomized parallel-group single-center twoarmed clinical phase IV trial

Primary study design Interventional

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 Coronary artery disease (CAD) and known dyslipidemia

Interventions Twelve weeks oral Niacin therapy

Intervention Type Drug

Phase

Phase IV

Drug/device/biological/vaccine name(s)

Niacin

Primary outcome measure

Effect of 12 weeks oral niacin therapy in addition to standard long-term CAD medication on flow dependent vasodilation (FMD) in patients suffering from CAD

Secondary outcome measures

Effects of niacin therapy on plasma lipid composition, HDL-C levels, LDL, triglycerides, total cholesterol, cholesterol ratio, high sensitivity C-reactive protein (hs-CRP), cardiovascular biomarkers, endothelium-independent nitrogylcerin-induced vasodilation (NMD) and FMD levels.

Overall study start date

19/01/2006

Completion date

19/05/2006

Eligibility

Key inclusion criteria

1. Men or women > 35 and < 80 years of age

2. Documented clinically stable CAD and known dyslipidemia, defined by a low-density lipoprotein cholesterol (LDL >70 mg/dl) and a high density lipoprotein cholesterol (HDL <65mg /dl)

3. A flow-mediated vasodilatation (FMD) of less than 8%

- 4. Ability of subject to understand character and individual consequences of clinical trial
- 5. Written informed consent must be available before enrolment in the trial
- 6. For women with childbearing potential, adequate contraception

Participant type(s)

Patient

Age group

Adult

Sex Both

Target number of participants

100 subjects, i.e. 50 subjects per treatment group

Key exclusion criteria

1. Clinical signs of congestive heart failure or left ventricular ejection fraction <30% 2. Uncontrolled hypertension (blood pressure >180/110mmHg) or hypotension (systolic blood pressure <90 mmHg) 3. Initiation of any of the following medications within the last twelve weeks: aspirin, lipidlowering agents, calcium antagonists, betablockers, angiotensin converting enzymes inhibitors (ACEI) or angiotensin 1 (AT1) receptor blockers, hormone replacement therapy

4. Use of steroids or chemotherapy drugs within the past year or chronic use of non-steroidal anti-inflammatory drugs except for aspirin

5. Hemodynamically significant valvular heart diseases or hypertrophic obstructive cardiomyopathy

6. Renal dysfunction (creatinine > 2.5 mg/dl)

7. Known hepatic disease or elevation of serum transaminases or gamma glutamyl transferase (gGT) > 2x ULN (upper limit of normal range)

8. Uric acid >10.0 mg/dl

9. Alcohol abuse

10. White blood cell (WBC) count >12,000 or platelet count >500,000 /ul or <75,000 /ul

- 11. Existence of acute gastric ulcers
- 12. Existence of acute arterial bleeding
- 13. Other significant laboratory abnormalities

Date of first enrolment

19/01/2006

Date of final enrolment

19/05/2006

Locations

Countries of recruitment Germany

Study participating centre Johannes Gutenberg-University Mainz Mainz Germany 55131

Sponsor information

Organisation Johannes Gutenberg-University Mainz (Germany)

Sponsor details Langenbeckstr 1 Mainz Germany 55131 +49 (0)6131/17-7250 muenzel@2-med.klinik.uni-mainz.de **Sponsor type** University/education

Website http://www.klinik.uni-mainz.de/2-Med

ROR https://ror.org/023b0x485

Funder(s)

Funder type Industry

Funder Name Merck Pharma GmbH

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?
<u>Results article</u>	results	01/05/2009		Yes	No