# Effects of Ginkgo biloba extract EGb 761® on arteriosclerosis-relevant biomarkers in subjects with early stage metabolic syndrome

Submission date	Recruitment status	[X] Prospectively registered
23/11/2010	No longer recruiting	<pre>Protocol</pre>
Registration date	Overall study status	Statistical analysis plan
14/01/2011	Completed	Results
Last Edited	Condition category	Individual participant data
13/12/2013	Nutritional, Metabolic, Endocrine	<ul><li>Record updated in last year</li></ul>

# Plain English summary of protocol

Not provided at time of registration

# Contact information

# Type(s)

Scientific

#### Contact name

Dr F.A. Malek

#### Contact details

Dr. Willmar Schwabe GmbH & Co. KG Clinical Research Department Willmar-Schwabe-Str. 4 Karlsruhe Germany 76227

# Additional identifiers

Protocol serial number

523006.01.009

# Study information

#### Scientific Title

An explorative clinical trial to investigate the effects of Ginkgo biloba extract EGb 761® on arteriosclerosis-relevant biomarkers in men and women with early stage metabolic syndrome

#### **Study objectives**

To evaluate the pharmacodynamic effects, safety and tolerability of a 6-month treatment with 120 mg twice daily Ginkgo biloba extract EGb 761® after a 1-month placebo run-in phase in subjects with early stage metabolic syndrome with regard to biochemical atherothrombotic risk markers and factors.

On 18/09/2012 the anticipated end date was changed from 31/12/2011 to 31/12/2013.

On 13/12/2013 the anticipated end date was changed from 31/12/2013 to 31/12/2014.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Ethics Committee UMHAT "St. Ivan Rilski" EAD, 16/12/2010, ref: 38/16.12.2010

#### Study design

Phase I/IIA, single-centre, open trial with a within-subject comparison of diverse atherothrombotic risk markers

#### Primary study design

Interventional

#### Study type(s)

Treatment

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

Early stage metabolic syndrome

#### Interventions

120 mg EGb 761® film coated tablets orally (p.o.) twice daily for 6 months after a one month single-blind run-in phase for eligibility assessment.

### Intervention Type

Drug

#### Phase

Phase II/III

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

Ginkgo biloba extract (EGb 761®)

### Primary outcome(s)

- 1. Effects on diverse athero-thrombotic risk markers and factors after 6 months of investigational treatment (additionally selected biomarkers at screening, on baseline, after 1, 2, 4 and 6 months of investigational treatment)
- 2. Effects on mood state (Multidimensional Mood State Questionnaire [MDMQ] on baseline and after 2 and 6 months of investigational treatment)
- 3. Clinical safety and tolerability (adverse events, vital functions and clinical laboratory tests at each visit, ECG at screening, on baseline and after 6 months of investigational treatment)

#### Key secondary outcome(s))

No secondary outcome measures

#### Completion date

31/12/2014

# **Eligibility**

#### Key inclusion criteria

- 1. Male and female Caucasian subjects; females are eligible for enrolment if non-pregnant, non-lactating, having a negative pregnancy test at VI-01 and VI-02+, post-menopausal or using medically adequate contraception
- 2. Aged 21 to 50 years (boundaries included)
- 3. Lipoprotein(a) fraction: Lp(a) greater than 25 mg/dL at VI-01 and VI-02
- 4. Early stage metabolic syndrome at least two but not more than three of the criteria listed below at VI-01 and VI-02:
- 4.1. Waist circumference greater than or equal to 102 cm in men, greater than or equal to 88 cm in women
- 4.2. Morning fasting triglyceride levels greater than or equal to 150 mg/dL (1.70 mmol/L)
- 4.3. Morning fasting high density lipoprotein (HDL)-cholesterol less than 40 mg/dL (1.04 mmol/L) in men, less than 50 mg/dL (1.30 mmol/L) in women
- 4.4. Recumbent systolic blood pressure (SBP) greater than or equal to 130 mmHg or diastolic blood pressure (DBP) greater than 85 mmHg
- 4.5. Morning fasting glucose greater than or equal to 100 mg/dL (5.55 mmol/L)
- 5. Absence of confounding co-morbidity
- 6. Absence of confounding co-medication
- 7. Willing and able to provide informed consent
- 8. Willing and able to comply with all procedures of the trial and attend all scheduled visits at the investigational site

## Participant type(s)

Patient

# Healthy volunteers allowed

No

# Age group

Adult

#### Sex

All

# Key exclusion criteria

- 1. Previous participation in the trial
- 2. Participation in another clinical trial with a registered or non-registered drug or food supplement within the last 3 months prior to entry into the present study
- 3. Evidence or suspicion of hypersensitivity to the investigational drug
- 4. History or presence of treatment demanding allergies (including drug allergies)
- 5. Presence of acute or chronic infection at the time of recruitment
- 6. Evidence or suspicion of any relevant congenital disease or abnormality

- 7. Evidence or suspicion of any relevant clinical abnormality (as based on medical history, physical examination, vital signs, and 12-lead electrocardiogram [ECG])
- 8. Known gastrointestinal disorders (e.g. gastro-oesophageal reflux, partial or total gastrectomy, enterectomy, inflammatory bowel disease, celiac disease, symptomatic lactose intolerance, other disorders associated with chronic diarrhoea) within the last 6 months prior to inclusion into the study
- 9. Limiting vital signs, in particular:
- 9.1. Resting recumbent heart rate less than 50 or greater than 90 bpm
- 9.2. ECG: QTc greater than or equal to 450 msec (acc. Fridericia), QRS greater than or equal to 100 msec, PQ greater than or equal to 200 msec
- 9.3. Subjects with cardiac pacemaker or implantable cardioverter defibrillator
- 10. Relevant adverse clinical laboratory finding except for those explained and/or compatible with early-stage metabolic syndrome, in particular (but not exclusively) haemoglobin less than 13 g/dl for men and less than 12 g/dl for women; liver enzymes greater than 1.5 the upper limit of the normal range
- 11. Positive results for hepatitis and human immunodeficiency virus (HIV) serology
- 12. Positive alcohol or drug test
- 13. Use of prohibited medications, in particular medications for the treatment of hypertension, coronary heart disease, cardiac insufficiency, dysrhythmia, diabetes, hyper- or dyslipidaemia, anticoagulants; such medications should not have been used within the two months before visit 1 and during the trial
- 14. Use (within the last two months before visit 1) of prohibited food supplements that might confound to the study criteria
- 15. Donation of blood or plasma within the last 30 days before visit 1
- 16. Evidence or suspicion that the subject is (socially) drug dependent, including those drinking more than 40 g alcohol per day
- 17. Smoking more than 10 cigarettes per day
- 18. Adherence to a prohibited diet (e.g. vegetarian) or lifestyle (including extreme physical activities such as competitive sports and weight lifting)
- 19. Evidence or suspicion that the subject might not be willing or able to comply with the study directives and restrictions, or that the subject might not be sufficiently reliable and trustworthy 20. Subjects who are known or suspected not to be capable of understanding and evaluation the information that is given to them as part of the obligatory information policy (informed consent), in particular regarding the risks and discomfort due to trial procedure to which they would agree to be exposed

Date of first enrolment 15/01/2011

Date of final enrolment 31/12/2014

# Locations

Countries of recruitment

Bulgaria

Germany

Study participating centre
Dr. Willmar Schwabe GmbH & Co. KG
Karlsruhe
Germany
76227

# Sponsor information

#### Organisation

Dr. Willmar Schwabe GmbH & Co. KG (Germany)

#### **ROR**

https://ror.org/043rrkc78

# Funder(s)

### Funder type

Industry

#### **Funder Name**

Dr Willmar Schwabe GmbH & Co. KG (Germany)

# **Results and Publications**

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?

Participant information sheet 11/11/2025 No Yes