# Clinical trial to explore treatment effects of Ginkgo biloba Extract EGb 761® in patients with different types of vertigo and effect modification by type of vertigo, chronicity and concomitant pathologies

Submission date	Recruitment status No longer recruiting	[X] Prospectively registered		
05/10/2016		☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
17/10/2016	Completed	[X] Results		
<b>Last Edited</b> 30/08/2022	Condition category Signs and Symptoms	[] Individual participant data		

#### Plain English summary of protocol

Background and study aims

Vertigo is when a person feels as if they or the objects around them are moving when they are not. It is a symptom of different diseases, mainly of the inner ear, sometimes of certain regions of the brain, that can have different underlying causes. Vertigo may appear continuously or in intervals, and other symptoms such as depression or anxiety can be also present. EGb 761® is a dry extract of Ginkgo biloba (maidenhair tree) which may be used for treatment of vertigo. Previously studies suggest that the effect of EGb 761® could be different depending on the cause, influence of risk factors, chronicity (duration of symptoms) and accompanying features. Therefore the aim of this study is to explore whether such factors influence the treatment effect of EGb 761®. This might be the basis to identify groups of patients that benefit most from EGb 761® treatment and help to improve treatment with EGb 761® in patients with vertigo.

Who can participate?

Adults aged at least 18 with a diagnosis of vertigo syndrome

#### What does the trial involve?

After a screening period (at most 14 consecutive days), all participants receive tablets containing EGb 761® for about 84 consecutive days (about 12 weeks). Participants take two tablets per day (one in the morning and one in the evening) regardless of meal times. Throughout the study side effects from the medication are monitored by the patient and care team. After 6 and 12 weeks, participants complete a number of questionnaires in order to find out if the medication has helped reduce their symptoms.

What are the possible benefits and risks of participating?

All participants receive EGb 761® treatment, which is expected to better control vertigo disease

by reducing or eliminating its symptoms. Therefore, participants may benefit from an improvement in their quality of life. They may also benefit from detailed and extensive diagnostic tests. Blood tests may cause mild pain and can provoke bruises or tenderness in the extraction area. As part of the vertigo assessment, patients undergo several diagnostic examinations some of which can cause slight discomfort (e.g. applying warm water to the ear). As EGb 761® is well tolerated according to the data gathered so far, there is no major risk in taking EGb 761®. The adverse events potentially associated with EGb 761®, such as upset stomach, headache and allergic skin reactions, are usually mild in nature. Bleeding may also occur during treatment with EGb 761®.

Where is the study run from? Centrum Medyczne LIMED (lead centre) and 11 (as of 18/10/2018) other medical centres in Poland

When is the study starting and how long is it expected to run for? December 2016 to May 2018

Who is funding the trial?
Dr Willmar Schwabe GmbH & Co. KG (Germany)

Who is the main contact?

- 1. Mrs Annette Wassmer (public)
- 2. Dr Robert Hoerr (scientific)

# Contact information

# Type(s)

**Public** 

#### Contact name

Mrs Annette Wassmer

#### Contact details

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

#### Type(s)

Scientific

#### Contact name

Dr Robert Hoerr

#### **ORCID ID**

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# Additional identifiers

Clinical Trials Information System (CTIS) 2016-000316-15

Protocol serial number 523079.01.114

# Study information

#### Scientific Title

Clinical trial to explore treatment effects of Ginkgo biloba Extract EGb 761® in patients with different types of vertigo and effect modification by type of vertigo, chronicity and concomitant pathologies

#### **Study objectives**

To explore the treatment effects of Ginkgo biloba Extract EGb 761® in patients with different types of vertigo and effect modification by type of vertigo, chronicity and concomitant pathologies. As prior information whether different types of vertigo and effect modification by type of vertigo, chronicity and concomitant pathologies influence the treatment effect of EGb 761® is limited, no formal hypotheses are formulated and the data will be analyzed descriptively.

#### Ethics approval required

Old ethics approval format

# Ethics approval(s)

Ethics Committee at Silesian Medical Chamber in Katowice, Grażyńskiego 49a, 40-126 Katowice, 15/06/2016, ref: 24/2016

# Study design

Multicentre uncontrolled open-label explorative phase IIb clinical trial

# Primary study design

Interventional

# Study type(s)

Treatment

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

Vertigo

#### **Interventions**

The trial will involve 175 participants (male and female). The trial duration per participant is maximum of 15 weeks. Every patient receives 120 mg EGb 761® film coated tablets twice daily during the 12 treatment weeks. All patients undergo the following scheduled visits:

Screening visit: day -14 to day 0, medical history, vertigo diagnostic (ears-nose-throat examinations, audiometry, spontaneous nystagmus test with and without Frenzel glasses, Romberg test, Unterberger stepping test. Electronystagmography (ENG) or videonystagmography (VNG), caloric testing, video head impulse test (vHIT), vestibular evoked muscular potentials (VEMPs), Dix-Hallpike test, safety laboratory tests, electrocardiogram (ECG), vital signs, physical examination)

Baseline visit: Day 0, start treatment with EGb 761®, start treatment with EGb 761®, patient questionnaires (DHI, VSS, HADS, PSQ, SDS, TMT, severity of vertigo), concomitant medications, adverse events

Week 3 Call: Week 3  $\pm$  1, concomitant medications, adverse events

Week 6 Visit: Week 6  $\pm$  1 patient questionnaires, concomitant medications, adverse events Week 9 Call: Week 9  $\pm$  1, concomitant medications, adverse events

Week 12 Visit: Week 12  $\pm$  1, vertigo diagnostic (ears-nose-throat examinations, audiometry, spontaneous nystagmus test with and without Frenzel glasses, Romberg test, Unterberger stepping test, patient questionnaires, concomitant medications, adverse events, safety laboratory tests, electrocardiogram (ECG), vital signs, physical examination).

#### Intervention Type

Drug

#### Phase

Phase II

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

EGb 761® (Ginkgo biloba extract)

#### Primary outcome(s)

- 1. Effectiveness, measured using the Vertigo Symptom Scale Short Form (VSS-SF) at baseline visit, Week 6 visit and Week 12 visit
- 2. Effectiveness, measured using the 11-point box scale for severity of vertigo at baseline visit, Week 6 visit and Week 12 visit
- 3. Effectiveness, measured using the Dizziness Handicap Inventory (DHI) at baseline visit, Week 6 visit and Week 12 visit
- 4. Anxiety and Depression, measured using the Hospital Anxiety and Depression Scale (HADS) at baseline visit, Week 6 visit and Week 12 visit
- 5. Stress, measured using the Perceived Stress Questionnaire (PSQ) at baseline visit, Week 6 visit and Week 12 visit
- 6. Cardiovascular disease, recorded by medical history at screening visit
- 7. Effectiveness, measured using the Sheehan Disability Scale (SDS) at baseline visit, week 6 visit and week 12 visit
- 8. Visual search, scanning, speed of processing, mental flexibility, measured using the Trail-Making Test (TMT) Forms A and B at baseline visit, Week 6 visit and Week 12 visit

#### Key secondary outcome(s))

- 1. Serious (SAEs) and non-serious adverse events (AEs), spontaneously reported by the patient or observed by the investigator continuously throughout the trial
- 2. Vital signs (blood pressure, pulse rate), measured in sitting position at baseline, 6 and 12

#### weeks

3. Safety laboratory results (hematology, coagulation, clinical chemistry and urinanalysis), measured via blood and urine samples at screening and 12 weeks

#### Completion date

12/06/2018

# **Eligibility**

#### Key inclusion criteria

- 1. Outpatients of both sexes, at least 18 years old
- 2. Vertigo syndrome:
- 2.1. Diagnosed and specified by medical history and physical examination, Romberg test, Unterberger stepping test, nystagmus testing with and without Frenzel glasses, and the following diagnostic tests which may have been performed up to 3 months before Baseline Visit: ENG or VNG including caloric testing, vHIT, VEMPs, Dix-Hallpike test (only to be performed if necessary to exclude benign paraoxysmal positional vertigo (BPPV)), ECG
- 2.2. Excluding BPPV, Ménière's disease, vestibular migraine, somatoform phobic vertigo, acute vestibular neuritis within the first two weeks of onset, acute central or peripheral vertigo within the first two weeks of onset
- 2.3. Duration of at least 2 weeks
- 3. Score > 25 in the Dizziness Handicap Inventory
- 4. Written informed consent to participate in the clinical trial, to trial-related treatment and to data recording in accordance with applicable laws

### Participant type(s)

**Patient** 

#### Healthy volunteers allowed

No

#### Age group

Mixed

#### Lower age limit

18 years

#### Sex

All

#### Total final enrolment

206

#### Key exclusion criteria

- 1. Participation in another experimental drug trial at the same time or within the past 4 weeks before Baseline Visit
- 2. Vertigo for which other treatments are recommended by current guidelines or expert consensus: BPPV, Ménière's disease, vestibular migraine, somatoform phobic vertigo, acute vestibular neuritis within the first two weeks of onset, acute central or peripheral vertigo within the first two weeks of onset

- 3. Any other drug treatments for vertigo taken currently or within 2 weeks before Baseline Visit
- 4. Gingko biloba preparation for any reason taken currently or within 4 weeks before Baseline Visit
- 5. Ongoing psychiatric disorder, such as major depression, generalized anxiety disorder, schizophrenia, etc. Of note: Symptoms of depression or anxiety or other behavioral or psychological symptoms at sub-syndromal level and not requiring treatment with psychotropic drugs are permitted
- 6. Ongoing severe cardiac or circulatory disorder:
- 6.1. Severe (Canadian Cardiovascular Society stage IV) or unstable angina pectoris
- 6.2. Decompensated congestive heart failure (NYHA stage IV)
- 6.3. Uncontrolled hypertension with systolic blood pressure above 180 mmHg and/or diastolic blood pressure above 115 mmHg
- 6.4. Clinically significant cardiac arrhythmias (Lown classes IVb and V, bifascicular bundle branch block)
- 7. Severe renal or hepatic dysfunction (defined by serum creatinine or serum ASAT, ALAT or gamma-GT above 3 times the upper limit of the reference range in the anamnesis)
- 8. Ongoing uncontrolled endocrine or hematological disorder
- 9. Intake of drugs not permitted during participation in the trial, in particular, psychoactive drugs, systemic acting perfusion-enhancing drugs, cognition enhancing drugs, systemic acting anti-cholinergic drugs, regular use of anticoagulants (platelet aggregation inhibitors permitted) during the 2 weeks prior to Baseline Visit
- 10. Ongoing hemorrhagic diathesis or coagulation disorder
- 11. Seizure within 2 years prior to Baseline Visit or regular use anticonvulsive drugs
- 12. Active malignant disease (exception: prostate cancer which does not require other than hormone treatment within the next 6 months).
- 13. Known hypersensitivity to Ginkgo biloba extract or to excipients contained in the tablets
- 14. Active peptic ulcer disease or any gastrointestinal disease with potential impairment of the absorption of orally applied drugs (e.g. Billroth I/II, Crohn's disease, ulcerative colitis, any kind of enterectomy)
- 15. Female patients of childbearing potential without safe contraception (any form of hormonal contraception, intrauterine devices, sexual abstinence and partner sterilization are considered sufficiently safe when used consistently and correctly; child-bearing potential can be denied in case of postmenopausal state for at least 2 years, hysterectomy, bilateral tubal ligation or bilateral oophorectomy).
- 16. Planned surgical intervention requiring hospitalization during the clinical trial
- 17. Previous inclusion in the present clinical trial
- 18. Incapability of understanding nature, meaning and consequences of the clinical trial
- 19. Patient unable to read and/or write
- 20. Patients in custody by juridical or official order
- 21. Patients who are members of the staff of the trial center, staff of the sponsor or involved Clinical Research Organizations (CROs), the investigator him-/herself or close relatives of the investigator

Date of first enrolment 28/10/2016

Date of final enrolment 20/11/2017

# Locations

#### Countries of recruitment

Poland

# Study participating centre Centrum Medyczne LIMED

Tylna 12 Tarnowskie Góry Poland 42-600

# Study participating centre Grażyna Pulka Specjalistyczny Ośrodek "ALL-MED"

Św. Marka 31/1 Kraków Poland 31-024

#### Study participating centre Medical Center Larmed

ul. Lwowska 17 lok. 1 and 2 Kraków Poland 30-548

# Study participating centre NUTRICARE Sp. z o.o.

Rydlówka 42 A/48 Kraków Poland 30-363

# Study participating centre Promed P.Łach R.Głowacki Spółka Jawna

ul. Entertainment 24a Kraków Poland 31-411

# Study participating centre

#### Centrum Medyczne Biotamed Morawska Barbara

ul. Vincent Fields 4a Wieliczka Poland 32-020

# Study participating centre Centrum Słuchu i Mowy Sp. z o.o.

Łużycka 42 Kraków Poland 30-658

# Study participating centre Centrum Słuchu i Mowy Sp. z o.o.

Mokra 7 Kajetany, Nadarzyn Poland 05-830

# Study participating centre Centrum Słuchu i Mowy Sp. z o.o.

Nasypowa 18 Katowice Poland 40-551

# Study participating centre

Indywidualne Specjalistyczna Praktyka Lekarska Alergologia-Laryngologia

Sienkiewicza 13 Kęty

Poland 32-650

# Study participating centre

Audiofonika - Aparaty Słuchowe Przemysław Śpiewak Sp. J.

Karpacka 4 Bielsko-Biała Poland 43-316 Study participating centre Specjalistyczna Praktyka Lekarska

Niedurnego 50 d Ruda Slaska Poland 41-709

# Sponsor information

#### Organisation

Dr Willmar Schwabe GmbH & Co. KG

#### **ROR**

https://ror.org/043rrkc78

# Funder(s)

# Funder type

Industry

#### Funder Name

Dr Willmar Schwabe GmbH & Co. KG

# **Results and Publications**

#### Individual participant data (IPD) sharing plan

The current data sharing plans for the current study are unknown and will be made available at a later date.

#### IPD sharing plan summary

Data sharing statement to be made available at a later date

#### **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Basic results		12/10/2019	30/08/2022	No	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes