פורמט עלון זה נקבע ע"י משרד הבריאות ותוכנו נבדק ואושר על ידו במרץ 2016

Summary of Product Characteristics

1. NAME OF THE MEDICINAL PRODUCT

Cerebonin® 120 mg

120 mg / Film-coated tablet For adults aged 18 years and over

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

1 film-coated tablet contains:

120 mg Dry extract from Ginkgo biloba leaves (35-67:1) (EGb 761®).

The 120mg extract contains: Flavone glycosides 26.4 – 32.4 mg,

Terpene lactones 6.48 - 7.92 mg, **Comprising of:** ginkgolides A, B, C (3.36- 4.08 mg) and of bilobalide (3.12-3.84 mg). Ginkgolic acids less than $0.6 \mu g$ per Film- coated tablet.

Contains lactose.

For full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Film-coated tablets

4. CLINICAL PARTICULARS

4.1. Therapeutic indications

- For the symptomatic treatment of mental losses due to organic brain syndrome within the framework of a general therapeutic concept for dementia syndromes having as major symptoms: Deficient memory, disturbances of concentration, depressive mood, dizziness, tinnitus and headache.

The primary target group includes patients with demential syndrome in primary degenerative dementia, vascular dementia and mixed forms of both.

Individual response to the treatment cannot be predicted.

Note: Prior to starting treatment with Ginkgo extract, clarification should be obtained as to whether the pathological symptoms encountered are not based on an underlying disease requiring a specific treatment.

- Vertigo of vascular and involutional origin.
- Adjuvant treatment in case of tinnitus of vascular and involutional origin.

The following note for the patient is included in the instruction leaflet:

"Frequently occurring dizziness and tinnitus always need to be clarified by a doctor. In case of sudden hearing deficit or hearing loss, you should immediately consult a doctor."

4.2. Posology and method of administration

Dementia syndrome:

Adults from 18 years on take 1 film-coated tablet (corresponding to 120 mg Ginkgo biloba dry extract EGb 761®) 2 times per day.

Vertigo, adjuvant tinnitus treatment:

Adults from 18 years on take 1 film-coated tablet (corresponding to 120 mg Ginkgo biloba dry extract EGb 761®) 1 to 2 times per day.

Mode of application

When taken twice daily, one film-coated tablet should be taken in the morning and one in the evening. When taken once daily, the film-coated tablet should be taken in the morning.

Do not take the film-coated tablets in a lying position. The film-coated tablets have to be taken unchewed with a sufficient quantity of liquid (preferably with a glass of water). The intake is independent of meals. There is no data concerning crushing or cutting the film-coated tablet.

Children and adolescents

Cerebonin® 120 mg is not recommended for use in children and adolescents under the age of 18 years.

Duration of application

Dementia syndrome

Duration of the treatment should last for at least 8 weeks. If the disease symptoms do not show any improvement or even worsen after a therapeutic period of 3 months, it should be checked by the physician whether further treatment is justified.

Vertigo:

Application over a longer period than 6 to 8 weeks bears no therapeutic advantage.

Tinnitus:

The adjuvant treatment should be carried out for at least 12 weeks. If no therapeutic success is observed after 6 months, no further improvement is to be expected after a longer period of treatment.

4.3. Contra-indications

Hypersensitivity to Ginkgo biloba or to any of the excipients, pregnancy.

4.4. Specials warnings and precautions for use

Cerebonin® 120 mg is not recommended for use in children and adolescents under the age of 18 years due to insufficient data on safety and efficacy.

In case of increased tendency to bleeding (haemorrhagic diathesis) and in case of simultaneous treatment with coagulation-inhibiting drugs, this pharmaceutical preparation should only be used after having consulted with a physician.

Single reports indicate the possibility that Ginkgo-containing preparations can increase bleeding tendency. This preparation should therefore be discontinued before surgical interventions.

The following note for the patient is included in the instruction leaflet:

"Please inform your doctor in due time if you have taken Cerebonin® 120 mg so that he/she may decide on the further proceeding."

It cannot be excluded that the application of Ginkgo preparations promotes the occurrence of seizures in epileptic patients. This may be related to the content in 4'-O-methylpyridoxin.

The following note for the patient is included in the instruction leaflet:

"Should you suffer from epileptic seizures, please consult with your doctor before starting treatment with Cerebonin® 120 mg."

Patients with rare hereditary galactose intolerance, lactase deficiency or glucose-galactose malabsorption should not take Cerebonin® 120 mg.

4.5. Interactions with other medicinal products and other forms of interaction

In case of concomitant application of Cerebonin® 120 mg with coagulation-inhibiting drugs (such as phenprocoumon, warfarin, clopidogrel, acetyl salicylic acid and other non-steroidal antirheumatics) it cannot be excluded that the effect of these preparations is enhanced.

As for all medicinal preparations, it cannot be excluded that Cerebonin® 120 mg acts on the metabolization of different other medicinal preparations via cytochrome P450-3A4,-1A2,-2C19 which may influence the potency and/or duration of the effect of the preparation concerned. There are not sufficient investigations available on these effects.

The following note for the patient is included in the instruction leaflet:

"For this reason, please consult with your doctor or pharmacist."

4.6. Pregnancy and lactation

As single reports indicate the possibility that Ginkgo-containing preparations can increase bleeding tendency, this preparation is not be taken during pregnancy (see section 4.3). As no sufficient investigations are available, this preparation should not be used during lactation. It is not known whether the extract components are excreted in breast milk.

4.7. Effects on ability to drive and use machines

None reported

4.8. Undesirable effects

The evaluation of adverse reactions is based on the following information on frequency:

Very common:	Common:
more than 1 out of 10 treated persons	less than 1 out of 10 but more than 1 out of
·	100 treated persons
Uncommon:	Rare:
less than 1 out of 100 but more than 1 out	less than 1 out of 1000 but more than 1 out
of 1000 treated persons	of 10 000 treated persons
Very rare:	·
less than 1 out of 10 000 treated persons	

There are no verified data on the frequency of the undesirable effects observed during treatment with Ginkgo biloba-containing preparations, since these undesirable effects have become known through single reports from patients, physicians or pharmacists. According to these reports, the following undesirable effects may occur during treatment with Cerebonin® 120 mg:

 Bleeding from single organs may occur in particular in case of concomitant use of coagulation-inhibiting preparations such as phenprocoumon, acetyl salicylic acid or other non-steroidal antirheumatics (see also 4.5 Interactions). Allergic shock is possible in hypersensitive persons; furthermore, allergic skin reactions (reddening, swelling, itching) may occur.

The following note for the patient is included in the instruction leaflet:

"Should any of the above-mentioned adverse reactions occur, please

"Should any of the above-mentioned adverse reactions occur, please do not take Cerebonin® 120 mg once more and immediately consult your doctor so that he/she may decide on the severity and possibly necessary measures."

- Furthermore, mild gastrointestinal disturbances, headache, dizziness or enhancement of already existing dizziness can occur.

The following note for the patient is included in the instruction leaflet:

"Please inform your doctor or pharmacist if you are considerably impaired by one of these undesirable effects."

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Any suspected adverse events should be reported to the Ministry of Health according to the National Regulation by using an online form:

http://forms.gov.il/globaldata/getsequence/getsequence.aspx?formType=AdversEffectMedic@moh.gov.il

4.9. Overdose

Symptoms from intoxication have not been reported up to now.

The following note for the patient is included in the instruction leaflet:

"If you have taken a larger quantity of Cerebonin® 120 mg, the adverse reactions described in section "Undesirable effects" can be increased. Please inform your doctor. He/she may decide on possibly necessary measures."

Specific antidotes in case of intoxication are not known. Treatment should be carried out depending on the clinical picture.

5. PHARMACOLOGICAL PROPERTIES

5.1. Pharmacodynamic properties

Pharmacotherapeutic group: other anti-dementia drugs, peripheral vasodilatators

ATC code: N06DX02, C04

The following pharmacological effects have been proven in animal experiments with the quantified extract EGb 761® contained in Cerebonin® 120 mg: Increase in tolerance to hypoxia, in particular of the cerebral tissue, inhibition of the development of traumatically or toxically induced brain edema and acceleration of its regression, reduction of retina edema and lesions of retina cells, inhibition of age-related reduction of muscarinergic choline receptors and alpha-2-adrenoceptors as well as promotion of choline uptake in the hippocampus, enhancement of memory performance and learning capacity, improved compensation of disturbances of equilibrium, circulatory increase in particular in the region of microcirculation, improvement of the rheological properties of the blood, inactivation of toxic oxygen radicals (flavonoids), PAF antagonism (ginkgolides) and neuroprotective effect (ginkgolides A and B, bilobalide).

Hypoxia-protective effects, increase of blood flow, in particular in the microcirculatory region and improvement of the rheological properties of the blood could be demonstrated in humans.

5.2. Pharmacokinetic properties

Cerebral bioavailability of the quantified extract EGb 761® in humans was demonstrated in the pharmaco-EEG on the base of dose-dependent effects on cerebro-electrical activity.

After oral application of 80 mg Ginkgo extract, the terpene lactones ginkgolide A, ginkgolide B and bilobalide showed in humans a very good absolute bioavailability of 98% for ginkgolide A, 79% for ginkgolide B and 72% for bilobalide. Maximum plasma concentrations were 15 ng/ml for ginkgolide A, 4 ng/ml for ginkgolide B and approx. 12 ng/ml for bilobalide. Half-lives were 3.9 hours (ginkgolide A), 7 hours (ginkgolide B) and 3.2 hours (bilobalide).

Plasma-protein binding (human blood) is 43% for ginkgolide A, 47% for ginkgolide B and 67% for bilobalide. In the rat, a resorption rate of 60% was determined following oral administration of ¹⁴C radioactively tagged extract EGb 761®. Maximum plasma concentrations were measured 1.5 hours after administration; half-life was 4.5 hours. A second plasma peak 12 hours after administration is indicative of an enterohepatic shunt.

5.3. Preclinical safety data

The following data concern the quantified extract EGb 761® contained in Cerebonin® 120 mg.

Acute toxicity (LD₅₀)

Oral application:

Mouse: 7725 mg/kg body weight
Rat: > 10 000 mg/kg body weight

Intravenous application:

Mouse: 1100 mg/kg body weight Rat: 1100 mg/kg body weight

Intraperitoneal application:

Mouse: 1900 mg/kg body weight Rat: 2100 mg/kg body weight

Subchronic and chronic toxicity

Subchronic toxicity studies consisted of examinations in the rat (15-100 mg/kg body weight/ day i.p.) over 12 weeks and in the dog (7.5-30 mg/kg body weight/day i.v. respectively 5 mg/kg body weight/day i.m.) over 8 weeks. Chronic toxicity was tested over 6 months in rats and dogs with daily doses between 20 and 100 mg/kg body weight, as well as with increasing doses of 300, 400 and 500 mg/kg body weight (rat) respectively 300 and 400 mg/kg body weight (dog) orally.

The data obtained were not indicative for any biochemical, haematological or histological damage. Hepatic and renal functions were not impaired.

Reproduction toxicity

The studies were carried out with oral applications of 100, 400 and 1600 mg/kg body weight/day in the rat and 100, 300 and 900 mg/kg body weight/day in the rabbit. In both animal species, the extract EGb 761® did not show any teratogenic, embryotoxic or reproduction-impairing effects.

In chicken embryo a not clearly specified Ginkgo extract caused in a dose-dependent manner subcutaneous bleeding, hypopigmentation, growth inhibition and anophthalmia.

Mutagenicity, cancerogenicity:

No mutagenic effects (Ames test, host-mediated assay, micronucleus test, chromosome aberration test) or cancerogenic effects (carcinogenicity study in rats over 104 weeks) were observed in studies with Ginkgo extract EGb 761®.

6. PHARMACEUTICAL PARTICULARS

6.1. List of excipients

Sodium croscarmellose; dimeticone; hypromellose; lactose monohydrate; macrogol 1500; magnesium stearate; maize starch; highly dispersed silicon dioxide; microcrystalline cellulose; alpha-octadecyl-omega-hydroxypoly (oxyethylene)-5; sorbic acid; talc; titanium dioxide (E171); iron oxide hydrate (E172), antifoam emulsion SE2 dry substance.

6.2. Incompatibilities

Not applicable

6.3. Shelf-life

The expiry date is printed both on pack and container (blister strip). The shelf-life of Cerebonin® 120 mg is 5 years. Cerebonin® 120 mg should not be used after expiry of shelf life.

6.4. Special precautions for storage

None

6.5. Nature and contents of container

The container (blister) is made of PVC/PVDC foil and aluminium foil. Each blister contains 15 Film- coated tablets.

Pack sizes of 30 and 60 film-coated tablets. Not all pack sizes may be marketed.

6.6. Special precautions for disposal / handling of the product

No special requirements

7. PHARMACEUTICAL COMPANY AND MANUFACTURER

Dr. Willmar Schwabe GmbH & Co. KG Willmar-Schwabe-Strasse 4 76227 Karlsruhe / Germany Phone: +49 -0800 000 52 58

Fax: +49 -0800 100 95 49

8. ISRAELI MARKETING AUTHORIZATION HOLDER

Dr. Samuelov Importing & Marketing Ltd 13 Hasadna st, POB 2486 Ra'anana 4365007, Israel

Phone: 09 7483769 Fax: 09 7889776

E-mail: info@drsamuelov.co.il

9. MARKETING AUTHORIZATION NUMBER

155-61-34325-00

10. DATE OF FIRST AUTHORIZATION/RENEWAL OF AUTHORIZATION

March 2016

11. DATE OF REVISION OF THE TEXT

July 2016

Cerebonin-SPC-07/2016