

## SIBELIUM® Capsules Janssen

### NAME OF THE MEDICINAL PRODUCT

Trade name

SIBELIUM®

International Non-Proprietary Name (Modified)  
(rINNM) flunarizine hydrochloride

### QUALITATIVE AND QUANTITATIVE COMPOSITION

Each SIBELIUM® capsule contains flunarizine hydrochloride equivalent to 5 mg flunarizine base.

For excipients, see List of Excipients.

### PHARMACEUTICAL FORM

Capsules

*5 mg capsules*

White powder filled in capsules (size 4) made up of red cap and dark grey body.

### CLINICAL PARTICULARS

#### Therapeutic Indications

Prophylaxis of classic (with aura) or common (without aura) migraine.

Symptomatic treatment of vestibular vertigo, due to a diagnosed functional disorder of the vestibular system.

#### Posology and Method of Administration

(See also Special Warnings and Special Precautions for Use).

• Migraine prophylaxis

- *Starting dose:*

Treatment is started at 10 mg daily (at night) for patients younger than 65 years of age and at 5 mg daily for patients older than 65 years. If, during this treatment, depressive, extrapyramidal or other unacceptable adverse experiences occur, administration should be discontinued. If, after 2 months of this initial treatment, no significant improvement is observed, the patient should be considered a non-responder and administration should also be discontinued.

- *Maintenance treatment:*

If the patient responds satisfactorily and if a main-

tenance treatment is needed, the dose should be decreased so that each week he/she has 5 days treatment at the same daily dose and 2 successive drug-free days.

Even if the prophylactic maintenance treatment is successful and well tolerated, it should be interrupted after 6 months and re-initiated only if the patient relapses.

• Vertigo

The same daily doses should be used as for migraine, but the starting treatment should not be given longer than needed for symptom control, which generally takes less than two months. If, however, no significant improvement is observed after one month for chronic vertigo or after two months for paroxysmal vertigo, the patient should be considered a non-responder and administration should be discontinued.

#### Contraindications

Sibelium is contraindicated in patients with a history of depressive illness, or with pre-existing symptoms of Parkinson's disease or other extrapyramidal disorders (see Special Warnings and Special Precautions for Use and Undesirable Effects).

#### Special Warnings and Special Precautions for Use

This treatment may give rise to extrapyramidal and depressive symptoms and reveal Parkinsonism, especially in predisposed patients, such as the elderly. Therefore, it should be used with caution in such patients.

In rare cases fatigue may increase progressively during Sibelium therapy: in this event, the therapy should be discontinued.

The recommended dose should not be exceeded. Patients should be seen at regular intervals, especially during maintenance treatment, so that extrapyramidal or depressive symptoms may be detected early and if so, treatment discontinued. If, during maintenance treatment, the therapeutic effects

wane, treatment should also be discontinued (for duration of treatment see also Posology and Method of Administration).

### Interaction with Other Medicinal Products and Other Forms of Interaction

Excessive sedation can occur when alcohol, hypnotics or tranquillisers are taken simultaneously with Sibelium.

Sibelium is not contra-indicated in patients who use beta blocking agents.

The pharmacokinetics of flunarizine were unaffected by topiramate. During co-administration of Sibelium with topiramate 50 mg every 12 hours, a 16% increase in the systemic exposure to flunarizine in migraine patients was observed comparable to a 14% increase in patients treated with flunarizine only. The steady-state pharmacokinetics of topiramate were unaffected by flunarizine.

Chronic administration of flunarizine did not affect the disposition of phenytoin, carbamazepine, valproate or phenobarbital. Plasma concentrations of flunarizine were generally lower in patients with epilepsy taking these anti-epileptic drugs (AEDs) compared to healthy subjects given similar doses. The plasma protein binding of carbamazepine, valproate, and phenytoin is not affected by co-administration with flunarizine.

### Pregnancy and Lactation

#### Use during pregnancy

The safety of Sibelium for use in human pregnancy has not been established. An evaluation of animal studies does not indicate direct or indirect harmful effects with respect to reproduction, development of the embryo or fetus, the course of gestation or perinatal development.

#### Use during lactation

Studies in lactating dogs have shown that flunarizine is excreted in the milk and that the concentration in the milk is greater than in the plasma. No data are available on the excretion in human breast milk. Nursing should therefore be discouraged in women taking Sibelium.

### Effects on Ability to Drive and Use Machines

Since somnolence may occur, especially at the start of the treatment, caution should be exercised during activities such as driving or operating dangerous machinery.

### Undesirable Effects

#### Clinical Trial Data

#### Placebo-Controlled Double-Blind Data – Adverse Drug Reactions Reported at $\geq 1\%$ Incidence

The safety of Sibelium (5 to 10 mg/day) was evaluated in 500 subjects (of which 247 were treated with Sibelium, 253 were given placebo) who participated in two placebo-controlled, double-blind parallel clinical trials, one in the treatment of migraine and the other in the treatment of vertigo.

Adverse Drug Reactions (ADRs) reported by  $\geq 1\%$  of Sibelium treated subjects in these trials are shown in Table 1.

**Table 1. Adverse Drug Reactions Reported by  $\geq 1\%$  of Sibelium-Treated Subjects in 2 Double-Blind Parallel Placebo-Controlled Clinical Trials of Sibelium**

System/Organ Class Adverse Reaction	SIBELIUM (5-10 mg) (n=247) %	Placebo (n=253) %
<b>Infections and Infestations</b>		
Rhinitis	4.0	1.6
<b>Metabolism and Nutrition Disorders</b>		
Increased appetite	4.0	2.0
<b>Psychiatric Disorders</b>		
Depression	4.5	0.8
<b>Nervous System Disorders</b>		
Somnolence	9.3	1.2
<b>Gastrointestinal Disorders</b>		
Constipation	2.4	0.4
<b>Musculoskeletal and Connective Tissue Disorders</b>		
Myalgia	2.4	0.8
<b>Reproductive System and Breast Disorders</b>		
Menstruation irregular	2.8	1.2
Breast pain	1.2	0.4
<b>Investigations</b>		
Weight increased	11.3	2.8

#### Active Comparator-Controlled Data – Adverse Drug Reactions Reported at $\geq 1\%$ Incidence

Two double-blind active comparator-controlled trials were selected to determine the incidence of ADRs.

In these two studies, 476 subjects were treated with 10 mg/day Sibelium, one in the treatment of migraine and the other in the treatment of vertigo or migraine.

ADRs reported by  $\geq 1\%$  of Sibelium-treated subjects noted in the active-comparator controlled clinical trials and not listed in Table 1 are shown in Table 2.

<b>Table 2. Adverse Drug Reactions Reported by <math>\geq 1\%</math> of Sibelium-Treated Subjects in 2 Double-Blind Active Comparator Clinical Trials of Sibelium</b>	
<b>System/Organ Class</b>	<b>SIBELIUM (10 mg/day) (n=476) %</b>
<b>Gastrointestinal Disorders</b>	
Stomach discomfort	2.3
<b>General Disorders and Administration Site Conditions</b>	
Fatigue	2.9

*Placebo- and Active Comparator-Controlled Data – Adverse Drug Reactions Reported at  $< 1\%$  Incidence*  
Additional ADRs that occurred in  $< 1\%$  of Sibelium-treated subjects in either of the above two clinical datasets are listed in Table 3.

<b>Table 3. Adverse Drug Reactions Reported by <math>&lt; 1\%</math> of Sibelium-Treated Subjects in Either the Placebo- or Comparator-Controlled Clinical Trials</b>	
<b>Psychiatric Disorders</b>	
Depressive Symptom	
Sleep disorder	
Apathy	
<b>Nervous System Disorders</b>	
Torticollis	
Tinnitus	
Lethargy	
Paraesthesia	
Sluggishness	
Restlessness	
Coordination Abnormal	
Disorientation	
<b>Cardiac Disorders</b>	
Palpitations	
<b>Gastrointestinal Disorders</b>	
Intestinal obstruction	
Gastrointestinal disorder	
Dry Mouth	
<b>Skin and Subcutaneous Tissue Disorders</b>	
Hyperhidrosis	

<b>Musculoskeletal and Connective Tissue Disorders</b>	
Muscle Spasms	
Muscle Twitching	
<b>Reproductive System and Breast Disorders</b>	
Oligomenorrhoea	
Menorrhagia	
Hypertrophy Breast	
Menstrual Disorder	
Libido Decreased	
<b>General Disorders and Administration Site Conditions</b>	
Generalised Oedema	
Asthenia	
Oedema Peripheral	

## Postmarketing Data

Adverse events first identified as ADRs during post-marketing experience with Sibelium are included in Table 4. In this table, the frequencies are provided according to the following convention:

- Very common  $\geq 1/10$
- Common  $\geq 1/100$  to  $< 1/10$
- Uncommon  $\geq 1/1000$  to  $< 1/100$
- Rare  $\geq 1/10000$  to  $< 1/1000$
- Very rare  $< 1/10000$ , including isolated reports

In Table 4, ADRs are presented by frequency category based on spontaneous reporting rates

<b>Table 4. Adverse Drug Reactions Identified During Postmarketing Experience with Sibelium by Frequency Category Estimated From Spontaneous Reporting Rates</b>		
<b>Psychiatric Disorders</b>		
Insomnia		Very rare
Anxiety		Very rare
<b>Nervous System Disorders</b>		
Akathisia		Very rare
Bradykinesia		Very rare
Cogwheel rigidity		Very rare
Dyskinesia		Very rare
Essential tremor		Very rare
Extrapyramidal disorder		Very rare
Parkinsonism		Very rare
Sedation		Very rare
Tremor		Very rare
<b>Gastrointestinal Disorders</b>		
Nausea		Very rare
<b>Musculoskeletal and Connective Tissue Disorder</b>		
Muscle rigidity		Very rare
<b>Skin and Subcutaneous Tissue Disorders</b>		
Erythema		Very rare
<b>Reproductive System and Breast Disorders</b>		
Galactorrhea		Very Rare

## **Overdose**

### *Symptoms*

On the basis of the pharmacological properties of the drug, sedation and asthenia may be expected to occur. A few cases of acute overdosage (up to 600 mg in one intake) have been reported and the observed symptoms were sedation, agitation and tachycardia.

### *Treatment*

There is no specific antidote. Within the first hour after ingestion, gastric lavage may be performed. Activated charcoal may be given if considered appropriate.

## **PHARMACOLOGICAL PROPERTIES**

ATC Code, N2C: Anti-Migraine Preps

### **Pharmacodynamic Properties**

Flunarizine is a selective calcium antagonist. It prevents cellular calcium overload by reducing excessive transmembrane calcium influx. Flunarizine has no effect on contractility or conduction of the heart.

### **Pharmacokinetic Properties**

The drug is well absorbed reaching peak plasma concentrations within 2 - 4 hours and reaching steady state at 5 - 6 weeks.

### *Absorption*

Flunarizine is well absorbed (>80%) from the gastrointestinal tract, reaching peak plasma concentrations within 2 to 4 hours after oral dosing. Under conditions of reduced gastric acidity (higher gastric pH), bioavailability may be moderately lower.

### *Distribution*

Flunarizine is >99% bound to plasma proteins. It has a large volume of distribution of approximately 78L/kg in healthy subjects and approximately 207L/kg in epileptic patients indicating extensive distribution into extravascular tissue. The drug quickly crosses the blood brain barrier; concentrations in the brain are approximately 10 times higher than those in plasma.

### *Metabolism*

Flunarizine is metabolized in the liver into at least 15 metabolites. The primary metabolic pathway is CYP2D6.

### *Elimination*

Flunarizine is primarily eliminated as parent drug and metabolites through the feces via bile. Within 24 to 48 hours after administration, approximately 3% to 5% of the administered dose of flunarizine is eliminated in the feces as parent drug and metabolites and less <1% is excreted as unchanged drug in urine. Its terminal elimination half-life is highly variable, ranging from 5 to 15 hours in most individual subjects after a single dose. Some subjects show measurable plasma concentrations of flunarizine (>0.5 ng/mL) for a prolonged time period (up to 30 days), possibly due to redistribution of the drug from other tissues.

### *Multiple-Dose*

Plasma concentrations of flunarizine reach steady-state after approximately 8 weeks of once-daily multiple dosing and are about 3-fold higher than those observed after a single dose.

Steady-state flunarizine concentrations are proportional over a dose range of 5 mg to 30 mg.

### **Preclinical Safety Data**

Preclinical effects of a CNS nature (e.g., sedation, salivation, ataxia) were observed only at exposures considered sufficiently in excess of the maximum human exposure indicating little relevance to clinical use.

## **PHARMACEUTICAL PARTICULARS**

### **List of Excipients**

The inactive ingredients of the capsules are lactose monohydrate, maize starch, talc, magnesium stearate and colloidal anhydrous silica.

The capsule shell contains erythrosine, yellow ferric oxide, titanium dioxide, black ferrous oxide, red ferric oxide, and gelatin.

### **Incompatibilities**

Not applicable.

### **Shelf Life**

Observe expiry date on the outer pack.

### **Special precautions for storage**

Store between 15°C and 30°C.

Keep out of reach of children.

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**Nature and Contents of Container**

Blisters: Polyvinylchloride foil, PVC/LDPE/PDVC, aluminum foil.

**Instructions for Use and Handling and Disposal**

Not applicable

**DATE OF (PARTIAL) REVISION OF THE TEXT**

November 2007