

## SUMMARY OF PRODUCT CHARACTERISTICS

### 1. NAME OF THE MEDICINAL PRODUCT

Razin

### 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Phentermine (as resinate) 15 mg/cap

For a full list of excipients, see section 6.1.

### 3. PHARMACEUTICAL FORM

Capsules.

### 4. CLINICAL PARTICULARS

#### 4.1 Therapeutic indications

For the treatment of severe obesity that has not responded to an appropriate diet- a minimal body mass index of 30 kg/m<sup>2</sup> is required.

Razin is indicated as an adjunct in a medically monitored comprehensive regimen of weight reduction based on exercise, diet (caloric restriction) and behaviour modification.

#### 4.2 Posology and method of administration

Adults and children aged over 16 years:

One capsules daily at breakfast, swallowed whole. Evening dosing should be avoided as this agent may induce insomnia. It is recommended that treatment should be initiated under the care of medical practitioners experienced in the treatment of obesity.

Razin capsules may be used for a period of up to 3 months of treatment.

Children:

Razin is not recommended for children under the age of 16.

Elderly:

Razin is not recommended for the elderly

#### 4.3 Contraindications

The use of Razin is contraindicated in cases of:

- hypersensitivity to phentermine, Sympathomimetic drugs or to any of the excipients listed in section 6.1
- Pulmonary artery hypertension
- Existing heart valve abnormalities or heart murmurs
- Moderate to severe arterial hypertension
- Cerebrovascular disease
- Severe cardiac disease including arrhythmias, Advanced arteriosclerosis
- Hyperthyroidism
- Agitated states or a history of psychiatric illness including anorexia nervosa and depression.
- Glaucoma
- History of drug/alcohol abuse or dependence.
- Concomitant treatment with monoamine oxidase (MAO) inhibitors or within 14 days following their administration.
- Co-administration of drug products for weight loss.

#### 4.4 Special warnings and precautions for use

Razin capsules may be used for a period of up to 3 months of treatment. Razin capsules are indicated only as short-term monotherapy for the management of exogenous obesity. The safety and efficacy of combination therapy with phentermine and other drug products for weight loss have not been established. Therefore, coadministration of drug products for weight loss is not recommended.

Since the selective serotonin reuptake inhibitors (e.g. fluoxetine, sertraline, paroxetine), ergot like drugs and clomipramine affect serotonin disposition there remains a theoretical risk that combination of these agents with phentermine may also be associated with cardiac valvular disease and is not recommended. There is no direct scientific evidence to confirm this theory.

Valvular Heart Disease: Serious regurgitate cardiac valvular disease, primarily affecting the mitral, aortic and/or tricuspid valves, has been reported in otherwise healthy persons who had taken a combination of phentermine with fenfluramine or dexfenfluramine for weight loss. The etiology of these valvulopathies has not been established and their course in individuals after the drugs are stopped is not known.

Primary Pulmonary Hypertension (PPH): Cases of severe, sometime fatal primary pulmonary hypertension, have been reported in patients who have received anorectics. In a case-control epidemiological study, the duration of treatment with anorectic agents, not including phentermine, beyond three months significantly increases the risk of PPH. However, patients treated with phentermine require medical review at least every 3 months (Refer to Section 4.2 – Dose and Method of Administration). PPH has been reported in patients receiving phentermine combined with fenfluramine / dexfenfluramine. The possibility of an association between PPH and the use of phentermine alone cannot be ruled out; there have been very rare cases of PPH in patients who reportedly have taken phentermine alone. The initial symptom of PPH is usually dyspnea. Other early symptoms include: angina pectoris, syncope, lower extremity edema or the unexplained onset or aggravation of diminished exercise tolerance. Under these circumstances, treatment should be immediately discontinued and the patient referred to a specialist unit for investigation.

##### Use with Caution in the Following Circumstances:

Razin should be used with caution in patients with mild hypertension. In the first days of treatment, determine that there is no loss of blood pressure control.

In patients receiving Razin, response to insulin and oral hypoglycaemic agents may vary due to alterations in dietary regimes. This should be kept in mind if Razin is used in diabetic patients.

Inappropriate use has been reported with similar drugs and the possibility of this occurrence should be considered with Razin.

Cardiovascular and cerebrovascular events have rarely been reported, mainly in association with rapid weight loss. Weight loss should be gradual and controlled in obese patients undergoing treatment with Razin. Razin should be used with caution in patients with established coronary artery disease. A single case of exacerbation of angina pectoris in a patient with established coronary artery disease has been reported.

Razin should be used with caution in patients receiving psychotropic drugs, including sedatives and agents with sympathomimetic activity.

Razin should be used with caution in epileptic patients.

Razin should be used with caution in patients receiving anti-hypertensive agents.

##### **Use in the elderly**

Razin is not recommended for the elderly.

##### **Paediatric Use**

Razin Capsules (phentermine resin) are not recommended for use in pediatric patients under 16 years of age.

### **Effects on laboratory tests**

There are no reports to-date to suggest that phentermine interferes with laboratory or diagnostic tests.

### **Excipients**

Razin contains lactose. Patients with rare hereditary problems of galactose intolerance, total lactase deficiency or glucose-galactose malabsorption should not take this medicine.

Razin contains Sucrose. Patients with rare hereditary problems of fructose intolerance, glucose-galactose malabsorption or sucrase-isomaltase insufficiency should not take this medicine.

## **4.5 Interaction with other medicinal products and other forms of interaction**

Use Razin with caution in patients receiving sympathomimetic agents.

Phentermine antagonises adrenergic neurone blocking drugs such as clonidine, methyldopa and guanethidine and may decrease their hypotensive effect.

The effects of phentermine are potentiated by monoamine oxidase inhibitors (see contraindications) and may result in a hypertensive crisis.

The concurrent use of thyroid hormones with Razin may increase the CNS stimulation that can occur with Razin.

Alcohol may increase CNS side effects such as dizziness, light-headedness and confusion and its concurrent use should be avoided with Razin.

## **4.6 Fertility, Pregnancy and Lactation**

### **Effects on fertility**

In rats, administration of phentermine at a dose 10 times the maximum human dose on a mg/m<sup>2</sup> basis abolished oestrous cycling. There is no information on the potential of phentermine to impair fertility in humans.

### **Use in pregnancy – Pregnancy Category B2** (Australian category system)

Weight reduction using appetite suppression drugs is not recommended during pregnancy. In rats, administration of phentermine during late gestation at a dose 7 times the maximum human dose on a mg/m<sup>2</sup> basis had no adverse effects on dams or offspring. There is no information on the teratological potential of phentermine. Because of inadequate evidence of safety in human pregnancy, Razin should not be used in pregnant women.

### **Use in lactation**

There is no data available on the safety of Razin in lactation and as such, its use in lactating women should be avoided.

## **4.7 Effects on ability to drive and use machines**

Razin may impair the ability to perform activities requiring mental alertness, such as driving and operating machinery, and patients therefore should be cautioned accordingly.

## **4.8 Undesirable effects**

Cardiovascular: Refer to Section 4.4 – “Special Warnings and Precautions for Use - Valvular Heart Disease and Primary pulmonary hypertension”. The most common reported reactions are palpitation, tachycardia, elevation of blood pressure and precordial pain. Rare occurrences of cardiovascular or cerebrovascular events have been described with anorectic agents. In particular stroke, angina, myocardial infarction, cardiac failure and cardiac arrest have been reported.

Central Nervous System: Overstimulation, restlessness, nervousness, insomnia, tremor, dizziness and headache. Rarely euphoria may occur and this may be followed by fatigue and depression. Psychotic episodes and hallucinations are rare side effects.

Gastrointestinal: Nausea, vomiting, dry mouth, abdominal cramps, unpleasant taste, diarrhoea, constipation.

Other: Micturition disturbances, rash, impotence, changes in libido, facial oedema.

Reporting of suspected adverse reactions:

Reporting of 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: <https://sideeffects.health.gov.il/>

#### 4.9 Overdose

Symptoms: Initially irritability, rapid respiration, agitation, euphoria, restlessness, hyperreflexia, disorientation and tremor, aggressiveness, hallucinations and panic states may occur, followed by cardiac arrhythmias, convulsions, fatigue, central nervous system depression and coma. Cardiovascular consequences include hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps.

Treatment: The treatment is largely symptomatic. Activated charcoal may reduce absorption of the medicine if given within one or two hours after ingestion. In patients who are not fully conscious or have impaired gag reflex, consideration should be given to administering activated charcoal via a nasogastric tube, once the airway is protected. Diazepam, preferably by mouth (cautiously by intravenous injection) can be used to control marked excitement and convulsions. Provided renal function is adequate, elimination of phentermine has been shown to be assisted by acidification of the urine. There is insufficient experience to recommend haemodialysis or peritoneal dialysis.

### 5. PHARMACOLOGICAL PROPERTIES

#### 5.1 Pharmacodynamic properties

##### **Mechanism of action**

Razin is a sympathomimetic amine with significant anorectic activity in animal models. Its appetite suppressant effect is generally considered to be exerted through the hypothalamus, but it is not certain that this is the only effect related to weight loss. Phentermine has major effects on the dopaminergic and noradrenergic nervous systems. The cardiovascular effects include a pressor response and increase in heart rate and force of contraction.

##### **Clinical trials**

No data available

#### 5.2 Pharmacokinetic properties

##### **Absorption**

Absorption of phentermine is almost complete. The rate of absorption from the resin complex is significantly slower than that from the hydrochloride salt, resulting in a lower and later peak blood level. Phentermine is readily absorbed from the gastrointestinal tract.

##### **Metabolism & Excretion**

Following an oral dose of phentermine capsule, one study demonstrated urinary excretion of unchanged drug ranging from 62.7% to 84.8% in 72 hours. The remainder is metabolised by the liver. The half-life of phentermine is about 25 hours. In one study in volunteers acidification of the urine reduced the half-life to 7 to 8 hours

#### 5.3 Preclinical Safety Data

##### **Genotoxicity**

Phentermine was not mutagenic in a bacterial gene mutation assay, however, studies to assess the potential for chromosomal damage have not been performed.

##### **Carcinogenicity**

No studies have been performed to determine the potential of phentermine for carcinogenesis.

## **6. PHARMACEUTICAL PARTICULARS**

### **6.1 List of excipients**

Lactose  
Acacia  
Sucrose  
Magnesium Stearate  
Maize starch  
Titanium dioxide  
Yellow iron oxide  
Black iron dioxide  
Red iron oxide  
Indigo carmine  
Erythrosin  
Gelatin

### **6.2 Shelf life**

The expiry date of the product is indicated on the packaging materials.

### **6.3 Nature and contents of container**

Razin capsules are packed in PVC/aluminum foil blister packs.

### **6.4 Special precautions for disposal and other handling**

No special requirements.

### **6.5 Special precautions for storage**

Store at temperature below 25 °C

## **7. MANUFACTURER**

CTS chemical industries Ltd.  
3 Hakidma st.  
Kiryat- Malachi 83057  
Israel

## **8. LISENCE HOLDER AND IMPORTER**

CTS chemical industries Ltd.  
3 Hakidma st.  
Kiryat- Malachi 83057  
Israel

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