

# Summary of Product Characteristics

## 1 NAME OF THE MEDICINAL PRODUCT

Zaditen 0.25 mg/ml, eye drops, solution

## 2 QUALITATIVE AND QUANTITATIVE COMPOSITION

One ml contains 0.345 mg ketotifen fumarate corresponding to 0.25mg ketotifen.

Each drop contains 8.5 microgram ketotifen fumarate.

Excipient(s) with known effect: Benzalkonium chloride (0.1mg/ml).

For the full list of excipients, see section 6.1.

## 3 PHARMACEUTICAL FORM

Eye drops, solution.

Clear, colourless to faintly yellow solution.

## 4 CLINICAL PARTICULARS

### 4.1 Therapeutic Indications

Symptomatic treatment of seasonal allergic conjunctivitis.

### 4.2 Posology and method of administration

Adults, elderly and children (age 3 and older): one drop of Zaditen into the conjunctival sac twice a day.

The contents and dispenser remain sterile until the original closure is broken. To avoid contamination do not touch any surface with the dropper tip.

The safety and efficacy of Zaditen in children aged from birth to 3 years have not yet been established.

### 4.3 Contraindications

Hypersensitivity to the active substance or to any of the excipients listed in section 6.1.

#### **4.4 Special warnings and precautions for use**

The formulation of Zaditen eye drops contains benzalkonium chloride as a preservative, which may be deposited in soft contact lenses; therefore Zaditen eye drops should not be instilled while the patient is wearing these lenses. The lenses should be removed before application of the drops and not reinserted earlier than 15 minutes after use.

All eye drops preserved with benzalkonium chloride may possibly discolour soft contact lenses. Benzalkonium chloride may cause eye irritation.

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

If Zaditen is used concomitantly with other eye medications there must be an interval of at least 5 minutes between the two medications.

The use of oral dosage forms of ketotifen may potentiate the effect of CNS depressants, antihistamines and alcohol. Although this has not been observed with Zaditen eye drops, the possibility of such effects cannot be excluded.

#### **4.6 Fertility, pregnancy and lactation**

##### Pregnancy

There are no adequate data from the use of ketotifen eye drops in pregnant women. Animal studies using maternally toxic oral doses showed increased pre- and postnatal mortality, but no teratogenicity. Systemic levels after ocular administration are much lower than after oral use. Caution should be exercised when prescribing to pregnant women.

##### Breast-feeding

Although animal data following oral administration show excretion into breast milk, topical administration to human is unlikely to produce detectable quantities in breast milk. Zaditen eye drops can be used during lactation.

##### Fertility

There is no data available on the effect of ketotifen fumarate on fertility in humans.

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

Any patient who experiences blurred vision or somnolence should not drive or operate machines.

#### **4.8 Undesirable effects**

*Adverse reactions are ranked under heading of frequency, using the following convention: Very common ( $\geq 1/10$ ); common ( $\geq 1/100$  to  $< 1/10$ ); uncommon ( $\geq 1/1,000$  to  $< 1/100$ ); rare ( $\geq 1/10,000$  to  $< 1/1,000$ ); very rare ( $< 1/10,000$ ), not known (cannot be estimated from the available data).*

##### Immune system disorders

Uncommon: Hypersensitivity

##### Nervous system disorders

Uncommon: Headache

##### Eye disorders

Common: Eye irritation, eye pain, punctate keratitis, punctate corneal epithelial erosion.

Uncommon: Vision blurred (during instillation), dry eye, eyelid disorder, conjunctivitis, photophobia, conjunctival haemorrhage.

##### Gastrointestinal disorders

Uncommon: Dry mouth

##### Skin and subcutaneous tissue disorders

Uncommon: Rash, eczema, urticaria

##### General disorders and administration site conditions

Uncommon: Somnolence

Adverse drug reactions from post-marketing experience (Frequency not known):  
The following post marketing events have also been observed: hypersensitivity reactions including local allergic reaction (mostly contact dermatitis, eye swelling, eyelid pruritis and oedema), systemic allergic reactions including facial swelling/oedema (in some cases associated with contact dermatitis) and exacerbation of pre-existing allergic conditions such as asthma and eczema.

##### Reporting of suspected adverse reactions

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. Healthcare professionals are asked to report any suspected adverse reactions via

HPRA Pharmacovigilance  
Earlsfort Terrace  
IRL - Dublin 2  
Tel: +353 1 676 4971  
Fax: +353 1 676 2517  
Website: [www.hpra.ie](http://www.hpra.ie)  
e-mail: [medsafety@hpra.ie](mailto:medsafety@hpra.ie)

#### **4.9 Overdose**

No case of overdose has been reported.

Oral ingestion of the contents of a 5 ml bottle would be equivalent to 1.25 mg of ketotifen which is 60% of a recommended oral daily dose for a 3 year old child. Clinical results have shown no serious signs or symptoms after oral ingestion of up to 20 mg of ketotifen.

### **5 PHARMACOLOGICAL PROPERTIES**

#### **5.1 Pharmacodynamic properties**

Pharmacotherapeutic group: Ophthalmologicals, other anti-allergics  
ATC code: S01GX08

Ketotifen is a histamine H1-receptor antagonist. *In vivo* animal studies and *in vitro* studies suggest the additional activities of mast cell stabilisation and inhibition of infiltration, activation and degranulation of eosinophils.

#### **5.2 Pharmacokinetic properties**

In a pharmacokinetic study conducted in 18 healthy volunteers with Zaditen eye drops, plasma levels of ketotifen after repeated ocular administration for 14 days were in most cases below the limit of quantitation (20 pg/ml).

After oral administration, ketotifen is eliminated biphasically with an initial half-life of 3 to 5 hours and a terminal half-life of 21 hours. About 1% of the substance is excreted unchanged in the urine within 48 hours and 60 to 70% as metabolites. The main metabolite is the practically inactive ketotifen-N-glucuronide.

#### **5.3 Preclinical safety data**

Preclinical data reveal no special hazard which is considered relevant in connection with use of Zaditen eye drops in humans based on conventional studies of safety

pharmacology, repeated dose toxicity, genotoxicity, carcinogenic potential and toxicity to reproduction.

## **6 PHARMACEUTICAL PARTICULARS**

### **6.1 List of excipients**

Benzalkonium chloride  
Glycerol (E422)  
Sodium hydroxide (E524)  
Water for injections

### **6.2 Incompatibilities**

Not applicable.

### **6.3 Shelf life**

Unopened bottle: 2 years.  
After opening: 4 weeks.

### **6.4 Special precautions for storage**

Do not store above 25 °C.

### **6.5 Nature and contents of container**

The container is a white-coloured LDPE bottle with a transparent LDPE dropper and a white HDPE screw cap with an integrated safety ring. One bottle contains 5 ml of the solution.

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

No special requirements.

## **7 MARKETING AUTHORISATION HOLDER**

Laboratoires Thea  
12, rue Louis Blériot  
63017 Clermont-Ferrand Cedex 2  
France

## **8 MARKETING AUTHORISATION NUMBER**

PA1107/010/001

**9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION**

Date of first authorisation: 24 November 2000

Date of last renewal: 30 June 2010

**10 DATE OF REVISION OF THE TEXT**

November 2014