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 0.25 mg ketotifen.

Each drop contains 8.5 microgram ketotifen fumarate.

Excipient(s) with known effect: Benzalkonium chloride (0.1 mg/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 special 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 interaction

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 (≥ 1/10); common (≥ 1/100 to < 1/10); uncommon (≥ 1/1,000 to < 1/100); rare (≥ 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, urticarial

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 the national reporting system [to
be completed nationally].

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

In 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

<[To be completed nationally]>

8 MARKETING AUTHORISATION NUMBER(S)

<[To be completed nationally]>

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

2000-06-30/2010-06-30

10 DATE OF REVISION OF THE TEXT

2014-09-15