OLOPATADINE HYDROCHLORIDE - olopatadine hydrochloride solution/drops
Teva Pharmaceuticals USA, Inc.

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HIGHLIGHTS OF PRESCRIBING INFORMATION
These highlights do not include all the information needed to use OLOPATADINE HYDROCHLORIDE OPHTHALMIC SOLUTION safely and effectively. See full prescribing information for OLOPATADINE HYDROCHLORIDE OPHTHALMIC SOLUTION.

OLOPATADINE HYDROCHLORIDE ophthalmic solution 0.2%
Initial U.S. Approval: 1996

---------------- INDICATIONS AND USAGE ------------------------
Olopatadine hydrochloride ophthalmic solution is a mast cell stabilizer indicated for the treatment of ocular itching associated with allergic conjunctivitis. (1)

---------------- DOSAGE AND ADMINISTRATION ------------------------
The recommended dose is one drop in each affected eye once a day. (2)

---------------- DOSAGE FORMS AND STRENGTHS ------------------------
Ophthalmic solution 0.2%: each mL contains 2.22 mg of olopatadine hydrochloride. (3)

---------------- WARNINGS AND PRECAUTIONS ------------------------
For topical ocular use only. Not for injection or oral use. (5.1)

---------------- ADVERSE REACTIONS ------------------------
Symptoms similar to cold syndrome and pharyngitis were reported at an incidence of approximately 10%. (6)
To report SUSPECTED ADVERSE REACTIONS, contact Teva Pharmaceuticals USA, Inc. at 1-866-832-8537 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.
See 17 for PATIENT COUNSELING INFORMATION.

Revised: 5/2017

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FULL PRESCRIBING INFORMATION

1 INDICATIONS AND USAGE
Olopatadine hydrochloride ophthalmic solution is indicated for the treatment of ocular itching associated with allergic conjunctivitis.

2 DOSAGE AND ADMINISTRATION
The recommended dose is one drop in each affected eye once a day.

3 DOSAGE FORMS AND STRENGTHS
Ophthalmic solution 0.2%: each mL contains 2.22 mg of olopatadine hydrochloride USP.

4 CONTRAINDICATIONS
None.

5 WARNINGS AND PRECAUTIONS
5.1 For Topical Ocular Use Only
Not for injection or oral use.

5.2 Contamination of Tip and Solution
As with any eye drop, to prevent contaminating the dropper tip and solution, care should be taken not to touch the eyelids or surrounding areas with the dropper tip of the bottle. Keep bottle tightly closed when not in use.

5.3 Contact Lens Use
Patients should be advised not to wear a contact lens if their eye is red.

Olopatadine hydrochloride ophthalmic solution 0.2% should not be used to treat contact lens related irritation.

The preservative in olopatadine hydrochloride ophthalmic solution, benzalkonium chloride, may be absorbed by soft contact lenses. Patients who wear soft contact lenses and whose eyes are not red, should be instructed to wait at least ten minutes after instilling olopatadine hydrochloride ophthalmic solution 0.2% before they insert their contact lenses.

6 ADVERSE REACTIONS
Symptoms similar to cold syndrome and pharyngitis were reported at an incidence of approximately 10%.
The following adverse experiences have been reported in 5% or less of patients:

Ocular: blurred vision, burning or stinging, conjunctivitis, dry eye, foreign body sensation, hyperemia, hypersensitivity, keratitis, lid edema, pain and ocular pruritus.

Non-ocular: asthenia, back pain, flu syndrome, headache, increased cough, infection, nausea, rhinitis, sinusitis and taste perversion.

Some of these events were similar to the underlying disease being studied.

8 USE IN SPECIFIC POPULATIONS

8.1 Pregnancy

Teratogenic Effects

Pregnancy Category C

Olopatadine was found not to be teratogenic in rats and rabbits. However, rats treated at 600 mg/kg/day, or 150,000 times the MROHD and rabbits treated at 400 mg/kg/day, or approximately 100,000 times the MROHD, during organogenesis showed a decrease in live fetuses. In addition, rats treated with 600 mg/kg/day of olopatadine during organogenesis showed a decrease in fetal weight. Further, rats treated with 600 mg/kg/day of olopatadine during late gestation through the lactation period showed a decrease in neonatal survival and body weight. There are, however, no adequate and well-controlled studies in pregnant women. Because animal studies are not always predictive of human responses, this drug should be used in pregnant women only if the potential benefit to the mother justifies the potential risk to the embryo or fetus.

8.3 Nursing Mothers

Olopatadine has been identified in the milk of nursing rats following oral administration. It is not known whether topical ocular administration could result in sufficient systemic absorption to produce detectable quantities in the human breast milk. Nevertheless, caution should be exercised when olopatadine hydrochloride ophthalmic solution 0.2% is administered to a nursing mother.

8.4 Pediatric Use

Safety and effectiveness in pediatric patients below the age of 2 years have not been established.

8.5 Geriatric Use

No overall differences in safety and effectiveness have been observed between elderly and younger patients.

11 DESCRIPTION

Olopatadine hydrochloride ophthalmic solution USP 0.2% is a sterile ophthalmic solution containing olopatadine for topical administration to the eyes. Olopatadine hydrochloride, USP is a white or whitish, crystalline, water-soluble powder.

The structural formula of olopatadine hydrochloride, USP is:
C₂₁H₂₃NO₃ • HCl M.W. 373.88

**Chemical Name:** 11-[(Z)-3-(Dimethylamino) propylidene]-6-11-dihydrodibenz[b,e] oxepin-2-acetic acid, hydrochloride.

Each mL of olopatadine hydrochloride ophthalmic solution USP for topical ocular use only, contains 2.22 mg olopatadine hydrochloride, USP equivalent to 2 mg olopatadine and has the following inactive ingredients: dibasic sodium phosphate anhydrous, edetate disodium, povidone, sodium chloride; benzalkonium chloride 0.01% (preservative); hydrochloric acid/sodium hydroxide (adjust pH); and water for injection.

It has a pH of approximately 7 and an osmolality of approximately 300 mOsm/kg.

### 12 CLINICAL PHARMACOLOGY

#### 12.1 Mechanism of Action

Olopatadine is a mast cell stabilizer and a histamine H1 antagonist. Decreased chemotaxis and inhibition of eosinophil activation has also been demonstrated.

#### 12.3 Pharmacokinetics

Systemic bioavailability data upon topical ocular administration of olopatadine hydrochloride ophthalmic solution are not available. Following topical ocular administration of olopatadine 0.15% ophthalmic solution in man, olopatadine was shown to have a low systemic exposure. Two studies in normal volunteers (totaling 24 subjects) dosed bilaterally with olopatadine 0.15% ophthalmic solution once every 12 hours for 2 weeks demonstrated plasma concentrations to be generally below the quantitation limit of the assay (< 0.5 ng/mL). Samples in which olopatadine was quantifiable were typically found within 2 hours of dosing and ranged from 0.5 to 1.3 ng/mL. The elimination half-life in plasma following oral dosing was 8 to 12 hours, and elimination was predominantly through renal excretion. Approximately 60 to 70% of the dose was recovered in the urine as parent drug. Two metabolites, the mono-desmethyl and the N-oxide, were detected at low concentrations in the urine.

### 13 NONCLINICAL TOXICOLOGY

#### 13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

Olopatadine administered orally was not carcinogenic in mice and rats in doses up to 500 mg/kg/day and 200 mg/kg/day, respectively. Based on a 40 μL drop size and a 50 kg person, these doses were approximately 150,000 and 50,000 times higher than the maximum recommended ocular human dose (MROHD). No mutagenic potential was observed when olopatadine was tested in an *in vitro* bacterial reverse mutation (Ames) test, an *in vitro* mammalian chromosome aberration assay or an *in vivo* mouse
micronucleus test. Olopatadine administered to male and female rats at oral doses of approximately 100,000 times MROHD level resulted in a slight decrease in the fertility index and reduced implantation rate; no effects on reproductive function were observed at doses of approximately 15,000 times the MROHD level.

14 CLINICAL STUDIES
Results from clinical studies of up to 12 weeks duration demonstrate that olopatadine hydrochloride ophthalmic solution when dosed once a day is effective in the treatment of ocular itching associated with allergic conjunctivitis.

16 HOW SUPPLIED/STORAGE AND HANDLING
Olopatadine hydrochloride ophthalmic solution USP 0.2% is a clear, colorless to light yellow solution supplied in a white, low density polyethylene (LDPE) bottle with a white dropper tip, and a high density polyethylene cap.
2.5 mL fill in 5 mL bottle (NDC 0093-7684-32)

Storage
Store at 2° to 25°C (36° to 77°F)
KEEP THIS AND ALL MEDICATIONS OUT OF THE REACH OF CHILDREN.

17 PATIENT COUNSELING INFORMATION
17.1 Topical Ophthalmic Use Only
For topical ophthalmic administration only.

17.2 Sterility of Dropper Tip
Patients should be advised to not touch dropper tip to any surface, as this may contaminate the contents.

17.3 Concomitant Use of Contact Lenses
Patients should be advised not to wear a contact lens if their eyes are red. Patients should be advised that olopatadine hydrochloride ophthalmic solution should not be used to treat contact lens related irritation. Patients should also be advised to remove contact lenses prior to instillation of olopatadine hydrochloride ophthalmic solution. The preservative in olopatadine hydrochloride ophthalmic solution, benzalkonium chloride, may be absorbed by soft contact lenses. Lenses may be reinserted following administration of olopatadine hydrochloride ophthalmic solution.

Manufactured In Israel By:

Teva Pharmaceutical Ind. Ltd.
Jerusalem, 9777402, Israel

Manufactured For:

Teva Pharmaceuticals USA, Inc.
North Wales, PA 19454
Rev. A 2/2017

Package/Label Display Panel
Olopatadine Hydrochloride Ophthalmic Solution USP 0.2%, 2.5 mL Bottle, Carton Text
NDC 0093-7684-32
(Once a day)
Olopatadine
Hydrochloride
Ophthalmic
Solution USP
0.2%*
For Topical Application in the Eye

Sterile

Manufactured in Israel For:
Teva Pharmaceuticals USA, Inc.
North Wales, PA 19454

WARNING: Do not touch dropper tip to any surface, as this may contaminate this solution. FOR TOPICAL APPLICATION IN THE EYE
This package is not child resistant. KEEP THIS AND ALL MEDICATIONS OUT OF THE REACH OF CHILDREN.
OLOPATADINE HYDROCHLORIDE
olopatadine hydrochloride solution/ drops

Product Information

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<th>Product Type</th>
<th>HUMAN PRESCRIPTION DRUG</th>
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Active Ingredient/Active Moiety

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Packaging

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Marketing Information
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**Labeler** - Teva Pharmaceuticals USA, Inc. (001627975)

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