

## **NEW ZEALAND DATA SHEET**

### **1. PRODUCT NAME**

LOMIDE™

Lodoxamide trometamol 0.1% Eye Drops

### **2. QUALITATIVE AND QUANTITATIVE COMPOSITION**

Each mL of Lomide Eye Drops contains the active ingredient lodoxamide trometamol 0.178% w/v equivalent to lodoxamide 0.1%.

Excipient with known effect

Benzalkonium chloride 0.007% as a preservative.

For the full list of excipients, see section 6.1.

### **3. PHARMACEUTICAL FORM**

Sterile preserved eye drops, solution.

### **4. CLINICAL PARTICULARS**

#### **4.1. Therapeutic indications**

Lomide Eye Drops 0.1% are indicated in the treatment of non-infectious allergic conjunctivitis (vernal conjunctivitis, giant papillary conjunctivitis and seasonal allergic conjunctivitis). The aetiologic factors are unknown, but common airborne allergens and contact lenses have been implicated. Lodoxamide trometamol may be effective against other ocular diseases where Type-I, IgE-mediated hypersensitivity (or mast cells) play a major role in the inflammatory process.

Prophylactic use of Lomide Eye Drops will assist in minimising the allergic symptoms associated with seasonal allergic conjunctivitis.

#### **4.2. Dose and method of administration**

Adults and children of 4 years and older

One drop in each eye four times a day at regular intervals.

Patients should be advised that the effect of therapy with Lomide Eye Drops is dependent upon its administration at regular intervals, as directed.

Improvements in signs and symptoms in response to therapy with Lomide Eye Drops (decreased discomfort, itching, foreign body sensation, photophobia, acute ocular pain, tearing, discharge, erythema/swelling, conjunctival redness, limbal reaction, epithelial disease, ptosis) are usually evident within a few days, however, longer treatment for up to four weeks is sometimes required. Further, continued treatment may result in ongoing improvement in signs and symptoms for at least 3 months. Once symptomatic improvement has been established, therapy should be continued for as long as needed to sustain improvement.

Patients should be advised to wait 10 minutes after instilling Lomide Eye Drops before instilling any other eye drops.

Use in the elderly

There are no special precautions required for prescribing Lomide Eye Drops for the elderly.

### Concomitant Therapy

Corticosteroids may be used concomitantly with Lomide Eye Drops.

### **4.3. Contraindications**

Hypersensitivity to lodoxamide or any of the excipients listed under section 6.1.

### **4.4. Special Warnings and Precautions for Use**

Lomide Eye Drops are not for injection.

Patients should be advised that effect of therapy with Lomide Eye Drops is dependent upon administration at regular intervals. The recommended frequency of administration should not be exceeded. Patients should also be advised that instillation of eye drops may cause discomfort or transient burning or stinging initially. Should these symptoms persist, the patient should be advised to contact the prescribing physician.

Lomide Eye Drops contain benzalkonium chloride which may cause eye irritation and is known to discolour soft contact lenses. Avoid contact with soft contact lenses. If patients continue to wear soft (hydrophilic) contact lenses while under treatment with Lomide Eye Drops, they should remove their lens(es) prior to instilling Lomide Eye Drops in the affected eye(s) and should not insert their lens(es) until 15 minutes after instillation of the eye drops.

### **4.5 Interactions with Other Medicinal Products and Other Forms of Interactions**

No specific drug interaction studies, either with ophthalmic or systemic medications, have been conducted. Limited concomitant medications, however, were permitted during the clinical studies and no interactions were observed. Concomitant medications included: corticosteroids (systemic and ophthalmic), naphazoline, antazoline, ketorolac, ciprofloxacin, gentamicin, sulfacetamide, tetracycline, tobramycin, timolol and dipivefrine.

Patients should be advised to wait 10 minutes after instilling LOMIDE Eye Drops before instilling any other eye drops.

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

#### Pregnancy

CATEGORY B1

Drugs which have been taken by only a limited number of pregnant women and women of childbearing age, without an increase in the frequency of malformation or other direct or indirect harmful effects on the human fetus having been observed. Lomide Eye Drops should only be used in pregnancy if clearly needed.

#### Breast-feeding

It is not known whether topically applied lodoxamide is excreted in human milk. There is insufficient information on the excretion of lodoxamide from Lomide Eye Drops in animal milk. A risk to the breastfed child cannot be excluded. A decision must be made whether to discontinue breast-feeding or to discontinue/abstain from Lomide Eye Drops therapy taking into account the benefit of breast-feeding for the child and the benefit of therapy for the woman

## Effects on fertility

There are no data available on the effect of lodoxamide on fertility in humans.

### **4.7 Effects on Ability to Drive or Use Machines**

Temporary blurred vision or other visual disturbances may affect the ability to drive or use machines. If blurred vision occurs at instillation, the patient must wait until the vision clears before driving or using machinery.

### **4.8 Undesirable Effects**

During clinical studies of Lomide Eye Drops, the most frequently reported ocular adverse experiences were transient burning, stinging, or discomfort upon instillation, which occurred in 13% of patients. Other ocular events occurring in 1 to 3.5% of the patients included ocular pruritus (3.5%), blurred vision (1.8%), lid margin crusting (1.6%), dry eye (1.3%), tearing (1.2%) and hyperaemia (1.2%).

Events that occurred in less than 1% of the patients included foreign body sensation, ocular pain, discharge, ocular oedema, ocular fatigue, ocular warming sensation, lid oedema, chemosis, anterior chamber cells, epitheliopathy, keratopathy/keratitis, blepharitis, sticky sensation, corneal erosion, dim vision, corneal abrasion and allergy.

Non-ocular events are rare and reported at incidences less than 0.5%; these included a temporary warm sensation, headache, nausea, stomach discomfort, dizziness, somnolence, dry nose, sneezing and rash.

The following adverse reactions are classified according to 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 ( $< 1/10,000$ ), or not known (cannot be estimated from the available data). Within each frequency-grouping, adverse reactions are presented in order of decreasing seriousness. The adverse reactions have been observed during clinical trials and post-marketing experience for lodoxamide eye drops.

System Organ Classification	MedDRA Preferred Term
Immune system disorders	Rare: drug hypersensitivity.
Nervous system disorders	Uncommon: dizziness, headache. Rare: somnolence, dysgeusia.
Eye disorders	Very common: ocular discomfort. Common: vision blurred, dry eye, eye pruritus, lacrimation increased, ocular hyperaemia. Uncommon: eye pain, eye oedema, asthenopia, corneal deposits, conjunctival oedema, abnormal sensation in the eye, foreign body sensation in eyes, eye discharge, eye irritation. Rare: corneal erosion, corneal scar,

	corneal abrasion, anterior chamber cell, corneal epithelium defect, keratitis, blepharitis, visual impairment, eyelid oedema, conjunctival disorder.
Respiratory, thoracic and mediastinal disorders	Rare: nasal dryness, sneezing.
Gastrointestinal disorders	Uncommon: nausea Rare: abdominal discomfort
Skin and subcutaneous tissue disorders	Uncommon: eyelid exfoliation. Rare: rash.
General disorders and administration site conditions	Uncommon: drug intolerance, feeling hot.

Additional adverse reactions identified from post-marketing surveillance include the following. Frequencies cannot be estimated from the available data. Within each system Organ Class adverse reactions are presented in order of decreasing seriousness.

<b>System Organ Classification</b>	<b>MedDRA Preferred Term</b>
Cardiac disorders	Not known: palpitations

#### Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicine is important. It allows continued monitoring of the benefit/risk balance of the medicine. Healthcare professionals are asked to report any suspected adverse reactions <https://nzphvc.otago.ac.nz/reporting>.

#### **4.9 Overdose**

Due to the characteristics of this preparation, toxic effects are unlikely following an ocular overdose of this product. In the event of an ocular overdose, flush from the eye with lukewarm water.

In case of accidental ingestion of doses of 0.1 mg to 10.0 mg of lodoxamide the following adverse effects may occur: feeling of warmth, flushing, nausea, vomiting, diaphoresis and abdominal cramping. Transient elevations of systolic and diastolic blood pressure have been noted with doses of 3.0 and 10.0 mg of oral lodoxamide, but they resolve spontaneously after a short time.

If accidentally ingested, efforts to decrease further absorption may be appropriate.

For advice on the management of overdose please contact the National Poisons Centre on 0800 POISON (0800 764 766).

### **5. PHARMACOLOGICAL PROPERTIES**

## 5.1 Pharmacodynamic properties

Pharmacotherapeutic group: ophthalmologicals; Antiallergics, ATC Code S01G X05.

### Mechanism of action

Lodoxamide trometamol is a mast cell stabiliser that inhibits the *in vivo* Type-I, IgE-mediated (immediate) hypersensitivity reaction. Lodoxamide inhibits the increase in cutaneous vascular permeability that is associated with reagin or IgE and antigen-mediated reactions.

### Pharmacodynamic effects

*In vitro* studies have demonstrated the ability of lodoxamide to stabilise rodent mast cells and prevent antigen-stimulated release of histamine. In addition, lodoxamide prevents the release of other mast cell inflammatory mediators (i.e. SRS-A, slow-reacting substances of anaphylaxis, also known as the peptido-leukotrienes) and inhibits eosinophil chemotaxis. Although lodoxamide's precise mechanism of action is unknown, the drug has been reported to prevent calcium influx into mast cells upon antigen stimulation.

Lodoxamide has no intrinsic vasoconstrictor, antihistaminic, cyclo-oxygenase inhibition or other anti-inflammatory activity.

## 5.2 Pharmacokinetic properties

The disposition of <sup>14</sup>C-lodoxamide was studied in six healthy adult volunteers receiving a 3 mg (50 µCi) oral dose of lodoxamide. Urinary excretion was the major route of elimination (83%). The elimination half-life of <sup>14</sup>C-lodoxamide was estimated from urinary excretion data to be 8.5 hours.

The administration of Lomide Eye Drops to twelve healthy adult volunteers (one drop in each eye four times per day for ten days) resulted in only 3 plasma samples (from a total of 108) with detectable levels of lodoxamide (level of detection 2.5 ng/mL). It is, therefore, possible that minute amounts of lodoxamide might be absorbed systemically in some patients.

## 5.3 Preclinical safety data

### Pregnancy

Studies in animals have not shown evidence of an increased occurrence of fetal damage.

Reproduction studies with lodoxamide trometamol administered orally to rats and rabbits in doses of 100 mg/kg/day produced no evidence of developmental toxicity. There are no or a limited amount of data from the use of Lomide Eye Drops in pregnant women. Animal studies do not indicate direct or indirect harmful effects with respect to reproductive toxicity. Because animal reproductive studies are not always predictive of human response, Lomide Eye Drops should only be used in pregnancy if clearly needed.

### Fertility

No evidence of impairment of reproductive function was shown in laboratory animal studies. There are no data available on the effect of lodoxamide on fertility in humans.

### Carcinogenicity

A long-term study with lodoxamide trometamol in rats (two-year oral administration) showed no neoplastic or tumourigenic effects at doses up to 100 mg/kg/day (more than

5,000 times the proposed human clinical dose).

### Mutagenicity

No evidence of mutagenicity or genetic damage was seen in assays for gene mutations and chromosomal damage. In the BALB/c-3T3 Cells Transformation Assay, some increase in the number of transformed foci was seen at high concentrations.

## **6. PHARMACEUTICAL PARTICULARS**

### **6.1. List of excipients**

Mannitol

Hypromellose

Sodium citrate dihydrate

Citric acid monohydrate

Tyloxapol

Disodium edetate dihydrate

Benzalkonium chloride

Hydrochloric acid

Sodium hydroxide

Purified water.

### **6.2 Incompatibilities**

Unknown.

### **6.3 Shelf life**

24 months.

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

Store below 25° C. Do not freeze.

Discard container 4 weeks after opening.

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

10 mL or 5 mL DROP-TAINER bottle dispenser.

### **6.6 Special precautions for disposal**

No special requirements for disposal.

## **7. MEDICINE SCHEDULE**

Pharmacy Only Medicine.

## **8. SPONSOR**

Novartis New Zealand Limited

PO Box 99102

Newmarket

Auckland 1149

New Zealand.

Free Phone: 0800 354 335.

**9. DATE OF FIRST APPROVAL**

25 July 1996

**10. DATE OF REVISION OF THE TEXT**

30 June 2020

**SUMMARY TABLE OF CHANGES**

Section	Summary of Changes
8. Sponsor	Update to Sponsor address

TM<sub>Trademark.</sub>

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