AUSTRALIAN PRODUCT INFORMATION – MINIMS® PREDNISOLONE EYE DROPS

1 NAME OF THE MEDICINE

Prednisolone Sodium Phosphate

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Minims Prednisolone Eye Drops contain prednisolone sodium phosphate 0.5% w/v as well as disodium edetate, monobasic sodium phosphate, sodium chloride, sodium hydroxide and purified water. No preservatives are contained in the formulation.

3 PHARMACEUTICAL FORM

Minims Prednisolone Eye Drops are clear, colourless sterile eye drops. Each unit contains approximately 0.5mL solution in a container that has a twist and pull cap. Each unit should be discarded after a single use. The solution has a neutral pH.

4 CLINICAL PARTICULARS

4.1 THERAPEUTIC INDICATIONS

Minims Prednisolone Eye Drops are indicated for non-infected inflammatory conditions of the eye.

4.2 DOSE AND METHOD OF ADMINISTRATION

Adults and the elderly

One drop applied topically to the eye as required.

Children

At the discretion of the physician.

Systemic absorption may be reduced by compressing the lacrimal sac at the medial canthus for a minute during and following the instillation of the drops. (This blocks the passage of the drops via the naso-lacrimal duct to the wide absorptive area of the nasal and pharyngeal mucosa.).

Each Minims Prednisolone Eye Drops unit should be discarded after a single use.

4.3 CONTRAINDICATIONS

Minims Prednisolone Eye Drops are contraindicated in the following patient groups / conditions:

- Patients with hypersensitivity to any of the components of the preparation.
- Presence of viral, fungal, tuberculous or other bacterial infection.
- In children, long-term, continuous topical corticosteroid therapy should be avoided due to possible adrenal suppression.
- Glaucoma.

4.4 SPECIAL WARNINGS AND PRECAUTIONS FOR USE

Minims Prednisolone Eye Drops are for topical ophthalmic use only. The solution should not be injected.

Care should be taken to ensure that the eye is not infected before Minims Prednisolone Eye Drops is used. Corticosteroids may reduce resistance to and aid in the establishment of bacterial, viral, or fungal infections and mask the clinical signs of infection, preventing recognition of ineffectiveness of the antibiotic, or may suppress hypersensitivity reactions to substances in the product. Fungal infection should be suspected in patients with persistent corneal ulceration who have been or are receiving these drugs and corticosteroid therapy should be discontinued if fungal infection occurs. If bacterial infection is present, appropriate anti-bacterial therapy should be used and if the infection does not respond promptly, the corticosteroid should be discontinued and other appropriate therapy initiated.

Steroid medication in the treatment of patients with a history of herpes simplex keratitis requires great caution; frequent slit microscopy is mandatory.

Prolonged application to the eye of preparations containing corticosteroids has caused increased intraocular pressure. If the treating physician determines the clinical need outweighs the risks in patients with glaucoma (see CONTRAINDICATION), intraocular pressure should be closely monitored and any undesirable elevation treated promptly.

Various ocular diseases and long term use of topical corticosteroids have been known to cause corneal and scleral thinning. Use of topical corticosteroids in the presence of thin corneal or scleral tissues may lead to perforation.

Systemic absorption of prednisolone may be reduced by compressing the lacrimal sac at the medial canthus for a minute during and following the instillation of the drops. (This blocks the passage of the drops via the naso-lacrimal duct to the wide absorptive area of the nasal and pharyngeal mucosa.)

Visual disturbance

Visual disturbance may be reported with systemic and topical corticosteroid use. If a patient presents with symptoms such as blurred vision or other visual disturbances, the patient should be considered for referral to an ophthalmologist for evaluation of possible causes which may include cataract, glaucoma or rare diseases such as central serous chorioretinopathy (CSCR) which have been reported after use of systemic and topical corticosteroids.

Use in the elderly

No data available

Paediatric use

In children, long-term, continuous topical corticosteroid therapy should be avoided due to possible adrenal suppression (see CONTRAINDICATIONS).

Effects on laboratory tests

No data available

4.5 INTERACTIONS WITH OTHER MEDICINES AND OTHER FORMS OF INTERACTIONS

Although negligible prednisolone passes into the bloodstream after ocular instillation, drug interactions are nevertheless possible. The interactions observed with prednisolone administered by any route should therefore be taken into account.

Corticosteroids are known to increase the effects of barbiturates, sedative hypnotics and tricyclic antidepressants.

Corticosteroids will, however, decrease the effects of anticholinesterases, antiviral eye preparations and salicylates.

Co-treatment with CYP3A inhibitors, including cobicistat-containing products, is expected to increase the risk of systemic side-effects. The combination should be avoided unless the benefit outweighs the increased risk of systemic corticosteroid side-effects, in which case patients should be monitored for systemic corticosteroid side-effects.

4.6 FERTILITY, PREGNANCY AND LACTATION

Effects on fertility

Studies have not been performed in either animals or humans to evaluate the potential for Prednisolone to impair fertility.

Use in pregnancy – Pregnancy Category - B3

Topical administration of corticosteroids to pregnant animals can cause abnormalities of foetal development and although the relevance of this finding to human beings has not been established, the use of Minims Prednisolone Eye Drops during pregnancy should be avoided.

Use in lactation.

Systemically absorbed prednisolone is excreted in breast milk, therefore, use of Minims Prednisolone Eye Drops to breastfeeding mothers is not recommended.

4.7 EFFECTS ON ABILITY TO DRIVE AND USE MACHINES

The effects of this medicine on a person's ability to drive and use machines were not assessed as part of its registration.

4.8 ADVERSE EFFECTS (UNDESIRABLE EFFECTS)

Reporting suspected adverse effects

Reporting suspected adverse reactions after registration 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 at www.tga.gov.au/reporting-problems.

Prolonged treatment with corticosteroids in high dosage is occasionally associated with cataract development.

Other ocular effects of corticosteroid therapy reported include: transient ocular discomfort, posterior subcapsular cataracts, ocular hypertension or glaucoma, defects in visual acuity and field of vision, optic nerve damage, decreased resistance to ocular infection, corneal epithelial healing impairment, uveitis, mydriasis and ptosis .

Following long term therapy, systemic effects of steroids are rarely reported but possible following the use of Minims Prednisolone Eye Drops.

Post Marketing

Eye disorders: vision blurred.

4.9 OVERDOSE

For information on the management of overdose, contact the Poisons Information Centre on 13 11 26 (Australia).

Overdosage with Minims Prednisolone Eye Drops is unlikely to occur.

5 PHARMACOLOGICAL PROPERTIES

5.1 PHARMACODYNAMIC PROPERTIES

Mechanism of action

The actions of corticosteroids are mediated by the binding of the corticosteroid molecules to receptor molecules located within sensitive cells. Corticosteroid receptors are present in human trabecular meshwork cells and in rabbit iris ciliary body tissue.

Corticosteroids are thought to act by the induction of phospholipase A2 inhibitory proteins, collectively called lipocortins. It is postulated that these proteins control the biosynthesis of potent mediators of inflammation such as prostaglandins and leukotrienes by inhibiting the release of their common precursor arachidonic acid. Arachidonic acid is released from membrane phospholipids by phospholipase A2.

The activation and migration of leucocytes will be affected by prednisolone. A 1% solution of prednisolone acetate has been demonstrated to cause a 51% reduction in polymorphonuclear leucocyte mobilisation to an inflamed rabbit cornea. Corticosteroids also lyse and destroy lymphocytes. These actions of prednisolone all contribute to its anti-inflammatory effect.

Clinical trials

No data available

5.2 PHARMACOKINETIC PROPERTIES

Aqueous humour levels have been reported in 93 human eyes, dosed with 50 µL of a 0.5% prednisolone sodium phosphate solution, prior to undergoing cataract extraction. Detectable levels were noted at the 90-240 minute interval. Levels were still detectable up to 8 hours after dosing, but not after 10 hours.

5.3 PRECLINICAL SAFETY DATA

Genotoxicity

No data available

Carcinogenicity

There are no studies on the carcinogenicity of prednisolone by the topical ocular route. No carcinogenic activity was noted in the mouse at oral doses up to 5 mg/kg/day for 18 months. In male rats, administration of prednisolone in the drinking water at a dose level of 0.4 mg/kg/day for two years caused an increased incidence of hepatocellular tumours. This carcinogenic response does not appear to be related to genotoxic activity.

6 PHARMACEUTICAL PARTICULARS

6.1 LIST OF EXCIPIENTS

Refer to Section 2 - Qualitative and quantitative composition.

6.2 INCOMPATIBILITIES

Incompatibilities were either not assessed or not identified as part of the registration of this medicine.

6.3 SHELF LIFE

In Australia, information on the shelf life can be found on the public summary of the Australian Register of Therapeutic Goods (ARTG). The expiry date can be found on the packaging.

6.4 SPECIAL PRECAUTIONS FOR STORAGE

Store at 2°C to 8°C. (Refrigerate. Do not freeze.). Do not expose to strong light.

6.5 NATURE AND CONTENTS OF CONTAINER

Minims Prednisolone Eye Drops are supplied as a clear colourless sterile eye drops in a single use polypropylene tube (unit) overwrapped in a polyester/paper blister. The blisters are packed in cartons of 20 units. Each unit contains approximately 0.5 mL solution.

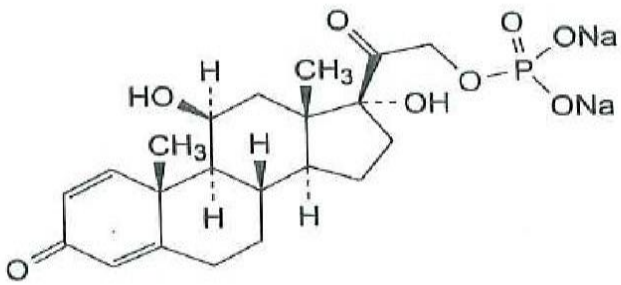
6.6 SPECIAL PRECAUTIONS FOR DISPOSAL

Each Minims Prednisolone Eye Drops unit should be discarded after a single use.

In Australia, any unused medicine or waste material should be disposed of in accordance with local requirements.

6.7 PHYSICOCHEMICAL PROPERTIES

Chemical structure



Chemical name: 11β,17-Dihydroxy-3,20-dioxopregna-1,4-dien-21-yl disodium phosphate

Molecular formula: $C_{21}H_{27}Na_2O_8P$

Molecular weight: 484.4

CAS number

125-02-0

7 MEDICINE SCHEDULE (POISONS STANDARD)

S4 – Prescription Only Medicine

8 SPONSOR

Bausch & Lomb (Australia) Pty Ltd
Level 2, 12 Help Street
Chatswood, NSW 2067

9 DATE OF FIRST APPROVAL

18 June 2009

10 DATE OF REVISION

5 September 2018

SUMMARY TABLE OF CHANGES

Section Changed	Summary of new information
All	New format
Special Warnings and Precautions for Use	The following paragraph included as per TGA's request: Visual disturbance Visual disturbance may be reported with systemic and topical corticosteroid use. If a patient presents with symptoms such as blurred vision or other visual disturbances, the patient should be considered for referral to an ophthalmologist for evaluation of possible causes which may include cataract, glaucoma or rare diseases such as central serous chorioretinopathy (CSCR) which have been reported after use of systemic and topical corticosteroids.
Adverse Effects	The following paragraph included as per TGA's request: POST MARKETING: 'Eye disorders: vision blurred'