NOVARTIS

MAXIDEX® Ophthalmic Suspension

(dexamethasone)

Eye Drops, 1 mg / ml

Professional Information

Document status: Final

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Scheduling Status S4

1. NAME OF THE MEDICINE

MAXIDEX® Ophthalmic Suspension

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml contains dexamethasone 1,0 mg.

Excipient with known effect in suspension:

Benzalkonium Chloride 0.01 % w/v

Total amount of phosphate buffer (disodium phosphate) is 2.0 mg/mL

For a full list of excipients, see section 6.1

3. PHARMACEUTICAL FORM

Eye drops, suspension

White to pale yellow, opaque suspension

4. CLINICAL PARTICULARS

4.1 Therapeutic Indications

Ophthalmic: Steroid-responsive inflammatory conditions of the palpebral and bulbar conjunctiva, cornea and anterior segment of the globe.

Otic: Steroid-responsive inflammatory conditions of the external auditory meatus, such as allergic otitis externa, selected purulent and non-purulent infective otitis externa, when in oedema and inflammation.

4.2 Posology and Method of administration

Posology

The frequency of instillation of drops and the duration of treatment will vary depending upon the severity of the underlying condition and the response to treatment.

Instil 1 or 2 drops topically into the conjunctival sac(s).

After application of eye drops the following measures are useful to reduce systemic resorption:

- Keep the eyelid closed for 2 minutes.
- Close the lacrimal duct with the finger for 2 minutes.

In severe inflammation, the instillations may be made hourly and subsequently at longer intervals until the treatment is discontinued (once the inflammation has subsided).

In mild inflammation, the drops may be administered 4 to 6 times daily.

For chronic inflammation, instil every 3 to 8 hours, as necessary.

The duration of treatment varies with the type of lesion and may last from a few days to several weeks, according to the therapeutic response.

Do not stop the treatment prematurely.

In the case of glaucoma, the duration of the treatment must be limited to 2 weeks, unless a prolongation is justified (see Section 4.4).

Otic: 3 to 4 drops in the aural canal, 2 to 4 times daily.

Special Population

Paediatric patients

The safety and efficacy of this product has not been established in children.

Hepatic and renal impairment

The safety and efficacy of **MAXIDEX® Ophthalmic Suspension** in patients with hepatic or renal impairment have not been established.

Method of Administration

For Ocular use

- SHAKE BOTTLE WELL BEFORE USE.
- Remove the snap collar after the cap is removed to avoid the collar falling into a patient’s eye.

- After cap is removed, if tamper evident snap collar is loose, remove before using product.
- Do not let the tip of the dropper touch the eye.
- Nasolacrimal occlusion or gently closing the eyelid after administration is recommended. This may reduce the systemic absorption of medicinal products administered via the ocular route and result in a decrease in systemic adverse reactions.
- If more than one topical ophthalmic medicinal product is being used, the medicines must be administered at least 5 minutes apart. Ointments should be administered last.

4.3 Contraindications

- Hypersensitivity to dexamethasone or to any ingredient of **MAXIDEX® Ophthalmic Suspension**
- Epithelial herpes simplex keratitis (dendritic keratitis)
- Vaccinia
- Varicella
- Other viral diseases of the cornea and conjunctiva
- Mycobacterial infection of the eye
- Fungal diseases of ocular structures
- The use of medicines containing topical corticosteroids such as **MAXIDEX® Ophthalmic Suspension** is always contra-indicated after the uncomplicated removal of a corneal foreign body and they should not be used in the treatment of mechanical lacerations and abrasions of the eye. They delay healing and promote the development and spread of infection.

4.4 Special Warnings and Precautions for Use

- To be prescribed and renewed only after examination by slit-lamp biomicroscopy and a fluorescein test.

- Excessive and/or prolonged use of ophthalmic steroids increases the risk of ocular complications and could cause systemic side effects.
- If the inflammatory condition does not respond within 3 to 4 days during the course of the therapy, other forms of therapy should be considered.
- Prolonged use may result in glaucoma – with damage to the optic nerve, defects in visual acuity and fields of vision – and posterior sub-capsular cataract formation. A patient with a family or personal history of glaucoma has a higher risk of a corticosteroid-induced rise in intraocular pressure. This is especially important in paediatric patients as the risk of corticosteroid-induced ocular hypertension may be greater in children and may occur earlier than in adults. The risk of corticosteroid-induced raised intraocular pressure and/or cataract formation is increased in predisposed patients (e.g. diabetes).
- Cushing's syndrome and/or adrenal suppression associated with systemic absorption of ophthalmic dexamethasone may occur after intensive or long-term continuous therapy in predisposed patients, including children and patients treated with CYP3A4 inhibitors (including ritonavir and cobicistat). (See Section 4.5). In these cases, treatment should not be discontinued abruptly, but progressively tapered to avoid hypoadrenalism.
- If **MAXIDEX® Ophthalmic Suspension** is used for 10 days or longer, intraocular pressure should be routinely monitored even though it may be difficult in children and uncooperative patients.
- Patients with glaucoma should be monitored weekly.
- Topical ophthalmic corticosteroids may slow corneal wound healing. Topical NSAIDs are also known to slow or delay healing. Concomitant use of topical NSAIDs and topical steroids may increase the potential for healing problems. (See Section 4.5).
- In those diseases causing thinning of the cornea or sclera, perforations have been known to occur with the use of topical steroids.
- It is important that corneal ulcers are correctly diagnosed before treatment with corticosteroids is initiated.

- Corneal ulceration may be aggravated when corticosteroids are applied.
- Ocular herpes simplex has occurred in patients under systemic or local corticosteroid therapy for other conditions. Using **MAXIDEX® Ophthalmic Suspension** in the treatment of herpes simplex other than epithelial herpes simplex keratitis, in which it is contra-indicated, requires great caution; periodic slit-lamp microscopy is essential.
- **MAXIDEX® Ophthalmic Suspension** may mask infection or exacerbate an existing infection.
- Prolonged use of **MAXIDEX® Ophthalmic Suspension** may suppress the immune response and thus increase the hazard of secondary ocular infection.
- Appropriate antibiotic therapy should be instituted for concurrent bacterial infections.
- The possibility of persistent fungal infections of the cornea should be considered after prolonged corticosteroid dosing.
- Treatment with **MAXIDEX® Ophthalmic Suspension** should not be discontinued prematurely as a flare-up of the inflammatory condition may occur with the sudden interruption of highly dosed corticosteroids.
- Additionally, the preservative benzalkonium chloride can be adsorbed by soft contact lenses and may discolour lenses or cause eye irritation. **MAXIDEX® Ophthalmic Suspension** should not be instilled while wearing contact lenses.
- **MAXIDEX® Ophthalmic Suspension** is not effective in the treatment of Sjogren's keratoconjunctivitis.
- Wearing contact lenses (hard or soft) is discouraged during treatment with topical ophthalmic corticosteroids. Dexamethasone eye contains benzalkonium chloride which may cause eye irritation and is known to discolour soft contact lenses. Avoid contact with soft contact lenses. However, if the healthcare provider considers contact lenses use appropriate, patients must be instructed to remove contact lenses prior to application of Dexamethasone Eye Drops and wait at least 15 minutes before reinsertion.

- As the possibility of adverse effects on the corneal permeability and the danger of disruption of the corneal epithelium with prolonged or repeated usage of benzalkonium chloride-preserved preparations cannot be excluded, regular ophthalmological examination is required.
- Caution should be exercised in the use of benzalkonium chloride-preserved topical medication over an extended period in patients with extensive ocular surface disease.
- Visual disturbance(s) 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.

4.5 Interaction with other medicines and other forms of interaction

When using pupil-dilating eye drops (atropine and other anticholinergic substances), which may cause elevation of intraocular pressure, concomitant use of **MAXIDEX® Ophthalmic Suspension** may lead to an additional elevation of intraocular pressure.

If supplementary eye preparations are to be used, one should wait about 15 minutes between 2 applications.

CYP3A4 inhibitors including ritonavir and cobicistat may increase systemic exposure resulting in increased risk of adrenal suppression/Cushing’s syndrome. (See Section 4.4). 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 effects.

4.6 Fertility, pregnancy and lactation

Pregnancy

The safety of treatment with **MAXIDEX® Ophthalmic Suspension** in pregnant women has not been established. **MAXIDEX® Ophthalmic Suspension** is not recommended during pregnancy.

Lactation

Mothers breast-feeding their infants should not be treated with **MAXIDEX® Ophthalmic Suspension.**

Fertility

Studies have not been performed to evaluate the effect of topical ocular administration of dexamethasone on fertility. There is limited clinical data to evaluate the effect of dexamethasone on male or female fertility. Dexamethasone was free of adverse effects on fertility in a chorionic gonadotropin primed rat model.

4.7 Effects on ability to drive and use machines

Temporarily 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

The following adverse effects have been reported following use of **MAXIDEX® Ophthalmic Suspension** and are classified according to the following convention:

Very common (≥ 1/10); common (≥ 1/100, < 1/10); uncommon (≥ 1/1 000, < 1/100); rare (≥ 1/10 000, < 1/1 000); very rare (≤ 1/10 000).

System Organ Classification	**MedDRA Preferred Term**
Nervous system disorders	*Uncommon:* dysgeusia
Eye disorders	*Common:* ocular discomfort *Uncommon:* keratitis, conjunctivitis, dry eye, vital dye staining cornea present, photophobia, vision blurred, eye pruritus, foreign body sensation in eyes, lacrimation increased, abnormal sensation in eye, eyelid margin crusting, eye irritation, ocular hyperaemia

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.

System Organ Classification	**MedDRA Preferred Term**
Immune system disorders	*Rare:* hypersensitivity.
Endocrine disorders	*Not known:* Cushing's syndrome, adrenal insufficiency
Nervous system disorders	*Not known*: dizziness, headache
Eye disorders	*Not known:* Glaucoma, visual field defects, ulcerative keratitis, intraocular pressure increased, visual acuity reduced, corneal erosion, eyelid ptosis, eye pain, mydriasis Rare: eye infection (exacerbation or secondary)
Investigations	Uncommon: intraocular pressure increased
Injury, poisoning and procedural complications	Very rare: corneal perforation

Adverse reactions reported in phosphate containing eye drops

Cases of corneal calcification have been reported very rarely in association with the use of phosphate containing eye drops in some patients with significantly damaged corneas.

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 to SAHPRA via the 6.04 Adverse Drug Reaction Reporting Form found online under SAHPRA's publications: https://www.sahpra.org.za/Publications/Index/8.

4.9 Overdose

A topical overdose is not likely to be associated with toxicity.

A topical overdose of **MAXIDEX® Ophthalmic Suspension** in the eye(s) can be washed out with tepid water.

Treatment of an accidental oral ingestion is symptomatic and supportive.

5. PHARMACOLOGICAL PROPERTIES

Pharmacodynamic properties:

A 15.2 Ophthalmic preparations with corticosteroids.

Pharmacotherapeutic group: corticosteroids. ATC code: S01BA01

Dexamethasone is a 9-fluoro 16-methyl substituted hydrocortisone analogy with an anti-inflammatory potency approximately 25 times that of hydrocortisone. Therapeutic concentrations are attained in the aqueous humour of the eye following application into the conjunctival sac.

Pharmacokinetic properties:

The corticosteroids are absorbed in the aqueous humour, the cornea, the iris and the ciliary body. Certain systemic resorption may occur, which is not of great significance unless large doses are administered, or with long-term use in children.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Disodium phosphate

Polysorbate 80

Disodium edetate

Sodium chloride

Benzalkonium chloride

Hypromellose

Citric acid

Purified water

6.2 Incompatibilities

None known

6.3 Shelf life

24 months

Do not use more than 28 days after opening.

6.4 Special precautions for storage

Store at or below 25 °C.

6.5 Nature and contents of container

A natural, low-density polyethylene bottle with white closure, containing 5 ml.

6.6 Special precautions for disposal

No special requirements

7. HOLDER OF CERTIFICATE OF REGISTRATION

Novartis South Africa (Pty) Ltd

Magwa Crescent West

Waterfall City

Jukskei View

2090

8. REGISTRATION NUMBER

H1143 (Act 101/1965)

9. DATE OF FIRST AUTHORISATION

29 Jan 1975

10. DATE OF REVISION OF THE TEXT

23 February 2024