SUMMARY OF PRODUCT CHARACTERISTICS

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1 NAME OF THE MEDICINAL PRODUCT

NEOMDEXSOL®, eye drops, solution.

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

1 ml contains:
1.092 mg dexamethasone sodium phosphate equivalent to 1 mg dexamethasone phosphate
3.5 mg neomycin (as sulphate)
Excipients: benzalkonium chloride
For a full list of excipients, see section 6.1.

3 PHARMACEUTICAL FORM

Eye drops, solution
Clear colourless to pale yellow solution

4 CLINICAL PARTICULARS

4.1 Therapeutic Indications

Anti-inflammatory and anti-bacterial eye local treatment:
- Following ophthalmic surgery
- Bacterial infections associated with inflammation caused by organisms sensitive to neomycin.

Consideration should be given to official guidance on the appropriate use of antibacterial agents.

4.2 Posology and method of administration

To be applied locally, by eye (ocular) instillation in the inferior conjunctival fornix. 1 drops every hour at initiation of the treatment in severe and acute conditions; 3 to 6 times a day for other conditions, for 7 days in average.
A longer period of treatment may be prescribed under strict ophthalmic supervision.

Paediatric population
The use of this medicine should be avoided in infants.

4.3 Contraindications

- Hypersensitivity to the active substances or to any excipients listed in section 6.
- Epithelial herpes simplex keratitis
- Fungal or tuberculous eye infections
- Personal and family history of glaucoma
- Early stages of viral keratoconjunctivitis
- Purulent infections of eyelids and eyes caused by neomycin resistant germs.

4.4 Special warnings and precautions for use

Special warnings
Repeated instillation and/or eye drops prolonged use may lead to the resorption of active ingredients.
In some patients, repeated instillation and/or eye drops prolonged use may lead to eye hypertonia and/or delay healing.
Cushing syndrome and/or inhibition of the adrenal function related to the systemic absorption of ophthalmic dexamethasone might occur after an intensive continuous or long term treatment, in predisposed patients, including children and patients treated with CUP3A4 inhibitors (including ritonavir and cobicistat). In this case, the treatment should be stopped gradually.

Visual disorders
Visual disorders might occur during systemic or local corticotherapy. In case of blurred vision or any other visual symptom during corticotherapy, an ophthalmic examination is required notable to assess cataract, glaucoma, or rare damage as central serous chorioretinopathy

Sportsmen (athletes) should be aware that this medicine contains an active substance which may induce a positive reaction to anti-doping tests.

Precautions for use
This eye drops solution is not intended for peri ocular or intra ocular injection.
If more than one ophthalmic medicinal product is being used, the medicines must be administered 15 minutes apart.
Sensitivity to topically applied neomycin sulphate may occur in some patients. If signs of serious reactions or hypersensitivity occur, the use of this medicine should be discontinued.
In case of lack of improvement or in case of prolonged treatment, a medical supervision with microorganisms' susceptibility studies is indicated to detect resistance and to eventually adapt the treatment.
This kind of association is, in general, contraindicated following a simple ablation of superficial corneal foreign body.
The use of corticosteroids in stroma herpes simplex required a close monitoring: the use of slit lamp examination is frequently required.
As with others corticosteroids ophthalmic preparations, prolonged use requires an ophthalmic monitoring of cornea, of intraocular pressure and of crystalline lens. Cases of thinning of the cornea and cases of cataract have been reported after prolonged use of local steroids.
In general, hereditary and degenerative ocular diseases are not adequately treated by this medicine.
Wearing contact lens during the treatment is not recommended due to adsorption risk of active ingredients and of preservative (benzalkonium).

4.5 Interaction with other medicinal products and other forms of interaction

CYP3A4 inhibitors (including ritonavir and cobistat) might decrease dexamethasone clearance causing an increase in the effects and inhibition of the adrenal function/Cushing syndrome. The combination should be avoided, except if the benefit is greater than the increased risk of systemic side effects of corticosteroids, in which case the patients should be monitored for the systemic effects of corticosteroids.

4.6 Fertility, pregnancy and breastfeeding

Pregnancy
Neomdexsol, eye drops, solution is not recommended during pregnancy.
There are no or limited amount of data from the use of this combination (dexamethasone, neomycin) in pregnant women. In clinical, foetal toxicity effects have been reported with systemic corticosteroids and aminoglycosides.

Breastfeeding
Breastfeeding is possible in case of short term treatment (10 days). Breastfeeding is not recommended in case of prolonged treatment.

4.7 Effects on ability to drive and use machines

Not applicable.

4.8 Undesirable effects

Possible transient localised irritation: blurred vision, increased lacrimation, burning sensation, ocular hyperaemia
Risk of cutaneous-conjunctiva hypersensitivity reactions.
In case of prolonged use: increase in intraocular pressure; lens opacification, superficial keratitis.
In case of cornea or sclera ulceration, corticosteroids may delay healing and cause super infection.

Side effects from the data obtained after the marketing (unknown frequency):
The following undesirable effects were observed after the product has been launch on the market:

- Endocrinal disorders: Cushing syndrome, inhibition of the adrenal function (see section 4.4).
- Eye disorders: blurred vision (see section 4.4).

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

4.9 Overdose

No case of overdose has been reported. However, repeated instillation may lead to the resorption of active ingredients, ocular high-pressure induced by corticosteroids, lens opacification, superficial keratitis and delay healing.
In patients receiving prolonged ophthalmic corticosteroid therapy, cornea, intraocular pressure and lens should be checked routinely and frequently. Cases of thinning of the cornea and cases of cataract have been reported after prolonged use of local steroids.

5 PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: ophthalmological; CORTICOSTEROIDS AND ANTI-INFECTIVES IN COMBINATION
ATC code: S01CA01

Dexamethasone is a steroidal anti-inflammatory drug.
Neomycin is an aminoglycoside bactericide antibiotic.

SUSCEPTIBILITY
The prevalence of acquired resistance may vary geographically and with time for selected species and local information on resistance is desirable, particularly when treating severe infections. These data can only bring a direction on the probability of sensitivity of a bacterial strain to this antibiotic.
When the variability of the resistance prevalence in France in known for a bacterial species, it is listed in the table below:

Category	**Frequency of acquired resistance in France (> 10 %) (extreme values)**
SENSITIVE SPECIES	50 – 75 %
Gram positive aerobic bacteria	20 – 25 %
Corynebacterium	?
Listeria monocytogenes	10 – 20 %
Staphylococcus mehti-S	15 – 25 %
Gram negative aerobic bacteria	25 – 35 %
Acinetobacter (mainly Acinetobacter baumannii)	10 – 15 % 10 – 20 %
Branhamella catarrhalis	20 – 50 %
Campylobacter	?
Citrobacter freundii	?
Citrobacter koseri	?
Enterobacter aerogenes	?
Enterobacter cloacae	?
Escherichia coli	?
Haemophilus influenzae *Klebsiella* *Morganella morganii* *Proteus mirabilis* *Proteus vulgaris* *Providencia rettgeri* *Salmonella* *Serratia* *Shigella* *Yersinia*	
MODERATELY SENTIVE SPECIES (*in vitro* intermediate sensitivity) **Gram negative aerobic bacteria** *Pasteurella*	

RESISTANT SPECIES **Gram positive aerobic bacteria** **Enterococcus** *Nocardia asteroides* *Staphylococcus methi-R** *Streptococcus* **Gram negative aerobic bacteria** *Alcaligenes denitrificans* *Burkholderia* *Flavobacterium sp.* *Providencia stuartii* *Pseudomonas aeruginosa* *Stenotrophomonas maltophilia* **Anaerobic bacteria** Strict anaerobic bacteria **Others** *Chlamydia* Mycoplasma Rickettsia	

*The frequency of methicillin resistance is about 30 to 50 % of the whole staphylococcus and encountered mainly in hospital environment.

Note: this spectrum corresponds to this of systemic form of antibiotics belonging to the family of aminosides. With the local pharmaceutical presentations, the concentrations obtained *in situ* are very greater than the plasma concentrations. Some doubts remain on the concentration kinetics of the *in situ* concentrations, on the local physico-chemical conditions that can modify the antibiotic activity and on the stability of the product *in situ*.

5.2 Pharmacokinetic properties
When used topically, neomycin has not a good cornea penetration.

5.3 Preclinical safety data
None stated.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients
Dibasic sodium phosphate (dihydrate); disodium edetate; benzalkonium chloride; mannitol; creatinine; sodium metabisulfite; glycerine; sodium sulfoxylate formaldehyde; sodium citrate; dihydrogen sodium phosphate, water for injections.

6.2 Incompatibilities
Not applicable

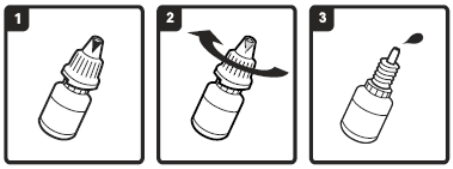
6.3 Shelf Life
Unopened: 2 years
Discard 1 month after first opening.

6.4 Special precautions for storage
Store at room temperature (below 30°C). Protect from light. Discard 1 month after first opening.

6.5 Nature and contents of container
The bottle is made of transparent low density polyethylene.
Plastic cap of white low density polyethylene.
Bottle of 5 ml.

6.6 Special precautions for disposal and other handling of the product
No particular requirements.

Bottle opening:



1. With the spike: tighten the cap on the nozzle.
2. The spike in the cap will pierce the tip of the bottle.
3. Dispense drops with gentle pressure. Replace the cap after every use.

7 CATEGORY OF DISTRIBUTION

☐ Other the counter medicine ☒ Prescription only medicine

List I

8 MARKETING AUTHORISATION HOLDER
Exphar s.a.
Zoning Industriel de Nivelles Sud, zone II
Avenue Thomas Edison 105 - 1402 Thines, Belgium

9 MANUFACTURER
Ahlcon Parenterals (India) Ltd
Address: SP 918, Phase III Bhiwadi
301019 Rajasthan, India

10 UPDATE DATE
September 2018.