HIGHLIGHTS OF PRESCRIBING INFORMATION
These highlights do not include all the information needed to use TOBRADEX ST safely and effectively. See full prescribing information for TOBRADEX ST.

TOBRADEX ST (tobramycin and dexamethasone ophthalmic suspension) 0.3%/0.05%, for topical ophthalmic use
Initial U.S. Approval: 1988

----------INDICATIONS AND USAGE----------
TOBRADEX® ST is a combination of tobramycin, an aminoglycoside antibacterial, and dexamethasone, a corticosteroid, indicated for steroid-responsive inflammatory ocular conditions for which a corticosteroid is indicated and where superficial bacterial ocular infection or a risk of bacterial ocular infection exists in adults and pediatric patients aged 2 years and older. (1).

----------DOSAGE AND ADMINISTRATION----------
- Instill one drop into the conjunctival sac(s) every 4 to 6 hours. (2.1)
- During the initial 24 to 48 hours, dosage may be increased to one drop every 2 hours. (2.1)
- Frequency should be decreased gradually as warranted by improvement in clinical signs, but care should be taken not to discontinue therapy prematurely. (2.1)

----------DOSAGE FORMS AND STRENGTHS----------
TOBRADEX ST ophthalmic suspension contains 0.3% (3 mg/mL) tobramycin and 0.05% (0.5 mg/mL) dexamethasone. (3)

----------CONTRAINDICATIONS----------
- TOBRADEX ST, as with other ophthalmic corticosteroids, is contraindicated in most viral diseases of the cornea and conjunctiva, including epithelial herpes simplex keratitis (dendritic keratitis), vaccinia, and varicella, and also in mycobacterial infection of the eye and fungal diseases of ocular structures. (4.1)
- Hypersensitivity to any component of the medication (4.2)

----------WARNINGS AND PRECAUTIONS----------
- Intraocular Pressure (IOP) Increase: Prolonged use of corticosteroids may result in glaucoma with damage to the optic nerve, defects in visual acuity and fields of vision. If this product is used for 10 days or longer, IOP should be monitored. (5.1).
- Sensitivity to topically applied aminoglycosides may occur. (5.2)
- Cataracts: Use of corticosteroids may result in posterior subcapsular cataract formation. (5.3)
- Delayed Healing: The use of steroids after cataract surgery may delay healing and increase the incidence of bleb formation. (5.4)
- Corneal and Scleral Melting: In those diseases causing thinning of the cornea or sclera, perforations have been known to occur with the use of topical steroids.. (5.5)
- Bacterial Infections: Prolonged use of corticosteroids may suppress the host response and thus increase the hazard of secondary ocular infections. In acute purulent conditions, steroids may mask infection or enhance existing infection. If signs and symptoms fail to improve after 2 days, the patient should be re-evaluated. (5.6)
- Viral Infections: Employment of a corticosteroid medication in the treatment of patients with a history of herpes simplex requires great caution. Use of ocular steroids may prolong the course and may exacerbate the severity of many viral infections of the eye (including herpes simplex). (5.7)
- Fungal Infections: Fungal infections of the cornea are particularly prone to develop coincidentally with long-term local steroid application. Fungus invasion must be considered in any persistent corneal ulceration where a steroid has been used or is in use. (5.8)
- Temporary Blurred Vision: Vision may be temporarily blurred following dosing with TOBRADEX ST. Exercise care in operating machinery or driving a motor vehicle. (5.9)

----------ADVERSE REACTIONS----------
Most common adverse reactions to topical ocular tobramycin are hypersensitivity and localized ocular toxicity, including eye pain, eyelids pruritus, eyelid edema, and conjunctival hyperemia. The reactions due to topical ocular dexamethasone are increases in IOP with possible development of glaucoma. (6)

To report SUSPECTED ADVERSE REACTIONS, contact Harrow at 1-833-4HARROW (427769) or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

See 17 for PATIENT COUNSELING INFORMATION.

Revised: 3/2026

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FULL PRESCRIBING INFORMATION

1 INDICATIONS AND USAGE

TOBRADEX® ST is indicated for steroid-responsive inflammatory ocular conditions for which a corticosteroid is indicated and where superficial bacterial ocular infection or a risk of bacterial ocular infection exists in adults and pediatric patients aged 2 years and older.

Ocular corticosteroids are indicated in inflammatory conditions of the palpebral and bulbar conjunctiva, cornea and anterior segment of the globe where the inherent risk of corticosteroid use in certain infective conjunctivitides is accepted to obtain a diminution in edema and inflammation. They are also indicated in chronic anterior uveitis and corneal injury from chemical, radiation or thermal burns, or penetration of foreign bodies.

The use of a fixed-combination drug product with an anti-infective component is indicated where the risk of superficial ocular infection is high or where there is an expectation that potentially dangerous numbers of bacteria will be present in the eye.

The particular anti-infective component in this product (tobramycin) is active against the following common bacterial eye pathogens: *Staphylococci*, including *S. aureus* and *S. epidermidis* (coagulase-positive and coagulase-negative), including penicillin-resistant isolates. *Streptococci*, including some Group A and other beta-hemolytic species, some nonhemolytic species, and some *Streptococcus pneumoniae, Pseudomonas aeruginosa, Escherichia coli, Klebsiella pneumoniae, Enterobacter aerogenes, Proteus mirabilis, Morganella morganii*, most *Proteus vulgaris isolates, Haemophilus influenzae, H. aegyptius, Moraxella lacunata, Acinetobacter calcoaceticus*, and some *Neisseria species*.

2 DOSAGE AND ADMINISTRATION

2.1 Recommended Dosage and Administration

Instill one drop into the conjunctival sac(s) every 4 to 6 hours. During the initial 24 to 48 hours, the dosage may be increased to one drop every 2 hours. Frequency should be decreased gradually as warranted by improvement in clinical signs. Care should be taken not to discontinue therapy prematurely.

Shake well before use.

2.2 Prescribing Guidelines

Evaluate intraocular pressure (IOP) prior to the initial prescription and renewal of the medication order *[see Warnings and Precautions (5.1)]*.

Perform ophthalmic examination with the aid of magnification, such as slit lamp biomicroscopy, and, where appropriate, fluorescein staining, prior to the initial prescription and renewal of the medication order. Re-evaluate the patient if signs and symptoms fail to improve after 2 days *[see Warnings and Precautions (5.4, 5.5)]*.

Not more than one bottle should be prescribed initially, and the prescription should not be refilled without further evaluation.

3 DOSAGE FORMS AND STRENGTHS

TOBRADEX ST ophthalmic suspension contains 0.3% (3 mg/mL) tobramycin and 0.05% (0.5 mg/mL) dexamethasone.

4 CONTRAINDICATIONS

4.1 Viral, Mycobacterial, and Fungal Infections

TOBRADEX ST is contraindicated in most active viral diseases of the cornea and conjunctiva, including epithelial herpes simplex keratitis (dendritic keratitis), vaccinia, and varicella, and also in mycobacterial infection of the eye and fungal diseases of ocular structures *[see Warnings and Precautions (5.7, 5.8)]*.

4.2 Hypersensitivity

TOBRADEX ST is contraindicated in patients with hypersensitivity to any component of TOBRADEX ST.

5 WARNINGS AND PRECAUTIONS

5.1 Intraocular Pressure (IOP) Increase

Prolonged use of corticosteroids may result in glaucoma with damage to the optic nerve, defects in visual acuity and fields of vision. If TOBRADEX ST is used for 10 days or longer, IOP should be routinely monitored.

5.2 Aminoglycoside Sensitivity

Sensitivity to topically applied aminoglycosides may occur.

5.3 Cataracts

Use of corticosteroids may result in posterior subcapsular cataract formation.

5.4 Delayed Healing

The use of steroids after cataract surgery may delay healing and increase the incidence of bleb formation.

5.5 Corneal and Scleral Melting

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 tissue may lead to perforation of the globe.

5.6 Bacterial Infections

Prolonged use of corticosteroids may suppress the host immune response and thus increase the hazard of secondary ocular infections. Acute purulent or parasitic infections of the eye may be masked or activity enhanced by the presence of corticosteroid medication. If signs and symptoms fail to improve after 2 days, the patient should be reevaluated.

5.7 Viral Infections

Use of ocular steroids may prolong the course and may exacerbate the severity of many viral infections of the eye (including herpes simplex). Employment of a corticosteroid medication in the treatment of patients with a history of herpes simplex requires great caution; frequent slit lamp microscopy is recommended.

5.8 Fungal Infections

Fungal infections of the cornea are particularly prone to develop coincidentally with long-term local corticosteroid application. Fungus invasion must be considered in any persistent corneal ulceration where a corticosteroid has been used or is in use. Fungal cultures should be taken when appropriate.

5.9 Temporary Blurred Vision

Vision may be temporarily blurred following dosing with TOBRADEX ST. Exercise care in operating machinery or driving a motor vehicle.

5.10 Risk of Contamination

Do not touch the dropper tip of the bottle to the eye, eyelids or to any surface, as this may contaminate the contents.

5.11 Contact Lens Use

TOBRADEX ST contains benzalkonium chloride, an antimicrobial preservative, that may be absorbed by soft contact lenses. Contact lenses should not be worn during the use of TOBRADEX ST.

6 ADVERSE REACTIONS

The following adverse reactions are described elsewhere in the labeling:

- Viral, Mycobacterial, and Fungal Infections *[see Contraindications (4.2)]*
- Hypersensitivity *[see Contraindications (4.3)]*
- Intraocular Pressure (IOP) Increase *[see Warnings and Precautions (5.1)]*
- Aminoglycoside Sensitivity *[see Warnings and Precautions (5.2)]*
- Cataracts *[see Warnings and Precautions (5.3)]*

- Delayed Healing *[see Warnings and Precautions (5.4)]*
- Corneal and Scleral Melting *[see Warnings and Precautions (5.5)]*
- Bacterial Infections *[see Warnings and Precautions (5.6)]*
- Viral Infections *[see Warnings and Precautions (5.7)]*
- Fungal Infections *[see Warnings and Precautions (5.8)]*

6.1 Clinical Trials Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in practice.

Adverse reactions have occurred with corticosteroid/anti-infective fixed-combination drug products, which can be attributed to the corticosteroid component, the anti-infective component, or the combination. Exact incidence figures are not available.

The most frequent adverse reactions to topical ocular tobramycin (TOBREX®) are hypersensitivity and localized ocular toxicity, including eye pain, eyelids pruritus, eyelid edema, and conjunctival hyperemia. These reactions occur in less than 4% of patients.

The reactions due to topical ocular dexamethasone are: increased IOP with possible development of glaucoma, and infrequent optic nerve disorder; subcapsular cataract; and impaired healing *[see Warnings and Precautions (5.1, 5.3, 5.4)]*.

The development of secondary infection has occurred after use of fixed-combination drugs containing corticosteroids and antimicrobials. Fungal infections of the cornea are particularly prone to develop coincidentally with long-term applications of steroids *[see Warnings and Precautions (5.8)]*. The possibility of fungal invasion must be considered in any persistent corneal ulceration where steroid treatment has been used. Secondary bacterial ocular infection following suppression of host responses also occurs.

Non-ocular adverse events occurring at an incidence of 0.5% to 1% included headache and increased blood pressure.

6.2 Postmarketing Experience

The following adverse reactions have been identified during postapproval use of TOBRADEX ST. Because these reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to drug exposure.

The following additional adverse reactions have been reported with the individual components below:

Aminoglycosides: Anaphylactic reaction and erythema multiforme. Neurotoxicity, ototoxicity, and nephrotoxicity have occurred in patients receiving systemic aminoglycoside therapy. Aminoglycosides may aggravate muscle weakness in patients with known or suspected neuromuscular disorders, such as myasthenia gravis or Parkinson’s disease, because of their potential effect on neuromuscular function.

Dexamethasone: Cushing's syndrome and adrenal suppression may occur after use of dexamethasone in excess of the listed dosing instructions in predisposed patients, including children and patients treated with CYP3A4 inhibitors.

8 USE IN SPECIFIC POPULATIONS

8.1 Pregnancy

Risk Summary

There are no adequate and well-controlled studies of TOBRADEX ST in pregnant women to inform a drug-associated risk. Developmental toxicity and teratogenicity were seen in animal studies with dexamethasone, both after systemic and ocular administration at therapeutically relevant dose levels *(see Data)*.

Reproduction studies in rats and rabbits have not shown evidence to harm the fetus following subcutaneous administration of tobramycin at dose levels greater than 48-fold the maximum recommended ocular human dose (MROHD) of 0.288 mg/kg/day [based on body surface area (BSA)].

TOBRADEX ST should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

The background risk of major birth defects and miscarriage for the indicated population is unknown; however, in the U.S. general population, the estimated background risk of major birth defects is 2%-4% and of miscarriage is 15%-20% of clinically recognized pregnancies.

Data

Animal Data

Dexamethasone

In embryo-fetal development studies with dexamethasone in mice, rats and rabbits, a number of malformations, fetal growth retardation, and mortality were seen at maternal toxic doses following systemic administration (oral, subcutaneous, and intramuscular) during the period of organogenesis. The overall no-observed-effect level (NOEL) for developmental toxicity was derived from an oral rat study and was based on embryotoxicity (0.01 mg/kg/day). Dexamethasone has also been shown to be teratogenic in mice and rabbits following topical ophthalmic application. Based on the ratio of the rat, NOEL to the MROHD is less than 1.

Tobramycin

In embryo-fetal development studies in rats and rabbits, pregnant animals received subcutaneously tobramycin at doses up to 100 and 40 mg/kg/day, respectively, during organogenesis. There was no embryo-fetal toxicity in either species up to the maximum dose tested, corresponding to 60 and 48 times respectively, the MROHD, based on BSA.

In a peri- and postnatal development study in rats, subcutaneous administration of up to 100 mg/kg/day tobramycin during early gestation through lactation period did not adversely affect the offspring. Based on BSA, the ratio of the highest dose tested to the MROHD is 60.

8.2 Lactation

Risk Summary

There are no data on the effects of topical ocular administration of tobramycin/dexamethasone on the breastfed infant or effects on milk production. It is not known if tobramycin or dexamethasone are present in human milk following topical ocular administration. It is not likely that the amount of tobramycin and dexamethasone would be detectable in human milk or be capable of producing clinical effects in the infant following topical use of the product. Limited published data in lactating women indicate that tobramycin was detected in the human milk following intramuscular administration. However, tobramycin was not detected in the human milk, following intravenous administration, with a detection limit of > 0.18mg/L.

Systemically administered corticosteroids appear in human milk and could suppress growth, interfere with endogenous corticosteroid production, or cause other untoward effects.
The developmental and health benefits of breastfeeding should be considered along with the mother's clinical need for TOBRADEX ST and any potential adverse effects on the breast-fed child from TOBRADEX ST.

8.4 Pediatric Use

The safety and effectiveness of TOBRADEX ST have been established in pediatric patients aged 2 years and older. Use of TOBRADEX ST is supported by evidence from adequate and well-controlled studies in adults with additional safety data in pediatric patients aged 2 years and older.

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

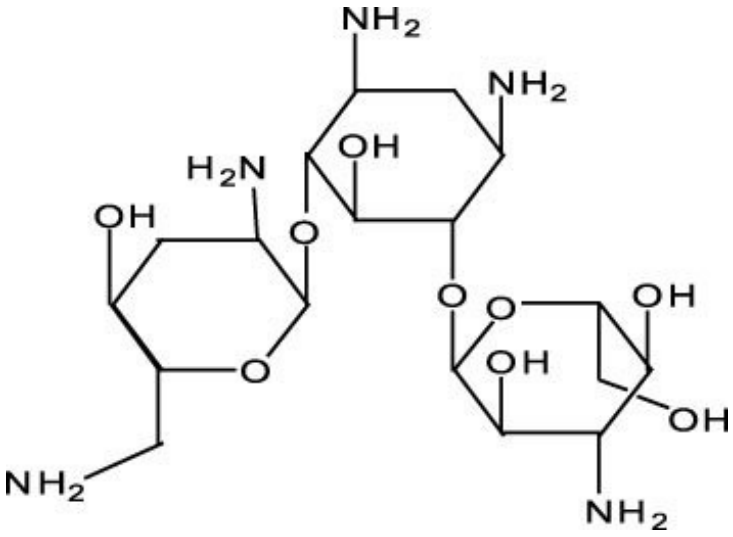
8.5 Geriatric Use

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

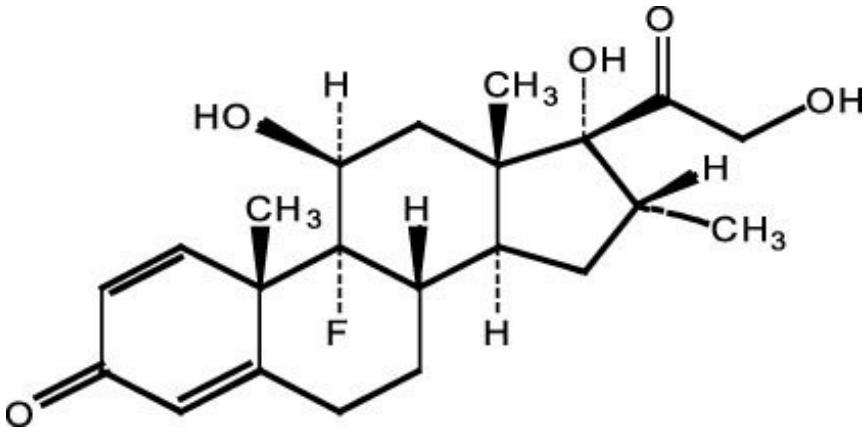
11 DESCRIPTION

TOBRADEX ST (tobramycin and dexamethasone ophthalmic suspension) 0.3%/0.05% is a sterile, isotonic, white, aqueous antibacterial and corticosteroid suspension for topical ophthalmic use with a pH of approximately 5.7 and an osmolality of approximately 290 mOsm/kg.

The chemical name of tobramycin is O-3-amino-3-deoxy-α-D-glucopyranosyl-(1→4)-O-[2,6-diamino-2,3,6-trideoxy-α-D-ribo-hexopyranosyl-(1→6)]-2-deoxy- L-streptamine. It has a molecular formula of $C_{18}H_{37}N_5O_9$ and a molecular weight of 467.52 g/mol. The chemical structure is:



The chemical name of dexamethasone is 9-fluoro-11β,17,21-trihydroxy-16α-methylpregna-1,4-diene-3,20-dione. It has a molecular formula of $C_{22}H_{29}FO_5$ and a molecular weight of 392.47 g/mol. The chemical structure is:



Each mL of TOBRADEX ST contains: Actives: tobramycin 3 mg and dexamethasone 0.5 mg. **Preservative:** benzalkonium chloride 0.1 mg. **Inactives:** edetate disodium, propylene glycol, purified water, sodium chloride, sodium sulfate, tyloxapol, and xanthan gum. Hydrochloric acid and/or sodium hydroxide may be added for adjustment of pH.

12 CLINICAL PHARMACOLOGY

12.1 Mechanism of Action

Dexamethasone is a potent corticosteroid. Corticosteroids suppress the inflammatory response to a variety of agents and they can delay or slow healing. Since corticosteroids may inhibit the body's defense mechanism against infection, a concomitant antimicrobial drug may be used when this inhibition is considered to be clinically significant.
Tobramycin is an antibacterial drug *[see Microbiology (12.4)]*.

12.3 Pharmacokinetics

In a multi-center, double-masked, parallel-group, randomized, single-dose pharmacokinetic study in male and female cataract surgery patients, mean dexamethasone concentrations following administration of TOBRADEX ST were similar to dexamethasone concentrations following administration of TOBRADEX (tobramycin and dexamethasone ophthalmic suspension) 0.3%/0.1%. Aqueous humor concentrations reached a mean peak of 33.7 ng/mL 2 hours following single-dose administration of TOBRADEX ST.

No data are available on the extent of systemic absorption of tobramycin from TOBRADEX ST ophthalmic suspension. Following multiple-dose (4 times a day for 2 days) bilateral ocular administration of TOBRADEX (tobramycin 0.3% and dexamethasone 0.1% ophthalmic suspension) in healthy male and female volunteers, peak plasma concentrations of dexamethasone were less than 1 ng/mL and occurred within 2 hours post dose across all subjects.

12.4 Microbiology

Mechanism of Action

Tobramycin inhibits the growth of bacteria by inhibiting protein synthesis. Tobramycin is included in this fixed-combination drug product to provide action against common bacterial eye pathogens.

Antimicrobial Activity
In vitro studies have demonstrated that tobramycin is active against susceptible isolates of the following bacteria:

Gram-positive bacteria
- *Acinetobacter calcoaceticus*
- *Pseudomonas aeruginosa*
- *Staphylococcus aureus* (includes penicillin-resistant isolates)
- *Staphylococcus epidermidis* (coagulase-positive and coagulase-negative, including penicillin-resistant isolates)
- *Streptococci* (including some Group A other beta-hemolytic species, some nonhemolytic species, and some *S. pneumoniae*)

Gram-negative bacteria
- *Enterobacter aerogenes*
- *Escherichia coli*
- *Haemophilus aegypticus*
- *Haemophilus influenzae*
- *Klebsiella pneumoniae*
- *Moraxella lacunata*
- *Morganella morganii*
- *Neisseria perflava*
- *Neisseria sicca*
- *Proteus mirabilis*
- *Proteus vulgaris*

In vitro bacterial studies demonstrate that in some cases bacteria resistant to gentamicin are susceptible to tobramycin.

13 NONCLINICAL TOXICOLOGY

13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

Carcinogenesis
The carcinogenic potential of tobramycin was investigated in a two-year inhalation toxicology study in rats. No carcinogenic effect was observed up to the highest dose of 25.7 mg/kg/day tested in this study. This corresponds to 15 times the MRHOD based on BSA.

Long term studies in animals have not been conducted to evaluate the carcinogenic potential of dexamethasone.

Mutagenesis
Tobramycin and dexamethasone did not show genotoxic potential in a series of *in vitro* bacterial and mammalian test systems and *in vivo* mouse micronucleus assay.

Impairment of Fertility
No impairment of fertility was noted in studies of subcutaneous tobramycin in rats at doses of 50 and 100 mg/kg/day (equivalent to human doses of 8 and 16 mg/kg/day, at least 2 orders of magnitude greater than the topical ocular dose).

16 HOW SUPPLIED/STORAGE AND HANDLING

TOBRADEX ST (tobramycin and dexamethasone ophthalmic suspension) 0.3%/0.05% is supplied as a 5 mL suspension in an 8 mL natural polyethylene DROP-TAINER® bottle with a natural polyethylene dispenser tip and a pink polypropylene overcap. Tamper evidence is provided with a shrink band around the closure and neck area of the bottle.

5 mL NDC 82667-011-05

Storage

Store upright at 2°C to 25°C (36°F to 77°F). Protect from light. After opening, TOBRADEX ST can be used until the expiration date on the bottle.

17 PATIENT COUNSELING INFORMATION

Ability to Drive and Use Machines
Advise the patient that vision may be temporarily blurred following dosing with TOBRADEX ST. Care should be exercised in operating machinery or driving a motor vehicle *[see Warnings and Precautions (5.9)]*.

Risk of Contamination
Instruct the patient not to touch dropper tip to any surface, as this may contaminate the contents *[see Warnings and Precautions (5.10)]*.

Contact Lens Wear

Advise the patient that contact lenses should not be worn during the use of this product *[see Warnings and Precautions (5.11)]*.

Storage and Handling

Instruct the patient to store the bottle upright and away from light. Shake well before using *[see Dosage and Administration (2.2) and How Supplied/Storage and Handling (16)]*.

Manufactured for:
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