

COSOMIA

Sterile Ophthalmic Solution

Composition:

Each 1 mL of **COSOMIA** ophthalmic solution contains Dorzolamide 20 mg (2%) (Equivalent to 22.26 mg of Dorzolamide hydrochloride) and Timolol 5 mg (0.5%) (Equivalent of 6.83 mg of Timolol maleate).
Preservative: Benzalkonium chloride

Excipients:

Sodium citrate dihydrate, Hydroxyethyl cellulose, Mannitol, Sodium Hydroxide, water for injection

Mechanism of action:

COSOMIA is composed of two components: Dorzolamide hydrochloride and Timolol maleate. Each of these two components decreases elevated intraocular pressure, whether or not associated with glaucoma, by reducing aqueous humor secretion.

Dorzolamide hydrochloride is an inhibitor of human carbonic anhydrase II. Inhibition of carbonic anhydrase decreases aqueous humor secretion, Timolol maleate is a beta1 and beta2 (non-selective) adrenergic receptor blocking agent that does not have significant intrinsic sympathomimetic, direct myocardial depressant, or local anesthetic activity.

Pharmacokinetic:

Dorzolamide Hydrochloride:

When topically applied, Dorzolamide reaches the systemic circulation.

Dorzolamide is primarily excreted unchanged in the urine; the metabolite also is excreted in urine. After dosing is stopped, Dorzolamide washes out of RBCs nonlinearly, resulting in a rapid decline of drug concentration initially, followed by a slower elimination phase with a half-life of about four months.

To simulate the systemic exposure after long-term topical ocular administration, Dorzolamide was given orally to eight healthy subjects for up to 20 weeks. The oral dose of 2 mg twice daily closely approximates the amount of drug delivered by topical ocular administration of Dorzolamide 2% three times daily. Steady state was reached within 8 weeks. The inhibition of CA-II and total carbonic anhydrase activities was below the degree of inhibition anticipated to be necessary for a pharmacological effect on renal function and respiration in healthy individuals.

Timolol Maleate:

In a study of plasma drug concentrations in six subjects, the systemic exposure to Timolol was determined following twice daily topical administration of Timolol maleate ophthalmic solution 0.5%. The mean peak plasma concentration following morning dosing was 0.46 ng/mL.

Indications:

COSOMIA is indicated for the reduction of elevated intraocular pressure (IOP) in patients with open-angle glaucoma or ocular hypertension who are insufficiently responsive to beta-blockers.

Dosage and administration:

The dose is one drop of **COSOMIA** in the affected eye(s) two times daily.

If more than one topical ophthalmic drug is being used, the drugs should be administered at least five minutes apart.

Contraindications:

COSOMIA is contraindicated in the following cases:

- Asthma, COPD: **COSOMIA** is contraindicated in patients with bronchial asthma, a history of bronchial asthma, or severe chronic obstructive pulmonary disease.
- Sinus Bradycardia, AV Block, Cardiac Failure, Cardiogenic Shock
- Hypersensitivity to any component of this product

Warnings and precautions:

• **COSOMIA** may potentiate respiratory reactions including asthma.

• Cardiac Failure: At the first sign or symptom of cardiac failure, **COSOMIA** should be discontinued.

• Sulfonamide Hypersensitivity: **COSOMIA** contains Dorzolamide, a sulfonamide; and although administered topically, it is absorbed systemically. Therefore, the same types of adverse reactions that are attributable to sulfonamides may occur with topical administration of **COSOMIA**. Fatalities have occurred, although rarely, due to severe reactions to sulfonamides including Stevens-Johnson syndrome, toxic epidermal necrolysis, fulminant hepatic necrosis, agranulocytosis, aplastic anemia, and other blood dyscrasias. Sensitization may recur when a sulfonamide is readministered irrespective of the route of administration. If signs of serious reactions or hypersensitivity occur, discontinue the use of this preparation.

• Obstructive Pulmonary Disease: Patients with chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) of mild or moderate severity, bronchospastic disease, or a history of bronchospastic disease (other than bronchial asthma or a history of bronchial asthma, in which **COSOMIA** is contraindicated) should, in general, not receive beta-blocking agents, including **COSOMIA**.

• Increased Reactivity to Allergens: While taking beta-blockers, patients with a history of atopy or a history of severe anaphylactic reactions to a variety of allergens may be more reactive to repeated accidental, diagnostic, or therapeutic challenge with such allergens. Such patients may be unresponsive to the usual doses of epinephrine used to treat anaphylactic reactions.

• Potentiation of Muscle Weakness: Timolol has been reported rarely to increase muscle weakness in some patients with myasthenia gravis or myasthenic symptoms.

• Masking of Hypoglycemic Symptoms in Patients with Diabetes Mellitus: Beta-adrenergic receptor blocking agents may mask the signs and symptoms of acute hypoglycemia.

• Masking of Thyrotoxicosis: Beta-adrenergic blocking agents may mask certain clinical signs (e.g., tachycardia) of hyperthyroidism. Patients suspected of developing thyrotoxicosis should be managed carefully to avoid abrupt withdrawal of beta-adrenergic blocking agents that might precipitate a thyroid storm.

• Renal and Hepatic Impairment: Dorzolamide has not been studied in patients with severe renal impairment. Because Dorzolamide and its metabolite are excreted predominantly by the kidney, **COSOMIA** is not recommended in such patients.

• Dorzolamide has not been studied in patients with hepatic impairment and should therefore be used with caution in such patients.

• Impairment of Beta-Adrenergically Mediated Reflexes During Surgery: Beta-adrenergic receptor blockade impairs the ability of the heart to respond to beta-adrenergically mediated reflex stimuli. This may augment the risk of general anesthesia in surgical procedures.

• If necessary, during surgery, the effects of beta-adrenergic blocking agents may be reversed by sufficient doses of adrenergic agonists.

• Corneal Endothelium: There is an increased potential for developing corneal edema in patients with low endothelial cell counts. Caution should be used when prescribing **COSOMIA** to this group of patients.

• Bacterial Keratitis: There have been reports of bacterial keratitis associated with the use of multiple-dose containers of topical ophthalmic products. These containers had been inadvertently contaminated by patients who, in most cases, had a concurrent corneal disease or a disruption of the ocular epithelial surface.

Pregnancy and lactation:

Pregnancy: Category C. There are no adequate and well-controlled studies in pregnant women. **COSOMIA** should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Lactation: It is not known whether Dorzolamide is excreted in human milk. Timolol has been detected in human milk following oral and ophthalmic drug administration. Because of the potential for serious adverse reactions from **COSOPT** in nursing infants, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

Side effects:

The most frequently reported adverse reactions occurring in up to 30% of patients were taste perversion (bitter, sour, or unusual taste) or ocular burning and/or stinging.

The following adverse reactions were reported in 5 to 15% of patients: conjunctival hyperemia, blurred vision, superficial punctate keratitis or eye itching.

The following adverse reactions were reported in 1 to 5% of patients: abdominal pain, back pain, blepharitis, bronchitis, cloudy vision, conjunctival discharge, conjunctival edema, conjunctival follicles, conjunctival injection, conjunctivitis, corneal erosion, corneal staining, cortical lens opacity, cough, dizziness, dryness of eyes, dyspepsia, eye debris, eye discharge, eye pain, eye tearing, eyelid edema, eyelid erythema, eyelid exudate/scales, eyelid pain or discomfort, foreign body sensation, glaucomatous cupping, headache, hypertension, influenza, lens nucleus coloration, lens opacity, nausea, nuclear lens opacity, pharyngitis, post-subcapsular cataract, sinusitis, upper respiratory infection, urinary tract infection, visual field defect, vitreous detachment.

Overdosage:

Symptoms consistent with systemic administration of beta-blockers or carbonic anhydrase inhibitors may occur, including electrolyte imbalance, development of an acidotic state, dizziness, headache, shortness of breath, bradycardia, bronchospasm, cardiac arrest and possible central nervous system effects. Serum electrolyte levels (particularly potassium) and blood pH levels should be monitored.

Storage conditions:

Store at (20–25)°C, protect from light.

Keep out of reach of children.

Rx only

Packaging:

Polyethylene bottle 5 mL with dropper tightly sealed with a polyethylene closer within a carton box.

Produced by MIAMED Pharmaceutical Industries –Damascus countryside –Syria

This is a medication
- A medication is a product but unlike any other products.
- A medication is a product which affect your health, and its consumption contrary to instructions is dangerous for you.
- Follow strictly the doctor's prescription, the method of use and the instructions of the pharmacist who sold the medication.
- The doctor and the pharmacist are experts in medicine, its benefits and risks.
- Do not by yourself interrupt the period of treatment prescribed for you.
- Do not repeat the same prescription without consulting your doctor.

Keep medications out of reach of children

Council of Arab Health Ministers



Arab pharmacist Association