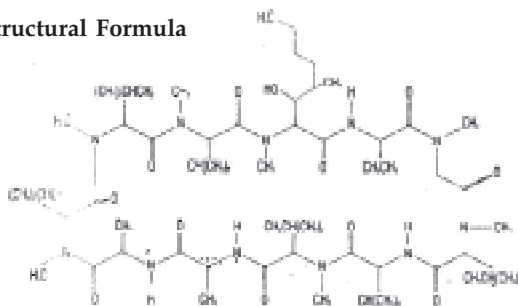


DESCRIPTION

RESTASIS™ (cyclosporine ophthalmic emulsion) 0.05% contains a topical immunomodulator with anti-inflammatory effects. Cyclosporine's chemical name is Cyclo [[(E)-(2S,3R,4R)3-hydroxy-4-methyl-2-(methylamino)-6-octenoyl]-L-2-aminobutyryl-N-methylglycyl-N-methyl-L-valyl-N-L-leucyl-N-methyl-L-valyl] and it has the following structure:

Structural Formula



Formula: $C_{62}H_{111}N_{11}O_{12}$ Mol. Wt.:1202.6

Cyclosporine is a fine white powder. RESTASIS™ appears as a white opaque to slightly translucent homogeneous emulsion. It has an osmolality of 230 to 320 mOsmol/kg and a pH of 6.5-8.0.

Each mL of RESTASIS™ contains: **Active:** cyclosporine 0.05%. **Inactive:** glycerin; castor oil; polysorbate 80; carbomer 1342; purified water and sodium hydroxide to adjust the pH.

CLINICAL PHARMACOLOGY

Mechanism of action:

Cyclosporine is an immunosuppressive agent when administered systemically.



Restasis^{B.I.D.}
(Cyclosporine Ophthalmic Emulsion) 0.05%

In patients whose tear production is presumed to be suppressed due to ocular inflammation associated with keratoconjunctivitis sicca, cyclosporine emulsion is thought to act as a partial immunomodulator. The exact mechanism of action is not known.

Pharmacokinetics:

Blood cyclosporin A concentrations were measured using a specific high pressure liquid chromatography-mass spectrometry assay. Blood concentrations of cyclosporine, in all the samples collected, after topical administration of RESTASIS™ 0.050%, BID, in humans for up to 12 months, were below the quantitation limit of 0.1 ng/mL. There was no detectable drug accumulation in blood during 12 months of treatment with RESTASIS™.

Clinical Evaluations:

Four multicenter, randomized, adequate and well-controlled clinical studies were performed in approximately 1200 patients with moderate to severe keratoconjunctivitis sicca. RESTASIS™ demonstrated statistically significant increases in Schirmer wetting of 10 mm versus vehicle at six months in patients whose tear production was presumed to be suppressed due to ocular inflammation. This effect was seen in approximately 15% of RESTASIS™ treated patients versus approximately 5% of vehicle treated patients. Increased tear production was not seen in patients currently taking topical anti-inflammatory drugs or using punctal plugs.

No increase in bacterial or fungal ocular infections was reported following administration of RESTASIS™.

INDICATIONS AND USAGE

RESTASIS™ is indicated to increase tear production in patients whose tear production is presumed to be suppressed due to ocular inflammation associated with keratoconjunctivitis sicca. Increased tear production was not seen in patients currently taking topical anti-inflammatory

drugs or using punctal plugs.

CONTRAINDICATIONS

RESTASIS™ is contraindicated in patients with active ocular infections and in patients with known or suspected hypersensitivity to any of the ingredients in the formulation.

WARNING

RESTASIS™ has not been studied in patients with a history of herpes keratitis.

PRECAUTIONS

General: For ophthalmic use only.

Information for Patients:

The emulsion from one individual single-use vial is to be used immediately after opening for administration to one or both eyes, and the remaining contents should be discarded immediately after administration.

Do not allow the tip of the vial to touch the eye or any surface, as this may contaminate the emulsion.

RESTASIS™ should not be administered while wearing contact lenses. Patients with decreased tear production typically should not wear contact lenses. If contact lenses are worn, they should be removed prior to the administration of the emulsion. Lenses may be reinserted 15 minutes following administration of RESTASIS™.

Carcinogenesis, Mutagenesis, and Impairment of Fertility:

Systemic carcinogenicity studies were carried out in male and female mice and rats. In the 78-week oral (diet) mouse study, at doses of 1, 4 and 16mg/kg/day, evidence of a statistically significant trend was found for lymphocytic lymphomas in females and the incidence of hepatocellular carcinomas in mid-dose males significantly exceeded the control value.

In the 24-month oral (diet) rat study, conducted at 0.5, 2, and 8 mg/kg/day, pancreatic islet cell adenomas significantly exceeded the control rate in the low dose level. The hepatocellular carcinomas and pancreatic islet cell adenomas were not dose related. The low doses in mice and rats are approximately 1000 and 500 times greater, respectively, than the daily human dose of one drop (28µl) of 0.05% RESTASIS™ BID into each eye of a 60 kg person (0.001mg/kg/day), assuming that the entire dose is absorbed.

Cyclosporine has not been found mutagenic/genotoxic in the Ames Test, the V79-HGPRT Test, the micronucleus test in mice and Chinese hamsters, the chromosome-aberration tests in Chinese hamster bone-marrow, the mouse dominant lethal assay, and the DNA-repair test in sperm from treated mice. A study analyzing sister chromatid exchange (SCE) induction by cyclosporine using human lymphocytes *in vitro* gave indication of a positive effect (i.e. induction of SCE).

No impairment in fertility was demonstrated in studies in male and female rats receiving oral doses of cyclosporine up to 15 mg/kg/day (approximately 15,000 times the human daily dose of 0.001 mg/kg/day) for 9 weeks (male) and 2 weeks (female) prior to mating.

Pregnancy-Teratogenic effects:

Pregnancy category C.

Teratogenic effects: No evidence of teratogenicity was observed in rats or rabbits receiving oral doses of cyclosporine up to 300 mg/kg/day during organogenesis. These doses in rats and rabbits are approximately 300,000 times greater than the daily human dose of one drop (28 µl) 0.05% RESTASIS™ BID into each eye of a 60 kg person (0.001 mg/kg/day), assuming that the entire dose is absorbed.

Non-Teratogenic effects: Adverse effects were seen in reproduction studies in rats and rabbits only at dose levels toxic to dams. At toxic doses (rats at 30 mg/kg/day and rabbits at 100 mg/kg/day), cyclosporine oral solution, USP, was

embryo and fetotoxic as indicated by increased pre- and postnatal mortality and reduced fetal weight together with related skeletal retardations. These doses are 30,000 and 100,000 times greater, respectively than the daily human dose of one drop (28 µl) of 0.05% RESTASIS™ BID into each eye of a 60 kg person (0.001 mg/kg/day), assuming that the entire dose is absorbed. No evidence of embryofetal toxicity was observed in rats or rabbits receiving cyclosporine at oral doses up to 17 mg/kg/day or 30mg/kg/day, respectively, during organogenesis. These doses in rats and rabbits are approximately 17,000 and 30,000 times greater, respectively, than the daily human dose.

Offspring of rats receiving a 45 mg/kg/day oral dose of cyclosporine from Day 15 of pregnancy until Day 21 post partum, a maternally toxic level, exhibited an increase in postnatal mortality; this dose is 45,000 times greater than the daily human topical dose, 0.001 mg/kg/day, assuming that the entire dose is absorbed. No adverse events were observed at oral doses up to 15mg/kg/day (15,000 times greater than the daily human dose).

There are no adequate and well-controlled studies of RESTASIS™ in pregnant women. RESTASIS™ should be administered to pregnant women only if clearly needed.

Nursing Mothers:

Cyclosporine is known to be excreted in human milk following systematic administration but excretion in milk after topical treatment has not been investigated. Although blood concentrations are undetectable after topical administration of RESTASIS™, caution should be exercised when RESTASIS™ is administered to a nursing woman,

Pediatric Use:

The safety and efficacy of RESTASIS™ have not been established in pediatric patients below the age of 16.

Geriatric Use:

No overall difference in safety or effectiveness has been observed between elderly and younger patients.

ADVERSE REACTIONS

The most common adverse event following the use of RESTASIS™ was ocular burning (17%). Other events reported in 1% to 5% of patients included conjunctival hyperemia, discharge, epiphora, eye pain, foreign body sensation, pruritus, stinging, and visual disturbance (most often blurring).

DOSAGE AND ADMINISTRATION

Invert the unit dose vial a few times to obtain a uniform, white, opaque emulsion before using. Instill one drop of RESTASIS™ twice a day in each eye approximately 12 hours apart. RESTASIS™ can be used concomitantly with artificial tears, allowing a 15 minute interval between products. Discard vial immediately after use.

HOW SUPPLIED

RESTASIS™ is packaged in single use vials. Each vial contains 0.4 mL fill in a 0.9 mL LOPE vial: 32 vials are packaged in a polypropylene tray with an aluminium peelable lid.

Storage: Store RESTASIS™ below 25°C.

KEEP OUT OF REACH OF CHILDREN.

COMPOSITION

Each ml contains

Sodium Carboxy Methyl Cellulose IP	5 mg
Oxychloro complex (Purite)	0.005% w/v

Many things can make your eyes feel dry, scratchy and uncomfortable like Airconditioners or heaters, Computer use, Reading, Medications & Wind or a reduction in the amount of tears. Your body produces tears which help to lubricate and nourish your eyes. Refresh Tears® restores the moisture your eyes crave with a special formula that has some of the healthy qualities as natural tears.

INDICATIONS

For temporary relief from burning irritation and discomfort due to dryness of the eye or due to exposure to wind or sun. May also be used as a protectant against further irritation.

WARNINGS

To avoid contamination do not touch tip of container to any surface. Do not reuse. Once opened, discard. If you experience eye pain, changes in vision continued redness or irritation of the eye and if the condition worsens or persists for more than 72 hours, discontinue use and consult a doctor. If solution changes colour or becomes cloudy do not use. Keep this and all drugs out of the reach of children. In case of accidental ingestion, seek professional assistance or consult your physician.

DOSAGE

Instill 1 to 2 drops in the affected eye(s) as directed.

HOW SUPPLIED

In sterile, 10 ml vials along with Carton & Product leaflet



Refresh Tears®
(Carboxymethylcellulose sodium)0.5%

Each mL contains: carboxymethylcellulose sodium 1.0% with boric acid, calcium chloride, magnesium chloride, potassium chloride, purified water, PURITE® (stabilized oxychloro complex) 0.0075%, sodium borate and sodium chloride.

Refresh Liquigel™ Lubricant Eye Drops provides soothing relief for dry, irritated eyes with a formula that resembles your body's own tears. Refresh Liquigel™ contains a unique, mild, non-sensitizing preservative that, when used, ultimately changes into components of natural tears (sodium chloride + water). Use Refresh Liquigel™ for long-lasting relief of your dry, irritated eyes as often as needed.

INDICATIONS

For temporary relief of burning, irritation, and discomfort due to dryness of the eye or due to exposure to wind or sun. Also may be used as a protectant against further irritation.

DIRECTIONS

Instil 1 or 2 drops in the affected eye(s) as needed. If irritation persists or increases, discontinue use and consult your doctor.

WARNINGS

To avoid contamination, do not touch tip of the container to any surface. Replace cap after using. If you experience eye pain, changes in vision, continued redness or irritation of the eye, or if the condition worsens or persists for more than 72 hours, discontinue use and consult a doctor. If solution changes color or becomes cloudy, do not use.

SIDE EFFECTS

When used as directed, no significant side effects are anticipated. Ocular irritation and allergic reactions have been reported occasionally.



Refresh Liquigel™
(Carboxymethylcellulose 1.0%)

PACKING

Refresh Liquigel™ Lubricant Eye Drops are available in 3ml and 15ml plastic dropper bottles.

Note: Store below 25°C. Keep out of the reach of children. Discard one month after opening.

DESCRIPTION:

Each ml contains:

- Polyvinyl Alcohol 14 mg
- Povidone IP 6 mg
- Chlorbutanol IP 5 mg

INDICATIONS:

LIQUIFILM TEARS™ is an ocular lubricant indicated for relief of burning, irritation and discomfort due to dryness of the eye. It can be used as a tear substitute in case of lacrimal secretion deficiency, dry eye syndrome or for any condition requiring soothing, lubricating and moisturizing of corneal tissues. It may also be used as a protectant against further irritation.

WARNINGS:

NOT FOR INJECTION. If irritation persists or increases discontinue use and consult physician. Do not touch the nozzle tip to any surface since this may contaminate the solution. Use the solution within one month after opening the container. Nor for use with soft contact lenses.

DOSAGE & ADMINISTRATION:

One or two drops in the eye as needed.

HOW SUPPLIED:

TEARS PLUS™ is available in 10 ml plastic dropper bottles.

NOTE: Store in a cool place. On prescription only.



TEARS PLUS™
(Polyvinyl Alcohol 1.4%, Povidone 0.6%)

COMPOSITION

Celluvisc is an isotonic formulation and contains carboxymethylcellulose sodium 10 mg/ml and sodium chloride, sodium lactate, potassium chloride, calcium chloride dihydrate and purified water.

PHARMACOLOGICAL ACTION

Celluvisc® Eye Drops are an isotonic, lubricant, non-preserved formulation similar to normal tears.

INDICATIONS

Celluvisc® Eye Drops are indicated as a lubricant to relieve irritation and discomfort due to dryness of the eye or due to exposure to wind or sun.

CONTRA-INDICATIONS

Hypersensitivity to any of the ingredients.

WARNINGS

If irritation increases or persists for more than 24 hours, discontinue use and consult a medical practitioner.

DOSAGE AND DIRECTIONS FOR USE

Ensure that the container is intact before use. To open, twist off the tab. To avoid contamination do not touch the tip of the container to any surface. Apply one or two drops in each eyes as needed, or as directed. There is no special dosage schedule for the elderly or for children. Use immediately after opening. Do not store opened container. Discard after use.

SIDE EFFECTS AND SPECIAL PRECAUTIONS

Irritation on instillation is the most frequently reported side effect. Transient blurring may also be experienced.



Celluvisc®
(carboxymethylcellulose 1.0%)

IDENTIFICATION

Clear, colourless to very slightly yellow solution in low density polyethylene single-use container.

PRESENTATION

Cardboard cartons containing 30 single-use containers per carton. Each single-use container contains 0.4 ml Celluvisc®

STORAGE INSTRUCTIONS

Store unopened container in a cool place (below 25°C). Do not store opened single-use container. Discard after use. Keep out of reach of children.