

Losartan Ophthalmic

A targeted anti-fibrotic for corneal scarring — where steroids alone aren't enough.



✓ 0.08% SOLUTION · PRESERVATIVE-FREE · OPHTHALMOLOGIST-PRESCRIBED

Corneal fibrosis is one of the leading causes of preventable vision loss — and steroids, the traditional go-to, don't address the underlying biology. **Topical losartan** works through a fundamentally different mechanism: by blocking the angiotensin II type 1 receptor, it suppresses TGF- β signaling and prevents the myofibroblast generation that drives permanent stromal scarring. Not commercially available as an ophthalmic drop at any concentration — compounding is the only source.

How It Works

Following corneal injury or surgery, TGF- β triggers keratocytes to differentiate into **myofibroblasts** — the cells responsible for laying down disorganized collagen and creating opaque stromal scars. Losartan, an angiotensin II receptor blocker (ARB), **blocks this TGF- β signaling pathway**, suppressing myofibroblast generation and inducing apoptosis of existing myofibroblasts. Topically applied, it penetrates full-thickness cornea without clinically meaningful systemic absorption or effect on blood pressure.

When It's Prescribed

- Post-Refractive Haze (PRK / PTK / LASIK)**
 Late haze from myofibroblast activity — especially breakthrough haze despite mitomycin C, or traumatic flap disruption.
- Post-Infectious Corneal Leukomas**
 Scarring fibrosis after bacterial, fungal, herpetic, or Acanthamoeba keratitis once the infection is cleared.
- Chemical & Thermal Burns**
 Alkali and acid injury scarring; synergistic with topical corticosteroids in the post-acute phase.
- Conjunctival Fibrosis & Pterygium**
 Stevens-Johnson syndrome, cicatricial pemphigoid, graft-versus-host disease, and pterygium recurrence prophylaxis.

Losartan vs. Steroids for Corneal Fibrosis

Feature	Topical Losartan 0.08%	Topical Corticosteroids
Mechanism	Blocks myofibroblast generation	Reduces inflammation only
Targets established scar	✓ Induces myofibroblast apoptosis	✗ Does not remodel established fibrosis
IOP risk	✓ None	✗ Steroid-induced glaucoma risk
Cataract risk	✓ None	✗ Long-term use risk

Losartan 0.08% (0.8 mg/mL) Ophthalmic Solution

Preservative-free · sterile · refrigerated

1 drop 6x daily · 4–12 weeks per prescriber · Rx required

Not Commercially Available

Compounding is the only source for ophthalmic losartan at any concentration.

Custom concentrations available per prescriber.

Could This Be Right for You?

- You have corneal haze or scarring after PRK, PTK, or a traumatic flap injury that hasn't resolved with steroids
- You're recovering from a corneal infection and your doctor wants to limit residual fibrosis
- You have a chemical or thermal burn with stromal scarring affecting your vision
- Your ophthalmologist has prescribed compounded losartan drops and needs a compounding pharmacy

Ask your eye doctor to send the prescription directly to us.

The Medicine Shoppe · 1698 S Queen St, York PA 17403 · (717) 846-0500
 Phone, fax (717) 845-8767, or e-prescribe. For educational purposes only — not medical advice.