

STEP THERAPY POLICY

- POLICY:** Ophthalmic – Glaucoma – Prostaglandins and Rho Kinase Inhibitors Step Therapy Policy
- Bimatoprost 0.03% ophthalmic solution (generic to discontinued Lumigan® 0.03% ophthalmic solution)
 - Lumigan® (bimatoprost 0.01% ophthalmic solution – Allergan)
 - Rhopressa® (netarsudil 0.02% ophthalmic solution – Aerie)
 - Rocklatan™ (netarsudil 0.02%/latanoprost 0.005% ophthalmic solution – Aerie)
 - Travatan® Z (travoprost 0.004% ophthalmic solution – Novartis, generic)
 - Vyzulta™ (latanoprostene bunod 0.024% ophthalmic solution – Bausch Health)
 - Xalatan® (latanoprost 0.005% ophthalmic solution –Pfizer, generic)
 - Xelpros™ (latanoprost 0.005% ophthalmic emulsion – Sun)
 - Zioptan® (tafluprost 0.0015% ophthalmic solution – Akorn, generic)

REVIEW DATE: 12/14/2022

OVERVIEW

The ophthalmic prostaglandins, rho kinase inhibitor, and rho kinase inhibitor-prostaglandin combination products are indicated for the **reduction of elevated intraocular pressure (IOP)** in patients with open-angle glaucoma or ocular hypertension.¹⁻⁹

Guidelines

The American Academy of Ophthalmology (AAO) Preferred Practice Pattern® guidelines (2020) for the treatment of primary open-angle glaucoma note that the initial therapy choice may be influenced by potential cost, side effects, and dosing schedules as well as the patient’s comorbid conditions (e.g., asthma, chronic obstructive lung disease, cardiac arrhythmia).¹⁰ Lowering the pretreatment IOP by 25% or more has been shown to slow progression of primary open-angle glaucoma. The prostaglandins are often selected as the initial medical therapy unless there are considerations (e.g., contraindications, cost, side effects) that would preclude its use. Moreover, the prostaglandins are the most frequently prescribed eye drops for lowering IOP due to efficacy and tolerability and they are dosed once daily. Other ophthalmic drugs for the treatment of glaucoma include beta-adrenergic blockers, alpha₂-adrenergic agonists, rho kinase inhibitors, and carbonic anhydrase inhibitors. If a drug fails to reduce IOP sufficiently, then either switching to an alternative medication as monotherapy or adding medication is appropriate, until the desired IOP level is attained.

Conjunctival Hyperemia

All of the agents in this class have been noted to cause conjunctival hyperemia.¹⁻⁹ While not a direct comparison, the incidences of hyperemia reported in product labeling are as follows: latanoprost (Xalatan, generic) 5% to 15%; Xelpros, ocular hyperemia, 41%, conjunctival hyperemia, 15%; Vyzulta 6%, Zioptan 4% to 20%; Lumigan 0.01% or bimatoprost 0.03%, 25% to 45%; Travatan Z, 30% to 50%; Rhopressa 53%, Rocklatan 59%. The discontinuation rates noted in the package labeling due to conjunctival hyperemia were < 1% of patients for latanoprost (Xalatan, generic), 0.5% to 3% of patients for Lumigan 0.01% or bimatoprost 0.03%, up to 3% of patients for Travatan Z, 6% of patients for Rhopressa, and 5% of patients for Rocklatan. The discontinuation rate due to ocular hyperemia was < 1% for Xelpros. The discontinuation rate due to ocular adverse events, including ocular hyperemia, conjunctival irritation, eye irritation, eye pain, conjunctival edema, blurred vision, punctate keratitis, and foreign body sensation is 0.6% for Vyzulta. A 2010 meta-analysis found the probability of hyperemia-type reactions varied between the prostaglandins, with latanoprost significantly less likely to cause hyperemia compared with Lumigan,

travoprost, or their combination with timolol (mean proportion was 24%, 59%, and 47% for latanoprost [Xalatan, generic], Lumigan, and travoprost, respectively).¹¹

Preservatives

Benzalkonium chloride (BAK), the most common preservative used in ophthalmic products, can have toxic effects on the cornea and conjunctiva.¹² All of the products listed in this policy are preserved with BAK except tafluprost 0.0015% ophthalmic solution (Zioptan, generic), travoprost 0.004% ophthalmic solution (Travatan Z, generic), and Xelpros.¹⁻⁹ Travoprost 0.004% ophthalmic solution (Travatan Z, generic) is preserved with an ionic buffered system, sofZia (boric acid, propylene glycol, sorbitol, zinc chloride).⁵ Xelpros is preserved with potassium sorbate 0.47%.⁸ Tafluprost 0.0015% ophthalmic solution does not contain any preservatives.⁹

POLICY STATEMENT

This program has been developed to encourage the use of a Step 1 Product prior to the use of a Step 2 Product. If the Step Therapy rule is not met for a Step 2 Product at the point of service, coverage will be determined by the Step Therapy criteria below. All approvals are provided for 1 year in duration.

Automation: A patient with a of one Step 1 Product within the 130-day look-back period is excluded from Step Therapy.

Step 1: generic bimatoprost 0.03% ophthalmic solution, generic latanoprost ophthalmic solution, generic travoprost 0.004% ophthalmic solution (generic to Travatan Z)

Step 2: Lumigan, Rhopressa, Rocklatan, Travatan Z, Xalatan, Xelpros, Vyzulta, Zioptan (brand and generic)

CRITERIA

1. If the patient has tried one Step 1 Product, approve a Step 2 Product.
2. If the patient has a known benzalkonium chloride (BAK) sensitivity AND a known sensitivity to other ophthalmic preservatives, approve Xelpros or Zioptan (brand and generic).
3. No other exceptions are recommended.

REFERENCES

1. Bimatoprost 0.03% ophthalmic solution [prescribing information]. Somerset, NJ: Micro Labs; March 2022.
2. Lumigan® 0.01% ophthalmic solution [prescribing information]. Madison, NJ: Allergan; March 2022.
3. Rhopressa® [prescribing information]. Irvine, CA: Aerie; March 2019.
4. Rocklatan [prescribing information]. Irvine, CA: Aerie; June 2020.
5. Travatan® Z 0.004% ophthalmic solution [prescribing information]. East Hanover, NJ: Novartis; October 2021.
6. Vyzulta® [prescribing information]. Bridgewater, NJ: Bausch Health; May 2019.
7. Xalatan® 0.005% ophthalmic solution [prescribing information]. New York, NY: Pfizer; September 2020.
8. Xelpros™ [prescribing information]. Cranbury, NJ: Sun; February 2021.
9. Zioptan® 0.0015% ophthalmic solution [prescribing information]. Lake Forest, IL: Akorn; November 2018.
10. Gedde SJ, Vinod K, Wright MW, et al. The American Academy of Ophthalmology Primary Open-Angle Glaucoma Preferred Practice Pattern®. Available at [https://www.aaojournal.org/article/S0161-6420\(20\)31024-1/fulltext](https://www.aaojournal.org/article/S0161-6420(20)31024-1/fulltext). Accessed on December 7, 2022.

11. Orme M, Collins S, Dakin H, et al. Mixed treatment comparison and meta-regression of the efficacy and safety of prostaglandin analogues and comparators for primary open-angle glaucoma and ocular hypertension. *Curr Med Res Opin.* 2010;26(3):511-528.
12. Mirza SK, Johnson SM. Efficacy and patient tolerability of travoprost BAK-free solution in patients with open-angle glaucoma and ocular hypertension. *Clin Ophthalmol.* 2010;4:877-888.