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# [Glaucoma Research Foundation](#)

## Glaucoma Medications

Glaucoma is an eye disease that gradually steals your vision. Often, glaucoma has no symptoms and can suddenly result in vision loss. Without proper treatment, glaucoma can lead to blindness. The good news is that with regular eye exams, early detection, and treatment, you can preserve your sight. If your eye doctor prescribes a glaucoma medication, it is important to carefully follow your medication regimen to continually preserve a healthy eye pressure and prevent vision loss.

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A number of medications are currently in use to treat glaucoma. Your doctor may prescribe a combination of medications or change your prescription over time to reduce side-effects or provide a more effective treatment. Typically medications are intended to reduce elevated intraocular pressure and prevent damage to the optic nerve.

### Alpha Agonist

Company	Brand Name	Generic Name
Alcon, Inc.	Iopidine®	Apraclonidine HCl 0.5%, 1%
Allergan Inc.	Alphagan® P	Brimonidine tartrate 0.1%, 0.15%

Works to both decrease production of fluid and increase drainage.

#### Side effects

Side effects can include burning or stinging upon instillation of the eye drop, fatigue, headache, drowsiness, dry mouth and dry nose.

### Beta Blockers

Company	Brand Name	Generic Name
Akorn Ophthalmics	Timolol Maleate USP	Timolol Maleate 0.5%
Alcon, Inc.	Betoptic® S	Betaxolol HCl 0.25%, 0.5%
Allergan Inc.	Betagan®	Levobunolol HCl ophthalmic solution, USP 0.25%, 0.5%
Bausch & Lomb Inc.	OptiPranolol®	Metipranolol 0.3%

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ISTA Pharmaceuticals Istalol®	Timolol Maleate Ophthalmic Solution 0.5%
Johnson & Johnson Betimol®	Timolol hemihydrate 0.25%, 0.5%
Merck & Co. Inc. Timoptic-XE®	Timolol maleate ophthalmic gel forming solution 0.25%, 0.5%

Decreases production of intraocular fluid.

### Side effects

Side effects can include low blood pressure, reduced pulse rate, and fatigue. Beta blockers can also cause a shortness of breath in people who have a history of asthma or other respiratory disorders. Additionally, beta blockers can change cardiac activity by decreasing the amount of blood the heart pumps out, which may reduce the pulse rate and/or slow down the heart's response rate during exercise. Rare side effects include reduced libido and depression.

## Carbonic Anhydrase Inhibitors

Company	Brand Name	Generic Name
Alcon, Inc.	Azopt™	Brinzolamide ophthalmic suspension 1%
Merck & Co. Inc.	Trusopt®	Dorzolamide HCl 2%
Duramed Inc.	Diamox® Sequels®	Acetazolamide

Decreases production of intraocular fluid.

### Side effects

Side effects of the pill form of these medications can include tingling or loss of strength of the hands and feet, upset stomach, mental fuzziness, memory problems, depression, kidney stones, and frequent urination. Since eyedrop form of this medication is relatively new, long-term studies are yet to be completed. Current effects of the eyedrop include stinging, burning and other eye discomfort.

## Cholinergic (Miotic)

Company	Brand Name	Generic Name
Alcon, Inc.	Isopto® Carpine	Pilocarpine HCl 1%, 2%, 4%, 6%, 8%
Alcon, Inc.	Isopto® Carbachol	Carbachol 0.75%, 1.5%, 3%
Alcon, Inc.	Pilopine HS® Gel	Pilocarpine HCl gel 4%
Bausch & Lomb Inc.	Pilocarpine HCl Ophthalmic Solution USP	Pilocarpine HCl ophthalmic solution USP ) 0.5%, 1%, 2%, 3%, 4%, 6%

Increases drainage of intraocular fluid.

### Side effects

Side effects Many people who use these medications complain of dim vision, especially at night or in darkened areas such as movie theaters. This is due to constriction of the pupil. Miotics increase drainage of intraocular fluid by making the pupil size smaller, thereby increasing the flow of intraocular fluid from the eye.

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## Combined

Company	Brand Name	Generic Name
Allergan Inc.	Combigan™	Brimonidine Tartrate & Timolol Maleate
Merck & Co. Inc.	Cosopt®	Dorzolomide HCl & Timolol Maleate

Decreases production of intraocular fluid.

Combigan™ is a combination of beta blocker and alpha agonist. Cosopt® is a combination of beta blocker and carbonic anhydrase inhibitor.

### Side effects

Side effects of Combigan™ include the symptoms of beta blockers and alpha agonists. Side effects of Cosopt® include burning and/or stinging of the eyes and changes in sense of taste. Since these medications are new to the market, long term follow up of people using these medications is not yet available.

## Prostaglandin Analogs

Company	Brand Name	Generic Name
Alcon, Inc.	Travatan® Z	Travaprost 0.004%
Allergan Inc.	Lumigan®	Bimatoprost 0.01%, 0.03%
Pfizer Inc.	Xalatan®	Latanoprost 0.005%

Increases drainage of intraocular fluid.

### Side effects

In initial studies, between 5% and 15% of people who used this medication reported a gradual change in eye color, due to an increased amount of brown pigment in the iris of the treated eye. The change in eye color occurs slowly and may not be noticeable for several months to years. Other side effects can include stinging, blurred vision, eye redness, itching, and burning. These medications are new to the market, and long term follow up of people who use them is not yet available.

## Have a question?

[email us](#)

Glaucoma Research Foundation—funding innovative research to find a cure for glaucoma.

251 Post Street, Suite 600, San Francisco, CA 94108, 415-986-3162, Toll-free: 800-826-6693

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