



Glaucoma Medications

There are a number of different eye drop medication categories. If you are taking eye drops, you should be aware of what they do and the side effects associated with their use. Your physician can make the best decision for you based on your medical history and current medication regimen.

- **Alpha adrenergic agonists** reduce aqueous humor production and increase the eye's fluid outflow. Allergic reactions frequently occur with this class of medication. Side effects may include increased heart rate, elevated blood pressure, headaches, blurry vision, fatigue, dry mouth and redness in or around the eye.

Examples include:

- apraclonidine (Iopidine[®])
 - brimonidine (Alphagan[®])
 - epinephrine (Glucon[®] and Epifrin[®])
 - dipivefrin (Propine[®])
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- **Beta-Blockers** work to lower the intraocular pressure by decreasing the rate at which fluid flows into the eye. Side effects may include a slow or irregular heartbeat, depression, impotence, drowsiness, double vision, and breathing problems for patients with asthma or emphysema.

Examples include:

- timolol (Timoptic XE Ocumeter[®] and Timoptic[®])
- levobunolol (Betagan[®])
- carteolol (Ocupress[®])

- metipranolol (OptiPranolol[®])
- betaxolol (Betoptic[®])
- **Carbonic anhydrase inhibitors** reduce fluid flow into the eye. Side effects may include skin rash, red eye or irritation, headache, nausea or upset stomach, altered taste (especially with carbonated beverages), weight loss, fatigue and decreased energy.

Examples include:

- dorzolamide (Trusopt[®])
 - brinzolamide (Azopt[®])
 - acetazolamide (Diamox[®]) – oral medication
 - methazolamide (Neptazane[®]) – oral medication
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- **Miotics** (cholinergic agents) help increase the rate of fluid drainage from the eye. Side effects may include red eyes, headache and blurry or cloudy vision.

Examples include:

- pilocarpine (Isopto Carpine[®], Pilocar[®] and Pilopine HS[®] ointment)
 - echothiophate (Phospholine Iodide[®])
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- **Prostaglandin analogs** reduce pressure in the eye by increasing the outward flow of fluid from the eye. Side effects may include eye redness or irritation, a change in eye color (mostly in hazel or green eyes), increase in thickness and number of eyelashes and joint aches or flu-like symptoms.

Examples include:

- latanoprost (Xalatan[®])
- bimatoprost (Lumigan[®])
- travopros (Travatan[®])

- **Combinations** of eye drops are also available for patients who require more than one type of eye drop. The side effects for these medications are mentioned above.

Examples include:

- dorzolamide and timolol (Cosopt[®])
- latanoprost and timolol (Xalacom[®])
- brimonidine and timolol (Combigan[®])

Some of the information in this fact sheet was obtained from the National Eye Institute and the National Library of Medicine. The above information should not in any way substitute for the advice of a qualified health care professional and is not intended to constitute medical advice. For further information, contact National Glaucoma Research, a program of the American Health Assistance Foundation, at 22512 Gateway Center Drive, Clarksburg, Maryland 20871, call 1-800-437-2423, or visit our website at www.ahaf.org.