

## Glaucoma Prescribing Guideline

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## Document control

Date	Version	Amendments
Oct 2013	1.0	New guideline
Oct 2014	1.1	Update
Oct 2015	1.2	Update
Jun 2017	1.3	Minor amendment (advice regarding treatment period of apraclonidine 0.5%)
Jan 2018	2.0	Update – carteolol 1% and 2% removed

## Document management

Groups / Individuals who have overseen the development of this guidance:	Emilia Lamberti – MEH Formulary Pharmacist
Groups which were consulted and have given approval:	NCL JFC
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Before offering medication any relevant comorbidities or potential drug interactions need to be checked carefully. A single drug should be started and its effectiveness at lowering eye pressure and any side effects should be assessed usually upon follow-up. If there is no IOP response and the patient has been compliant to treatment, the drug should be stopped and another tried from a different class. If there is a satisfactory IOP drop but insufficient to meet the target pressure then a second drug may be added. Medical therapy of more than three topical agents-one separate and one combination should trigger consideration for either laser or surgery. Maximal medical treatment would consist of all 4 classes of topical pressure lowering medication and possible oral acetazolamide

The Guidelines should be adhered to for all new patients. No change in treatment plan is recommended for patient already on different medications when there is satisfactory IOP response. Non-responders should be switched to a different class of drug.

Drug		With Preservative	Preservative Free Restricted to patients with true preservative allergy and/or evidence of epithelial toxicity from preservatives and/or severe dry eyes
prostaglandin analogues	<b>1<sup>st</sup> Line</b>	1 <sup>st</sup> latanoprost 0.005% eye drops 2 <sup>nd</sup> travoprost 0.004% eye drops 3 <sup>rd</sup> bimatoprost 0.01% eye drops	1 <sup>st</sup> latanoprost 0.005% single use eye drop 2 <sup>nd</sup> bimatoprost 0.03% single use eye drop
β-blockers	<b>2<sup>nd</sup> Line</b>	1 <sup>st</sup> timolol 0.25% eye drops 2 <sup>nd</sup> timolol 0.25% eye gel (long acting)	1 <sup>st</sup> timolol 0.1% eye gel
carbonic anhydrase inhibitor	<b>3<sup>rd</sup> Line</b>	1 <sup>st</sup> brinzolamide 1% eye drops 2 <sup>nd</sup> dorzolamide 2% eye drops	1 <sup>st</sup> dorzolamide 2% single use eye drop
alpha-adrenergic agonist	<b>4<sup>th</sup> Line</b>	1 <sup>st</sup> brimonidine 0.2% eye drops	

**1<sup>st</sup> LINE:** prostaglandin analogues  
*Safer than β-Blockers and probably more effective at lowering IOP*

**2<sup>nd</sup> LINE:** β-blockers  
*Used as first line for unilateral glaucoma patients or for cosmetic reasons. Not to be prescribed if there is history of bronchospasm and stopped immediately if patient develops wheezing or other β-blocker related side effects*

**STEP 1**

**USE** prostaglandin analogue **PLUS** β-blockers

**STEP 2**

*When prostaglandin and beta-blocker is insufficient to achieve the desired target IOP.*

**ADD** carbonic anhydrase inhibitor **OR** alpha-adrenergic agonist

**STEP 3**

**Combination Therapies TO BE USED WHEN COMPLIANCE/ COST ISSUES ARISE.**  
*Choice needs to be made according to patient's concurrent and/or previous therapy:*  
Latanoprost/Timolol, Bimatoprost/Timolol, Travoprost/Timolol, Dorzolamide/Timolol, Brinzolamide/Timolol, Brimonidine/Timolol, Dorzolamide/Timolol P.F, Bimatoprost/Timolol P.F, Brinzolamide/Brimonidine

**Other glaucoma drugs on Moorfields Eye Hospital Formulary FOR RESTRICTED USE ONLY.**  
Pilocarpine various strengths, Betaxolol 0.25% MR, Betaxolol 0.25% MR PF UD, Levobunolol 0.5%, Levobunolol 0.5% PF UD, Timolol 0.25% multidose PF (unlicensed), Timolol 0.5% (long acting), Tafluprost UD\*  
\*Existing patients only.

**ADD Apraclonidine 0.5% Eye Drop** *used short term to delay laser treatment or surgery in patients with glaucoma not adequately controlled by another drug however, some patients may benefit from treatment with Apraclonidine 0.5% for longer periods*

**Adjunct Therapy** Oral Acetazolamide