Evidence Table 21. KQ2

| **Study** | **Patients included** | **Patient characteristics** | **Comparators** | **Number of patients** | **Study Design, Risk of bias** | **Outcomes** | **Results** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| CIGTS 2001115 116 | POAG, PXF, pigmentaryGlaucoma | -age range 35-64-55% white, 38% black-mean vertical C/D ratio 0.69 | Trabeculectomy (with or without 5-fluorouracil), if treatment failed ALT, then sequence of medications, then repeating trabeculectomy with antifibrotic agents, then repeating medications vs.Medications, starting with topical beta-blocker followed by other topical agents (up to three), then alternative topical and/or oral medications. If treatment failed ALT, then trabeculectomy (with or without 5-fluorouracil), repeating medication, repeating trabeculectomy with antifibrotic agents, repeating medication | 607 patients | RCT1. Low2. low3. unclear4. low5. low | -Visual Activities QuestionnaireGlaucoma (VAQ),- Symptom and health problem check list (frequency and bothersomeness)- Glaucoma Health Perceptions Index-Fear of blindness | - Total VAQ: No statistically significant differences.On VAQ acuity subscale, adjusted for baseline variables, primary surgery was associated more dysfunction than initial medical treatment (p = 0.02).- Symptom and health problem check list : Overall decrease in both groups. 12 symptoms were more reported in the surgical group and 7 symptoms were more reported in the medical groupSurgical patients reporting 22% more symptom bothersomeness related to visual function-No statistically significant differences on the Glaucoma Health Perceptions Index-Fear of blindness decreased in both groups and was not associated with a specific treatment |
| Javitt200045 | POAG, OHT | -mean age 58-56% white, 39% black | Brimonidine tartrate 0.2% twice dailyvsTimolol maleate 0.05% twice dailyFor 4 months | 219 patients | RCT1. low2. low3. low4. high5. high | -Short Form-36 Health Survey (SF-36) | no statistically significant changes in QOL |
| EMGT200536 | POAG, NTG, PXF | -mean age 68-mean visual acuity 0.9 | No treatment vs.Betaxolol 5mg/ml twice daily and ALT, Latanoprost if IOP exceeds 25mmHg | 255 patients | RCT1. low2. low3. low4. high5. low | -Swedish translation of the NEI VFQ-25 | Treatment was not associated with change in QOL. |
| Konstas200352 | PXF with OHT, PXF | -mean age 70-average visual acuity 20/40 | Latanoprost 0.005% once dailyvs.Timolol maleate/Dorzolamide fixed combination twice dailyEach for 2 months | 54 patients | Randomized cross-over trial1. unclear2. unclear3. low4. high5. unclear | -Preference for one treatment arm | 80 % preferred lanatanoprost vs. 20% Timolol/Dorzolamide(mostly because of convenience) |
| Schenker199981 | POAH and OHT | -mean age 59-70 % white, 24% black | Timolol Gel once daily vs.Timolol Solution twice dailyEach for 6 weeks | 202 patients | Randomized cross-over trial1. unclear2. unclear3. low4. low5. high | -Antiglaucoma patient-preference questionnaire(includes: satisfaction,compliance) | -71% preferred timolol gel vs. 29% timolol solution (mostly because of frequency of usage)-there was no statistically significant difference for satisfaction-compliance was statistically significant higher with timolol gel |
| Solish200489 | POAG, OHT, PXF and pigmentaryGlaucoma | -Mean age 64-65% white, 25% black-45% had visual field defects | 0.5% Timolol maleate/ 2% Dorzolamide fixed combination twice dailyvs0.5% Timolol maleate and 0.2% Brimonidine twice dailyFor 6 months | 492 patients | RCT1. unclear2. unclear3. low4. low5. high | -Convenience -Satisfaction(On a 7 point scale) | Both treatments were convenient for >80% of patients and satisfied > 82% of the patients. Dorzolamide/timolol fixed combination was better than Brimonidine+ Timolol, regarding convenience but this did not reach statistical significance. |
| Simmons2002117 | POAG, OHT, PXF | -Mean age 65-66% white, 24% black | 0.2% Brimonidine VsLatanoprost 0.005%For 3 months | 115patients | RCT1. unclear2. unclear3. low4. low5. high | -Glaucoma disability index | Patientsin the latanoprost group were more likely to report negative quality-of-life variables than patients in thebrimonidine group |
| Cantor2001118 | POAG, OHT, PXF | -Mean age 59-77% white, 17% black | BrimonidineVsBetaxololFor 1 month | 159patients | RCT1. unclear2. unclear3. low4. low5. high | -Glaucoma disability index | Mean scores on theGDI did not change significantly frombaseline in either treatment group, |
| Javitt2000119 | POAG, OHT | -Mean age 61-82% white, 15% black | BrimonidineVsBetaxololFor 4 months | 188 patients | RCT1. low2. unclear3. low4. low5. high | -Glaucoma disability index | There were no significant between-group differences in the incidence ofadverse events or in the quality of life summary scores. |

Abbreviations: PXF= Pseudoexfoliative Glaucoma; NTG= Normal tension Glaucoma; ALT=Argon Laser Trabeculoplasty; NEI VFQ-25= National Eye Institute Visual Function Questionnaire. Risk of Bias: 1. Sequence Generation 2.Allocation Concealment 3.Blinding of Participants, Personnel, and Outcome Assessors 4.Incomplete Outcome Data 5.Pharmaceutical Support