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, pigmentary  Glaucoma | -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 | RCT  1. Low  2. low  3. unclear  4. low  5. low | -Visual Activities Questionnaire  Glaucoma (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 group  Surgical 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 |
| Javitt  200045 | POAG, OHT | -mean age 58  -56% white, 39% black | Brimonidine tartrate 0.2% twice daily  vs  Timolol maleate 0.05% twice daily  For 4 months | 219 patients | RCT  1. low  2. low  3. low  4. high  5. high | -Short Form-36 Health Survey (SF-36) | no statistically significant changes in QOL |
| EMGT  200536 | 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 | RCT  1. low  2. low  3. low  4. high  5. low | -Swedish translation of the NEI VFQ-25 | Treatment was not associated with change in QOL. |
| Konstas  200352 | PXF with OHT, PXF | -mean age 70  -average visual acuity 20/40 | Latanoprost 0.005% once daily  vs.  Timolol maleate/Dorzolamide fixed combination twice daily  Each for 2 months | 54 patients | Randomized cross-over trial  1. unclear  2. unclear  3. low  4. high  5. unclear | -Preference for one treatment arm | 80 % preferred lanatanoprost vs. 20% Timolol/Dorzolamide  (mostly because of convenience) |
| Schenker  199981 | POAH and OHT | -mean age 59  -70 % white, 24% black | Timolol Gel once daily  vs.  Timolol Solution twice daily  Each for 6 weeks | 202 patients | Randomized cross-over trial  1. unclear  2. unclear  3. low  4. low  5. 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 |
| Solish  200489 | POAG, OHT, PXF and pigmentary  Glaucoma | -Mean age 64  -65% white, 25% black  -45% had visual field defects | 0.5% Timolol maleate/ 2% Dorzolamide fixed combination twice daily  vs  0.5% Timolol maleate and 0.2% Brimonidine twice daily  For 6 months | 492 patients | RCT  1. unclear  2. unclear  3. low  4. low  5. 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. |
| Simmons  2002117 | POAG, OHT, PXF | -Mean age 65  -66% white, 24% black | 0.2% Brimonidine  Vs  Latanoprost 0.005%  For 3 months | 115  patients | RCT  1. unclear  2. unclear  3. low  4. low  5. high | -Glaucoma disability index | Patients  in the latanoprost group were more likely to report negative quality-of-life variables than patients in the  brimonidine group |
| Cantor  2001118 | POAG, OHT, PXF | -Mean age 59  -77% white, 17% black | Brimonidine  Vs  Betaxolol  For 1 month | 159  patients | RCT  1. unclear  2. unclear  3. low  4. low  5. high | -Glaucoma disability index | Mean scores on the  GDI did not change significantly from  baseline in either treatment group, |
| Javitt  2000119 | POAG, OHT | -Mean age 61  -82% white, 15% black | Brimonidine  Vs  Betaxolol  For 4 months | 188 patients | RCT  1. low  2. unclear  3. low  4. low  5. high | -Glaucoma disability index | There were no significant between-group differences in the incidence of  adverse 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