Table 28: Study Characteristics — Clinical Review

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
Research Questions 1 and 2					
MIGS Vs. Pharmacotherapy					
Vold et al. 2016[58] Armenia Funding source: Glaukos Corporation	RCT Analytical approach NR *Follow-up:* 1, 3, 6, 12, 18, 24, 30, and 36 mo *Loss to follow-up,* n (%)*:* At 12 mo: 2x iStent, 1 (2%); Travoprost, 0 (0%) At 24 mo: 2x iStent, 2 (4%); Travoprost, 1 (2%) At 36 mo: 2x iStent, 20 (37%); Travoprost, 14 (30%)	N = 101 eyes (101 patients) **Inclusion criteria:** Treatment-naive phakic patients with newly diagnosed POAG or PXF or ocular hypertension with IOP ≥ 21 mm Hg and ≤ 40 mm Hg, cup to disk ratio ≤ 0.9 and normal angle anatomy **Exclusion criteria:** Patients with uveitic, neovascular, or angle-closure glaucoma; glaucoma associated with vascular disorders; corneal pathology or prior surgery; congenital or traumatic cataract or prior cataract surgery; retinal or optic nerve disorders; ocular disease or condition that would place the participant at risk, confound study results or interfere with participation; participants in clinical trials; pregnant or nursing women	2x iStent Travoprost (medication; prostaglandin F analog, 0.004%)	**Clinical effectiveness:** IOP (Goldmann applanation tonometry), proportion of eyes with IOP ≤ 18 mm Hg or ≤ 15 mm Hg without additional medical therapy, BCVA (decimal chart), VF (Humphrey 24-2 SITA) **Safety:** Complications	1, 2
Fea et al. 2014[36] Italy, Spain, Poland, Germany,	RCT Between-group comparisons using Fisher's exact test	N = 192 eyes (192 patients) **Inclusion criteria:** Patients with OAG and a post-washout IOP	2x iStent Inject Latanoprost + Timolol (two medications; fixed combination	**Clinical effectiveness:** IOP (measured between 8 to 11 AM), proportion of patients who achieved an IOP reduction ≥	1, 2

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
UK, Armenia Funding source: Glaukos corporation	*Follow-up:* 1 d; 1, 3, 6, 9, and 12 mo *Loss to follow-up,* n (%)*:* At 12 mo, 2x iStent Inject, 0 (0%); Latanoprost + Timolol, 7 (8%)	between ≥ 22 mm Hg and < 38 mm Hg; BCVA of 20/200 or better; scleral spur clearly visibly by gonioscopy; able and willing to attend follow-up visits for 1 y; prior SLT not performed within 90 days of screening visit **Exclusion criteria:** Patients who were known non-responders to Latanoprost; had secondary glaucoma (except PXF and pigmentary); prior incisional glaucoma surgery or procedure (e.g., Trabeculectomy shunt or collagen implant); cloudy cornea inhibiting gonioscopic view; signs of traumatic or uveitic, neovascular, or angle-closure glaucoma	of Latanoprost/timolol; prostaglandin F analog and beta-blocker)	20%, ≥ 30%, ≥ 40%, or ≥ 50% versus unmedicated baseline IOP, proportion of patients who achieved an IOP ≤ 18 mm Hg or ≤15 mm Hg, BCVA **Safety:** Adverse events	
MIGS Vs. Laser Therapy					
Fea et al. 2017[62] Italy Funding source: None	Prospective cohort Within-group comparisons using two-sided paired t-tests; between-group differences using unpaired two-sided t-tests; prediction of primary outcomes (IOP and number of glaucoma medications at 12 mo) using linear regression	N = 56 eyes (56 patients) **Inclusion criteria:** Consecutive patients with POAG not sufficiently controlled by, intolerant of, or noncompliant with current IOP regimen; IOP > 21 mm Hg on at least two consecutive measurements; VF loss on Octopus or Humphrey automated perimetry and glaucomatous alterations to	Hydrus Microstent SLT	**Clinical effectiveness:** IOP (Goldmann applanation tonometry; median of at least 3 measurements in the week before treatment, NR for follow-up), number of glaucoma medications, VA **Safety:** Intraoperative complications, rate of adverse events, loss of VA and ocular health	1, 2

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
	Follow-up: 1 d; 1 wk; 1, 3, 6, and 12 mo *Loss to follow-up:* 1 patient (3%) in Hydrus group	optic nerve head **Exclusion criteria:** Eye surgery in previous 6 mo, any previous incisional glaucoma surgery, glaucoma type other than POAG, Shaffer angle grade of ≤ 2, medication with systemic or topical steroids			
MIGS Vs. Another MIGS					
Katz et al. 2018[59] and Katz et al. 2015[60] Armenia Funding source: Glaukos Corporation	RCT ITT and "modified ITT" (including subset of patients who did not undergo cataract surgery prior to 12 mo follow-up) analyses; between-group comparisons using Tukey's pairwise multiple-comparison test *Follow-up:* 1 d; 1 wk; 1, 3, 6, 12, 13, 18, 24, 25, 30, 36, 37, and 42 mo *Loss to follow-up,* n (%): At 12 and 18 mo: None At 42 mo: iStent, 5 (13%); 2x iStent, 3 (7%); 3x iStent, 2 (5%)	N = 119 eyes (119 patients) **Inclusion criteria:** Phakic or pseudophakic participants with OAG (including pigmentary and PXF), mild-to-moderate stage of neuropathy, normal angle anatomy, C:D ratio ≤ 0.9, current treatment with 1 to 3 medications, preoperative medicated IOP of 18 mm Hg to 30 mm Hg, and unmedicated (post-washout) IOP of 22 to 38 mm Hg; willingness to attend scheduled follow-up examinations for 5 y post-operatively **Exclusion criteria:** Pseudophakia with anterior-chamber IOL; peripheral anterior synechia, rubeosis, or other angle abnormalities that could impair proper stent placement; prior stent	iStent 2x iStent 3x iStent	**Clinical effectiveness:** Medicated and unmedicated IOP (Goldmann applanation tonometry); proportion of eyes achieving IOP reduction ≥ 20%, ≤ 18 mm Hg, or ≤ 15 mm Hg without medication; number of eyes on glaucoma medications; proportion of eyes with BCVA equal to or better than 20/40, 20/100, and 20/200, VF **Safety:** Intraoperative, perioperative and post-operative complications	1, 2

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
		implantation in study eye; traumatic, uveitic, neovascular, or angle-closure glaucoma; glaucoma associated with vascular disorders; functionally significant VF loss; prior incisional glaucoma surgery; prior SLT within 90 days of screening; prior ALT, iridectomy, or laser iridotomy; VF status at risk by washout period; unmedicated IOP expected to be > 38 mm Hg after washout period; active corneal inflammation or edema; clinically significant corneal dystrophy; corneal surgery of any type; corneal opacities; congenital or traumatic cataract; retinal or optic nerve disorders; elevated episcleral venous pressure; clinically significant sequelae from trauma; chronic ocular inflammatory disease; BCVA worse than 20/200; fellow eye in the trial; pregnant or nursing women			
MIGS Vs. Filtration Surgery					
ECP Vs. Glaucoma Drainage Device					
Murakami et al. 2017[63] US Funding source:	Retrospective cohort Within-group comparisons using Students t-test and Wilcoxon paired signed-rank test; between-group	N = 73 eyes (73 patients) **Inclusion criteria:** Pseudophakic eyes; open-angle, angle closure, or secondary glaucoma; had a	ECP Second GDD-2 (BGI 250 or 350)	**Clinical effectiveness:** IOP (Goldmann applanation tonometry; mean value of 2 measurements on 2 visits prior to surgery, NR for follow-up), number of glaucoma	1, 2

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
None declared	comparisons using Student's t-test, Mann-Whitney test, and Fisher exact test or; Wilcoxon's test, Sign's test, ANOVA, and Student's t-test *Follow-up:* 1, 3, 6, 12, 18, and 24 mo *Loss to follow-up,* n (%)*:* At 3 mo: ECP, 0 (0%); GDD-2, 1 (2%) At 6 mo: ECP, 2 (8%); GDD-2, 5 (10%) At 12 mo: ECP, 6 (24%); GDD-2, 18 (38%) At 24 mo: ECP, 14 (54%); GDD-2, 28 (58%)	failed initial tube shunt (BGI) surgery > 6 mo prior; inadequate IOP control (> 21 mm Hg) on 2 or more glaucoma medications, or IOP ≤ 21 mm Hg but above a predetermined target IOP (based on baseline IOP, severity of optic nerve or VF damage, or progression of visual loss), or intolerant of medical therapy or on an oral carbonic anhydrase inhibitor; VA better than light perception; minimum 2 y follow-up **Exclusion criteria:** Neovascular glaucoma, VA light perception or worse, prior ciliary body ablation, non-patent aqueous shunt without fluid drainage to plate		medications **Safety:** Complications, surgical interventions to manage complications	
Lima et al. 2004[61] Brazil Funding source: NR	Non-randomized controlled clinical trial Between-group comparisons using Wilcoxon signed-rank test, Sign's test; ANOVA, Student t-test *Follow-up:* 1 wk; 1, 2, 3, 4, 5, 6, 12, 18, and 24 mo	N = 68 eyes (68 patients) **Inclusion criteria:** Pseudophakic eyes with IOP ≥ 35 mm Hg on maximum tolerated therapy, with at least 1 previous Trabeculectomy with antimetabolite, and a VA better than LP	ECP AGI	**Clinical effectiveness:** IOP (Goldmann tonometer, assessed around 10:00 AM in triplicate, but whether values were averaged or a single value was reported was NR); success (IOP > 6 mm Hg and < 21 mm Hg at 24 mo follow-up, with or without medication); number of medications; VA (LogMAR)	1, 2

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
	Mean follow-up ± SD: *ECP*, 21.29 ± 6.42 mo (range 2 to 24 mo) AGI, 19.82 ± 8.35 mo (range 2 to 24 mo) *P* = 0.4 *Loss to follow-up:* At 12 mo: ECP, 3 (8.8%); AGI, 7 (20.6%) At 24 mo: ECP, 6 (17.6%); AGI, 8 (23.5%)	**Exclusion criteria:** Previous glaucoma drainage device implantation or a cyclodestructive procedure, eyes that did not perceive light, eyes that had a retinal or choroidal detachment, or eyes with a failed corneal graft		**Safety:** Complications	
Trabectome (or 2x iStent Inject) Vs. Trabeculectomy					
Pahlitzsch et al. 2017[25] Germany Funding source: None	Prospective cohort Within-group comparisons using independent sample t-test; between two-group and three-group comparisons using Mann-Whitney U test and Kruskal-Wallis test respectively *Follow-up:* 1 d; 6 wk; 3 and 6 mo *Loss to follow-up:* None	N = 88 eyes (88 patients) **Inclusion criteria:** OAG, BCVA of at least 20/200 with reliable VF testing, age 50 to 90 y **Exclusion criteria:** Active inflammation in anterior/posterior chamber or a corneal infection; higher spherical errors or astigmatism; hazy optic media; ocular trauma; intraocular surgery or use of contact lenses within 3 mo; cancer, uncontrolled diabetes or hypertension, pulmonal disorders, metabolic syndromes, thyroid disorders	Trabectome or 2x iStent Inject (combined [MIGS] or separate in analyses) Trabeculectomy with MMC	**Clinical effectiveness:** QoL (12 subscales [general health, ocular pain, general vision, near activities, distance activities, mental health, social functioning, role difficulties, dependency, driving, colour vision, peripheral vision] and overall composite that included all but the general health parameter; NEI VFQ-25), IOP (Goldmann applanation tonometry), number of glaucoma medications, VA **Safety:** None	1

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
Jea et al. 2012[64] US Funding source: None	Retrospective cohort Between-group comparisons using Student t-test and chi-square tests *Follow-up:* 1, 3, 6, 12, 18, 24, and 30 mo *Mean follow-up ± SD:* Trabectome, 27.3 ± 15.4 mo (range, 2.1 to 62.6) Trabeculectomy, 25.5 ± 17.1 months (range, 2.3 to 61.4) *P* = 0.406 *Loss to follow-up,* n (%)*:* At 6 mo: Trabectome, 13 (11.3%); Trabeculectomy, 14 (13.7%) At 12 mo: Trabectome, 26 (22.6%); Trabeculectomy, 29 (28.4%) At 24 mo: Trabectome, 31 (27.0%); Trabeculectomy, 53 (52.0%) At 30 mo: Trabectome, 39 (33.9%); Trabeculectomy, 59 (57.8%)	N = 217 eyes (217 patients) **Inclusion criteria:** Consecutive patients; age ≥ 40 y, OAG (POAG, PXF, pigmentary glaucoma, or uveitic glaucoma provided that no peripheral anterior synechia were present) uncontrolled with maximum tolerable medical therapy **Exclusion criteria:** Concurrent surgical procedure (including cataract extraction)	Trabectome Trabeculectomy with MMC	**Clinical effectiveness:** IOP (mean of 2 visits at baseline; NR for follow-up), number of glaucoma medications, VA **Safety:** Complications, need for additional glaucoma procedures and surgeries	1, 2

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
Xen45 With MMC Vs. Trabeculectomy With MMC					
Schlenker et al. 2017[65] Austria, Belgium, Canada, Germany Funding source: None	Retrospective cohort Between-group comparisons using Fisher exact tests, 2-sided Student t-tests, or Wilcoxon tests *Follow-up:* median irrespective of censoring, Xen45, 15.0 mo (IQR 9.5 to 19.6); Trabeculectomy, 17.8 mo (IQR 12.6 to 25.4) *Loss to follow-up:* NR	N = 354 eyes (293 patients) **Inclusion criteria:** Consecutive patients; age 30 to 90 y with POAG, PXF, pigment dispersion, normal-tension, angle-recession, combined mechanism, history of angle-closure, or juvenile glaucoma, with above-target IOP on maximal medical therapy **Exclusion criteria:** Prior incisional filtering surgery; neovascular or uveitic glaucoma, iridocorneal endothelial syndrome or Axenfeld-Rieger syndrome; fibrous or epithelial downgrowth; previous corneal graft or retinal surgery; <1 mo follow-up	XEN 45 microstent with MMC (Xen45) Trabeculectomy with MMC	**Clinical effectiveness:** IOP, number of medications, BCVA (Snellen converted to logMAR) **Safety:** Post-operative interventions, reoperations, or complications	1, 2
Research Questions 3 and 4					
MIGS + Cataract Surgery Vs. Cataract Surgery Alone					
ECP + Phaco Vs. Phaco Alone					
Kang et al. 2017[72] UK Funding source: NR	Retrospective cohort Between-group comparisons using unpaired t-tests *Mean follow-up:* 21 mo (range 2 wk to 6 y 2 mo)	N = 124 eyes (114 patients) **Inclusion criteria:** Consecutive OAG (normal tension, PXF, pigmentary) patients with complete data	ECP + Phaco Phaco alone	**Clinical effectiveness:** IOP (Goldmann applanation tonometry), number of glaucoma medications, VA (Snellen VA)	3, 4

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
	Loss to follow-up (ECP + Phaco group): 1 eye (< 1%); 40 eyes excluded due to incomplete data, unreliable measures, or incorrect intervention	**Exclusion criteria:** Missing follow-up data, VA of counting fingers or worse		**Safety:** Complications	
Perez Bartolome et al. 2017[73] UK Funding source: None	Retrospective cohort Between-group comparisons using Chi-squared test, Fisher exact test, and Student t-tests; within-group comparisons using paired t-tests *Follow-up:* 1 d; 1 wk; 1, 3, 6 mo; 1 y *Loss to follow-up,* n (%)*:* ECP + Phaco, 3 (4%); Phaco, 2 (6%) (from original sample of N = 104)	N = 99 eyes (99 patients) **Inclusion criteria:** Consecutive patients with POAG and cataract ECP + Phaco group: Uncontrolled glaucoma or previous failed glaucoma surgery (Trabeculectomy, GDD, transscleral cyclophotocoagulation) with ≥ 3 glaucoma medications or if fewer medications due to intolerance, at least 1 y follow-up Phaco alone: Early-stage glaucoma controlled with 1 to 2 medications **Exclusion criteria:** None	ECP + Phaco Phaco alone	**Clinical effectiveness:** IOP (Goldmann applanation tonometry), number of glaucoma medications, VA (Snellen converted to logarithm of the minimum angle of resolution) **Safety:** Post-operative complications	3, 4
Sheybani et al. 2015[74] US Funding source: NR	Retrospective cohort Between-group comparisons using Student t-test, Chi-squared test, and Fisher's exact tests; within-group comparisons using paired t-tests	N = 141 eyes (141 patients) **Inclusion criteria:** Consecutive patients with OAG, age 50 to 90 y **Exclusion criteria:** Patients with: advanced glaucomatous disease as determined by VF	ECP + Phaco Phaco alone	**Clinical effectiveness:** IOP (Goldmann applanation tonometry; averaged over 2-3 consecutive visits if available, otherwise a single value reported), number of glaucoma medications, BCVA (Snellen eye chart converted to logMAR)	3

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
	Follow-up, mean: ECP + Phaco, 7.4 mo; Phaco, 2.1 mo P < 0.05 *Loss to follow-up:* NA due to study design	(MD worse than –12.00 dB, defects affecting fixation); non-glaucomatous ocular disease with best-corrected vision before cataract formation of < 20/80; any prior ocular surgery; history of PXF, traumatic or uveitic glaucoma; uncontrolled diabetes; used oral carbonic anhydrase inhibitors; pregnant; intraoperative complications (e.g., anterior or posterior capsular tears, vitreous loss); required iris expansion, capsular staining, or corneal suture during surgery; lens implant not placed in the capsular bag (or with optic capture)		**Safety:** None	
Siegel et al. 2015[75] US Funding source: None	Retrospective cohort Between-group comparisons using unpaired t-tests, Mann-Whitney U test, repeated measures ANOVA *Follow-up:* 1, 6, 12, 18, 24, 30, and 36 mo *Loss to follow-up:* NR; possible that there were none lost to follow-up due to study design but this was not explicit	N = 313 eyes (161 patients) **Inclusion criteria:** Mild-to-moderate glaucoma (≥ 1 but < 3 glaucoma medications with defined but stable minimal glaucomatous field loss and cupping > 0.6 but < 0.8), well-controlled medically **Exclusion criteria:** Severe glaucoma; prior Phaco, cyclodestructive, filtering or other tube shunt procedures	ECP + Phaco Phaco alone	**Clinical effectiveness:** IOP, number of glaucoma medications, VA (Snellen) **Safety:** IOP spikes (acute rise in IOP > 10 mm Hg from preoperative baseline during the early post-operative period), surgical complications	3, 4

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
Francis et al. 2014[84] US Funding source: NR	Prospective cohort Between-group comparisons using independent samples t-test, Wilcoxon rank sum test, and Chi-square test; within-group comparisons using paired t-test *Follow-up:* 6, 12, 24, and 36 mo *Loss to follow-up,* n (%)*:* At 6 mo: ECP + Phaco, 2 (2.5%); Phaco, 0 (0%) At 12 mo: ECP + Phaco, 1 (1.3%); Phaco, 0 (0%) At 24 mo: ECP + Phaco, 0 (0%); Phaco, 0 (0%) At 36 mo: ECP + Phaco, 35 (43.8%); Phaco, 37 (46.3%)	N = 160 eyes (160 patients) **Inclusion criteria:** Consecutive patients with medically controlled POAG with mild-to-moderate optic nerve damage with or without VF damage (mean deviation 0 to12 dB, without reduction in a paracentral point to below 10 dB); optic nerve damage characteristic of glaucoma, such as focal notching or an increase in generalized cupping from baseline; IOP ≥ 21 mm Hg **Exclusion criteria:** Patients without evidence of optic nerve damage; advanced uncontrolled glaucoma characterized by advanced optic nerve cupping and VF damage; glaucoma other than open-angle; previous filtration, tube, or cyclodestructive surgery; fewer than 6 months of follow-up due to dropout or insufficient time since surgery	ECP + Phaco Phaco alone	**Clinical effectiveness:** IOP, number of glaucoma medications **Safety:** Post-operative complications	3, 4
1 or 2 iStent(s) + Phaco Vs. Phaco Alone					
El Wardani et al. 2015[76] Switzerland Funding source:	Retrospective cohort Analytical approach NR *Follow-up:* 1, 3, and 6 wk; 3 and 6 mo	N = 131 eyes (105 patients) **Inclusion criteria:** Consecutive patients with cataract and ocular hypertension or mild/moderate primary	iStent + Phaco 2x iStent + Phaco Phaco alone	**Clinical effectiveness:** IOP, number of glaucoma medications, VA **Safety:** None	3, 4

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
NR	*Loss to follow-up,* n (%)*:* At 6 mo: iStent + Phaco, 8 (26%); 2x iStent + Phaco, 5 (23%); Phaco alone, 32 (41%)	glaucoma (including PXF or pigmentary) or mixed-type glaucomas, with at least 1 glaucoma medication **Exclusion criteria:** Severely uncontrolled IOP, advanced glaucoma field defects, previous glaucoma surgery or corneal opacity preventing gonioscopic view of the iridocorneal angle			
Fea et al. 2015[66] and Fea 2010[67] Italy Funding source: NR	RCT Within-group comparisons using paired-sample t-tests; between-group comparisons using 2-sample t-tests or Fisher exact tests *Follow-up:* 1 d; 1 wk; 1, 2, 3, 6, 9, 12, and 15 mo; 4 y *Loss to follow-up,* n (%)*:* At 15 mo: iStent + Phaco, 0 (0%); Phaco, 3 (12.5%) At 4 y: iStent + Phaco, 2 (16.7%); Phaco, 10 (41.7%)	N = 36 eyes (36 patients) **Inclusion criteria:** POAG with IOP >18 mm Hg at 3 separate visits on ≥ 1 ocular hypotensive medications, preoperative corrected-distance VA no better than 0.6 (20/80), likely to follow surgeon instructions **Exclusion criteria:** Other glaucoma diagnosis, peripheral anterior synechias, a cloudy cornea likely to inhibit gonioscopic view of the angle, previous ocular surgery (including glaucoma-filtering surgery), history of trauma or ocular surface disease, pre-proliferative or proliferative diabetic retinopathy, age-related macular degeneration with macular scar or large macular atrophy that would inhibit potential VA	iStent + Phaco Phaco alone	**Clinical effectiveness:** IOP (medicated and unmedicated; Goldmann applanation tonometry), number of medications **Safety:** Adverse events	3, 4

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
Craven et al. 2012[68] and Samuelson et al. 2011[34] US Funding source: Glaukos Corporation	RCT Between-group comparisons using 2-sample t-test, 2-sample or 1-sided z tests, and Fisher exact tests *Follow-up:* 1 d; 1-2 wk; 3, 6, 12, 18, and 24 mo *Loss to follow-up,* n (%)*:* At 12 mo: iStent + Phaco, 11 (9.4%); Phaco alone, 11 (8.9%) At 24 mo: iStent + Phaco, 19 (16.2%); Phaco alone, 22 (17.9%) At 24 mo: Analyses conducted as ITT (all randomized eyes) with last observation carried-forward approach, or with the "consistent cohort" (defined as eyes with IOP and ocular hypotensive medication data at screening, 12 mo, and 24 mo who did not have secondary surgical intervention that may confound the results)	N = 240 eyes (239 patients) **Inclusion criteria:** Mild-to-moderate OAG (including VF defects and/or optic nerve pathology, and C:D ≤ 0.8); IOP of ≤ 24 mm Hg while taking 1 to 3 medications; and unmedicated IOP ≥ 22 mm Hg and ≤ 36 mm Hg during normal office hours; clinically significant cataract with BCVA of 20/40 or worse in the presence of glare **Exclusion criteria:** Angle-closure glaucoma; neovascular, uveitic, or angle-recession glaucoma; secondary glaucoma (except PXF and pigmentary); severely uncontrolled IOP; severe glaucomatous field defects; previous glaucoma surgery (except iridectomy); previous refractive procedures; known corticosteroid responders; ocular disease that would affect safety; monocular patients or patients with a CDVA or BCVA worse than 20/200 in the fellow eye	iStent + Phaco Phaco alone	**Clinical effectiveness:** IOP (2-person applanation tonometry), number of medications, CDVA, VF (Humphrey 30-2 or 24-2 SITA standard) **Safety:** Complications and adverse events	3, 4
Fernandez-Barrientos et al. 2010[69]	RCT Between-group comparisons using Mann-Whitney	N = 33 eyes (33 patients) **Inclusion criteria:** Age ≥ 18 y; IOP > 17 and	2x iStent + Phaco Phaco alone	**Clinical effectiveness:** IOP (Goldmann applanation tonometry), number of medications	3, 4

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
Spain Funding source: Glaukos Corporation	nonparametric test, Chi-square test, repeated measures analysis of variance (MANOVA), Friedman test *Follow-up:* 1 d 1 wk; 1-2 wk, 1, 3, 6, and 12 mo *Loss to follow-up:* None	< 31 mm Hg with treatment and > 21 mm Hg and <36 mm Hg after the pharmacologic washout period; cataract that requires surgery; scleral spur clearly visible with gonioscopy; has not undergone glaucoma incisional surgery or a laser procedure; minimum VA of 20/200 or better **Exclusion criteria:** Closed-angle glaucoma, secondary glaucoma, non-neovascular, uveitic, or angular recession glaucoma; previous glaucoma procedures (e.g., Trabeculectomy, viscocanalostomy, ALT, SLT, drainage implant, collagen implant, cyclodestruction procedure); threat of visual field fixation; cornea with opacity that impedes gonioscopy vision from the nasal angle; elevated episcleral venous pressure due to a history of thyroid orbitopathy, carotid cavernous fistula, orbital tumour, or congestive orbital illness; retrobulbar tumour; thyroid ocular illness; Sturge-Weber syndrome; chronic inflammatory disease; previous ocular trauma; peripheral anterior		**Safety:** Intraoperative complications	

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
		synechiae in the area where the implant is inserted; glaucoma due to vascular disorder; ocular surface disorders; glaucoma due to burns with chemical elements; previous refractive surgery that makes IOP measures difficult (PRK, RK, LASIK, LASEK)			
Hydrus Microstent + Phaco Vs. Phaco Alone					
Samuelson et al. 2018[88] Canada, Germany, Italy, Mexico, Philippines, Poland, Spain, UK, US Funding source: None	RCT Between- and within-group comparisons using 2-sample t-tests or the Fisher exact test *Follow-up:* 1, 3, 6, 12, 18, and 24 mo *Loss to follow-up,* n (%): Complete sample: 28 (5%) lost to 24-mo follow-up	N = 556 eyes (556 patients) **Inclusion criteria:** Age-related cataract; diagnosis of mild-to-moderate POAG on 1 to 4 topical glaucoma medications; ophthalmoscopically visible glaucomatous optic neuropathy, mild-to-moderate VF loss (Hodapp-Anderson-Parrish criteria), BCVA 20/40 or worse with or without brightness acuity testing, Schaffer grade III-IV angle in all 4 quadrants; medicated IOP ≤ 31 mm Hg; unmedicated modified DIOP between 22 mm Hg and 34 mm Hg with an increase of at least 3 mm Hg compared with medicated value; prior SLT was allowed **Exclusion criteria:** Cataract surgery complications; angle closure or any secondary	Hydrus Microstent + Phaco Phaco alone	**Clinical effectiveness:** Modified unmedicated DIOP (2-person Goldmann applanation tonometry; average of 3 measurements taken 4 ± 1 hours apart between 8 a.m. and 4 p.m.); IOP (2-person Goldmann applanation tonometry); proportion of eyes with unmedicated modified DIOP reduction of ≥ 20%, ≥ 30%, or ≥ 40% compared with baseline; number of medications **Safety:** Intraoperative complications, adverse events	3, 4

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
		glaucoma; VF mean deviation between 0 and -12 dB; exudative ARMD; proliferative diabetic retinopathy; significant risk of glaucomatous progression with medication washout; narrow anterior-chamber angle (Shaffer grade I-II) or other angle abnormality; central corneal thickness < 480 µm or > 620 µm or clinically significant corneal dystrophy; prior corneal surgery, cycloablation, or any incisional glaucoma procedure (e.g., Trabeculectomy, tube shunt, deep sclerectomy, canaloplasty); prior ALT			
Pfeiffer et al. 2015[71] Germany, Italy, Spain, The Netherlands Funding source: Ivantis, Inc. and the University Medical Center Mainz (Mainz, Germany)	RCT Within-group and between-group comparisons using unpaired t-tests or the Fisher exact test *Follow-up:* 1 d; 1 wk; 1, 3, 6, 12, 18, and 24 mo *Loss to follow-up,* n (%)*:* At 12 mo: Hydrus + Phaco, 2 (4%); Phaco, 1 (2%) At 24 mo: Hydrus + Phaco, 3 (6%);	N = 100 eyes (100 patients) **Inclusion criteria:** Patients with OAG and cataract; IOP ≤ 24 mm Hg with no more than 4 hypotensive medications; DIOP between 21 mm Hg and 36 mm Hg; Shaffer grade III or IV chamber angle in all quadrants, HVF changes characteristic of glaucoma or glaucomatous optic nerve damage confirmed by ophthalmoscopy and nerve fibre layer imaging; ability to safely undergo medication washout	Hydrus Microstent (Hydrus) + Phaco Phaco alone	**Clinical effectiveness:** DIOP (unmedicated; 2-person Goldmann applanation tonometry, average of: mean of duplicate or median of triplicate measures taken at 3 time points 4 h apart between 8 a.m. and 4 p.m.), proportion of eyes with ≥ 20% reduction in washed-out DIOP, number of medications **Safety:** Complications, adverse events	3, 4

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
	Phaco, 7 (4%) *Patients lost to follow-up and/or without medication washout at follow-up (i.e., non-evaluable),* n (%): At 12 mo: Hydrus + Phaco, 6 (12%); Phaco, 16 (32%)	**Exclusion criteria:** Angle-closure glaucoma; secondary glaucomas (except PXF or pigment dispersion glaucomas); exudative age-related macular degeneration; proliferative diabetic retinopathy; significant risk of vision loss because of washout of IOP-lowering medications; narrow angle or other angle abnormality visible on gonioscopy; central corneal thickness < 480 µm or > 620 µm; clinically significant corneal dystrophy; prior eye procedures (corneal surgery, ALT, cycloablation, any incisional glaucoma procedure such as Trabeculectomy, tube shunts, deep sclerectomy, canaloplasty)			
Other Comparisons (From Single Studies)					
Vold et al. 2016[70] US Funding source: "NA"	RCT Comparisons using Fisher exact test and Student t-test, using per-protocol and intention-to-treat analyses *Follow-up:* 1 and 7 d; 1, 3, 6, 12, 18 and 24 mo *Loss to follow-up*, n (%)*:* 25 (5.0%) lost to 24-mo follow-up, and additional 32 (6.3%)	N = 505 eyes (505 patients) **Inclusion criteria:** Age ≥ 45 y with POAG; screening medicated IOP ≤ 25 mm Hg or unmedicated between 21 mm Hg and 33 mm Hg; baseline unmedicated diurnal IOP between 21 mm Hg and 33 mm Hg and ≥ 3 mm Hg greater than screening IOP; age-related cataract with BCVA or acuity testing of 20/40 or worse	CyPass Micro-Stent + Phaco Phaco alone Note: The CyPass Micro-Stent was voluntarily withdrawn from the global market by the manufacturer in August 2018 due to five-year data from this study;[37,38] however, at the time of report publication, this device was still active in the MDALL and is therefore included in this	**Clinical effectiveness:** IOP (2-person Goldmann applanation tonometry; means of 2 measurements determined at approx. 8 a.m., noon, and 4 p.m. were averaged to provide mean DIOP at baseline, NR for follow-up), proportion of eyes with unmedicated IOP of 6 mm Hg to 18 mm Hg, number of medications **Safety:** Adverse events	3, 4

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
	followed-up but not per-protocol	eligible for Phaco with IOL implantation **Exclusion criteria:** > 3 ocular hypotensive medications; significant risk with medication washout; previous corneal or glaucoma surgery (except laser trabeculoplasty); other clinically significant ocular pathology; diagnosis of acute angle closure or traumatic, congenital, malignant, uveitic, PXF, pigmentary, or neovascular glaucoma	report.		
MIGS + Cataract Surgery Vs. A Different MIGS + Cataract Surgery					
Goniotomy With Kahook Dual Blade + Phaco Vs. iStent + Phaco					
Dorairaj et al. 2018[86] US and Mexico Funding source: None	Retrospective cohort Between-group comparisons using mixed model techniques with Bonferroni's method to address multiple comparisons *Follow-up:* 1 d; 1 wk; 1, 3 and 6 mo *Loss to follow-up*, n (%): At 1 mo: KDB + Phaco, 14 (5.9%); iStent + Phaco, 35 (17.7%) At 3 mo: KDB + Phaco, 34 (14.3%); iStent + Phaco, 70 (35.4%)	N = 435 eyes (318 patients) **Inclusion criteria:** Patients aged 18 to 89 years diagnosed with mild-to-moderate glaucoma (defined by International Classification of Diseases 9 definitions); IOP controlled with ≥ 1 topical medications; having undergone uncomplicated Phaco and posterior chamber IOL implantation with goniotomy using the KDB or implantation of a single iStent; with complete follow-up data **Exclusion criteria:** Ocular comorbidities reducing BCDVA;	Goniotomy with the KDB + Phaco (KDB + Phaco) iStent + Phaco	**Clinical effectiveness:** IOP (Goldmann applanation tonometry), proportion of patients with IOP reduction of ≥ 20% from baseline, number of medications, BCVA (Snellen acuity chart at 20 foot equivalent distance under mesopic lighting converted to logMAR) **Safety:** Adverse events, secondary surgical interventions	3, 4

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
	At 6 mo: NA due to study design	cataract surgery complicated by vitreous loss, vitrectomy, or IOL implantation in the sulcus or anterior chamber; prior incisional glaucoma surgery			
Trabectome + Phaco Vs. 2x iStent + Phaco					
Kurji et al. 2017[79] Canada Funding source: NR	Retrospective cohort Between-group comparisons at baseline using Wilcoxon rank sums and Chi-square test; between-group comparisons from baseline to follow-up using generalized estimating equation to control for correlation between eyes for patients with more than 1 eye enrolled in the study; prediction of primary outcome (IOP at 6 and 12 mo) using multivariate regression *Follow-up:* 1 d; 1 wk; 1, 3, 6 and 12 mo *Loss to follow-up,* n (%): 6 (9%) patients (3 in each group)	N = 70 eyes (55 patients) **Inclusion criteria:** Consecutive patients; age 18 to 85 y; early, moderate, or advanced OAG (including PXF) with open angles; IOP ≥ 18 mm Hg on at least one glaucoma medication; 12 mo follow-up; prior SLT or ALT were acceptable **Exclusion criteria:** angle-closure glaucoma, cornea edema, ocular problems precluding accurate tonometry, absence of clear angle landmarks, peripheral anterior synechiae, increased episcleral venous pressure, evidence of other ocular disease, prior angle or filtering procedure, history of refractive surgery or ocular trauma, use of steroids concurrently or within previous 3 mo, presence of significant health conditions (e.g., uncontrolled diabetes)	Trabectome + Phaco 2x iStent + Phaco	**Clinical effectiveness:** IOP (Goldman applanation tonometer), number of glaucoma medications, BCVA (Snellen) **Safety:** Complications	3, 4

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
Khan et al. 2015[78] Canada and US Funding source: None	Retrospective cohort Within-group comparisons using Wilcoxon signed-rank test; between-group comparisons using Fisher exact test, Student t-test, and Mann-Whitney U test; changes in IOP across time (baseline to 12 mo) and between groups assessed using 2-way ANOVA *Follow-up:* 1 d; 1 wk; 1, 3, 6 and 12 mo *Loss to follow-up,* n (%)*:* At 6 mo: Trabectome + Phaco, 5 (9.6%); 2x iStent + Phaco, 8 (16.3%) At 12 mo: NR; analyses conducted with last observation carried forward (with the complete sample)	N = 101 eyes (101 patients) **Inclusion criteria:** POAG, PXF, or pigmentary dispersion glaucoma of any severity **Exclusion criteria:** Patients with adjunctive surgery such as ECP, endocycloplasty, or goniosynechialysis; angle-closure glaucoma; previous incisional conjunctival surgery; post-operative follow-up less than 12 mo	Trabectome + Phaco 2x iStent + Phaco	**Clinical effectiveness:** IOP, number of medications **Safety:** Post-operative adverse events	3, 4
Trabectome + MICS Vs. iStent/iStent Inject + MICS					
Gonnermann et al. 2017[77] Germany Funding source: None	Retrospective cohort Between-group comparisons (intra-individual eye comparison) using student's t-test, or the Mann-Whitney U or Wilcoxon-Rank-signed-test *Follow-up:* 1 d; 6 wk; 3, 6, and 12 mo	N = 50 eyes (25 patients) **Inclusion criteria:** IOP above target with worsening glaucoma on maximally tolerated medical treatment; mild/moderate VF defects **Exclusion criteria:** Previous surgery or laser treatment; other	Trabectome + MICS 2 iStent Inject + MICS	**Clinical effectiveness:** IOP (Goldmann applanation tonometry), number of glaucoma medications, BCVA **Safety:** Number of post-operative interventions, complications	3, 4

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
	Loss to follow-up: 2 eyes (7%) in each group (required Trabeculectomy) from original sample size of n = 27 per group	ocular or systemic diseases; missing follow-up exams			
Different Numbers of iStents + Phaco					
Vlasov and Kim 2017[80] US Funding source: NR	Retrospective cohort Between-group comparisons using paired-sample t-tests; within-group comparisons using Wilcoxon signed-rank tests *Follow-up:* 1 d; 1 wk; 1, 3, 6, and 12 mo *Loss to follow-up,* n (%)*:* *A*t 12 mo: iStent + Phaco, 11 (28%); 2x iStent + Phaco, 17 (57%)	N = 69 eyes (69 patients) **Inclusion criteria:** Patients with POAG, PXF, or pigmentary dispersion glaucoma at any stage of severity and with visually significant cataract **Exclusion criteria:** None	iStent + Phaco 2x iStent + Phaco	**Clinical effectiveness:** IOP, number of medications **Safety:** Complications or adverse events	3, 4
Belovay et al. 2012[83] Canada Funding source: NR	Non-randomized controlled clinical trial Within-group comparisons using paired t-test; between-group comparisons using 2 sample t-test, Mann-Whitney test, Fisher exact test *Follow-up:* 1 d; 1 wk; 1, 3, 6, and 12 mo *Loss to follow-up:* NA due to study design	N = 53 eyes (47 patients) **Inclusion criteria:** Visually significant cataract, IOP that was not well-controlled on medication or was well-controlled but ≥ 3 medications, 12 mo follow-up **Exclusion criteria:** None	2x iStent + Phaco 3x iStent + Phaco	**Clinical effectiveness:** IOP (Goldmann applanation tonometry), proportion of patients with IOP ≤ 15 mm Hg at 12 mo, number of medications, CDVA (Snellen) **Safety:** Complications	3, 4

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
ECP + iStent + Phaco Vs. iStent + Phaco					
Ferguson et al. 2017[81] US Funding source: NR	Retrospective cohort Within-group comparisons using paired t-test or Wilcoxon signed-rank test; between-group comparisons using independent sample t-tests and Wilcoxon Mann-Whitney test *Follow-up:* 1 d; 1 wk; 1, 3, 6, and 12 mo *Loss to follow-up,* n (%): At 12 mo: ECP + iStent + Phaco, 3(6%); iStent + Phaco, 0 (0%)	N = 101 eyes (76 patients) **Inclusion criteria:** Consecutive patients with mild, moderate, or severe OAG; 1 or more medications at baseline **Exclusion criteria:** None	ECP + iStent + Phaco iStent + Phaco	**Clinical effectiveness:** IOP (Goldmann applanation tonometry), number of glaucoma medications **Safety:** Need for additional surgery, post-operative complications, IOP increases of >15 mm Hg	3, 4
ECP + Phaco Vs. Trabectome + Phaco					
Moghimi et al. 2018[89] Iran Funding source: None	Retrospective cohort Between-group comparisons using Kruskal-Wallis test, Chi-squared, or Fisher exact test; within-group comparisons using Wilcoxon signed-rank test *Follow-up:* 1 d; 1 wk; 1, 3, 6, 12 and 24 mo Mean follow-up, complete sample: 17.2 ± 5.5 mo (range 12 to 24 mo) *Loss to follow-up:* NA due to study design	N = 61 eyes (61 patients) **Inclusion criteria:** Patients with age > 40 y; OAG (defined by glaucomatous optic disc damage with or without VF damage) and visually significant cataract; IOP < 30 mm Hg with or without glaucoma medication; treated with ECP + Phaco or Trabectome + Phaco (or phacoviscocanalostomy — excluded from the present report) and with at least 12 mo follow-up	ECP + Phaco Trabectome + Phaco	**Clinical effectiveness:** IOP (Goldmann applanation tonometer), number of medications, visual field (static automated white-on-white threshold perimetry program 24-2, SITA standard) **Safety:** Complications	3, 4

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
		Exclusion criteria: Patients with secondary angle-closure glaucoma or neovascular glaucoma, history of surgery or trauma to the enrolled eye			
MIGS + Cataract Surgery Vs. Filtration Surgery + Cataract Surgery					
Ting et al. 2018[87] Canada Funding source: University of Alberta, Faculty of Medicine and Dentistry	RCT Within-group comparisons using a general linear mixed model; between-group comparisons using Chi-squared test, Fisher's exact test, or Wilcoxon rank sum *Follow-up:* 6 and 12 mo *Loss to follow-up,* n (%): At 6 and 12 mo: Trabectome + Phaco, 1 (10%); Trabeculectomy + Phaco, 1 (11%)	N = 19 eyes (19 patients) **Inclusion criteria:** Age 40 to 85 y; OAG (≥ Shaffer Grade 2); inadequately controlled glaucoma and/or IOP on tolerated medical therapy; visually significant cataract (opacification of the crystalline lens with attributable reduction in BCVA to ≤ 20/30); availability for at least 1 y follow-up **Exclusion criteria:** angle-closure glaucoma; secondary OAG (with the exception of PSF glaucoma); absence of clear angle landmarks on gonioscopy; other ocular disease affecting assessments of VA, VF, or tonometry; prior angle or filtering surgery; steroid use within the past 3 mo	Trabectome + Phaco Trabeculectomy with MMC + Phaco	**Clinical effectiveness:** IOP (Goldmann applanation tonometry; mean of 2 consecutive measurements or median of 3 if the first 2 were not within 2 mm Hg); number of medications **Safety:** Surgical complications (early [≤3 0 d post-operative] or late [> 30 d post-operative]; mild, moderate, or severe), secondary glaucoma surgery	3, 4

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
Kinoshita-Nakano et al. 2018[85] Japan Funding source: The Japan Society for the Promotion of Science KAKENHI Grant	Prospective and retrospective cohort Data for Trabectome + Phaco group were collected prospectively; data for Trabeculotomy + Phaco group were collected retrospectively Between-group comparisons using Mann-Whitney U tests or Chi-squared tests *Follow-up:* 3, 6, 12, 18, 24, and 36 mo *Loss to follow-up,* n (%): At 12 mo: Trabectome + Phaco, 3 (6%); Trabeculectomy + Phaco, 0 (0%) At 36 mo: Trabectome + Phaco, 25 (53%); Trabeculectomy + Phaco, 8 (29%)	N = 76 eyes (76 patients) **Inclusion criteria:** Age ≥ 20 y; POAG, exfoliation glaucoma, or other secondary OAG (including normal-tension glaucoma); operation performed by a single designated surgeon; >12 mo follow-up **Exclusion criteria:** History of ocular surgery except cataract surgery; concurrent surgery (including goniosynechialysis or vitrectomy) except cataract surgery Note: Data included in this report are from a subgroup of the complete sample.	Trabectome + Phaco Trabeculotomy + Phaco	**Clinical effectiveness:** IOP (Goldmann applanation tonometer; mean value of 2 measurements at baseline, NR at follow-up), number of glaucoma medications **Safety:** None	3
Marco et al. 2017[82] Canada Funding source: None	Retrospective cohort T-tests and Wilcoxon rank sum; Chi-squared test, or Fisher's exact test *Follow-up:* 6 mo	N = 53 eyes (53 patients) **Inclusion criteria:** Consecutive patients undergoing ECP + Phaco and age-matched patients undergoing Trabeculectomy + Phaco	ECP + Phaco Trabeculectomy + Phaco (with MMC)	**Clinical effectiveness:** IOP, number of glaucoma medications, VA (Snellen VA converted to logMAR) **Safety:** IOP spike (≥ 6 mm Hg from baseline), intraoperative	3, 4

Study Citation, Country, Funding Source	Study Design, Analytical Approach, Duration	Patient Characteristics — Sample Size, Inclusion and Exclusion Criteria	Intervention(s) and Comparator(s)	Outcomes	Relevant for Clinical Research Question(s)
	Loss to follow-up, n: 14 (not included in the sample of N = 53)	**Exclusion criteria:** NR		complications, complications in early (< 30 d) and late (≥ 30 d) post-operative periods	

2x = two devices; 3x = three devices; AGI = Ahmed glaucoma implant; ALT = argon laser trabeculoplasty; ANOVA = analysis of variance; ARMD = age-related macular degeneration; BCDVA = best corrected-distance visual acuity; BCVA = best-corrected visual acuity; BGI = Baerveldt glaucoma implant; CACG = chronic angle-closure glaucoma; C:D = cup-to-disc ratio; CDVA = corrected-distance visual acuity; CVA = cerebral vascular accident; d = day; dB = decibel; DIOP = diurnal intraocular pressure; ECP = endoscopic cyclophotocoagulation; GDD = glaucoma drainage device; GDD-2 = second Baerveldt glaucoma implant 250 or 350; GI = glaucoma index; HFV = Humphrey visual field; Hydrus = Hydrus Microstent; IOL = intraocular lens; IOP = intraocular pressure; IQR = inter-quartile range; ITT = intention-to-treat; KDB = Kahook Dual Blade; mo = month; LASEK = laser subepithelial keratomileusis; LASIK = laser in situ keratomileusis; LP = light perception; MANOVA = multivariate analysis of variance; MDALL = Medical Devices Active Licence Listing; MICS = micro-incision cataract surgery; MIGS = minimally invasive glaucoma surgery; MMC = mitomycin C; NA = not applicable; NEI VFQ-25 = National Eye Institute-Visual Functioning Questionnaire - 25; NLP = no light perception; NR = not reported; OAG = open-angle glaucoma; PACG = primary angle-closure glaucoma; Phaco = phacoemulsification; Phaco-ECP = phacoemulsification plus endoscopic cyclophotocoagulation; POAG = primary open-angle glaucoma; PRK = photorefractive keratectomy; PXF = pseudoexfoliative glaucoma; QoL = quality of life; RCT = randomized controlled trial; RK = radial keratectomy; SD = standard deviation; SITA = Swedish Interactive Threshold Algorithm; SLT = selective laser trabeculoplasty; Trab + Phaco = Trabeculectomy with mitomycin C + Phacoemulsification; VA = visual acuity; VF = visual field; wk = week; y = year.