

Table 43: Adverse Events and Harms of MIGS + Cataract Surgery Versus Comparators in Adults With Glaucoma

Quality Assessment							Summary of Findings				Importance
No. of Studies	Study Design	Risk of Bias	Inconsistency	Indirectness	Imprecision	Other Considerations	No. of Eyes		Effect	Quality	
							MIGS	Comparator			
MIGS + Cataract Surgery Vs. Cataract Surgery Alone: ECP + Phaco Vs. Phaco Alone											
4	Prospective cohort and retrospective cohort ^a	Very serious risk of bias ^b	No serious inconsistency	Serious indirectness ^c	Serious imprecision ^d	None	472	224	Mixed Findings; ECP + Phaco [$<$]/$<$[$=$] Phaco Alone: Adverse events: <ul style="list-style-type: none"> ECP + Phaco $<$ Phaco⁷³ ECP + Phaco [$<$] Phaco^{72,75} ECP + Phaco [$=$] Phaco⁸⁴ Across studies, adverse events were minor in all treatment groups except for the following major complications that occurred only in the ECP + Phaco groups: <ul style="list-style-type: none"> Intracameral tissue plasminogen activator injection with synechiolysis, n = 1⁷² Retinal detachment, n = 3^{73,75} Requirement for penetrating keratoplasty, n = 1⁷⁵ 	⊕000 VERY LOW	CRITICAL
MIGS + Cataract Surgery Vs. Cataract Surgery Alone: iStents + Phaco Vs. Phaco Alone											
2	RCTs ^e	Very serious risk of bias ^f	No serious inconsistency	Serious indirectness ^g	Serious imprecision ^h	None	129	147	iStent + Phaco [$=$] Phaco Alone: Adverse events: <ul style="list-style-type: none"> All minor; iStent + Phaco [$=$] Phaco^{34,66-68} Secondary surgery required: <ul style="list-style-type: none"> iStent + Phaco (4.3%) [$=$] Phaco (5.1%)^{34,68} 	⊕000 VERY LOW	CRITICAL
MIGS + Cataract Surgery Vs. Cataract Surgery Alone: 2 iStents + Phaco Vs. Phaco Alone											
1	RCT ⁱ	Very serious risk of bias ^j	No serious inconsistency	Serious indirectness ^k	Serious imprecision ^l	None	17	16	2 iStents + Phaco [$<$] Phaco Alone: Adverse events: <ul style="list-style-type: none"> All minor; 2x iStent + Phaco [$<$] Phaco (only complication was iStent malposition; 18%)⁶⁹ 	⊕000 VERY LOW	CRITICAL

Quality Assessment							Summary of Findings			Importance	
No. of Studies	Study Design	Risk of Bias	Inconsistency	Indirectness	Imprecision	Other Considerations	No. of Eyes		Effect		Quality
							MIGS	Comparator			
MIGS + Cataract Surgery Vs. Cataract Surgery Alone: CyPass Micro-Stent + Phaco Vs. Phaco Alone											
1	RCT ^m	Serious risk of bias ⁿ	No serious inconsistency	Serious indirectness ^o	Serious imprecision ^p	None	374	131	<p>Mixed Findings; CyPass Micro-Stent + Phaco =/>> Phaco Alone:⁷⁰ Adverse events:</p> <ul style="list-style-type: none"> • CyPass Micro-Stent + Phaco = Phaco • Exception; transient (≤ 30 d) BCVA loss: CyPass Micro-Stent + Phaco (8.8%) > Phaco (15.3%) <p>All minor, except for:</p> <ul style="list-style-type: none"> • BCVA loss ≥ 10 letters (≥ 2 lines) at 24 mo: 1.1% in CyPass Micro-Stent + Phaco, 0% in Phaco • Visual field loss progression: 6.7% in CyPass Micro-Stent + Phaco; 9.9% in Phaco <p>Secondary surgery required:</p> <ul style="list-style-type: none"> • CyPass Micro-Stent + Phaco (5.5%) = Phaco (5.3%) 	⊕○○○ VERY LOW	CRITICAL
MIGS + Cataract Surgery Vs. Cataract Surgery Alone: Hydrus Microstent + Phaco Vs. Phaco Alone											
2	RCTs ^q	No serious risk of bias ^r	No serious inconsistency	Serious indirectness ^s	Serious imprecision ^t	None	419	237	<p>Mixed Findings; Hydrus Microstent + Phaco =/</[?] Phaco alone: Adverse events: In one RCT:⁷¹</p> <ul style="list-style-type: none"> • Focal peripheral anterior synechiae (minor) at 1 y follow-up: Hydrus Microstent + Phaco (12.0%) < Phaco alone (2.0%) • Focal peripheral anterior synechiae (minor) at 2 y follow-up: Hydrus Microstent + Phaco (18.8%) < Phaco alone (2.0%) <p>• All other adverse events at 1 and 2 y follow-up: Hydrus Microstent = Phaco</p> <p>All minor except the following (not significantly different between groups; Hydrus Microstent + Phaco and Phaco alone, respectively):</p>	⊕○○○ VERY LOW	CRITICAL

Quality Assessment							Summary of Findings			Importance	
No. of Studies	Study Design	Risk of Bias	Inconsistency	Indirectness	Imprecision	Other Considerations	No. of Eyes		Effect		Quality
							MIGS	Comparator			
									<ul style="list-style-type: none"> Retinal detachment in year 1: 0.0%, 2.0% Anterior ischemic optic neuropathy in year 1: 0.0%, 2.0% BCVA loss > 2 lines in year 1: 0.0%, 6.0% BCVA loss > 2 lines in year 2: 0.0%, 2.0% <p>In the other RCT:⁸⁸</p> <ul style="list-style-type: none"> No statistical comparisons between groups All minor except for the following (Hydrus Microstent + Phaco and Phaco alone respectively): <ul style="list-style-type: none"> BCVA loss \geq 2 lines \geq 3 mo, 1.4%, 1.6% Worsening of VF mean deviation by 2.5 dB, 4.3%, 5.3% Development of neovascular glaucoma and secondary angle closure, 1%, 0.5% <p>Secondary glaucoma surgery: In one RCT:⁷¹</p> <ul style="list-style-type: none"> In year 1: None in either group In year 2: Hydrus Microstent + Phaco (2.1%) = Phaco alone (4.1%) <p>In the other RCT:⁸⁸</p> <ul style="list-style-type: none"> No statistical comparisons between groups; 1.1% and 2.7% in Hydrus Microstent + Phaco and Phaco alone, respectively 		
MIGS + Cataract Surgery Vs. A Different MIGS + Cataract Surgery: Goniotomy With KDB + Phaco Vs. iStent + Phaco											
1	Retrospective cohort ^u	Serious risk of bias ^v	No serious inconsistency	Serious indirectness ^w	Serious imprecision ^x	None	KDB + Phaco, 237 iStent + Phaco, 198	NA ^y	<p>Mixed Findings; KDB + Phaco => iStent + Phaco:⁸⁶</p> <p>Adverse events:</p> <ul style="list-style-type: none"> All minor IOP spikes: KDB + Phaco (6.3%) 	⊕○○○ VERY LOW	CRITICAL

Quality Assessment							Summary of Findings			Importance	
No. of Studies	Study Design	Risk of Bias	Inconsistency	Indirectness	Imprecision	Other Considerations	No. of Eyes		Effect		Quality
							MIGS	Comparator			
									> iStent + Phaco (12.6%) • All other adverse events: KDB + Phaco = iStent + Phaco		
MIGS + Cataract Surgery Vs. A Different MIGS + Cataract Surgery: Trabectome + Phaco Vs. 2x iStent + Phaco											
2	Retrospective cohort ^z	Serious risk of bias ^{aa}	No serious inconsistency	Serious indirectness ^{bb}	Serious imprecision ^{cc}	None	Trabectome + Phaco, 88 2x iStent + Phaco, 83	NA ^y	Trabectome + Phaco <= iStent + Phaco:⁷⁹ Adverse events: • All minor • Hyphema: Trabectome + Phaco < 2x iStent + Phaco ⁷⁸ • All other adverse events: Trabectome + Phaco = 2x iStent + Phaco ⁷⁸ • Trabectome + Phaco < 2x iStent + Phaco ⁷⁹ Secondary glaucoma surgery: • Trabectome + Phaco = 2x iStent + Phaco ⁷⁸ • Trabectome + Phaco [<] 2x iStent + Phaco ⁷⁹	⊕000 VERY LOW	CRITICAL
MIGS + Cataract Surgery Vs. A Different MIGS + Cataract Surgery: Trabectome + MICS Vs. 2x iStent Inject + MICS											
1	Retrospective cohort ^{dd}	Serious risk of bias ^{ee}	No serious inconsistency	Serious indirectness ^{ff}	Serious imprecision ^{gg}	None	Trabectome + MICS, 25 2x iStent Inject + MICS, 25	NA ^y	Trabectome + MICS [=] 2x iStent Inject + MICS:⁷⁷ Adverse events: • All minor • Trabectome + MICS [=] 2x iStent Inject + MICS Secondary glaucoma surgery: • Trabectome + MICS [=] 2x iStent Inject + MICS	⊕000 VERY LOW	CRITICAL
MIGS + Cataract Surgery Vs. A Different MIGS + Cataract Surgery: Different Numbers of iStents + Phaco											
2	Retrospective cohort and non-randomized controlled clinical trial ^{hh}	Serious risk of bias ⁱⁱ	No serious inconsistency	Serious indirectness ^{jj}	Serious imprecision ^{kk}	None	iStent + Phaco, 39 2x iStent + Phaco, 58 3x iStent + Phaco, 25	NA ^y	1 iStent + Phaco [<]/[?] 2 iStents + Phaco: Adverse events: • 1 iStent + Phaco [<] 2x iStent + Phaco ⁸⁰ • All minor except for 1 major complication in the iStent + Phaco group (central retinal vein)	⊕000 VERY LOW	CRITICAL

Quality Assessment							Summary of Findings				Importance
No. of Studies	Study Design	Risk of Bias	Inconsistency	Indirectness	Imprecision	Other Considerations	No. of Eyes		Effect	Quality	
							MIGS	Comparator			
									occlusion leading to development of anterior-chamber neovascularization and neovascular glaucoma) 2 iStents + Phaco [?] 3 iStents + Phaco: Adverse events were not reported separately for each group. ⁸³ All were minor (exception: death due to unrelated systemic illness, 1 patient).		
MIGS + Cataract Surgery Vs. A Different MIGS + Cataract Surgery: ECP + iStent + Phaco Vs. iStent + Phaco											
1	Retrospective cohort ^{ll}	Serious risk of bias ^{mm}	No serious inconsistency	Serious indirectness ⁿⁿ	Serious imprecision ^{oo}	None	ECP + iStent + Phaco, 51 iStent + Phaco, 50	NA ^y	ECP + iStent + Phaco [=] iStent + Phaco: ⁸¹ Adverse events: • All minor • ECP + iStent + Phaco [=] iStent + Phaco Secondary glaucoma surgery: • ECP + iStent + Phaco [=] iStent + Phaco	⊕000 VERY LOW	CRITICAL
MIGS + Cataract Surgery Vs. A Different MIGS + Cataract Surgery: ECP + Phaco Vs. Trabectome + Phaco											
1	Retrospective cohort ^{pp}	Serious risk of bias ^{qq}	No serious inconsistency	Serious indirectness ^{rr}	Serious imprecision ^{ss}	None	ECP + Phaco, 35 Trabectome + Phaco, 26	NA ^y	ECP + Phaco [?] Trabectome + Phaco: ⁸⁹ Adverse events: All minor; not compared statistically between groups Secondary glaucoma surgery: No eyes required secondary surgery in either group	⊕000 VERY LOW	CRITICAL
MIGS + Cataract Surgery Vs. Filtration Surgery + Cataract Surgery: Trabectome + Phaco Vs. Trabeculectomy With MMC + Phaco											
1	RCT ^{tt}	Very serious risk of bias ^{uu}	No serious inconsistency	Serious indirectness ^{vv}	Serious imprecision ^{ww}	None	10	9	Trabectome + Phaco = Trabeculectomy with MMC + Phaco: ⁸⁷ Early or late post-operative complications: • Trabectome + Phaco = Trabeculectomy + Phaco • All minor, except hypotony	⊕000 VERY LOW	CRITICAL

Quality Assessment							Summary of Findings			Importance	
No. of Studies	Study Design	Risk of Bias	Inconsistency	Indirectness	Imprecision	Other Considerations	No. of Eyes		Effect		Quality
							MIGS	Comparator			
									maculopathy (22% in Trabeculectomy + Phaco group) Secondary glaucoma surgery: • Trabectome + Phaco = Trabeculectomy + Phaco		
MIGS + Cataract Surgery Vs. Filtration Surgery + Cataract Surgery: ECP + Phaco Vs. Trabeculectomy With MMC + Phaco											
1	Retrospective cohort ^{xx}	Serious risk of bias ^{yy}	No serious inconsistency	Serious indirectness ^{zz}	Serious imprecision ^{aaa}	None	24	29	ECP + Phaco <[?] Trabeculectomy with MMC + Phaco: ⁸² Adverse events: • All minor • IOP spike: ECP + Phaco < Trabeculectomy + Phaco • Intraoperative complications: ECP + Phaco [<] Trabeculectomy + Phaco • Post-operative complications: ECP + Phaco [>] Trabeculectomy + Phaco	⊕○○○ VERY LOW	CRITICAL

= = not significantly different between groups; [=] = not compared statistically but tendency for no difference between groups; > = intervention more favourable than comparator; < = intervention less favourable than comparator; [<] = not compared statistically but tendency for intervention less favourable than comparator; [?] = not compared statistically or non-interpretable; 2x = two devices; 3x = three devices; dB = decibels; ECP = endoscopic cyclophotocoagulation; IOP = intraocular pressure; BCVA = best-corrected visual acuity; d = day; KDB = Kahook Dual Blade; MICS = micro-incision cataract surgery; MIGS = minimally invasive glaucoma surgery; MMC = mitomycin C; mo = months; NA = not applicable; no. = number; Phaco = phacoemulsification; RCT = randomized controlled trial; VF = visual field; vs. = versus; wk = weeks; y = years.

Note: Data were collected by RCT, non-randomized controlled clinical trial, retrospective or prospective cohort, with up to 4 years of follow-up. The method of measuring adverse events or harms was not reported in any study. The CyPass Micro-Stent was voluntarily withdrawn from the global market by the manufacturer in August 2018 due to five-year data from a long-term safety study,^{37,88} however, at the time of report publication, this device was still active in the MDALL and is therefore included in this report.

^a One prospective cohort study⁸⁴ and three retrospective cohort studies.^{72,73,75}

^b Very serious risk of bias. Bias due to confounding: retrospective study and rationale for assigning treatments likely to be different between groups;^{72,73,75} baseline characteristics not reported for Phaco alone group so unable to assess whether groups were systematically different at baseline;⁷² treatment assignment based on patient characteristics and groups were systematically different;⁷³ baseline characteristics were different between groups;^{73,84} treatment group was assigned based on patient choice and treatment availability;⁷⁵ how participants were prospectively assigned to groups was not reported;⁸⁴ potential confounding variables not controlled for in analyses.^{72,73,75,84} Bias in selection of participants: only those with complete data or sufficient follow-up were included and it is possible that those with complete data or a given follow-up duration were systematically different from those without complete data or a particular follow-up duration (i.e., different from those in routine clinical practice).^{72,73,84} Bias due to deviations from intended interventions: important co-intervention may not have been balanced between groups (number of medications was not reported in one group;⁷² absolute number of medications not compared statistically between groups⁷³); important co-intervention not balanced between groups (number of medications significantly different between groups).^{75,84} Bias due to missing data: reasons for patient exclusion only reported for the ECP + Phaco group;⁷² low risk up to 24 months of follow-up but large amount of missing data at later time points and reasons not reported.⁸⁴ Bias in measurement of outcomes: method of measuring adverse events and harms not specified.^{72,73,75,84} Bias in selection of the reported result: statistical comparisons not conducted or reported.^{72,75,84}

^c Serious indirectness.^{72,73,75,84} Method of measuring adverse events or harms was not specified; therefore, it is unclear whether direct or surrogate measures were used or whether data on all patient-important adverse events or harms were collected.

^d Serious imprecision.^{72,73,75,84} Relatively few adverse events or harms reported and unclear method of measurement, and no measures of variability.

^e Two RCTs in four publications.^{34,66-68}

^f Very serious risk of bias. Selection bias: no indication of allocation concealment.^{34,66-68} Detection bias: method of measuring adverse events and harms not specified.^{34,66-68} Attrition bias: low-risk up to 15 months of follow-up (reasons for missing data reported and not likely to be related to the outcome), but large amount of missing data at four-year follow-up and amount not balanced across groups;^{66,67} large amount of missing data and reasons for missing data may be related to the true outcome (e.g., those with failed Phaco due to adverse event were excluded post-randomization).^{34,68} Reporting bias: statistical comparisons not conducted or reported.^{34,66-68}

^g Serious indirectness.^{34,66-68} Method of measuring adverse events or harms was not specified; therefore, it is unclear whether direct or surrogate measures were used or whether data on all patient-important adverse events or harms were collected.

^h Serious imprecision.^{34,66-68} Relatively few measures of adverse events or harms, and no measures of variability.

ⁱ One RCT.⁶⁹

^j Very serious risk of bias.⁶⁹ Selection bias: no indication of allocation concealment. Detection bias: method of measuring adverse events and harms not specified. Reporting bias: statistical comparisons not conducted or reported.

^k Serious indirectness.⁶⁹ Method of measuring adverse events or harms was not specified; therefore, it is unclear whether direct or surrogate measures were used or whether data on all patient-important adverse events or harms were collected.

^l Serious imprecision.⁶⁹ Relatively few measures of adverse events or harms, and no measures of variability.

^m One RCT.⁷⁰

ⁿ Serious risk of bias.⁷⁰ Selection bias: no indication of allocation concealment. Detection bias: method of measuring adverse events and harms not specified.

^o Serious indirectness.⁷⁰ Method of measuring adverse events or harms was not specified; therefore, it is unclear whether direct or surrogate measures were used or whether data on all patient-important adverse events or harms were collected.

^p Serious imprecision.⁷⁰ Only a single study; relatively few adverse events or harms and no measures of variability.⁷⁰

^q Two RCTs.^{71,88}

^r Serious risk of bias.^{71,88} Possible risk of selection bias; concealment not explicitly specified but likely, based on method of randomization (online computer algorithms). Detection bias: method of measuring adverse events and harms not specified.

^s Serious indirectness.^{71,88} Method of measuring adverse events or harms was not specified; therefore, it is unclear whether direct or surrogate measures were used or whether data on all patient-important adverse events or harms were collected.

^t Serious imprecision.^{71,88} No measures of variability.

^u One retrospective cohort study.⁸⁶

^v Serious risk of bias.⁸⁶ Bias due to confounding: retrospective design and rationale for assigning treatments likely to be different between groups; significant differences between groups at baseline; potential confounding variables not controlled for in analyses. Bias in selection of participants: only those with six-month complete data were included and it is possible that those with complete data were systematically different from those without complete data (i.e., different from those in routine clinical practice). Bias due to deviations from intended interventions: important co-intervention not balanced between groups (number of medications significantly different between groups). Bias due to missing data: large amount of missing data at one month and three months, reasons for missing data not reported, and amount of missing data not balanced across groups. Bias in measurement of outcomes: method of measuring adverse events and harms not specified.

^w Serious indirectness.⁸⁶ Method of measuring adverse events or harms was not specified; therefore, it is unclear whether direct or surrogate measures were used or whether data on all patient-important adverse events or harms were collected.

^x Serious imprecision.⁸⁶ Only a single study; relatively few adverse events or harms and no measures of variability.

^y In these studies, one MIGS performed in combination with cataract surgery was compared with another MIGS combined with cataract surgery.^{77-81,83,86}

^z Two retrospective cohort studies.^{78,79}

^{aa} Serious risk of bias. Bias due to confounding: retrospective design and rationale for assigning treatments likely to be different between groups;^{78,79} different surgeons performed procedures in the different treatment arms;⁷⁹ potential confounding variables not controlled for in analyses.^{78,79} Bias in selection of participants: only those with 12-month follow-up were included and it is possible that those with 12-month follow-up were systematically different from those with shorter follow-up (i.e., different from those in routine clinical practice).^{78,79} Bias due to deviations from intended interventions: important co-intervention not balanced between groups (number of medications significantly different between groups).⁷⁸ Bias due to missing data: substantial amount of missing data, amount of missing data not balanced across groups and analyses conducted with last observation carried forward (but

disease progression or treatment effectiveness may change over time).⁷⁸ Bias in measurement of outcomes: method of measuring adverse events and harms not specified.^{78,79} Bias in selection of the reported result: different numerical values reported in the abstract and text, leading to unclear interpretation of findings.⁷⁹

^{bb} Serious indirectness.^{78,79} Method of measuring adverse events or harms was not specified; therefore, it is unclear whether direct or surrogate measures were used or whether data on all patient-important adverse events or harms were collected.

^{cc} Serious imprecision.^{78,79} No measures of variability.

^{dd} One retrospective cohort study.⁷⁷

^{ee} Serious risk of bias.⁷⁷ Bias in selection of participants: only those with complete follow-up were included and it is possible that those with versus without complete follow-up were systematically different (i.e., different from those in routine clinical practice). Bias due to deviations from intended interventions: by design the post-operative medication regimen was different between groups and the number of medications was significantly different between groups at six-week follow-up. Bias in measurement of outcomes: method of measuring adverse events and harms not specified. Bias in selection of the reported result: statistical comparisons not conducted or reported.

^{ff} Serious indirectness.⁷⁷ Method of measuring adverse events or harms was not specified; therefore, it is unclear whether direct or surrogate measures were used or whether data on all patient-important adverse events or harms were collected.

^{gg} Serious imprecision.⁷⁷ Only a single study; relative few adverse events or harms and no measures of variability.

^{hh} One retrospective cohort⁸⁰ and one non-randomized controlled clinical trial.⁸³

ⁱⁱ Serious risk of bias. Bias due to confounding: retrospective design and rationale for assigning treatments likely to be different between groups;⁸⁰ treatment assigned based on patient characteristics and judgment of operating surgeon (i.e., with those requiring greater IOP control receiving three versus two iStents);⁸³ potential confounding variables not controlled for in analyses.^{80,83} Bias in selection of participants: only those with 12-month follow-up were included and it is possible that those with 12-month follow-up were systematically different from those with shorter follow-up (i.e., different from those in routine clinical practice).⁸³ Bias due to deviations from intended interventions: important co-intervention not balanced between groups (number of medications significantly different between groups).⁸³ Bias due to missing data: substantial loss to follow-up, amount of missing data not balanced across groups, and reasons for missing data not reported.⁸⁰ Bias in measurement of outcomes: method of measuring adverse events and harms not specified.^{80,83} Bias in selection of the reported result: statistical comparisons not conducted or reported;⁸⁰ results for adverse events and harms not reported separately for each group.⁸³

^{jj} Serious indirectness.^{80,83} Method of measuring adverse events or harms was not specified; therefore, it is unclear whether direct or surrogate measures were used or whether data on all patient-important adverse events or harms were collected.

^{kk} Serious imprecision.^{80,83} Relatively few adverse events or harms and no measures of variability;^{80,83} adverse events not reported separately for each group.⁸³

^{ll} One retrospective cohort study.⁸¹

^{mmm} Serious risk of bias.⁸¹ Bias due to confounding: retrospective design and rationale for assigning treatments likely to be different between groups, groups not matched on baseline characteristics, and potential confounding variables not controlled for in analyses. Bias due to deviations from intended interventions: important co-intervention not balanced between groups (number of medications significantly different between groups). Bias in measurement of outcomes: method of measuring adverse events and harms not specified. Bias in selection of the reported result: statistical comparisons not conducted or reported; specific values not reported for the iStent + Phaco group.

ⁿⁿ Serious indirectness.⁸¹ Method of measuring adverse events or harms was not specified; therefore, it is unclear whether direct or surrogate measures were used or whether data on all patient-important adverse events or harms were collected.

^{oo} Serious imprecision.⁸¹ Only a single study; relatively few adverse events or harms and no measures of variability.

^{pp} One retrospective cohort study.⁸⁹

^{qq} Serious risk of bias.⁸⁹ Bias due to confounding: retrospective design and rationale for assigning treatments likely to be different between groups; some baseline characteristics (e.g., age) different between groups; potential confounding variables not controlled for in analyses. Bias in selection of participants: only those with 12-month follow-up were included and it is possible that those with 12-month follow-up were systematically different from those with shorter follow-up (i.e., different from those in routine clinical practice); at least one patient who did not meet inclusion criteria was included (the inclusion criteria specified age > 40 years, but the range of ages in one group was reported as 30 to 85 years). Bias in selection of the reported result: statistical comparisons not conducted or reported.

^{rr} Serious indirectness.⁸⁹ Method of measuring adverse events or harms was not specified; therefore, it is unclear whether direct or surrogate measures were used or whether data on all patient-important adverse events or harms were collected.

^{ss} Serious imprecision.⁸⁹ Only a single study; no measures of variability.

^{tt} One RCT.⁸⁷

^{uu} Very serious risk of bias.⁸⁷ Selection bias: inclusion criteria were altered after the start of the study due to slow patient recruitment and specific changes to inclusion criteria were not reported. Performance bias: the study occurred over a long duration and how the intervention (Trabectome + Phaco) was conducted changed over the course of the study (i.e., length of the ablation cleft increased from ~90 to 160 degrees). Detection bias: method of measuring adverse events and harms not specified. Attrition bias: only one patient missing data in each group but the sample size was so small that this still represented a substantial proportion of the data (~10% per group). Other bias: the trial was stopped early due to difficulties in patient recruitment and lack of clinical equipoise over time, so fewer participants were recruited than planned a priori.

^{vv} Serious indirectness.⁸⁷ Method of measuring adverse events or harms was not specified; therefore, it is unclear whether direct or surrogate measures were used or whether data on all patient-important adverse events or harms were collected.

^{www} Serious imprecision.⁸⁷ Only a single study; relatively few adverse events or harms and no measures of variability.^{xx} One retrospective cohort study.⁸²

^{yy} Serious risk of bias.⁸² Bias due to confounding: participants in the different treatment arms were systematically different; Trabeculectomy + Phaco patients had healthy conjunctiva, ECP + Phaco patients had thin conjunctiva or plateau iris; potential confounding variables not controlled for in the analysis. Bias due to deviations from intended interventions: important co-intervention not balanced between groups (number of medications significantly different between groups). Bias due to missing data: substantial amount of missing data, amount of missing data not balanced across groups, and reasons for missing data not reported. Bias in measurement of outcomes method of measuring adverse events and harms not specified. Bias in selection of the reported result: some statistical comparisons not conducted or reported.

^{zz} Serious indirectness.⁸² Method of measuring adverse events or harms was not specified; therefore, it is unclear whether direct or surrogate measures were used or whether data on all patient-important adverse events or harms were collected.

^{aaa} Serious imprecision.⁸² Only a single study; relatively few adverse events or harms and no measures of variability.