Table 33: Effect of MIGS Versus Comparators on Proportion of Eyes Achieving IOP Targets

Quality Assessment							Summary of Findings				Importance
							No. of Eyes		Effect	Quality	
No. of Studies	Study Design	Risk of Bias	Inconsistency	Indirectness	Imprecision	Other Considerations	MIGS	Comparator			
MIGS Vs. Pharmacotherapy: 2x iStent Vs. Travoprost, or 2x iStent Inject Vs. Latanoprost + Timolol											
2	RCT[a]	Very serious risk of bias[b]	No serious inconsistency	No serious indirectness	Serious imprecision[c]	None	2x iStent, 54 2x iStent Inject, 94	Travoprost, 47 Latanoprost + Timolol, 98	**Mixed Findings; MIGS [=]/>/[>] Pharmacotherapy:** **≥ 20%, 30%, or 40% IOP reduction** from baseline (12 follow-up): • 2x iStent Inject [=] Latanoprost + Timolol[36] **≥ 50% IOP reduction** from baseline (12 follow-up): • 2x iStent Inject > Latanoprost + Timolol[36] **IOP ≤ 18 mm Hg**: • 2x iStent [>] Travoprost (at 12, 24, and 36 mo follow-up)[58] • 2x iStent Inject [=] Latanoprost + Timolol groups (at 12 mo follow-up)[36] **IOP ≤ 15 mm Hg**: • 2x iStent [>] Travoprost (at 12, 24, and 36 mo follow-up)[58] • 2x iStent Inject [=] Latanoprost + Timolol groups (at 12 mo follow-up)[36]	⊕OOO VERY LOW	CRITICAL
MIGS Vs. Laser Therapy: Hydrus Microstent Vs. SLT											
1	Prospective cohort[d]	Serious risk of bias[e]	No serious inconsistency	No serious indirectness	Serious imprecision[f]	None	56	31	**MIGS [=] Laser Therapy:** **> 20% IOP reduction** from baseline (12 mo follow-up): • Hydrus Microstent [=] SLT[62]	⊕OOO VERY LOW	CRITICAL
MIGS Vs. Another MIGS: 1x Vs. 2x Vs. 3x iStent											
1	RCT[g]	Serious risk of bias[h]	No serious inconsistency	No serious indirectness	Serious imprecision[i]	None	iStent, 38 2x iStent,	NA[j]	**3 iStents [=] 2 iStents [=] 1 iStent:** **≥ 20% IOP reduction** from baseline (12 and 48 mo follow-up): • no between-group difference [59,60] **IOP ≤ 18 mm Hg** (12 mo follow-up):	⊕⊕OO LOW	CRITICAL

Quality Assessment							Summary of Findings				Importance
							No. of Eyes		Effect	Quality	
No. of Studies	Study Design	Risk of Bias	Inconsistency	Indirectness	Imprecision	Other Considerations	MIGS	Comparator			
							41 3x iStent, 40		• no between-group difference[59,60] **IOP ≤ 15 mm Hg** (12 mo follow-up): • *3x* [>] *2x* [>] *1x* iStent[59,60]		
MIGS Vs. Filtration Surgery: ECP Vs. AGI											
1	Non-randomized controlled clinical trial[k]	Serious risk of bias[l]	No serious inconsistency	No serious indirectness	Serious imprecision[m]	None	34	34	**MIGS = Glaucoma Drainage Device:** **IOP > 6 mm Hg and < 21 mm Hg with/without medication** 12 and 24 mo follow-up: • ECP = AGI[61]	⊕OOO VERY LOW	CRITICAL

= = not significantly different between groups; [=] = not compared statistically but tendency for no difference between groups; > = intervention more favourable than comparator; [>] = not compared statistically but tendency for intervention more favourable than comparator; 1x = one device; 2x = two devices; 3x = three devices; AGI = Ahmed glaucoma implant; ECP = endoscopic cyclophotocoagulation; IOP = intraocular pressure; MIGS = minimally invasive glaucoma surgery; mo = months; no. = number; RCT = randomized controlled trial; SLT = selective laser trabeculoplasty; vs. = versus.

Note: Data were collected by RCT, non-randomized controlled clinical trial, or prospective cohort, with up to 42 months of follow-up. IOP was measured by Goldmann applanation tonometry.

[a] Two RCTs.[36,58]

[b] Very serious risk of bias. Selection bias: no indication of allocation concealment.[36,58] Detection bias: unclear whether diurnal variation accounted for in measurement of IOP;[58] no blinding of outcome assessors.[36,58] Attrition bias: low-risk at 12- and 24-month follow-up; large amount of missing data at 36-month follow-up and reasons not reported.[58] Reporting bias: no statistical comparisons conducted;[58] insufficient reporting of *P* values.[36]

[c] Serious imprecision. No measures of variability in one study,[58] and wide confidence intervals leading to uncertainty about the true magnitude of the effect in the other.[36]

[d] One prospective cohort study.[62]

[e] Serious risk of bias.[62] Bias due to confounding: significant differences between groups at baseline were not controlled, and treatment arm was assigned by geographical location. Bias in measurement of outcome: diurnal variation was not accounted for in measurement of IOP.

[f] Serious imprecision. Only a single study, and no measures of variability.[62]

[g] One RCT in two publications.[59,60]

[h] Serious risk of bias. Selection bias: no indication of allocation concealment.[59,60] Detection bias: unclear whether diurnal variation accounted for in measurement of IOP.[59,60]

[i] Serious imprecision. Only a single study.[59,60]

[j] In this study, different numbers of iStents (all MIGS) were compared.[59,60]

[k] One non-randomized controlled clinical trial.[61]

[l] Serious risk of bias.[61] Bias due to confounding: pseudorandomization (first patient randomized, followed by counterbalanced enrolment); potential confounding variables not controlled for in analyses. Bias due to missing data: large loss to follow-up, amount of missing data not balanced across groups, and reasons for missing data not reported.

[m] Serious imprecision. Only a single study, and no measures of variability.[61]