Table S8. Log odds ratios for IGS outcomes comparing the top decile to the remaining 90% for each GRS type calculated for AFR and EUR POAG-affected Veterans in the MVP. GRS were unweighted or weighted by published cross-ancestry meta-analysis or ancestry-specific effect estimates. We tested for statistical association between deciles of GRS and IGS type ("Trabeculectomy," "GDI," or "Any IGS") and compared the top decile to the reference bottom 90%. The "Any IGS" group included individuals who had either trabeculectomies or GDI documented in their EHR. Models were unadjusted for additional covariates.

Outcome	GRS Type	AFR beta (95% CI)	AFR OR (95% CI)	AFR p-value	EUR beta (95% CI)	EUR OR (95% CI)	EUR p-value
Trabeculectomy	Unweighted	-0.03 (-0.692-0.541)	0.971 (0.5-1.718)	0.92366	0.132 (-0.531-0.704)	1.141 (0.588-2.021)	0.67283
	Cross-ancestry meta-analysis	-0.24 (-0.965-0.372)	0.787 (0.381-1.45)	0.476726	0.132 (-0.531-0.704)	1.141 (0.588-2.021)	0.67283
	Ancestry-specific	0.064 (-0.573-0.619)	1.066 (0.564-1.857)	0.831497	0.398 (-0.199-0.925)	1.488 (0.82-2.523)	0.162614
GDI	Unweighted	-0.354 (-1.041-0.229)	0.702 (0.353-1.258)	0.269567	0.412 (-0.079-0.857)	1.509 (0.924-2.356)	0.083241
	Cross-ancestry meta-analysis	-0.163 (-0.795-0.385)	0.85 (0.451-1.47)	0.585485	0.573 (0.108-0.999)	1.774 (1.114-2.716)	0.011368
	Ancestry-specific	0.417 (-0.09-0.879)	1.518 (0.914-2.408)	0.089733	0.573 (0.108-0.999)	1.774 (1.114-2.716)	0.011368
Any IGS	Unweighted	-0.133 (-0.641-0.323)	0.876 (0.527-1.381)	0.58767	0.279 (-0.153-0.676)	1.322 (0.858-1.966)	0.185217
	Cross-ancestry meta-analysis	-0.133 (-0.641-0.323)	0.876 (0.527-1.381)	0.58767	0.407 (-0.007-0.79)	1.503 (0.993-2.204)	0.04446
	Ancestry-specific	0.238 (-0.208-0.647)	1.268 (0.812-1.91)	0.274189	0.448 (0.039-0.827)	1.565 (1.04-2.286)	0.025314

Abbreviations: IGS = invasive glaucoma surgeries, GDI = glaucoma drainage implants, Any IGS = trabeculectomy or GDI, GRS = genetic risk score, AFR = non-Hispanic African ancestry, EUR = non-Hispanic European ancestry, MVP = Million Veteran Program, OR = odds ratio, CI = confidence interval.