

**Table S2. Association analysis results for 127-variant POAG GRS and POAG case-control status in the MVP.** We performed logistic regression-based association analyses of the 127-variant GRS and POAG status for Veterans in the MVP. Adjusted models include covariates for age, sex, and 10 principal components. GRS were unweighted or weighted by published cross-ancestry meta-analysis or ancestry-specific effect estimates.

Outcome	Model	GRS Type	African Ancestry				European Ancestry			
			Estimate	Std. Error	z value	<i>P</i>	Estimate	Std. Error	z value	<i>P</i>
POAG	Unadjusted	Unweighted	0.383	0.025	15.06	$2.97 \times 10^{-51}$	0.557	0.018	30.625	$5.65 \times 10^{-206}$
		Cross-ancestry meta-analysis	0.439	0.026	16.687	$1.62 \times 10^{-62}$	0.614	0.018	34.435	$7.62 \times 10^{-260}$
		Ancestry-specific	0.275	0.025	11.046	$2.28 \times 10^{-28}$	0.605	0.018	34.219	$1.24 \times 10^{-256}$
	Adjusted	Unweighted	0.327	0.027	12.056	$1.80 \times 10^{-33}$	0.558	0.018	30.642	$3.36 \times 10^{-206}$
		Cross-ancestry meta-analysis	0.369	0.028	13.373	$8.67 \times 10^{-41}$	0.615	0.018	34.403	$2.28 \times 10^{-259}$
		Ancestry-specific	0.240	0.026	9.232	$2.67 \times 10^{-20}$	0.605	0.018	34.19	$3.44 \times 10^{-256}$

**Abbreviations:** POAG = primary open-angle glaucoma, GRS = genetic risk score, MVP = Million Veteran Program.