

**Table S10. Global genetic ancestry calculated for AFR and EUR POAG cases and controls in the MVP.** We determined global genetic ancestry using ADMIXTURE 1.3 with five reference populations from the 1000 Genomes Project: British in England and Scotland [GBR], Yoruba in Ibadan, Nigeria [YRI], Luhya in Webuye, Kenya [LWK], Han Chinese in Beijing, China [CHB], and Peruvian from Lima, Peru [PEL]. GBR served as the reference for non-Finnish European ancestry, while YRI+LWK were used as the reference for African ancestry. Data shown represent the median genetic global ancestry by POAG case-control status in AFR and EUR Veterans in the MVP. P-values were based on Mann-Whitney U tests for equal distributions.

Group (Reference)	Median Global Genetic Ancestry (IQR)			p-value
	Case	Control	Total	
<b>AFR</b> <b>(YRI+LWK)</b>	0.8489 (0.7831-0.9005)	0.8273 (0.7388-0.8906)	0.8348 (0.7522-0.8940)	<0.0001
<b>EUR</b> <b>(GBR)</b>	0.9690 (0.9561-0.9787)	0.9698 (0.9576-0.9793)	0.9698 (0.9575-0.9793)	0.0017

**Abbreviations:** AFR = African ancestry, EUR = European ancestry, POAG = primary open-angle glaucoma, MVP = Million Veteran Program, IQR =

interquartile range, YRI = Yoruba in Ibadan, Nigeria, LWK = Luhya in Webuye, Kenya, GBR = British in England and Scotland.