

Table S1: Multivariable associations with average macular retinal nerve fiber layer (mRNFL), ganglion cell complex (GCC) and ganglion cell inner plexiform layer (GCIPL) thicknesses in a subset of participants not using glaucoma medication and without self-reported glaucoma or hospital ICD 10 coded glaucoma. Results are presented for 3 multivariable models with all explanatory variables presented together in the same model ($N=41,449$ for each model). P -values <0.0024 are in bold, representing significance at a Bonferroni-corrected threshold for 21 statistical tests.

	mRNFL thickness (μm)		GCC thickness (μm)		GCIPL thickness (μm)	
	β (95% CI)	P -value	β (95% CI)	P -value	β (95% CI)	P -value
Age (per decade)	-0.37 (-0.42, -0.32)	2.1×10^{-52}	-1.85 (-1.95, -1.76)	$< 1 \times 10^{-300}$	-1.48 (-1.55, -1.42)	$< 1 \times 10^{-300}$
Sex						
Female	Ref		Ref		Ref	
Male	-0.66 (-0.73, -0.59)	1.6×10^{-58}	-0.72 (-0.86, -0.57)	8.0×10^{-22}	-0.06 (-0.16, 0.04)	0.24
Ethnicity						
White	Ref		Ref		Ref	
Asian	-0.93 (-1.16, -0.71)	2.0×10^{-16}	-1.98 (-2.42, -1.53)	2.2×10^{-18}	-1.04 (-1.34, -0.75)	4.8×10^{-12}
Black	-1.66 (-1.88, -1.44)	3.2×10^{-50}	-1.97 (-2.40, -1.53)	5.6×10^{-19}	-0.31 (-0.60, -0.02)	0.037
Other/mixed	-0.47 (-0.69, -0.24)	4.1×10^{-5}	-0.04 (-0.48, 0.41)	0.88	0.43 (0.14, 0.73)	0.004
Body mass index (per 5 Kg/m^2)	-0.12 (-0.16, -0.08)	1.9×10^{-8}	-0.29 (-0.38, -0.21)	3.9×10^{-12}	-0.17 (-0.23, -0.12)	7.1×10^{-10}
Smoking status						
Never	Ref		Ref		Ref	
Previous	0.03 (-0.04, 0.11)	0.39	0.02 (-0.13, 0.18)	0.78	-0.01 (-0.12, 0.09)	0.82
Current	-0.05 (-0.18, 0.07)	0.41	-0.10 (-0.35, 0.15)	0.43	-0.05 (-0.21, 0.12)	0.58
Alcohol intake						
Never or special occasion only	Ref		Ref		Ref	
One to three times a month	0.01 (-0.13, 0.14)	0.92	0.06 (-0.21, 0.32)	0.68	0.05 (-0.13, 0.23)	0.59
Once or twice a week	0.04 (-0.07, 0.15)	0.51	0.07 (-0.15, 0.29)	0.53	0.03 (-0.11, 0.18)	0.66
Three or four times a week	-0.11 (-0.22, 0.01)	0.07	-0.26 (-0.49, -0.03)	0.025	-0.15 (-0.31, 0.00)	0.047
Daily or almost daily	-0.19 (-0.31, -0.07)	0.002	-0.65 (-0.88, -0.41)	8.2×10^{-8}	-0.46 (-0.61, -0.30)	1.6×10^{-8}
Townsend deprivation index						
Least deprived quartile	Ref		Ref		Ref	
2 nd quartile	-0.03 (-0.13, 0.07)	0.53	-0.02 (-0.22, 0.18)	0.85	0.01 (-0.12, 0.14)	0.85
3 rd quartile	-0.12 (-0.23, -0.02)	0.016	-0.26 (-0.46, -0.06)	0.011	-0.14 (-0.27, 0.00)	0.046
Most deprived quartile	-0.13 (-0.24, -0.03)	0.015	-0.41 (-0.62, -0.20)	1.1×10^{-4}	-0.28 (-0.42, -0.14)	8.0×10^{-5}
Education level						
Less than O level	Ref		Ref		Ref	
O level	0.15 (0.05, 0.25)	0.003	0.28 (0.08, 0.48)	0.006	0.13 (0.00, 0.27)	0.06
A Level	0.36 (0.24, 0.48)	1.1×10^{-8}	0.57 (0.33, 0.82)	4.7×10^{-6}	0.21 (0.05, 0.38)	0.011
Degree	0.36 (0.27, 0.45)	1.1×10^{-14}	0.64 (0.46, 0.83)	4.2×10^{-12}	0.28 (0.16, 0.40)	5.1×10^{-6}
Diabetes (self-report)						
No	Ref		Ref		Ref	
Yes	-0.51 (-0.68, -0.34)	3.3×10^{-9}	-0.89 (-1.22, -0.56)	1.8×10^{-7}	-0.38 (-0.60, -0.16)	0.001
Spherical equivalent (dioptries)	-0.35 (-0.37, -0.33)	1.7×10^{-283}	0.40 (0.36, 0.43)	2.1×10^{-92}	0.75 (0.72, 0.77)	$< 1 \times 10^{-300}$
IOPcc (mmHg) (iopcc3)	0.01 (0.00, 0.02)	0.011	-0.02 (-0.04, 0.01)	0.14	-0.03 (-0.04, -0.02)	3.9×10^{-5}
Model R-squared	6.7%		5.4%		11.0%	

IOPcc – corneal-compensated intraocular pressure