

**Supplementary Table S2.** Univariable associations between serum lipid levels and corneal-compensated intraocular pressure (IOPcc) in UK Biobank and EPIC Norfolk cohorts

Serum lipid levels (mmol/L)	UK Biobank			EPIC-Norfolk		
	$\beta$	(95% CI)	P-value	$\beta$	(95% CI)	P-value
Total cholesterol (per unit increase)	0.10	(0.08, 0.12)	<0.001	0.15	(0.06, 0.23)	0.001
Total cholesterol in quartiles						
Q1	Ref			Ref		
Q2	0.10	(0.04, 0.15)	0.002	0.16	(-0.11, 0.43)	0.24
Q3	0.18	(0.12, 0.24)	<0.001	0.13	(-0.14, 0.41)	0.34
Q4	0.29	(0.23, 0.35)	<0.001	0.38	(0.11, 0.65)	0.006
<i>P</i> for trend			<0.001			0.011
HDL-C (per unit increase)	0.04	(-0.02, 0.10)	0.15	0.17	(-0.06, 0.41)	0.15
HDL-C in quartiles						
Q1	Ref			Ref		
Q2	0.05	(-0.007, 0.11)	0.08	0.06	(-0.21, 0.33)	0.66
Q3	0.04	(-0.02, 0.10)	0.20	0.18	(-0.09, 0.46)	0.19
Q4	0.04	(-0.02, 0.10)	0.14	0.09	(-0.18, 0.36)	0.53
<i>P</i> for trend			0.63			0.38
LDL-C (per unit increase)	0.13	(0.10, 0.15)	<0.001	0.16	(0.06, 0.26)	0.001
LDL in quartiles						
Q1	Ref			Ref		
Q2	0.05	(-0.01, 0.11)	0.10	0.07	(-0.18, 0.33)	0.58
Q3	0.15	(0.09, 0.21)	<0.001	0.14	(-0.12, 0.40)	0.30
Q4	0.27	(0.21, 0.33)	<0.001	0.49	(0.20, 0.79)	0.001
<i>P</i> for trend			<0.001			0.002
Triglycerides (per unit increase)	0.08	(0.05, 0.10)	<0.001	-0.01	(-0.13, 0.12)	0.91
Triglycerides in quartiles						
Q1	Ref			Ref		
Q2	0.24	(0.18, 0.29)	<0.001	0.18	(-0.9, 0.45)	0.19
Q3	0.29	(0.23, 0.35)	<0.001	0.13	(-0.14, 0.40)	0.34
Q4	0.26	(0.20, 0.32)	<0.001	0.03	(-0.24, 0.31)	0.81
<i>P</i> for trend			<0.001			0.87

Quartiles in UK Biobank are defined as follows: for TC: Q1 ≤ 4.88, Q2 4.89-5.62, Q3 5.63-6.39, Q4 ≥ 6.40; for HDL-C: Q1 ≤ 1.18, Q2 1.19-1.41, Q3 1.42-1.69, Q4 ≥ 1.70; for LDL-C: Q1 ≤ 2.92, Q2 2.93-3.48, Q3 3.49-4.08, Q4 ≥ 4.09, for TG: Q1 ≤ 1.02, Q2 1.03-1.44, Q3 1.45-2.07, Q4 ≥ 2.08. Quartiles for EPIC-Norfolk are defined as follows: for TC: Q1 ≤ 4.67, Q2 4.68-5.49, Q3 5.50 - 6.19, Q4 ≥ 6.20- 10.20; for HDL-C: Q1≤ 1.21, Q2 1.22 - 1.46, Q3 1.47 - 1.77, Q4 ≥ 1.78 for LDL-C: Q1 ≤ 2.46, Q2 2.47 - 3.14, Q3 3.15 - 3.83, Q4 ≥ 3.84 for TG: Q1 ≤ 1.19, Q2 1.20 to 1.57, Q3 1.58 to 2.19, Q4 ≥ 2.20