

Supplementary Table 4: Retinal and choroidal imaging parameters of subjects imaged longitudinally

Parameters	Baseline ^a			2-year follow-up		
	APOE ϵ 4+ and Family history of dementia N=90 eyes (48 subjects)	APOE ϵ 4- and no family history of dementia N=64 eyes (33 subjects)	P-value ^b	APOE ϵ 4+ and Family history of dementia N=90 eyes (48 subjects)	APOE ϵ 4- and no family history of dementia N=64 eyes (33 subjects)	P-value ^b
OCT parameters, mean (SD)						
CST, microns	263.9 (22.93)	266.6 (19.44)	0.077	263.5 (23.43)	264.7 (19.08)	0.660
Average GC-IPL thickness, microns	76.49 (8.43)	75.94 (7.56)	0.602	76.24 (9.36)	76.45 (6.92)	0.308
Average RNFL thickness, microns	89.52 (10.39)	88.03 (9.43)	0.791	89.91 (10.28)	89.10 (9.83)	0.775
Choroidal parameters, mean (SD)						
Total choroidal area, units ^{2c}	4.95 (0.81)	4.64 (1.02)	0.416	5.04 (0.96)	4.59 (0.98)	0.295
Luminal area, units ^{2c}	3.38 (0.54)	3.16 (0.67)	0.389	3.42 (0.62)	3.13 (0.64)	0.287
Choroidal vascularity index, %	0.68 (0.02)	0.68 (0.02)	0.984	0.68 (0.02)	0.68 (0.02)	0.780
OCTA parameters, mean (SD)						
FAZ area, mm ²	0.24 (0.08)	0.24 (0.09)	0.748	0.24 (0.08)	0.24 (0.09)	0.198
PD (3mm ETDRS circle)	0.36 (0.03)	0.36 (0.02)	0.562	0.36 (0.03)	0.36 (0.03)	0.368
PD (3mm ETDRS ring)	0.38 (0.03)	0.38 (0.03)	0.398	0.38 (0.03)	0.38 (0.03)	0.248
VD (3mm ETDRS circle), mm ⁻¹	20.05 (1.78)	19.85 (1.51)	0.616	20.01 (1.62)	19.87 (1.52)	0.554
VD (3mm ETDRS ring), mm ⁻¹	21.10 (1.79)	20.92 (1.54)	0.446	21.07 (1.66)	20.94 (1.54)	0.440
PD (6mm ETDRS circle)	0.44 (0.03)	0.44 (0.03)	0.921	0.44 (0.03)	0.44 (0.03)	0.316
PD (6mm ETDRS outer ring)	0.45 (0.03)	0.44 (0.03)	0.878	0.44 (0.04)	0.44 (0.04)	0.200
PD (6mm ETDRS inner ring)	0.43 (0.03)	0.43 (0.03)	0.555	0.43 (0.03)	0.43 (0.04)	0.608
VD (6mm ETDRS circle), mm ⁻¹	18.02 (1.19)	17.78 (1.15)	0.815	17.75 (1.28)	17.66 (1.28)	0.387
VD (6mm ETDRS outer ring), mm ⁻¹	18.27 (1.19)	17.99 (1.21)	0.703	17.96 (1.37)	17.87 (1.32)	0.261
VD (6mm ETDRS inner ring), mm ⁻¹	18.11 (1.30)	18.04 (1.28)	0.638	17.95 (1.31)	17.91 (1.41)	0.616
Peripapillary OCTA parameters, mean (SD)						

CPD (average), %	44.02 (1.87)	43.77 (1.46)	0.706	44.39 (1.99)	43.89 (1.43)	0.893
CPD (superior), %	42.33 (3.01)	42.71 (2.18)	0.191	42.35 (2.76)	42.67 (1.96)	0.036
CPD (nasal), %	42.73 (2.65)	43.10 (2.41)	0.403	43.58 (2.41)	43.13 (1.95)	0.841
CPD (inferior), %	45.01 (3.05)	44.36 (2.60)	0.834	44.56 (2.84)	43.95 (2.40)	0.743
CPD (temporal), %	46.03 (2.13)	44.88 (2.73)	0.168	46.99 (2.33)	45.67 (2.35)	0.079
CFI (average)	0.41 (0.04)	0.41 (0.04)	0.976	0.44 (0.03)	0.43 (0.03)	0.142
CFI (superior)	0.41 (0.04)	0.41 (0.03)	0.611	0.42 (0.03)	0.42 (0.03)	0.089
CFI (nasal)	0.40 (0.06)	0.40 (0.05)	0.687	0.44 (0.04)	0.43 (0.03)	0.246
CFI (inferior)	0.42 (0.03)	0.42 (0.03)	0.909	0.43 (0.03)	0.42 (0.02)	0.320
CFI (temporal)	0.41 (0.06)	0.42 (0.06)	0.933	0.46 (0.04)	0.45 (0.03)	0.058

CST=central subfield thickness, GC-IPL=ganglion cell-inner plexiform layer, RNFL=retinal nerve fiber layer, FAZ=foveal avascular zone, PD=perfusion density, VD=vessel density, ETDRS=Early Treatment Diabetic Retinopathy Study, CPD=capillary perfusion density, CFI=capillary flux index.

^aNote: baseline data only those for subjects were participated in 2-year follow-up imaging

^bP-values based on generalized estimating equations (GEE) model score statistic for testing differences among and between means. P-values from GEE model adjusted for sex and age.

^cUnits²= 96×96 pixels²