

**Supplementary Table 5: Rate of change in retinal and choroidal imaging parameters**

	APOE ε4+ and Family history of dementia N=90 eyes (48 subjects)		APOE ε4- and no family history of dementia N=64 eyes (33 subjects)		P-value <sup>a</sup>
	Mean change per year (SD)	Equivalent % change/year	Mean change per year (SD)	Equivalent % change/year	
<b>OCT parameters</b>					
CST, microns	-0.357 (3.488)	-0.14%	-0.906 (2.956)	-0.34%	0.791
Average GC-IPL thickness, microns	-0.157 (1.321)	-0.21%	0.277 (1.312)	0.36%	<b>0.038</b>
Average RNFL thickness, microns	0.170 (1.471)	0.19%	0.552 (1.959)	0.63%	0.074
<b>Choroidal parameters</b>					
Total choroidal area, units <sup>2 b</sup>	0.021 (0.280)	0.42%	-0.036 (0.202)	-0.78%	0.746
Luminal area, units <sup>2 b</sup>	0.011 (0.182)	0.33%	-0.023 (0.127)	-0.73%	0.806
Choroidal vascularity index, %	< -0.0005 (0.006)	< -0.07%	0.001 (0.007)	0.15%	0.589
<b>OCTA parameters</b>					
FAZ area, mm <sup>2</sup>	0.001 (0.012)	0.42%	0.001 (0.021)	0.42%	0.690
PD (3mm ETDRS circle)	0.003 (0.017)	0.83%	0.003 (0.016)	0.83%	0.792
PD (3mm ETDRS ring)	0.003 (0.017)	0.79%	0.003 (0.017)	0.79%	0.796
VD (3mm ETDRS circle), mm <sup>-1</sup>	0.063 (0.988)	0.31%	0.067 (0.930)	0.34%	0.785
VD (3mm ETDRS ring), mm <sup>-1</sup>	0.023 (0.939)	0.11%	0.014 (0.903)	0.07%	0.653
PD (6mm ETDRS circle)	-0.001 (0.017)	-0.23%	-0.001 (0.017)	-0.23%	0.602
PD (6mm ETDRS outer ring)	-0.002 (0.016)	-0.44%	0.001 (0.020)	0.23%	0.641
PD (6mm ETDRS inner ring)	0.001 (0.024)	0.23%	0.001 (0.020)	0.23%	0.257
VD (6mm ETDRS circle), mm <sup>-1</sup>	-0.100 (0.633)	-0.55%	-0.014 (0.730)	-0.08%	0.474
VD (6mm ETDRS outer ring), mm <sup>-1</sup>	-0.131 (0.583)	-0.72%	-0.009 (0.757)	-0.05%	0.691
VD (6mm ETDRS inner ring), mm <sup>-1</sup>	-0.018 (0.917)	-0.10%	-0.025 (0.772)	-0.14%	0.218
<b>Peripapillary OCTA parameters, mean (SD)</b>					
CPD (average), %	-0.149 (0.708)	-0.34%	-0.070 (0.664)	-0.16%	0.786
CPD (superior), %	0.044 (1.094)	0.10%	0.002 (0.845)	0.00%	0.135
CPD (nasal), %	-0.398 (1.044)	-0.92%	-0.039 (1.021)	-0.09%	0.443
CPD (inferior), %	0.235 (0.891)	0.53%	0.206 (0.746)	0.46%	0.774

CPD (temporal), %	-0.438 (0.801)	-0.98%	-0.412 (1.166)	-0.88%	0.942
CFI (average)	-0.013 (0.021)	-3.17%	-0.011 (0.020)	-2.50%	0.411
CFI (superior)	-0.006 (0.017)	-1.46%	-0.005 (0.014)	-1.19%	0.401
CFI (nasal)	-0.016 (0.028)	-4.00%	-0.015 (0.027)	-3.41%	0.341
CFI (inferior)	-0.005 (0.014)	-1.19%	-0.003 (0.013)	-0.70%	0.594
CFI (temporal)	-0.022 (0.029)	-5.24%	-0.019 (0.033)	-4.13%	0.458

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.

<sup>a</sup>P-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.

<sup>b</sup>Units<sup>2</sup>= 96×96 pixels<sup>2</sup>