

SUPPLEMENTAL MATERIAL

Supplemental Table I. Linear regression results, stratified by hypertension, demonstrating beta coefficients for the progression in white matter hyperintensity (WMP) over ten years, associated with the presence of different retinal signs. Adjusted for age, gender, race, study center, total cholesterol, HDL cholesterol, BMI, pack years, cumulative systolic BP, blood glucose, and presence of CHD.

| Retinal Disease | WMP with HTN (cm ³) | 95% CI | WMP without HTN (cm ³) | 95% CI |
|----------------------------|------------------------------------|---------------|---|---------------|
| Any retinopathy | 3.17 | (-.81, 7.15) | 3.05 | (-.69, 6.79) |
| AV nicking | 3.72 | (.88, 6.55) | 1.51 | (-.80, 3.82) |
| Focal Arteriolar Narrowing | 2.21 | (-.55, 4.97) | 1.27 | (-.77, 3.31) |
| CRAE/10 | -0.15 | (-2.74, 2.45) | -0.04 | (-1.18, 1.10) |
| CRVE/10 | 0.35 | (-2.64, 3.34) | 0.11 | (-.97, 1.18) |
| Microaneurysms | 1.37 | (-3.69, 6.43) | 0.76 | (-5.49, 7.01) |
| Retinal Hemorrhage | 2.81 | (-2.32, 7.93) | 2.93 | (-2.95, 8.81) |

Abbreviations: WMP: white matter hyperintensity progression; BP: blood pressure;

HDL: high density lipoprotein; BMI: body mass index; CHD: coronary heart disease;

HTN: hypertension; AV: arteriovenous; CRAE: central retinal arteriolar equivalent;

CRVE: central retinal venular equivalent; CI: confidence interval.

Supplemental Table II. Linear regression results, stratified by diabetes, demonstrating beta coefficients for the progression in white matter hyperintensity (WMP) over ten years, associated with the presence of different retinal signs. Adjusted for age, gender, race, study center, total cholesterol, HDL cholesterol, BMI, pack years, cumulative systolic BP, blood glucose, and presence of CHD.

| Retinal Disease | WMP with diabetes (cm ³) | 95% CI | WMP without diabetes (cm ³) | 95% CI |
|----------------------------|---|----------------|--|---------------|
| Any retinopathy | 2.95 | (-2.65, 8.55) | 3.86 | (.77, 6.94) |
| AV nicking | -4.27 | (-10.17, 1.63) | 3.73 | (1.82, 5.65) |
| Focal Arteriolar Narrowing | 3.31 | (-2.25, 8.88) | 1.60 | (-.17, 3.38) |
| CRAE/10 | 0.39 | (-6.64, 7.42) | 0.38 | (-1.07, 1.83) |
| CRVE/10 | 0.46 | (-5.84, 6.76) | 0.88 | (-.74, 2.50) |
| Microaneurysms | 3.59 | (-2.17, 9.34) | 1.73 | (-3.15, 6.62) |
| Retinal Hemorrhage | 4.19 | (-2.32, 10.70) | 3.06 | (-1.43, 7.56) |

Abbreviations: WMP: white matter hyperintensity progression; BP: blood pressure;

HDL: high density lipoprotein; BMI: body mass index; CHD: coronary heart disease;

HTN: hypertension; AV: arteriovenous; CRAE: central retinal arteriolar equivalent;

CRVE: central retinal venular equivalent; CI: confidence interval.