**Supplemental Table 1.** Association between neuropsychological function (MMSE, CDR, GDS, and SNSB) and cerebral SVD markers.

|  |  |
| --- | --- |
| **r (*P* Value)** | **Neuropsychological function** |
| **Attention** | **Language** | **Visuospatial** | **Memory** | **Frontal** | **CDR** | **GDS** | **MMSE** |
| **Brain SVD markers** | **BG-PVS** | -.237(.126) | -.078(.620) | **-.316****(.039)** | -.091(.562) | -.284(.065) | **.299****(.043)** | **.385****(.004)** | **-.346****(.007)** |
| **CSO-PVS** | -.085(.586) | .058(.710) | -.252(.103) | -.063(.687) | -.157(.313) | .289(.052) | .263(.052) | **-.358****(.005)** |
| **Total no. of old lacunes** | -.005(.975) | -.098(.533) | -.237(.125) | -.135(.389) | -.236(.127) | .017(.912) | .166(.226) | -.032(.810) |
| **Total no. of microbleeds** | -.098(.531) | -.111(.478) | .004(.978) | -.071(.652) | -.214(.168) | -.069(.650) | -.092(.505) | .055(.682) |
| **Total WMH** | **-.368****(.015)** | -.223(.151) | **-.346****(.023)** | **-.342****(.025)** | **-.549****(<.001)** | .106(.481) | .264(.051) | -.176(.183) |
| **Total cerebral SVD score** | -.250(.106) | -.171(.274) | -.298(.053) | -.268(.083) | **-.576****(<.001)** | .052(.731) | **.285****(.035)** | -.156(.237) |

Coefficient of correlation (r) was derived from Pearson’s correlation test. A P-value in bold indicates statistical significance (P < .05).

BG = basal ganglia; CSO = centrum semiovale; PVS = perivascular space; WMH = white matter hyperintensity; SVD = small vessel disease; CDR = Clinical Dementia Rating Scale; CDR-SOB = CDR-sum of boxes; GDS = Global Deterioration Scale; MMSE = Mini-Mental State Examination

**Supplemental Table 2.** Association between the thickness of retinal GCL and various cerebral SVD markers.

|  |  |
| --- | --- |
| **r (*P* Value)** | **Retinal GCL thickness** |
| **Foveal center** | **Inferior** | **Superior** | **Nasal** | **Temporal** |
| **Brain SVD markers** | **BG-PVS** | .052(.703) | **-.276****(.041)** | **-.367****(.006)** | -.194(.145) | **-.273****(.038)** |
| **CSO-PVS** | .068(.614) | -.228(.094) | -.260(.055) | -.104(.437) | -.198(.136) |
| **Total no. of old lacunes** | -.003(.980) | **-.468****(<.001)** | **-.457****(<.001)** | -.202(.129) | **-.329****(.012)** |
| **Total no. of microbleeds** | -.111(.411) | -.129(.346) | -.132(.336) | -.224(.092) | -.166(.212) |
| **Total WMH** | .004(.979) | **-.469****(<.001)** | **-.371****(.005)** | **-.318****(.015)** | **-.268****(.042)** |
| **Total cerebral SVD score** | -.062(.647) | **-.555****(<.001)** | **-.510****(.004)** | **-.368****(.001)** | **-.417****(.001)** |

Coefficient of correlation (r) was derived from Pearson’s correlation test. A P-value in bold indicates statistical significance (P < .05).

BG = basal ganglia; CSO = centrum semiovale; PVS = perivascular space; WMH = white matter hyperintensity; SVD = small vessel disease; RNFL = retinal nerve fiber layer; GCL = ganglion cell layer