

Supplemental Material

Supplemental Table 1: Comparison of participants who did or did not return for visit 2

| Variable | Returned for Visit 2 | | | | | | |
|--|----------------------|------------------|--------------|--------------|------------|----------------------|----------------------|
| | Yes (n=989) | | No (n=301) | | | p-value ^s | p-value ^y |
| | Total | Hispanic (n=175) | Black (n=61) | White (n=57) | | | |
| Global cognitive domain Z-score at visit 1 (SD) | 0.1 (0.7) | -0.3 (0.8) | -0.39(0.72) | -0.35(0.87) | 0.07(0.67) | <.0001 | <.0001 |
| Age, visit 1 | 69 (9) | 75 (9) | 73 (9) | 76 (10) | 78 (9) | 0.0003 | <.0001 |
| Education, years | 10 (5) | 10 (5) | 8 (5) | 12 (4) | 13 (4) | <.0001 | 0.905 |
| Race/ethnicity* | | | | | | N/A | |
| White | 134 (14) | 57 (19) | N/A | N/A | N/A | | 0.007 |
| Black | 162 (16) | 61 (20) | N/A | N/A | N/A | | |
| Hispanic | 672 (68) | 175 (58) | N/A | N/A | N/A | | |
| Women | 610 (62) | 170 (57) | 102 (58) | 32 (53) | 31(54) | 0.53 | 0.106 |
| Medical insurance status | | | | | | | |
| Medicare or private insurance | 505 (51) | 172 (57) | 66 (38) | 46 (75) | 54 (95) | <.0001 | 0.064 |
| Medicaid or no insurance | 484 (49) | 129 (43) | 109 (62) | 15 (25) | 3 (5) | | |

| | White | African American | Hispanic | White vs AA | White vs H | African American vs H | p-value ^{\$} |
|-------------------------------|---------------|------------------|---------------|----------------|--------------|-----------------------|-----------------------|
| Literacy Z-scores | | | | | | | |
| WRAT/WAT | 0.01 (0.9) | -0.05 (1.04) | -0.003(0.952) | -0.358(1.202) | 0.268(0.830) | 0.003 | 0.387 |
| Peabody | 0.05 (1.0) | -0.16 (1.0) | -0.116(1.002) | -0.579 (1.150) | 0.179(0.723) | 0.0002 | 0.003 |
| Current smoker | 155 (16) | 48 (16) | 25 (14) | 16 (26) | 6 (11) | 0.034 | 0.909 |
| Moderate or Heavy Physical | 97 (10) | 34 (11) | 17 (9) | 8 (13) | 7 (12) | 0.417 | 0.464 |
| Activity | | | | | | | |
| Diabetes mellitus | 267 (27) | 86 (29) | 63 (36) | 12 (20) | 7 (12) | 0.0008 | 0.592 |
| Anti-hypertensive use | 590 (60) | 193 (64) | 114 (65) | 38 (62) | 36 (63) | 0.667 | 0.165 |
| Systolic BP, mm Hg | 136 (17) | 139 (18) | 139 (18) | 141 (15) | 134 (15) | 0.057 | 0.004 |
| Diastolic BP, mm Hg | 79 (9) | 76 (10) | 77 (11) | 78 (10) | 72 (10) | 0.015 | 0.0005 |
| HDL, mg/dL | 53 (17) | 54.9 (17) | 50 (14) | 65 (21) | 58 (17) | <.0001 | 0.079 |
| LDL, mg/dL | 116 (36) | 114.2 (34) | 117 (34) | 109 (33) | 111 (34) | 0.371 | 0.442 |
| Waist Hip Ratio | 0.915 (0.084) | 0.924 (0.080) | 0.928(0.075) | 0.921(0.073) | 0.918(0.105) | 0.808 | 0.117 |
| Percent WMHV** | 0.594 (0.737) | 0.955 (1.066) | 0.923(1.008) | 1.320(1.373) | 0.662(0.716) | 0.002 | <.0001 |
| Brain parenchymal fraction*** | 0.730 (0.040) | 0.706 (0.046) | 0.713(0.039) | 0.702(0.056) | 0.689(0.047) | 0.196 | <.0001 |

^{\$} p-value for age adjusted global comparison among three race/ethnic groups (2 degrees of freedom)

* p-value for comparison between those who returned for visit2 and those who did not

* Column percentages sum to 98 because data for Other races are not included.

WAT = Word Accentuation Test; Peabody = Peabody Picture Vocabulary Test; BP = blood pressure; HDL = high density lipoprotein; LDL = low density lipoprotein; WRAT = Wide Range Achievement Test.

** Percent Total Cranial Volume adjusted WMHV

*** Total Cranial Volume adjusted (proportion)

Supplemental Table 2: Multivariable model of race/ethnicity and ordinal outcome of MCI/dementia among participants that were cognitively healthy at visit 1

| Parameter | | OR | 95% CI of OR | p-value* | p-value** |
|----------------|-----------|-----|--------------|----------|--------------|
| Model 1 | | | | | |
| Black | vs. White | 1.8 | 0.8 | 4 | 0.175 <.0001 |
| Hispanic | vs. White | 6 | 2.7 | 13.6 | <.0001 |
| Hispanic | vs. Black | 3.4 | 1.7 | 7.1 | 0.0008 |
| Model 2 | | | | | |
| Black | vs. White | 1.8 | 0.7 | 4.1 | 0.364 <.0001 |
| Hispanic | vs. White | 6.9 | 2.9 | 16.8 | 0.0001 |
| Hispanic | vs. Black | 3.9 | 1.7 | 9.0 | 0.0011 |
| Model 3 | | | | | |
| Black | vs. White | 1.7 | 0.7 | 3.8 | 0.215 <.0001 |
| Hispanic | vs. White | 5.9 | 2.6 | 13.4 | <.0001 |
| Hispanic | vs. Black | 3.5 | 1.7 | 7.2 | 0.0009 |

Cognitively healthy defined as MMSE score of 27 or greater.

* p-value for testing pairwise comparison based on ordinal regression

** p-value for Likelihood Ratio Test with 2 degrees of freedom

Model 1 adjusted for age, education, medical insurance status, literacy.

Model 2 adjusted for variables in model 1 and smoking, leisure time physical

activity, diabetes mellitus, systolic and diastolic blood pressure, antihypertensive

use, low and high density lipoprotein levels, waist hip ratio, and reported ethanol

use.

Model 3 adjusted for variables in model 1 and brain parenchymal fraction,

subclinical infarct status, and log white matter hyperintensity volume.

Supplemental Table 3: Sensitivity analysis examining race/ethnic associations with outcomes of MCI/dementia versus cognitively healthy, and dementia versus MCI/cognitively healthy

| | MCI/Dementia combined vs. Healthy | | | | Dementia vs. MCI/Healthy combined | | | |
|--------------------|-----------------------------------|--------------|----------|-----------|-----------------------------------|--------------|----------|-----------|
| | OR | 95% CI of OR | p-value* | p-value** | OR | 95% CI of OR | p-value* | p-value** |
| Model 1 | | | | <.0001 | | | | 0.0208 |
| Black vs. White | 2.0 | 1.0 | 3.8 | 0.043 | 1.7 | 0.3 | 9.4 | 0.516 |
| Hispanic vs. white | 4.4 | 2.2 | 8.8 | <.0001 | 7.3 | 1.3 | 40.7 | 0.022 |
| Hispanic vs. Black | 2.2 | 1.3 | 3.9 | 0.004 | 4.2 | 1.2 | 15.1 | 0.028 |
| Model 2 | | | | <.0001 | | | | 0.0624 |
| Black vs. White | 1.8 | 0.9 | 3.7 | 0.087 | 2.0 | 0.3 | 11.3 | 0.456 |
| Hispanic vs. white | 4.5 | 2.1 | 9.3 | <.0001 | 6.6 | 1.1 | 39.8 | 0.039 |
| Hispanic vs. Black | 2.4 | 1.3 | 4.4 | 0.003 | 3.4 | 0.8 | 13.8 | 0.089 |
| Model 3 | | | | <.0001 | | | | 0.0304 |
| Black vs. White | 1.8 | 0.9 | 3.5 | 0.084 | 1.4 | 0.2 | 7.7 | 0.718 |
| Hispanic vs. white | 4.3 | 2.1 | 8.7 | <.0001 | 5.9 | 1.1 | 32.8 | 0.041 |
| Hispanic vs. Black | 2.4 | 1.4 | 4.2 | 0.003 | 4.3 | 1.2 | 15.8 | 0.027 |

* p-value for testing pairwise comparison based on logistic regression

** p-value for Likelihood Ratio Test with 2 degrees of freedom

Model 1 adjusted for age, education, medical insurance status, literacy.

Model 2 adjusted for variables in model 1 and smoking, leisure time physical

activity, diabetes mellitus, systolic and diastolic blood pressure, antihypertensive

use, low and high density lipoprotein levels, waist hip ratio, and reported ethanol use.

Model 3 adjusted for variables in model 1 and brain parenchymal fraction, subclinical infarct status, and log white matter hyperintensity volume.