

Online supplemental Table I. Comparison of participants with and without MRI information.

	Participants with biomarker measures at exam 6			
	TOTAL (N=3456)	Available MRI measures* (N=2233)	No MRI measures (N=1223)	P-value**
Women	1826 (52.8)	1181 (52.9)	645 (52.7)	0.93
Age at examination 6 (years)	59.2 (9.7)	58.3 (9.5)	60.9 (10.0)	<0.0001
Systolic blood pressure (mmHg)	128 (19)	127 (18)	132 (19)	<0.0001
Hypertension treatment	969 (28.1)	552 (24.8)	417 (34.2)	<0.0001
Diabetes	375 (11.0)	209 (9.5)	166 (14.0)	<0.0001
Smoking	529 (15.3)	309 (13.8)	220 (18.0)	0.001
History of CVD	387 (11.2)	197 (8.8)	190 (15.5)	<0.0001
History of atrial fibrillation	109 (3.2)	46 (2.1)	63 (5.2)	<0.0001
Left ventricular hypertrophy	24 (0.70)	6 (0.30)	18 (1.5)	<0.0001
Education group				
<High school degree	178 (5.2)	76 (3.4)	102 (8.3)	<0.0001
High school degree	1991 (57.6)	1296 (58.0)	695 (56.8)	
≥College degree	1151 (33.3)	861 (38.6)	290 (23.7)	
Missing	136 (3.9)	0 (0.0)	136 (11.1)	
BNP, pg/mL	8.5 (4.0, 18.9)	7.8 (4.0, 16.8)	10.1 (4.0, 24.1)	<0.0001
hs-CRP, mg/L	2.0 (0.9, 4.7)	1.9 (0.9, 4.4)	2.4 (1.1, 5.4)	<0.0001
Urine albumin (mg/L)	5.4 (3.0, 11.2)	5.1 (3.0, 9.9)	6.0 (3.0, 14.1)	0.0002
GDF-15, ng/L	1046 (815, 1362)	1000 (800, 1294)	1128 (855, 1489)	<0.0001
sST2, ng/mL	20.9 (16.7, 26.1)	20.6 (16.6, 25.6)	21.7 (16.8, 27.0)	0.0004

Footnote: Footnote: Continuous variables are presented as mean (standard deviation) for blood pressure as median (25th, 75th percentile) for laboratory assays, and for discrete variables as numbers (percentages). MRI= magnetic resonance imaging, NP= neuropsychological test, CVD= cardiovascular disease, BNP= B-type natriuretic peptide, GDF-15= growth differentiation factor-15.

*Includes participants who had MRI measures but were excluded from the main analysis due to prevalent dementia, stroke, or other neurological conditions.

**P-value calculated using a T-test for continuous variables, Chi-square test for categorical variables, and Kruskal-Wallis test for non-normally distributed variables.

Online supplemental Table II. Linear regression results for the association between biomarkers and MRI/NP measures, stratified by extensive white matter hyperintensities volume.

Outcome	Biomarker	Extensive white matter hyperintensities						P-value for interaction*
		No			Yes			
		N	Beta (SE)	P-value	N	Beta (SE)	P-value	
Total cerebral brain volume**	GDF-15†	1514	-0.67 (0.22)	0.003	231	-1.68 (0.60)	0.006	<0.0001
	sST2†	1511	-0.41 (0.21)	0.05	231	-0.051 (0.58)	0.93	0.38
Visual Reproductions Delayed***	GDF-15†	1511	-0.51 (0.24)	0.04	229	-0.52 (0.66)	0.44	0.16
	sST2†	1508	-0.51 (0.24)	0.03	229	-0.61 (0.62)	0.33	0.24
Trails B – Trails A†***	GDF-15†	1498	-0.012 (0.016)	0.43	228	0.033 (0.052)	0.52	0.02
	sST2†	1495	-0.008 (0.015)	0.61	228	-0.043 (0.049)	0.38	0.03

†Natural log (ln) transformed

*P-value for interaction between biomarker and extensive white matter hyperintensities (yes vs. no)

**Models are adjusted for age at MRI, age at MRI squared, sex, time between examination 6 and MRI, FSRP components (systolic blood pressure, hypertension treatment, diabetes, smoking, history of CVD, history of AF), BNP, hsCRP, and urine albumin.

***Models are adjusted for age at NP, sex, education group (<high school degree, high school degree, ≥college graduate) and time between examination 6 and NP, FSRP components (systolic blood pressure, hypertension treatment, diabetes, smoking, history of CVD, history of AF), BNP, hsCRP, and urine albumin.