

SUPPLEMENTAL MATERIAL

Supplemental Table I. Baseline characteristics of participants with SVD regression

	Study population (n=276)	SVD change		
		Stable SVD (n=143)	Regression (n=56)	Progression (n=77)
Demographics				
Age, years	62.5 ± 7.7	60.6 ± 7.2	62.8 ± 7.5	65.7 ± 7.8 ***
Male sex, n	163 (59.1)	82 (57.3)	34 (60.7)	47 (61.0)
MMSE score	28.6 ± 1.3	28.7 ± 1.4	28.6 ± 1.3	28.6 ± 1.2
Education, years	10.1 ± 1.5	10.2 ± 1.2	10.1 ± 1.9	9.9 ± 1.7
Vascular risk factors				
Hypertension, n	190 (68.8)	88 (61.5)	42 (75.0)	60 (77.9) *
Diabetes, n	30 (10.9)	13 (9.1)	6 (10.7)	11 (14.3)
Hypercholesterolemia, n	118 (42.8)	58 (40.6)	25 (44.6)	35 (45.5)
Smoking, ever, n	196 (71.0)	107 (74.8)	40 (71.4)	49 (63.6)
Alcohol, glasses/week	8.3 ± 9.0	8.5 ± 8.8	7.9 ± 9.9	8.1 ± 8.8
Body mass index, kg/m²	27.1 ± 4.1	26.9 ± 4.2	26.3 ± 3.6	28.1 ± 4.0 †
Imaging characteristics				
Total brain volume, ml	1086.3 ± 70.6	1104.6 ± 61.7	1076.0 ± 73.3 *	1059.6 ± 74.9 ***
Gray matter volume, ml	620.7 ± 48.9	631.5 ± 44.3	616.1 ± 53.4	603.8 ± 49.1 ***
White matter volume, ml	465.6 ± 38.9	473.1 ± 34.6	459.9 ± 43.3	455.8 ± 40.8 **
WMH volume, ml	2.3 (0.8–6.1)	1.3 (0.6–2.8)	5.1 (2.4–14.0) ***	3.7 (1.3–13.3) ***
Lacunes, n	55 (19.9)	12 (8.4)	20 (35.7) ***	23 (29.9) ***
Microbleeds, n	36 (13.0)	7 (4.9)	26 (46.4) ***	3 (3.9) †††

Data represent mean ± SD, number (n) of participants (%) or median (IQR). Comparisons were performed by ANOVA, Chi-square or Mann-Whitney-U test. ***p<0.001, **p<0.01, *p<0.05 versus participants with stable SVD; †††p<0.001, †p<0.05 versus participants with regression. Nr: number of participants; MMSE: Mini-Mental State Examination.

Supplemental Table II. Change in microbleeds per brain location

	B 2006 (n=264)	FU 2011 (n=264)	FU 2015 (n=264)	Incident MB	Vanishing MB
Lobar microbleeds, % of participants (number of microbleeds)					
Frontal	7.0% (28)	8.1% (35)	10.1% (50)	7.4% (31)	2.7% (9)
Parietal	3.1% (9)	3.9% (18)	7.0% (24)	6.6% (17)	0.8% (2)
Occipital	3.1% (12)	3.5% (15)	3.5% (13)	1.6% (5)	1.6% (4)
Temporal	4.3% (30)	4.7% (40)	5.8% (36)	3.5% (18)	2.3% (12)
Any lobar	11.6% (79)	13.6% (108)	18.6% (123)	13.6% (71)	6.2% (27)
Deep microbleeds, % of participants (number of microbleeds)					
Basal ganglia	3.5% (18)	5.8% (25)	6.4% (28)	4.3% (12)	0.4% (2)
Thalamus	1.6% (16)	1.6% (12)	2.3% (14)	1.6% (3)	0.8% (5)
Internal capsule	1.6% (3)	1.6% (3)	1.2% (2)	0.8% (1)	0.8% (2)
Infratentorial	1.9% (18)	4.3% (28)	6.6% (31)	5.0% (14)	0.4% (1)
Any deep	5.4% (55)	8.9% (68)	11.6% (75)	8.5% (30)	1.2% (10)
Any microbleeds, % (n)	14.0% (134)	19.0% (176)	25.2% (198)	19.0% (101)	6.2% (37)

Data represent % of participants with number of microbleeds during the nine-year follow-up per brain location. All participants with neuroimaging assessments at all three time-points were taken into account (n=264). Basal ganglia include Globus Pallidus, Putamen and Caudate Nucleus. Infratentorial includes pons, mesencephalon, medulla oblongata and cerebellum. MB: microbleeds.