

Table S1 Characteristics of the study population at baseline and follow-up (n=159)

Characteristics	Baseline (n=159)	Follow-up (n=159)	Change	P value
Demographics				
Age, y, median (IQR)	67 (62.7 to 72.2)	73.9 (69.0 to 78.4)	6.8 (6.7 to 7.3)	–
Sex, male, n (%)	71 (44.7)	71 (44.7)	–	–
Education, y, median (IQR)	12 (9 to 15)	12 (9 to 15)	–	–
Vascular risk factors				
Body mass index, kg/m ² , median (IQR)	24.5 (21.9 to 27.3)	23.4 (21.6 to 26.1)	–1.2 (–2.1 to 0.3)	0.023
Current smoking, n (%)	17 (10.7)	11 (6.9)	–6 (3.8)	0.235
ApoE ε4 carriers, n (%)	23 (14.8)	23 (14.8)	–	–
ApoE ε2 carriers, n (%)	26 (16.8)	26 (16.8)	–	–
History of hypertension, n (%)	77 (48.4)	91 (57.2)	14 (8.8)	0.116
Diabetes, n (%)	19 (12.0)	25 (15.7)	6 (3.8)	0.330
Hyperlipidemia, n (%)	61 (38.4)	69 (43.4)	8 (5.0)	0.361
Cardiogenic diseases, n (%)	17 (10.7)	24 (15.1)	7 (4.4)	0.241
Medication use, n (%)				
Antihypertensive	73 (45.9)	90 (56.6)	17 (10.7)	0.056
Antidiabetic	16 (10.1)	30 (18.9)	14 (8.8)	0.026
Lipid lowering	6 (3.8)	30 (18.9)	24 (15.1)	<0.001
Antiplatelet/anticoagulation	29 (18.2)	25 (15.7)	–4 (2.5)	0.550
Prevalence of microbleeds, n (%)				
Any	16 (10.1)	53 (33.3)	37 (23.3)	<0.001
1 microbleed	11 (6.9)	31 (19.5)	20 (12.6)	0.001
2–4 microbleeds	3 (1.9)	16 (10.1)	13 (8.2)	0.003
≥5 microbleeds	2 (1.26)	6 (3.8)	4 (2.5)	0.283
Strictly deep microbleeds	6 (3.8)	14 (8.8)	8 (5.0)	0.065
Lobar or infratentorial microbleeds	10 (6.3)	39 (24.5)	29 (18.2)	<0.001

IQR, interquartile range.

Table S2 Baseline characteristics of all individuals (n=317)

	Total (n=317)	Followed (n=159)	Not followed (n=130)	Death (n=28)	P value
Demographics					
Age, y, median (IQR)	68.7 (63.2 to 73.3)	67 (62.7 to 72.2)	69.9 (63.9 to 74.5)	71.9 (66.3 to 77.9)	0.002
Sex, male, n (%)	147 (46.4)	71 (44.7)	61 (46.9)	15 (53.6)	0.651
Education, y, median (IQR)	12 (9 to 14)	12 (9 to 15)	12 (9 to 14)	12 (4.5 to 12)	0.079
Vascular risk factors					
Body mass index, kg/m ² , median (IQR)	24.7 (22.5 to 27.2)	24.5 (21.9 to 27.3)	25.1 (22.9 to 27.3)	23.9 (22.4 to 26.4)	0.439
Current smoking, n (%)	40 (12.6)	17 (10.7)	15 (11.5)	8 (28.6)	0.043
ApoE ε4 carriers, n (%)	45 (14.4)	23 (14.8)	18 (14.0)	4 (14.3)	0.971
ApoE ε2 carriers, n (%)	56 (18.0)	26 (16.8)	22 (17.1)	8 (28.6)	0.313
History of hypertension, n (%)	173 (54.6)	77 (48.4)	78 (60.0)	18 (64.3)	0.081
Diabetes, n (%)	46 (14.5)	19 (12.0)	21 (16.2)	6 (21.4)	0.309
Hyperlipidemia, n (%)	120 (37.9)	61 (38.4)	50 (38.5)	9 (32.1)	0.842
Cardiogenic disease, n (%)	39 (12.3)	17 (10.7)	16 (12.3)	6 (21.4)	0.261
Medication use, n (%)					
Antihypertensive	155 (48.9)	77 (48.4)	61 (46.9)	17 (60.7)	0.412
Antidiabetic	37 (11.7)	19 (12.0)	12 (9.2)	6 (21.4)	0.186
Lipid lowering	13 (4.1)	9 (5.7)	3 (2.3)	1 (3.6)	0.344
Antiplatelet/ anticoagulation	61 (19.2)	40 (25.2)	20 (15.4)	1 (3.6)	0.008
Prevalence of microbleeds, n (%)					
Any	44 (13.9)	16 (10.1)	23 (17.7)	5 (17.9)	0.124
1 microbleed	25 (7.9)	11 (6.9)	12 (9.2)	2 (7.1)	0.820
2–4 microbleeds	7 (2.2)	3 (1.9)	4 (3.1)	0 (0)	0.846
≥5 microbleeds	12 (3.8)	2 (1.3)	7 (5.4)	3 (10.7)	0.020
Strictly deep microbleeds	15 (4.7)	6 (3.8)	8 (6.2)	1 (3.6)	0.728
Lobar or infratentorial microbleeds	29 (9.1)	10 (6.3)	15 (11.5)	4 (14.3)	0.157

IQR, interquartile range.

Table S3 No. (Percentage) of participants at baseline and follow-up with cerebral microbleeds in four BP groups

	Total	Normal BP	Elevated SBP	Stage 1 hypertension	Stage 2 hypertension	P value
No. (Percentage) of participants at baseline						
Any microbleeds	16 (10.1)	1 (4.8)	1 (6.7)	4 (11.4)	10 (11.4)	0.906
1 microbleed	11 (6.9)	0 (0)	1 (6.7)	3 (8.6)	7 (8.0)	0.650
2–4 microbleeds	3 (1.9)	1 (4.8)	0 (0)	1 (2.9)	1 (1.1)	0.507
≥5 microbleeds	2 (1.3)	0 (0)	0 (0)	0 (0)	2 (2.2)	1.000
Strictly deep microbleeds	6 (3.8)	1 (4.8)	0 (0)	1 (2.9)	4 (4.5)	1.000
Lobar or infratentorial microbleeds	10 (6.3)	0 (0)	1 (6.7)	3 (8.6)	6 (6.8)	0.663
No. (Percentage) of participants at follow-up						
Any microbleeds	53 (33.3)	4 (19.0)	4 (26.7)	11 (31.4)	34 (38.6)	0.354
1 microbleed	31 (19.5)	2 (9.5)	4 (26.7)	7 (20.0)	18 (20.5)	0.619
2–4 microbleeds	16 (10.1)	2 (9.5)	0 (0)	2 (5.7)	12 (13.6)	0.421
≥5 microbleeds	6 (3.8)	0 (0)	0 (0)	2 (5.7)	4 (4.5)	0.795
Strictly deep microbleeds	14 (8.8)	0 (0)	0 (0)	3 (8.6)	11 (12.5)	0.226
Lobar or infratentorial microbleeds	39 (24.5)	4 (19.0)	4 (26.7)	8 (22.9)	23 (26.1)	0.924

BP, blood pressure; SBP, systolic blood pressure.

Table S4 Univariable and multivariable analyses between possible predictors and incident cerebral microbleeds

Possible predictors	Univariable			Multivariable		
	IRR	95% CI	P	IRR	95% CI	P*
Age	1.07	1.03, 1.10	<0.001	1.11	1.07, 1.15	<0.001
Sex	0.37	0.24, 0.57	<0.001	0.17	0.10, 0.29	<0.001
Body mass index	1.04	0.99, 1.09	0.101	1.04	0.99, 1.10	0.140
Current smoking	0.53	0.25, 1.14	0.105	2.32	0.93, 5.76	0.070
ApoE ϵ 4 carriers	1.20	0.74, 1.94	0.467	1.70	1.00, 2.87	0.049
ApoE ϵ 2 carriers	0.63	0.35, 1.11	0.112	0.56	0.31, 1.03	0.063
BP categories						
Normal BP	Ref	Ref	Ref	Ref	Ref	Ref
Elevated systolic BP	0.7	0.17, 2.80	0.614	0.96	0.24, 3.94	0.958
Stage 1 hypertension	2.7	1.11, 6.54	0.028	2.79	1.11, 7.00	0.029
Stage 2 hypertension	3.22	1.41, 7.38	0.006	3.05	1.29, 7.24	0.011
Diabetes	2.54	1.68, 3.85	<0.001	2.75	1.76, 4.31	<0.001
Hyperlipidemia	0.46	0.30, 0.71	<0.001	0.34	0.21, 0.54	<0.001
Cardiogenic diseases	0.53	0.25, 1.14	0.105	0.52	0.24, 1.15	0.105
Antiplatelet/anticoagulation	0.76	0.46, 1.27	0.300	0.71	0.41, 1.23	0.224
Uncontrolled BP at follow-up	1.16	0.76, 1.77	0.486	0.99	0.64, 1.53	0.949

*, P values were calculated after adjusting for age, sex, body mass index, current smoking, ApoE ϵ 4 carriers, ApoE ϵ 2 carriers, BP categories, diabetes, hyperlipidemia, cardiogenic diseases, antiplatelet or anticoagulation medication and uncontrolled BP at follow-up. BP categories: (I) normal BP, SBP <120 mmHg and DBP <80 mmHg; (II) elevated systolic BP, SBP of 120 to 129 mmHg and DBP <80 mmHg; (III) stage 1 hypertension, SBP of 130 to 139 mmHg or DBP of 80 to 89 mmHg; (IV) stage 2 hypertension, SBP \geq 140 mmHg or DBP \geq 90 mmHg. Uncontrolled BP at follow-up: SBP \geq 130 mmHg or DBP \geq 80 mmHg. BP, blood pressure; SBP, systolic blood pressure; DBP, diastolic blood pressure; IRR, incident rate ratio.