

Supplemental Table 1. Hazard ratios (HRs, 95% CIs) of ischemic stroke subtypes according to quartiles of serum albumin in all participants.

	Serum albumin quartiles				P for trend	1 SD decrease*
	Q1 (low)	Q2	Q3	Q4 (high)		
No. at risk	2589	3746	3919	2786		
Person-years	53,084	82,818	88,380	64,488		
Lacunar infarction						
No. of events	86	95	95	49		
Age-, sex-, community-adjusted HR (95% CI)	1.43 (1.00–2.06)	1.23 (0.87–1.74)	1.25 (0.88–1.77)	1.00	0.06	1.10 (0.99–1.23)
Multivariable HR ¹ (95% CI)	1.46 (1.01–2.13)	1.24 (0.87–1.77)	1.26 (0.89–1.78)	1.00	0.05	1.11 (0.99–1.24)
Multivariable HR ² (95% CI)	1.69 (1.16–2.47)	1.37 (0.96–1.95)	1.34 (0.95–1.90)	1.00	0.007	1.16 (1.04–1.30)
Multivariable HR ³ (95% CI)	1.82 (1.24–2.67)	1.40 (0.98–2.01)	1.39 (0.98–1.98)	1.00	0.002	1.18 (1.06–1.33)
Large-artery occlusive infarction						
No. of events	16	20	25	11		
Age-, sex-, community-adjusted HR (95% CI)	1.14 (0.52–2.53)	1.11 (0.53–2.34)	1.42 (0.70–2.89)	1.00	0.90	1.12 (0.90–1.41)
Multivariable HR ¹ (95% CI)	1.46 (0.65–3.31)	1.31 (0.62–2.79)	1.55 (0.76–3.17)	1.00	0.44	1.23 (0.98–1.54)
Multivariable HR ² (95% CI)	1.69 (0.74–3.85)	1.43 (0.67–3.05)	1.65 (0.81–3.39)	1.00	0.26	1.28 (1.02–1.60)
Multivariable HR ³ (95% CI)	1.59 (0.68–3.69)	1.37 (0.63–2.94)	1.61 (0.78–3.32)	1.00	0.34	1.26 (1.00–1.60)
Embolic infarction						
No. of events	20	50	35	15		
Age-, sex-, community-adjusted HR (95% CI)	1.14 (0.57–2.27)	2.17 (1.21–3.88)	1.48 (0.81–2.71)	1.00	0.63	1.13 (0.95–1.35)
Multivariable HR ¹ (95% CI)	1.16 (0.57–2.34)	2.19 (1.21–3.94)	1.49 (0.81–2.73)	1.00	0.61	1.14 (0.95–1.38)
Multivariable HR ² (95% CI)	1.35 (0.66–2.73)	2.39 (1.33–4.32)	1.58 (0.86–2.90)	1.00	0.32	1.20 (1.00–1.44)
Multivariable HR ³ (95% CI)	1.56 (0.76–3.19)	2.74 (1.51–4.98)	1.71 (0.92–3.16)	1.00	0.14	1.24 (1.03–1.48)
Unclassified infarction						
No. of events	43	63	58	38		
Age-, sex-, community-adjusted HR (95% CI)	0.88 (0.56–1.38)	0.99 (0.66–1.48)	0.97 (0.64–1.46)	1.00	0.58	1.00 (0.87–1.15)
Multivariable HR ¹ (95% CI)	0.92 (0.58–1.46)	1.01 (0.67–1.54)	0.98 (0.65–1.48)	1.00	0.73	1.01 (0.88–1.17)
Multivariable HR ² (95% CI)	1.08 (0.67–1.72)	1.12 (0.74–1.69)	1.05 (0.69–1.58)	1.00	0.74	1.07 (0.92–1.23)
Multivariable HR ³ (95% CI)	1.09 (0.68–1.75)	1.12 (0.73–1.70)	1.06 (0.70–1.60)	1.00	0.71	1.07 (0.92–1.24)

*1 SD decrease of serum albumin was 0.3 g/dL.

Q1: 2.6–4.2 g/dl, Q2: 4.3–4.4 g/dl, Q3: 4.5–4.6 g/dl, Q4:4.7–5.6 g/dl.

¹ adjusted further for serum total cholesterol.² adjusted further for systolic blood pressure and antihypertensive medication use.³ adjusted further for body mass index, cigarette smoking status, alcohol intake status, serum triglyceride, serum glutamic-oxaloacetic transaminase (GOT), serum glutamic-pyruvic transaminase (GPT), atrial fibrillation and diabetes mellitus.

Supplemental Table 2. Sex-specific hazard ratios* (HRs, 95% CIs) of ischemic stroke subtypes according to quartiles of serum albumin.

	Serum albumin quartiles				P for trend	1 SD decrease [†]
	Q1 (low)	Q2	Q3	Q4 (high)		
Men						
No. at risk	988	1328	1488	1267		
Person-years	17,767	27,019	31,741	28,457		
Lacunar infarction						
No. of events	55	52	47	28		
Age- and community-adjusted HR (95% CI)	1.72 (1.06–2.80)	1.28 (0.80–2.05)	1.17 (0.73–1.87)	1.00	0.02	1.28 (1.07–1.52)
Multivariable HR ¹ (95% CI)	1.80 (1.09–2.96)	1.31 (0.82–2.12)	1.18 (0.74–1.90)	1.00	0.01	1.30 (1.08–1.56)
Multivariable HR ² (95% CI)	2.08 (1.25–3.44)	1.45 (0.90–2.35)	1.27 (0.79–2.04)	1.00	0.003	1.36 (1.14–1.63)
Multivariable HR ³ (95% CI)	2.21 (1.33–3.67)	1.48 (0.91–2.40)	1.38 (0.85–2.23)	1.00	0.002	1.37 (1.15–1.64)
Large-artery occlusive infarction						
No. of events	3	8	15	7		
Age- and community-adjusted HR (95% CI)	0.41 (0.10–1.67)	0.83 (0.29–2.34)	1.53 (0.62–3.80)	1.00	0.20	0.72 (0.47–1.11)
Multivariable HR ¹ (95% CI)	0.57 (0.13–2.39)	1.03 (0.36–2.99)	1.74 (0.70–4.36)	1.00	0.51	0.84 (0.54–1.32)
Multivariable HR ² (95% CI)	0.65 (0.15–2.76)	1.11 (0.38–3.23)	1.85 (0.74–4.64)	1.00	0.67	0.90 (0.57–1.40)
Multivariable HR ³ (95% CI)	0.60 (0.14–2.69)	1.03 (0.35–3.08)	1.65 (0.64–4.23)	1.00	0.59	0.87 (0.54–1.38)
Embolic infarction						
No. of events	8	25	19	9		
Age- and community-adjusted HR (95% CI)	0.74 (0.27–2.02)	1.86 (0.85–4.07)	1.40 (0.63–3.13)	1.00	0.66	1.03 (0.75–1.41)
Multivariable HR ¹ (95% CI)	0.77 (0.28–2.15)	1.91 (0.86–4.22)	1.42 (0.64–3.18)	1.00	0.73	1.05 (0.76–1.46)
Multivariable HR ² (95% CI)	0.88 (0.31–2.46)	2.05 (0.92–4.56)	1.50 (0.67–3.37)	1.00	0.95	1.11 (0.80–1.54)
Multivariable HR ³ (95% CI)	1.01 (0.36–2.88)	2.50 (1.11–5.63)	1.71 (0.75–3.90)	1.00	0.75	1.15 (0.83–1.59)
Unclassified infarction						
No. of events	20	39	26	22		
Age- and community-adjusted HR (95% CI)	0.76 (0.40–1.44)	1.19 (0.69–2.04)	0.84 (0.48–1.50)	1.00	0.51	0.98 (0.77–1.24)
Multivariable HR ¹ (95% CI)	0.80 (0.41–1.54)	1.23 (0.71–2.12)	0.86 (0.48–1.53)	1.00	0.62	1.00 (0.78–1.28)
Multivariable HR ² (95% CI)	0.92 (0.47–1.79)	1.34 (0.77–2.33)	0.91 (0.51–1.62)	1.00	0.96	1.06 (0.83–1.35)
Multivariable HR ³ (95% CI)	0.95 (0.49–1.87)	1.36 (0.78–2.38)	0.92 (0.52–1.65)	1.00	0.96	1.08 (0.84–1.38)
Women						
No. at risk	1601	2418	2431	1519		
Person-years	35,318	55,799	56,638	36,031		
Lacunar infarction						
No. of events	31	43	48	21		
Age- and community-adjusted HR (95% CI)	1.14 (0.65–2.01)	1.20 (0.71–2.02)	1.36 (0.82–2.28)	1.00	0.80	1.01 (0.88–1.16)
Multivariable HR ¹ (95% CI)	1.13 (0.64–2.02)	1.19 (0.70–2.02)	1.36 (0.81–2.27)	1.00	0.82	1.01 (0.87–1.16)
Multivariable HR ² (95% CI)	1.32 (0.73–2.36)	1.31 (0.77–2.23)	1.45 (0.87–2.43)	1.00	0.45	1.05 (0.91–1.21)

Multivariable HR ³ (95% CI)	1.37 (0.76–2.46)	1.34 (0.79–2.30)	1.42 (0.85–2.39)	1.00	0.36	1.06 (0.92–1.23)
Large-artery occlusive infarction						
No. of events	13	12	10	4		
Age- and community-adjusted HR (95% CI)	2.29 (0.73–7.16)	1.68 (0.54–5.25)	1.45 (0.45–4.62)	1.00	0.12	1.34 (1.03–1.75)
Multivariable HR ¹ (95% CI)	2.68 (0.83–8.62)	1.87 (0.59–5.88)	1.52 (0.47–4.85)	1.00	0.07	1.41 (1.08–1.85)
Multivariable HR ² (95% CI)	3.17 (0.98–10.34)	2.07 (0.66–6.56)	1.66 (0.52–5.33)	1.00	0.04	1.46 (1.12–1.91)
Multivariable HR ³ (95% CI)	2.85 (0.85–9.55)	1.87 (0.59–5.97)	1.63 (0.51–5.27)	1.00	0.07	1.40 (1.06–1.84)
Embolic infarction						
No. of events	12	25	16	6		
Age- and community-adjusted HR (95% CI)	1.88 (0.69–5.06)	2.75 (1.12–6.71)	1.63 (0.64–4.17)	1.00	0.18	1.21 (0.97–1.50)
Multivariable HR ¹ (95% CI)	1.84 (0.67–5.06)	2.72 (1.10–6.69)	1.63 (0.63–4.16)	1.00	0.21	1.20 (0.96–1.51)
Multivariable HR ² (95% CI)	2.21 (0.80–6.13)	3.05 (1.24–7.54)	1.74 (0.68–4.47)	1.00	0.10	1.26 (1.01–1.58)
Multivariable HR ³ (95% CI)	2.36 (0.84–6.25)	3.04 (1.22–7.57)	1.78 (0.68–4.64)	1.00	0.07	1.25 (1.00–1.56)
Unclassified infarction						
No. of events	23	24	32	16		
Age- and community-adjusted HR (95% CI)	1.13 (0.59–2.16)	0.83 (0.44–1.58)	1.15 (0.63–2.10)	1.00	0.84	1.03 (0.86–1.22)
Multivariable HR ¹ (95% CI)	1.14 (0.58–2.23)	0.84 (0.44–1.60)	1.15 (0.63–2.11)	1.00	0.81	1.03 (0.86–1.24)
Multivariable HR ² (95% CI)	1.36 (0.69–2.70)	0.94 (0.49–1.80)	1.23 (0.70–2.26)	1.00	0.44	1.08 (0.90–1.30)
Multivariable HR ³ (95% CI)	1.35 (0.67–2.70)	0.96 (0.50–1.84)	1.26 (0.69–2.33)	1.00	0.48	1.08 (0.84–1.38)

*P values for sex interaction were 0.22 for lacunar infarction, 0.005 for large-artery occlusive infarction, 0.19 for embolic infarction and 0.73 for unclassified infarction.

†1 SD decrease of serum albumin was 0.3 g/dL in men and 0.2 g/dL in women.

Q1: 2.6–4.2 g/dl, Q2: 4.3–4.4 g/dl, Q3: 4.5–4.6 g/dl, Q4: 4.7–5.6 g/dl in men; Q1: 3.4–4.2 g/dl, Q2: 4.3–4.4 g/dl, Q3: 4.5–4.6 g/dl, Q4: 4.7–5.3 g/dl in women.

¹ adjusted further for serum total cholesterol.

² adjusted further for systolic blood pressure and antihypertensive medication use.

³ adjusted further for body mass index, cigarette smoking status, alcohol intake status, serum triglyceride, serum glutamic-oxaloacetic transaminase (GOT), serum glutamic-pyruvic transaminase (GPT), atrial fibrillation and diabetes mellitus.