

1 **Table S1.** Multivariable adjusted hazard ratios and 95% confidence intervals for incident stroke according to categories of HDL-C by
2 menopausal status in women.

Stroke		HDL-C levels (mmol/L)			P for trend
		<1.03	1.04–1.55	≥1.56	
Premenopausal women	Number of participants	221	1,179	614	
	Number of events	2	6	4	
	Parson-years	2,365	12,908	6,610	
	Incidence rate ^a	0.81	0.46	0.61	
	Model 1 ^b	1.00	0.59 (0.12–2.95)	0.72 (0.13–3.95)	0.851
	Model 2 ^c	1.00	0.62 (0.12–3.23)	1.06 (0.18–6.28)	0.777
	Model 3 ^d	1.00	0.68 (0.13–3.58)	1.22 (0.20–7.58)	0.678
Menopausal women	Number of participants	683	2,815	1,194	
	Number of events	37	113	37	
	Parson-years	7,345	30,577	12,853	
	Incidence rate ^a	5.04	3.70	2.88	
	Model 1 ^b	1.00	0.75 (0.52–1.09)	0.60 (0.38–0.94)	0.027
	Model 2 ^c	1.00	0.84 (0.57–1.25)	0.54 (0.33–0.90)	0.015
	Model 3 ^d	1.00	0.81 (0.54–1.21)	0.50 (0.30–0.84)	0.007

3 HDL-C, high-density lipoprotein cholesterol; HR, hazard ratio

4 ^a Incidence rate was expressed as per 1,000 person-years

5 ^b Model 1 was adjusted for age.

6 ^c Model 2 was adjusted for age, body mass index, systolic blood pressure, plasma glucose, smoking status (current, past, or never),
7 alcohol consumption status (current, past, or never), use of antihypertensive, antihyperlipidemic, or antidiabetic medications (yes or no),
8 and physical activity (low, moderate, or high).

9 ^d Model 3 was adjusted for the variables in Model 2 and non-high-density lipoprotein cholesterol.

10

11 Table S2. Multivariable adjusted hazard ratios and 95% confidence intervals for incident cerebral infarction subtypes according to
 12 categories of HDL-C.

Subtypes of cerebral infarction		HDL-C levels (mmol/L)			P for trend
		<1.03	1.04–1.55	≥1.56	
Men					
Lacunar infarction	Number of events	14	34	10	
	Incidence rate ^a	1.26	1.33	1.16	
	Model 1 ^b	1.00	1.09 (0.58–2.03)	0.85 (0.38–1.91)	0.736
	Model 2 ^c	1.00	1.06 (0.55–2.03)	0.77 (0.32–1.87)	0.603
	Model 3 ^d	1.00	1.06 (0.55–2.05)	0.78 (0.32–1.91)	0.632
Atherothrombotic cerebral infarction	Number of events	2	10	3	
	Incidence rate ^a	0.18	0.39	0.35	
	Model 1 ^b	1.00	2.18 (0.48–9.93)	1.84 (0.31–11.03)	0.514
	Model 2 ^c	1.00	2.84 (0.59–13.73)	4.24 (0.61–29.46)	0.127
	Model 3 ^d	1.00	2.88 (0.60–13.82)	4.72 (0.69–32.44)	0.099
Women					
Lacunar infarction	Number of events	11	24	7	
	Incidence rate ^a	1.11	0.55	0.36	
	Model 1 ^b	1.00	0.54 (0.26–1.10)	0.37 (0.15–0.96)	0.039
	Model 2 ^c	1.00	0.62 (0.29–1.32)	0.36 (0.12–1.07)	0.058
	Model 3 ^d	1.00	0.60 (0.28–1.28)	0.33 (0.11–1.01)	0.045
Atherothrombotic cerebral infarction	Number of events	5	5	5	
	Incidence rate ^a	0.50	0.11	0.26	
	Model 1 ^b	1.00	0.25 (0.07–0.87)	0.60 (0.17–2.06)	0.527
	Model 2 ^c	1.00	0.27 (0.08–0.96)	0.58 (0.15–2.18)	0.506
	Model 3 ^d	1.00	0.30 (0.08–1.11)	0.77 (0.19–3.10)	0.765
Men and Women combined					
Lacunar infarction	Number of events	25	58	17	

	Incidence rate ^a	1.19	0.84	0.60	
	Model 1 ^b	1.00	0.83 (0.52–1.33)	0.61 (0.33–1.13)	0.112
	Model 2 ^c	1.00	0.89 (0.55–1.46)	0.61 (0.31–1.21)	0.169
	Model 3 ^d	1.00	0.88 (0.54–1.45)	0.60 (0.30–1.19)	0.153
Atherothrombotic cerebral infarction	Number of events	7	15	8	
	Incidence rate ^a	0.33	0.22	0.28	
	Model 1 ^b	1.00	0.72 (0.29–1.77)	0.96 (0.35–2.67)	0.982
	Model 2 ^c	1.00	0.75 (0.29–1.89)	1.13 (0.38–3.36)	0.800
	Model 3 ^d	1.00	0.84 (0.33–2.15)	1.47 (0.49–4.43)	0.501

CI, confidence interval; HDL-C, high-density lipoprotein cholesterol; HR, hazard ratio

^a Incidence rate was expressed as per 1,000 person-years

^b Model 1 was adjusted for age, and sex (men or women) only in men and women combined.

^c Model 2 was adjusted for age, body mass index, systolic blood pressure, plasma glucose, smoking status (current, past, or never smoker), alcohol drinking status (current, past, or never drinker), use of antihypertensive, antihyperlipidemic, or antidiabetic medication (yes or no), physical activity (low, middle, or high), menopausal status (pre or post) only in women, and sex (men or women) only in men and women combined.

^d Model 3 was adjusted for the variables in Model 2 plus non-high-density lipoprotein cholesterol.

22 **Table S3.** Multivariable adjusted hazard ratios and 95% confidence intervals for stroke mortality according to categories of HDL-C.

Stroke		HDL-C levels (mmol/L)			P for trend
		<1.03	1.04–1.55	≥1.56	
Men	Number of participants	1,057	2,407	820	
	Number of deaths	34	71	22	
	Parson-years	18,575	43,374	14,500	
	Crude mortality rate ^a	1.83	1.61	1.52	
	Model 1 ^b	1.00	0.91 (0.61–1.38)	0.77 (0.45–1.32)	0.344
	Model 2 ^c	1.00	0.94 (0.61–1.46)	0.80 (0.45–1.44)	0.473
	Model 3 ^d	1.00	0.91 (0.59–1.42)	0.75 (0.41–1.36)	0.356
Women	Number of participants	915	4,014	1,814	
	Number of deaths	23	76	36	
	Parson-years	17,171	75,253	33,762	
	Crude mortality rate ^a	1.34	1.01	1.07	
	Model 1 ^b	1.00	0.84 (0.53–1.34)	0.96 (0.57–1.62)	0.997
	Model 2 ^c	1.00	1.02 (0.60–1.71)	1.07 (0.60–1.92)	0.801
	Model 3 ^d	1.00	1.00 (0.59–1.69)	1.04 (0.57–1.88)	0.888
Men and women combined	Number of participants	1,972	6,421	2,634	
	Number of deaths	57	147	58	
	Parson-years	35,745	118,646	48,262	
	Crude mortality rate ^a	1.59	1.24	1.20	
	Model 1 ^b	1.00	0.87 (0.64–1.19)	0.87 (0.60–1.26)	0.475
	Model 2 ^c	1.00	0.99 (0.71–1.39)	0.96 (0.64–1.43)	0.837
	Model 3 ^d	1.00	0.96 (0.69–1.36)	0.91 (0.61–1.38)	0.657

23 HDL-C, high-density lipoprotein cholesterol; HR, hazard ratio

24 ^a Crude mortality rate was expressed as per 1,000 person-years

25 ^b Model 1 was adjusted for age, and sex (men or women) only in men and women combined.

26 ^c Model 2 was adjusted for age, body mass index, systolic blood pressure, plasma glucose, smoking status (current, past, or never),
27 alcohol consumption status (current, past, or never), use of antihypertensive, antihyperlipidemic, or antidiabetic medications (yes or no),
28 physical activity (low, moderate, or high), menopausal status (pre or post) only in women, and sex (men or women) only in men and
29 women combined.

30 ^d Model 3 was adjusted for the variables in Model 2 and non-high-density lipoprotein cholesterol.

31

32 **Table S4.** Multivariable adjusted hazard ratios and 95% confidence intervals for stroke subtypes mortality according to categories of
33 HDL-C.

Stroke subtypes		HDL-C levels (mmol/L)			P for trend
		<1.03	1.04–1.55	≥1.56	
Men					
Subarachnoid hemorrhage	Number of deaths	3	7	2	
	Crude mortality rate ^a	0.16	0.16	0.14	
	Model 1 ^b	1.00	0.99 (0.26–3.85)	0.82 (0.14–4.92)	0.842
	Model 2 ^c	1.00	2.89 (0.35–24.27)	2.32 (0.20–27.02)	0.547
	Model 3 ^d	1.00	3.22 (0.38–27.12)	3.02 (0.25–36.27)	0.392
Intracerebral hemorrhage	Number of deaths	11	21	4	
	Crude mortality rate ^a	0.59	0.48	0.28	
	Model 1 ^b	1.00	0.83 (0.40–1.72)	0.44 (0.14–1.40)	0.175
	Model 2 ^c	1.00	0.73 (0.34–1.58)	0.42 (0.13–1.36)	0.138
	Model 3 ^d	1.00	0.68 (0.31–1.49)	0.36 (0.11–1.21)	0.090
Cerebral infarction	Number of deaths	20	43	16	
	Crude mortality rate ^a	1.08	0.99	1.10	
	Model 1 ^b	1.00	0.96 (0.56–1.63)	0.93 (0.48–1.80)	0.830
	Model 2 ^c	1.00	0.95 (0.55–1.66)	0.95 (0.46–1.94)	0.874
	Model 3 ^d	1.00	0.91 (0.52–1.59)	0.86 (0.41–1.80)	0.687
Women					
Subarachnoid hemorrhage	Number of deaths	6	14	7	
	Crude mortality rate ^a	0.35	0.19	0.21	
	Model 1 ^b	1.00	0.57 (0.22–1.48)	0.68 (0.23–2.02)	0.568
	Model 2 ^c	1.00	0.60 (0.23–1.58)	0.62 (0.20–1.95)	0.450
	Model 3 ^d	1.00	0.62 (0.23–1.63)	0.66 (0.21–2.10)	0.514
Intracerebral hemorrhage	Number of deaths	4	24	9	
	Crude mortality rate ^a	0.23	0.32	0.27	

Cerebral infarction	Model 1 ^b	1.00	1.49 (0.52–4.29)	1.35 (0.42–4.38)	0.730
	Model 2 ^c	1.00	1.96 (0.59–6.55)	1.52 (0.40–5.77)	0.763
	Model 3 ^d	1.00	1.96 (0.58–6.57)	1.51 (0.39–5.83)	0.774
	Number of deaths	13	38	20	
	Crude mortality rate ^a	0.76	0.50	0.59	
	Model 1 ^b	1.00	0.78 (0.41–1.46)	0.96 (0.48–1.94)	0.948
	Model 2 ^c	1.00	0.99 (0.47–2.10)	1.21 (0.53–2.73)	0.590
	Model 3 ^d	1.00	0.95 (0.45–2.02)	1.11 (0.48–2.56)	0.741
	Men and Women combined				
Subarachnoid hemorrhage	Number of deaths	9	21	9	
	Crude mortality rate ^a	0.25	0.18	0.19	
	Model 1 ^b	1.00	0.69 (0.31–1.51)	0.73 (0.29–1.85)	0.533
	Model 2 ^c	1.00	0.89 (0.37–2.11)	0.84 (0.30–2.36)	0.752
	Model 3 ^d	1.00	0.94 (0.39–2.24)	0.96 (0.34–2.72)	0.937
Intracerebral hemorrhage	Number of deaths	15	45	13	
	Crude mortality rate ^a	0.42	0.38	0.27	
	Model 1 ^b	1.00	1.00 (0.56–1.80)	0.73 (0.35–1.57)	0.432
	Model 2 ^c	1.00	1.06 (0.57–1.98)	0.73 (0.33–1.62)	0.423
	Model 3 ^d	1.00	1.03 (0.55–1.94)	0.69 (0.31–1.55)	0.348
Cerebral infarction	Number of deaths	33	81	36	
	Crude mortality rate ^a	0.92	0.68	0.75	
	Model 1 ^b	1.00	0.87 (0.58–1.31)	0.96 (0.60–1.54)	0.888
	Model 2 ^c	1.00	1.00 (0.65–1.56)	1.13 (0.67–1.90)	0.651
	Model 3 ^d	1.00	0.96 (0.61–1.49)	1.02 (0.60–1.75)	0.928

34 CI, confidence interval; HDL-C, high-density lipoprotein cholesterol; HR, hazard ratio

35 ^a Crude mortality rate was expressed as per 1,000 person-years

36 ^b Model 1 was adjusted for age, and sex (men or women) only in men and women combined.

37 ^c Model 2 was adjusted for age, body mass index, systolic blood pressure, plasma glucose, smoking status (current, past, or never),
38 alcohol consumption status (current, past, or never), use of antihypertensive, antihyperlipidemic, or antidiabetic medication (yes or no),
39 physical activity (low, moderate, or high), menopausal status (pre or post) only in women, and sex (men or women) only in men and
40 women combined.

41 ^d Model 3 was adjusted for the variables in Model 2 and non-high-density lipoprotein cholesterol.

42