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# Characteristics

Table S1.	Characteristics of eight studies of	women having information	on infertility, miscarriage, s	stillbirth, and stroke in	the InterLACE consortium
			······································		

Study	Country	Study population	Number	Baseline	Age (Med	ian, IQR)
				year	Baseline	Last follow-up*
ALSWH-mid	Australia	Women who are Australian citizens or permanent residents and born	12,262	1996	47.6 (46.3,48.9)	70.0 (69.0,72.0)
		between 1946 and 1951 were randomly selected from the universal				
		health insurance data base.				
Prospect-EPIC	Netherlands	women aged 50-69 years living in the city of Utrecht and vicinity who	16,930	1993-1997	56.9 (52.1,62.7)	72.0 (68.0,77.0)
		were scheduled for breast cancer screening between 28th June 1993				
		and 28th November 1997, were invited to join the Prospect-EPIC				
		study.				
China Biobank <sup>†</sup>	China	Women aged between 30 and 79 years old at baseline, were identified	299,611	2004-2008	50.9 (42.6,58.8)	53.7 (45.3,61.1)
		through official residential records and recruited from 10				
		geographically defined regions (5 urban and 5 rural) of China.				
JNHS	Japan	Female registered nurses, licensed practical nurses, public health	14,770	2001-2007	41.0 (35.0,48.0)	50.0 (44.0,57.0)
		nurses, and/or midwives, who were at least 30 years old and resident				

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		in Japan at the baseline survey. The age limit was reduced to 25 years				
		old in 2005.				
NSHD <sup>‡</sup>	UK	The target sample for the first data collection was all the births in	1,265	1989	36.0 (36.0,36.0)	54.0 (54.0,54.0)
		England, Scotland, and Wales in one week in March 1946.				
		Subsequent data collections have been from a sample of all single				
		births to married women with husbands in non-manual and agriculture				
		employment and 1 in 4 of all comparable births to women with				
		husbands in manual employment.				
SWAN	USA	Premenopausal women from the cross-sectional phase of SWAN were	3,175	1996-1997	46.0 (44.0,48.0)	54.0 (52.0,57.0)
		enrolled into the longitudinal follow-up study, if they were aged 42-52				
		years at baseline, had a uterus and at least one intact ovary, reported a				
		menstrual period within the past three months and had not taken				
		hormone medication in the last three months.				
UK Biobank	UK	Women aged 40-69 years who attended one of the 22 centres across	222,419	2006-2010	58.0 (51.0,63.0)	70.0 (63.0,75.0)
		the UK between 2006 and 2010 were recruited.				

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# WLH Sweden Women aged 29-49 years at baseline and resident in the Uppsala 48,419 1991-1992 40.0 (35.0,45.0) 60.0 (55.0,65.0) Health Care Region were selected randomly from the Swedish Population Registry. For the Swedish For the Swedi

ALSWH-mid: Australian Longitudinal Study on Women's Health 1946-51 cohort; Prospect-EPIC: the Utrecht contribution to the European Prospective Investigation into Cancer and Nutrition cohort, the Netherlands; JNHS: Japan Nurses' Health Study; NSHD: MRC National Survey of Health and Development Study; SWAN: Study of Women's Health Across the Nation; WLH: Women's Lifestyle and Health Study; IQR: interquartile range; \*: last follow-up for non-fatal stroke event; †: In the study of China Biobank, 302,510 women were enrolled. All of them had follow-up data on fatal stroke, and 12,014 of them had follow-up data on non-fatal stroke. ‡: In NSHD (1946 British Birth Cohort) 1982 was used as the baseline year.

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Figure S1. Flow chart of sample for analysis of the association between infertility, miscarriage, stillbirth, and stroke in the InterLACE consortium

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The eight included studies were Australian Longitudinal Study on Women's Health 1946-51 cohort (ALSWH-mid), China Kadoorie Biobank, the Utrecht contribution to the European Prospective Investigation into Cancer and Nutrition cohort, the Netherlands (Prospect-EPIC), Japan Nurses' Health Study (JNHS), MRC National Survey of Health and Development Study (NSHD), Study of Women's Health Across the Nation (SWAN), UK Biobank, and Women's Lifestyle and Health Study (WLH). \*: ALSWH-mid, Prospect-EPIC, JNHS, NSHD, SWAN, and WLH. JNHS enrolled 49,927 women, and 15,017 women were followed up for non-fatal stroke. <sup>†</sup>. ALSWH-mid, Prospect-EPIC and JNHS. In JNHS, 15,017 of 49,927 women were followed up for fatal stroke. <sup>‡</sup>. ALSWH-mid, China Biobank, Prospect-EPIC, and UK Biobank. <sup>II</sup>. China Biobank, Prospect-EPIC, NSHD, SWAN, and UK Biobank. <sup>II</sup>. China Biobank, Prospect-EPIC, NSHD, SWAN, and UK Biobank. <sup>II</sup>. China Biobank, Prospect-EPIC, and UK Biobank. <sup>II</sup>. <sup>II</sup>.

# Table S2. Ascertainment of exposures and outcomes

Study	Infertility	Miscarriage	Stillbirth	Non-fatal stroke	Fatal stroke
ALSWH-mid	Questionnaire	Questionnaire	/	Questionnaire (survey 1-9): diagnosis	Death registry data (until January
(Survey 1-9)	(survey 3):	(survey 1): number		or treatment of stroke	2019):
	1.unsuccessfully to	of miscarriages		Hospital admission data (until	ICD 10 (stroke: I60, I61, I63, I64,
	get pregnant? (For			December 2020): ICD 9 (stroke: 430,	I690, I691, I693, I694; haemorrhagic
	12 months or more)			431, 433, 434, 436; haemorrhagic	stroke: I60, I61, I690, I691; ischaemic
	2.diagnosed as			stroke: 430, 431; ischaemic stroke: 433,	stroke: I63 I64, I693, I694)
	infertile			434, 436) and ICD 10 (stroke: I60, I61,	
	3.treatment for			163, 164, 1690, 1691, 1693, 1694;	
	infertility			haemorrhagic stroke: I60, I61, I690,	
				I691; ischaemic stroke: I63, I64, I693,	
				I694)	
				Aged care data (up to 2019)	
Prospect-EPIC	Questionnaire	Questionnaire	Questionnaire	Questionnaire (survey 1-5): diagnosis	Statistic Netherlands (until December
(Survey 1-5)	(survey 1):	(survey 1): number	(survey 1): number	or treatment of stroke	2010, derived): ICD 9 (stroke: 430,
	sub/infertility and	of miscarriages	of stillbirths	Hospital admission data (until	431, 432, 433, 434, 436; haemorrhagic
	infertility consult			December 2010, derived): Dutch	stroke: 430, 431, 432; ischaemic
				Hospital Association and Order of	stroke: 433, 434, 436) and ICD 10

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Study	Infertility	Miscarriage	Stillbirth	Non-fatal stroke	Fatal stroke
				Medical Specialists, ICD 9 (stroke:	(stroke: I60, I61, I62, I63, I64, I65;
				430, 431, 432, 433, 434, 436;	haemorrhagic stroke: I60, I61, I62;
				haemorrhagic stroke: 430, 431, 432;	ischaemic stroke: I63, I64, I65)
				ischaemic stroke: 433, 434, 436) and	
				ICD 10 (stroke: I60, I61, I62, I63, I64,	
				I65; haemorrhagic stroke: I60, I61, I62;	
				ischaemic stroke: I63, I64, I65)	
China	/	Questionnaire	Questionnaire	Questionnaire (survey 1-2): diagnosis	Death registry data (until December
Biobank		(survey 1-2):	(survey 1-2):	of stroke	2014, derived):
(Survey 1-2)		number of	number of still births		ICD 10 (stroke: I60, I61, I63, I64,
		spontaneous			I690, I691, I693, I694; haemorrhagic
		abortions			stroke: I60, I61, I690, I691; ischaemic
					stroke: I63 I64, I693, I694)
JNHS	Questionnaire	/	/	Questionnaire (survey 1-6): diagnosis	Death registry data (until March
(Survey 1-6)	(survey 1):			of stroke, subarachnoid hemorrhage,	2017):
	1.have difficulty in			cerebral hemorrhage, cerebral	ICD 10 (stroke: I60, I61, I63, I64,
	becoming pregnant			infarction.	I690, I691, I693, I694; haemorrhagic

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Study	Infertility	Miscarriage	Stillbirth	Non-fatal stroke	Fatal stroke
	for more than 2				stroke: I60, I61, I690, I691; ischaemic
	years;				stroke: I63 I64, I693, I694)
	2.treatment of				
	infertility				
NSHD*	Questionnaire	Questionnaire	Questionnaire	Questionnaire (survey 5,6,13):	/
(Survey 1-7)	(survey 6):	(survey 6): number	(survey 6): number	diagnosis of stroke	
	1.consult a doctor or	of miscarriages	of stillbirths		
	other professional				
	about infertility				
SWAN	Questionnaire	Questionnaire	Questionnaire	Questionnaire (survey 1-11): diagnosis	/
(Survey 1-11)	(survey 1):	(survey 1): number	(survey 1): outcome	or treatment for stroke	
	1.have a period of	of miscarriages,	of each pregnancy		
	12 months not being	outcome of each	(e.g., livebirth,		
	able to get pregnant	pregnancy (e.g.,	stillbirth,		
		livebirth, stillbirth,	miscarriage)		
		miscarriage)			

Study	Infertility	Miscarriage	Stillbirth	Non-fatal stroke	Fatal stroke
UK Biobank	/	Questionnaire	Questionnaire	Questionnaire (survey 1-3): diagnosis	Death registry data (until March
(Survey 1-3)		(survey 1-3):	(survey 1-3):	of stroke	2021): ICD 9 (stroke: 430, 431, 433,
		number of	number of stillbirths	Derived hospital records (up to 31 Dec	434, 436; haemorrhagic stroke: 430,
		miscarriages		2016): date of first stroke, ischaemic,	431; ischaemic stroke: 433, 434, 436)
				intracerebral haemorrhage,	and ICD 10 (stroke: I60, I61, I63, I64,
				subarachnoid haemorrhage	I690, I691, I693, I694; haemorrhagic
				Hospital admission data (until March	stroke: I60, I61, I690, I691; ischaemic
				2021): ICD 9 (stroke: 430, 431, 433,	stroke: I63, I64, I693, I694)
				434, 436; haemorrhagic stroke: 430,	
				431; ischaemic stroke: 433, 434, 436)	
				and ICD 10 (stroke: I60, I61, I63, I64,	
				1690, 1691, 1693, 1694; haemorrhagic	
				stroke: I60, I61, I690, I691; ischaemic	
				stroke: I63, I64, I693, I694)	
WLH	Questionnaire	/	/	Questionnaire (survey 1& final):	/
(Survey 1-2)	(survey 1-2):			diagnosis of stroke	
				Patient registry data (until 2012)	

Study	Infertility	Miscarriage	Stillbirth	Non-fatal stroke	Fatal stroke
	1. have difficulty in			Hospital admission data (until 2010):	
	becoming pregnant			ICD 9 (stroke: 430, 431, 433, 434, 436;	
	for 1 or more years;			haemorrhagic stroke: 430, 431;	
	2.treatment of			ischaemic stroke: 433, 434, 436) and	
	infertility			ICD 10 (stroke: I60, I61, I63, I64, I690,	
				I691, I693, I694; haemorrhagic stroke:	
				I60, I61, I690, I691; ischaemic stroke:	
				163, 164, 1693, 1694)	

ALSWH-mid: Australian Longitudinal Study on Women's Health; Prospect-EPIC: the Utrecht contribution to the European Prospective Investigation into Cancer and

Nutrition cohort, the Netherlands; JNHS: Japan Nurses' Health Study; NSHD: MRC National Survey of Health and Development Study; SWAN: Study of Women's Health Across the Nation; WLH: Women's Lifestyle and Health Study.

Group	Education	BMI	Smoking	Race	Hypertension	Diabetes	Study	No. (%)
	level		status			mellitus		
1	Х	Х	Х	Х	Х	Х	Х	699,740 (98.28%)
2	Х	Х	Х	Х	Х		Х	612 (0.09%)
3	Х	Х	Х	Х		Х	Х	757 (0.11%)
4	Х	Х	Х	Х			Х	374 (0.05%)
5	Х	Х		Х	Х	Х	Х	2,198 (0.31%)
6	Х	Х		Х	Х		Х	13 (0.00%)
7	Х	Х		Х		Х	Х	48 (0.01%)
8	Х	Х		Х			Х	470 (0.07%)
9	Х		Х	Х	Х	Х	Х	4,763 (0.67%)
10	Х		Х	Х	Х		Х	10 (0.00%)
11	Х		Х	Х		Х	Х	9 (0.00%)
12	Х		Х	Х			Х	1 (0.00%)
13	Х			Х	Х	Х	Х	26 (0.00%)
14		Х	Х	Х	Х	Х	Х	1,881 (0.26%)
15		Х	Х	Х	Х		Х	26 (0.00%)
16		Х	Х	Х		Х	Х	28 (0.00%)
17		Х	Х	Х			Х	13 (0.00%)
18		Х		Х	Х	Х	Х	182 (0.03%)
19		Х		Х	Х		Х	4 (0.00%)
20		Х		Х		Х	Х	7 (0.00%)
21		Х		Х			Х	780 (0.11%)
22			Х	Х	Х	Х	Х	18 (0.00%)
23				Х	Х	Х	Х	3 (0.00%)
24				Х			Х	7 (0.00%)

# Table S3. Missing data pattern of the pooled dataset of the eight included studies from the InterLACE

"X" indicates presence of data, and "." indicates missing data.

	Infertility and non-fatal stroke		Miscarriage and n	on-fatal stroke	Miscarriage and fatal stroke		
	Competed dataset	Missing data	Competed dataset	Missing data	Competed dataset	Missing data	
Sample size, No. (%)	94,187 (93.28)	6,781 (6.72)	262,618 (94.49)	15,321 (5.51)	545,346 (97.22)	15,582 (2.78)	
Race/ethnicity, No. (%)							
White	77,474 (82.26)	6,100 (89.96)	237,426 (90.41)	13,620 (88.90)	233,992 (42.91)	13,908 (89.26)	
Asian	15,405 (16.36)	490 (7.23)	17,379 (6.62)	804 (5.25)	304,619 (55.86)	835 (5.36)	
Others	1,308 (1.39)	191 (2.82)	7,813 (2.98)	897 (5.85)	6,735 (1.23)	839 (5.38)	
Body-mass index, No. (%)							
Underweight	4,965 (5.27)	1,441 (23.26)	3,810 (1.45)	1,390 (12.12)	15,914 (2.92)	515 (4.37)	
Normal	56,092 (59.55)	2,510 (40.51)	100,025 (38.09)	3,886 (33.88)	209,229 (38.37)	4,192 (35.58)	
Overweight	24,192 (25.69)	1,402 (22.63)	97,953 (37.30)	3,587 (31.27)	219,288 (40.21)	4,198 (35.63)	
Obese	8,938 (9.49)	843 (13.61)	60,830 (23.16)	2,607 (22.73)	100,915 (18.50)	2,878 (24.43)	
Current smoking, No. (%)							
No	75,385 (80.04)	3,921 (75.75)	236,029 (89.88)	10,923 (86.89)	507,940 (93.14)	11,822 (86.10)	
Yes	18,802 (19.96)	1,255 (24.25)	26,589 (10.12)	1,648 (13.11)	37,406 (6.86)	1,908 (13.90)	
Education level (years), No. (9	%)						
≤10	27,959 (29.68)	2,999 (54.10)	139,470 (53.11)	7,288 (55.15)	374,174 (68.61)	7,544 (54.24)	
11-12	22,626 (24.02)	974 (17.57)	36,756 (14.00)	1,786 (13.52)	74,428 (13.65)	2,168 (15.59)	

Table S4. Comparison of women's characteristics in complete dataset used for analysis and the dataset with missing data

≥12	43,602 (46.29)	1,570 (28.32)	86,392 (32.90)	4,140 (31.33)	96,744 (17.71)	4,197 (30.17)
Hypertension, No. (%)						
No	75,823 (80.50)	4,308 (76.06)	189,624 (72.21)	9,760 (74.17)	379,244 (69.54)	10,250 (70.90)
Yes	18,364 (19.50)	1,356 (23.94)	72,994 (27.79)	3,399 (25.83)	166,102 (30.46)	4,206 (29.10)
Diabetes mellitus, No. (%)						
No	92,268 (98.02)	5,799 (96.97)	252,832 (96.45)	13,341 (96.37)	520,333 (95.49)	14,240 (95.98)
Yes	1,868 (1.98)	181 (3.03)	9,296 (3.55)	502 (3.63)	24,554 (4.51)	597 (4.02)

	Stillbirth and no	n-fatal stroke	Stillbirth and fatal stroke				
	Competed dataset	Missing data	Competed dataset	Missing data			
Sample size, No. (%)	252,406 (95.26)	12,559 (4.74)	535,259 (97.68)	12,694 (2.32)			
Race/ethnicity, No. (%)							
White	227,667 (90.20)	11,001 (87.59)	224,359 (41.92)	11,162 (87.93)			
Asian	17,119 (6.78)	735 (5.85)	304,357 (56.86)	768 (6.05)			
Others	7,620 (3.02)	823 (6.55)	6,543 (1.22)	764 (6.02)			
Body-mass index, No. (%)							
Underweight	3,151 (1.25)	1,235 (13.98)	15,267 (2.85)	348 (3.86)			
Normal	95,202 (37.72)	2,649 (29.99)	204,480 (38.20)	2,881 (31.94)			
Overweight	95,091 (37.67)	2,817 (31.90)	216,456 (40.44)	3,397 (37.66)			
Obese	58,962 (23.36)	2,131 (24.13)	99,056 (18.51)	2,393 (26.53)			
Current smoking, No. (%)							
No	227,705 (90.21)	9,027 (88.15)	499,695 (93.36)	9,846 (87.34)			
Yes	24,701 (9.79)	1,213 (11.85)	35,564 (6.64)	1,427 (12.66)			
Education level (years), No. (	%)						
≤10	134,244 (53.19)	5,974 (56.45)	369,034 (68.94)	6,143 (55.09)			
11-12	35,042 (13.88)	1,337 (12.63)	72,747 (13.59)	1,686 (15.12)			
≥12	83,120 (32.93)	3,271 (30.91)	93,478 (17.46)	3,322 (29.79)			

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Hypertension, No. (%)				
No	181,596 (71.95)	7,612 (72.70)	371,299 (69.37)	8,018 (68.87)
Yes	70,810 (28.05)	2,859 (27.30)	163,960 (30.63)	3,624 (31.13)
Diabetes mellitus, No. (%)				
No	242,916 (96.43)	10,717 (96.24)	510,540 (95.46)	11,493 (95.74)
Yes	9,006 (3.57)	419 (3.76)	24,266 (4.54)	511 (4.26)

Distributions between complete dataset and the dataset with missing value were compared using Chi-square test. All the p value were <.001, except the p value for diabetes mellitus between women included and excluded in the analysis for miscarriage and non-fatal stroke (p=0.62), the p values for diabetes mellitus between women included and excluded and excluded in the analysis for miscarriage and fatal stroke (p=0.005 for diabetes), the p values for hypertension and diabetes mellitus between women included and excluded in the analysis for stillbirth and non-fatal stroke (p=0.09 for hypertension; p=0.29 for diabetes), and p values for hypertension and diabetes mellitus between women included and excluded and excluded in the analysis for stillbirth and fatal stroke (p=0.25 for hypertension; p=0.14 for diabetes).

#### Kaplan-Meier survival plot

Figure S2. Kaplan-Meier survival curves comparing the rate of non-fatal stroke according to the history of

#### infertility



Figure S3. Kaplan-Meier survival curves comparing the rate of non-fatal stroke according to the history of miscarriage



Figure S4. Kaplan-Meier survival curves comparing the rate of non-fatal stroke according to the number of miscarriages



Figure S5. Kaplan-Meier survival curves comparing the rate of fatal stroke according to the history of



Figure S6. Kaplan-Meier survival curves comparing the rate of fatal stroke according to the number of miscarriages



Figure S7. Kaplan-Meier survival curves comparing the rate of non-fatal stroke according to the history of stillbirth





stillbirths





Figure S9. Kaplan-Meier survival curves comparing the rate of fatal stroke according to the history of stillbirth

Figure S10. Kaplan-Meier survival curves comparing the rate of fatal stroke according to the number of

stillbirths



# Sensitivity analysis

		Non-fatal stroke			Haem	orrhagic stroke	Ischa	emic stroke	Unspecific stroke	
	Comparison	Sample size	No. of events	HR (95% CI)	No. of events	HR (95% CI)	No. of events	HR (95% CI)	No. of events	HR (95% CI)
History of infertility	Never	61,741	2,038	Ref.	370	Ref.	888	Ref.	813	Ref.
	Ever	13,332	407	1.16 (1.12,1.21)	85	1.13 (0.93,1.38)	197	1.16 (1.08,1.24)	137	1.20 (0.96,1.50)
History of miscarriage	Never	184,178	5,535	Ref.	1,173	Ref.	2,699	Ref.	1,750	Ref.
	Ever	62,603	2,055	1.11 (1.08,1.15)	398	1.04 (1.01,1.07)	936	1.08 (1.03,1.13)	750	1.20 (1.10,1.30)
Number of miscarriages	0	184,178	5,535	Ref.	1,173	Ref.	2,699	Ref.	1,750	Ref.
	1	44,616	1,405	1.07 (1.05,1.10)	280	1.03 (0.96,1.10)	619	1.01 (0.96,1.06)	530	1.20 (1.13,1.28)
	2	11,528	382	1.12 (1.07,1.17)	62	0.88 (0.73,1.06)	191	1.21 (1.09,1.33)	132	1.13 (0.97,1.32)
	≥3	6,401	264	1.36 (1.28,1.44)	56	1.41 (1.08,1.84)	124	1.37 (1.23,1.53)	86	1.27 (1.06,1.53)
History of stillbirth	Never	229,283	6,754	Ref.	1,441	Ref.	3,337	Ref.	2,076	Ref.
	Ever	7,414	382	1.40 (1.32,1.48)	65	1.15 (1.00,1.33)	194	1.38 (1.35,1.41)	126	1.54 (1.24,1.91)
Number of stillbirths	0	229,283	6,754	Ref.	1,441	Ref.	3,337	Ref.	2,076	Ref.
	1	6,425	326	1.38 (1.30,1.46)	59	1.21 (1.01,1.45)	161	1.33 (1.25,1.40)	109	1.53 (1.21,1.94)
	≥2	978	56	1.58 (1.55,1.60)	6	0.81 (0.59,1.11)	33	1.77 (1.55,2.02)	17	1.65 (1.41,1.93)

Table S5. Sensitivity analysis for the association of infertility, miscarriage, and stillbirth with first non-fatal stroke, subtypes of first non-fatal stroke using hospital data

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Women from the studies, in which information on first non-fatal stroke were collected from questionnaires only, were excluded. Infertility: 19,114 women from Japan Nurses' Health Study (JNHS), MRC National Survey of Health and Development Study (NSHD), and Study of Women's Health Across the Nation (SWAN) were excluded. Miscarriage: 15,837 women from China Kadoorie Biobank, MRC National Survey of Health and Development Study (NSHD), and Study of Women's Health Across the Nation (SWAN) were excluded. Stillbirth: 15,709 women from China Kadoorie Biobank, MRC National Survey of Health and Development Study (NSHD), and Study (NSHD), and Study of Women's Health Across the Nation (SWAN) were excluded. HRs were adjusted for ethnicity (Caucasian, Asian, and other), body-mass index (underweight, normal, overweight, and obese), smoking status (current smoker and not current smoker), education level ( $\leq 10$ , 11-12, and >12 years), and study, and stratified by hypertension (yes and no).

Table S6. Sensitivity analysis for the association between infertility and first non-fatal stroke, subtypes of first non-fatal stroke disaggregated by ascertainment of infertility

		Non-fatal stroke			Haem	orrhagic stroke	Ischaemic stroke		Unspecific stroke		
	Comparison	Sample	No. of	HR (95% CI)	No. of	HR (95% CI)	No. of	HR (95% CI)	No. of	HR (95% CI)	
	Companion	size	events	vents			events		events		
History of infertility	Never	49,302	1,131	Ref.	253	Ref.	543	Ref.	363	Ref.	
	Ever	12,148	295	1.15 (1.08,1.22)	71	1.16 (0.94,1.44)	155	1.17 (1.10,1.26)	80	1.13 (0.87,1.47)	

32,737 women from Japan Nurses' Health Study (JNHS), MRC National Survey of Health and Development Study (NSHD), and the Utrecht contribution to the European Prospective Investigation into Cancer and Nutrition cohort, the Netherlands (Prospect-EPIC) were excluded, in which infertility were additionally identified through unsuccessfully trying to be pregnant for 2 years or more, or infertility consult. HRs were adjusted for ethnicity (Caucasian, Asian, and other), body-mass index (underweight, normal, overweight, and obese), smoking status (current smoker and not current smoker), education level ( $\leq 10$ , 11-12, and >12 years), and study, and stratified by hypertension (yes and no). Table S7. Sensitivity analysis for the association of infertility, miscarriage, and stillbirth with first non-fatal stroke, subtypes of first non-fatal stroke with redefined baseline of NSHD

		Non-fatal stroke		Haem	Haemorrhagic stroke		Ischaemic stroke		Unspecific stroke	
	Comparison	Sample	No. of events	HR (95% CI)	No. of events	HR (95% CI)	No. of events	HR (95% CI)	No. of events	HR (95% CI)
History of infertility	Never	78,203	2,293	Ref.	408	Ref.	1,020	Ref.	905	Ref.
	Ever	16,234	453	1.14 (1.08,1.20)	91	1.13 (0.94,1.36)	217	1.15 (1.07,1.23)	158	1.15 (0.93,1.42)
History of miscarriage	Never	197,361	5,812	Ref.	1,173	Ref.	2,699	Ref.	2,027	Ref.
	Ever	65,370	2,125	1.11 (1.07,1.15)	398	1.04 (1.01,1.07)	936	1.08 (1.03,1.13)	820	1.18 (1.09,1.27)
Number of miscarriages	0	197,361	5,812	Ref.	1,173	Ref.	2,699	Ref.	2,027	Ref.
	1	46,720	1,455	1.07 (1.04,1.10)	280	1.03 (0.96,1.10)	619	1.01 (0.96,1.06)	580	1.18 (1.10,1.25)
	2	11,996	395	1.12 (1.07,1.17)	62	0.88 (0.73,1.06)	191	1.21 (1.09,1.33)	145	1.12 (0.97,1.29)
	≥3	6,596	271	1.36 (1.28,1.45)	56	1.41 (1.08,1.84)	124	1.37 (1.23,1.53)	93	1.27 (1.06,1.53)
History of stillbirth	Never	243,942	7,070	Ref.	1,441	Ref.	3,337	Ref.	2,392	Ref.
	Ever	8,552	412	1.32 (1.11,1.58)	65	1.15 (1.00,1.33)	194	1.38 (1.35,1.41)	156	1.30 (0.95,1.78)
Number of stillbirths	0	243,942	7,070	Ref.	1,441	Ref.	3,337	Ref.	2,392	Ref.
	1	7,315	350	1.33 (1.16,1.52)	59	1.21 (1.01,1.45)	161	1.33 (1.25,1.40)	133	1.35 (1.03,1.78)
	≥2	1,225	62	1.31 (0.85,2.02)	6	0.81 (0.59,1.11)	33	1.77 (1.54,2.02)	23	1.08 (0.57,2.03)

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After redefining the baseline of MRC National Survey of Health and Development Study (NSHD), 250, 113, and 88 women were further included in the analysis of infertility, miscarriage, and stillbirth, respectively. HRs were adjusted for ethnicity (Caucasian, Asian, and other), body-mass index (underweight, normal, overweight, and obese), smoking status (current smoker and not current smoker), education level ( $\leq 10$ , 11-12, and >12 years), and study, and stratified by hypertension (yes and no).

Table S8. Sensitivity analysis for the association of infertility, miscarriage, and stillbirth with first non-fatal stroke, subtypes of first non-fatal stroke with additional adjustment of oral contraceptive pill and hormone replacement therapy

			Non-fata	l stroke	Haem	orrhagic stroke	Ischa	emic stroke	Unsp	ecific stroke
	Comparison	Sample size	No. of events	HR (95% CI)	No. of events	HR (95% CI)	No. of events	HR (95% CI)	No. of events	HR (95% CI)
History of infertility	No	25,796	1,299	Ref.	163	Ref.	509	Ref.	634	Ref.
	Yes	5,037	231	1.15 (1.05,1.27)	35	1.26 (0.84,1.89)	96	1.16 (1.09,1.22)	102	1.10 (0.81,1.50)
History of miscarriage	Never	179,620	5,309	Ref.	1,125	Ref.	2,620	Ref.	1,642	Ref.
	Ever	59,401	1,860	1.10 (1.06,1.14)	364	1.03 (1.01,1.05)	881	1.08 (1.03,1.12)	638	1.16 (1.09,1.24)
Number of miscarriages	0	179,620	5,309	Ref.	1,125	Ref.	2,620	Ref.	1,642	Ref.
	1	42,513	1,283	1.06 (1.03,1.09)	261	1.03 (0.97,1.10)	589	1.01 (0.97,1.05)	453	1.17 (1.12,1.22)
	2	10,888	338	1.09 (1.04,1.13)	54	0.84 (0.73,0.96)	176	1.18 (1.08,1.29)	111	1.10 (0.94,1.29)
	≥3	5,944	235	1.35 (1.27,1.45)	49	1.38 (1.04,1.83)	114	1.36 (1.22,1.52)	72	1.27 (1.05,1.53)
History of stillbirth	Never	231,641	6,800	Ref.	1,429	Ref.	3,315	Ref.	2,154	Ref.
	Ever	7,448	379	1.39 (1.31,1.46)	65	1.18 (1.01,1.37)	189	1.36 (1.31,1.41)	128	1.51 (1.22,1.86)
Number of stillbirths	0	231,641	6,800	Ref.	1,429	Ref.	3,315	Ref.	2,154	Ref.
	1	6,469	324	1.37 (1.30,1.44)	59	1.23 (1.02,1.48)	157	1.30 (1.22,1.40)	111	1.50 (1.19,1.90)
	≥2	967	55	1.56 (1.51,1.61)	6	0.83 (0.61,1.14)	32	1.74 (1.56,1.94)	17	1.59 (1.35,1.88)

Women with missing value on oral contraceptive pill or hormone replacement therapy were excluded. Infertility: 63,354 women were excluded, who were from Australian Longitudinal Study on Women's Health 1946-51 cohort (ALSWH-mid), the Utrecht contribution to the European Prospective Investigation into Cancer and Nutrition cohort,

the Netherlands (Prospect-EPIC), Japan Nurses' Health Study (JNHS), MRC National Survey of Health and Development Study (NSHD), Study of Women's Health Across the Nation (SWAN), or Women's Lifestyle and Health Study (WLH). Miscarriage: 23,597 women were excluded, who were from Australian Longitudinal Study on Women's Health 1946-51 cohort (ALSWH-mid), China Kadoorie Biobank, the Utrecht contribution to the European Prospective Investigation into Cancer and Nutrition cohort, the Netherlands (Prospect-EPIC), MRC National Survey of Health and Development Study (NSHD), Study of Women's Health Across the Nation (SWAN), or UK Biobank. Stillbirth: 13,317 women were excluded, who were from China Kadoorie Biobank, the Utrecht contribution to the European Prospective Investigation into Cancer and Nutrition cohort, the Netherlands (Prospect-EPIC), MRC National Survey of Health and Development Study (NSHD), Study of Women's Health Across the Nation (SWAN), or UK Biobank. HRs were adjusted for ethnicity (Caucasian, Asian, and other), body-mass index (underweight, normal, overweight, and obese), smoking status (current smoker and not current smoker), education level (≤10, 11-12, and >12 years), and study, and stratified by hypertension (yes and no). Table S9. Sensitivity analysis for the association of miscarriage and stillbirth with fatal stroke, subtypes of fatal stroke with additional adjustment of oral contraceptive pill and hormone replacement therapy

			Fatal s	troke	Haem	orrhagic stroke	Ischaemic stroke		
	Comparison	Sample	No. of	HR (95% CI)	No. of	HR (95% CI)	No. of	HR (95% CI)	
	I	size	events		events	(,	events		
History of miscarriage	Never	176,428	627	Ref.	323	Ref.	327	Ref.	
	Ever	58,090	200	1.01 (0.84,1.22)	77	0.76 (0.67,0.86)	129	1.25 (1.05,1.49)	
Number of miscarriages	0	176,428	627	Ref.	323	Ref.	327	Ref.	
	1	41,583	126	0.90 (0.73,1.10)	48	0.66 (0.56,0.79)	83	1.14 (0.93,1.39)	
	2	10,645	40	1.10 (0.80,1.50)	16	0.86 (0.57,1.30)	24	1.26 (0.96,1.64)	
	≥3	5,810	34	1.71 (1.18,2.48)	13	1.27 (0.57,2.80)	22	2.10 (1.72,2.55)	
History of stillbirth	Never	227,366	787	Ref.	385	Ref.	429	Ref.	
	Ever	7,300	42	1.22 (0.97,1.53)	16	0.99 (0.89,1.10)	28	1.43 (1.03,1.99)	
Number of stillbirths	0	227,366	787	Ref.	385	Ref.	429	Ref.	
	1	6,321	32	1.07 (0.93,1.24)	15	1.07 (0.95,1.21)	19	1.13 (0.87,1.45)	
	≥2	969	10	2.23 (1.21,4.10)	<5	0.47 (0.06,4.08)	9	3.49 (2.19,5.57)	

Women with missing value on oral contraceptive pill or hormone replacement therapy were excluded. Miscarriage: 310,828 women were excluded, who were from Australian Longitudinal Study on Women's Health 1946-51 cohort (ALSWH-mid), China Kadoorie Biobank, the Utrecht contribution to the European Prospective Investigation into Cancer and Nutrition cohort, the Netherlands (Prospect-EPIC), or UK Biobank. Stillbirth: 300,593 women were excluded, who were from China Kadoorie Biobank, the Utrecht contribution to the European Prospective Investigation into Cancer and Nutrition cohort, the Netherlands (Prospect-EPIC), or UK Biobank. Stillbirth: 300,593 women were excluded, who were from China Kadoorie

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included fatal stroke cases were identified as unspecified stroke. HRs were adjusted for ethnicity (Caucasian, Asian, and other), body-mass index (underweight, normal, overweight, and obese), smoking status (current smoker and not current smoker), education level ( $\leq 10$ , 11-12, and >12 years), and study, and stratified by hypertension (yes and no).

Table S10. Sensitivity analysis for the association of infertility, miscarriage, and stillbirth with first non-fatal stroke, subtypes of first non-fatal stroke among women without diabetes mellitus

			Non-fata	l stroke	Haem	orrhagic stroke	Ischa	emic stroke	Unspecific stroke		
	Comparison	Sample size	No. of events	HR (95% CI)	No. of events	HR (95% CI)	No. of events	HR (95% CI)	No. of events	HR (95% CI)	
History of infertility	No	76,425	2,139	Ref.	399	Ref.	939	Ref.	840	Ref.	
	Yes	15,843	424	1.15 (1.10,1.20)	87	1.11 (0.96,1.29)	206	1.18 (1.12,1.26)	144	1.15 (0.90,1.46)	
History of miscarriage	Never	190,152	5,267	Ref.	1,116	Ref.	2,404	Ref.	1,827	Ref.	
	Ever	62,680	1,894	1.09 (1.05,1.14)	382	1.06 (1.01,1.11)	826	1.08 (1.03,1.14)	714	1.13 (1.03,1.25)	
Number of miscarriages	0	190,152	5,267	Ref.	1,116	Ref.	2,404	Ref.	1,827	Ref.	
	1	44,953	1,312	1.06 (1.03,1.10)	269	1.04 (0.95,1.14)	551	1.01 (0.96,1.07)	515	1.15 (1.08,1.23)	
	2	11,465	346	1.08 (1.02,1.15)	60	0.90 (0.74,1.10)	167	1.20 (1.11,1.30)	122	1.04 (0.86,1.26)	
	≥3	6,205	232	1.33 (1.25,1.41)	53	1.45 (1.18,1.77)	106	1.38 (1.25,1.53)	75	1.16 (0.88,1.55)	
History of stillbirth	Never	234,959	6,382	Ref.	1,372	Ref.	2,972	Ref.	2,131	Ref.	
	Ever	7,957	353	1.32 (1.14,1.52)	64	1.24 (1.16,1.31)	163	1.37 (1.33,1.41)	129	1.28 (0.93,1.75)	
Number of stillbirths	0	234,959	6,382	Ref.	1,372	Ref.	2,972	Ref.	2,131	Ref.	
	1	6,830	303	1.33 (1.20,1.47)	58	1.29 (1.17,1.41)	136	1.32 (1.25,1.39)	112	1.35 (0.99,1.83)	
	≥2	1,117	50	1.26 (0.86,1.85)	6	0.90 (0.60,1.36)	27	1.79 (1.34,2.38)	17	0.98 (0.54,1.76)	

Women with diabetes or having missing value on diabetes were excluded. Infertility:1,919 women were excluded, who were from Australian Longitudinal Study on Women's Health 1946-51 cohort (ALSWH-mid), the Utrecht contribution to the European Prospective Investigation into Cancer and Nutrition cohort, the Netherlands (Prospect-EPIC), Japan Nurses' Health Study (JNHS), MRC National Survey of Health and Development Study (NSHD), Study of Women's Health Across the Nation (SWAN), or Women's Lifestyle and Health Study (WLH). Miscarriage: 9,786 women were excluded, who were from Australian Longitudinal Study on Women's Health 1946-51 cohort (ALSWH-mid), China Kadoorie Biobank, the Utrecht contribution to the European Prospective Investigation into Cancer and Nutrition cohort, the Netherlands (Prospect-EPIC), MRC National Survey of Health and Development Study (NSHD), Study of Women's Health Across the Nation (SWAN), or UK Biobank. Stillbirth: 9,490 women were excluded, who were from China Kadoorie Biobank, the Utrecht contribution to the European Prospective Investigation into Cancer and Nutrition cohort, the Netherlands (Prospect-EPIC), MRC National Survey of Health and Development Study (NSHD), Study of Women's Health Across the Nation (SWAN), or UK Biobank. HRs were adjusted for ethnicity (Caucasian, Asian, and other), body-mass index (underweight, normal, overweight, and obese), smoking status (current smoker and not current smoker), education level (≤10, 11-12, and >12 years), and study, and stratified by hypertension (yes and no).

			Non-fata	l stroke	te Haemorrhagic stroke			emic stroke	Unspecific stroke	
	Comparison	Sample size	No. of events	HR (95% CI)	No. of events	HR (95% CI)	No. of events	HR (95% CI)	No. of events	HR (95% CI)
History of miscarriage	Never	434,548	2,772	Ref.	1,727	Ref.	976	Ref.	123	Ref.
	Ever	85,785	616	1.18 (1.04,1.33)	380	1.22 (0.95,1.57)	231	1.13 (0.99,1.29)	17	-
Number of miscarriages	0	434,548	2,772	Ref.	1,727	Ref.	976	Ref.	123	Ref.
	1	63,270	412	1.08 (0.93,1.25)	252	1.10 (0.84,1.44)	155	1.05 (0.91,1.21)	12	-
	2	15,041	124	1.30 (1.08,1.57)	79	1.41 (1.06,1.87)	44	1.17 (0.93,1.46)	<5	-
	≥3	7,421	80	1.77 (1.49,2.11)	49	1.86 (1.40,2.47)	32	1.76 (1.21,2.55)	<5	-
History of stillbirth	Never	487,563	2,973	Ref.	1,821	Ref.	1,086	Ref.	124	Ref.
	Ever	22,977	380	1.04 (0.97,1.11)	262	1.16 (1.08,1.25)	109	0.87 (0.69,1.09)	16	-
Number of stillbirths	0	487,563	2,973	Ref.	1,821	Ref.	1,086	Ref.	124	Ref.
	1	18,420	234	0.96 (0.89,1.04)	158	1.05 (0.97,1.14)	68	0.81 (0.67,0.99)	13	-
	≥2	4,549	146	1.19 (1.08,1.30)	104	1.38 (1.30,1.47)	41	0.99 (0.71,1.37)	<5	-

Table S11. Sensitivity analysis for the association of miscarriage and stillbirth with fatal stroke, subtypes of fatal stroke among women without diabetes mellitus

Women with diabetes or having missing value on diabetes were excluded. Miscarriage: 25,013 women were excluded, who were from Australian Longitudinal Study on Women's Health 1946-51 cohort (ALSWH-mid), China Kadoorie Biobank, the Utrecht contribution to the European Prospective Investigation into Cancer and Nutrition cohort, the Netherlands (Prospect-EPIC), or UK Biobank. Stillbirth: 24,719 women with diabetes or having missing value on diabetes were excluded, who were from China Kadoorie Biobank, the Utrecht contribution to the European Prospective Investigation into Cancer and Nutrition cohort, the Netherlands (Prospect-EPIC), or UK Biobank. HRs were adjusted for ethnicity (Caucasian, Asian, and other), body-mass index (underweight, normal, overweight, and obese), smoking status (current smoker and not current smoker), education level ( $\leq 10$ , 11-12, and >12 years), and study, and stratified by hypertension (yes and no).

		Non-fa	tal and fa	tal stroke	Haemorrhagic stroke		Ischaemic stroke		Unspecific stroke	
	Comparison	Sample size	No. of events	HR (95% CI)	No. of events	HR (95% CI)	No. of events	HR (95% CI)	No. of events	HR (95% CI)
History of infertility	Never	36,052	1,621	Ref.	239	Ref.	625	Ref.	779	Ref.
	Ever	5,341	238	1.11 (0.96,1.28)	33	1.03 (0.81,1.30)	81	1.04 (0.95,1.14)	130	1.22 (0.97,1.52)
History of miscarriage	Never	184,178	5,670	Ref.	1,236	Ref.	2,774	Ref.	1,750	Ref.
	Ever	62,603	2,099	1.11 (1.08,1.14)	411	1.01 (0.99,1.03)	967	1.08 (1.04,1.13)	750	1.20 (1.10,1.30)
Number of miscarriages	0	184,178	5,670	Ref.	1,236	Ref.	2,774	Ref.	1,750	Ref.
	1	44,616	1,432	1.07 (1.04,1.10)	287	1.00 (0.93,1.07)	639	1.01 (0.97,1.05)	530	1.20 (1.13,1.28)
	2	11,528	389	1.11 (1.07,1.15)	65	0.87 (0.73,1.03)	195	1.19 (1.07,1.31)	132	1.13 (0.97,1.32)
	≥3	6,401	274	1.36 (1.19,1.56)	59	1.39 (1.05,1.84)	131	1.39 (1.28,1.52)	86	1.26 (1.05,1.52)
History of stillbirth	Never	229,283	6,918	Ref.	1,507	Ref.	3,436	Ref.	2,076	Ref.
	Ever	7,414	390	1.39 (1.28,1.51)	69	1.16 (1.01,1.34)	200	1.38 (1.33,1.42)	126	1.54 (1.24,1.91)
Number of stillbirths	0	229,283	6,918	Ref.	1,507	Ref.	3,436	Ref.	2,076	Ref.
	1	6,425	332	1.37 (1.22,1.53)	62	1.21 (1.01,1.45)	166	1.32 (1.24,1.41)	109	1.53 (1.21,1.94)
	≥2	978	58	1.58 (1.39,1.79)	7	0.89 (0.64,1.23)	34	1.76 (1.53,2.02)	17	1.64 (1.41,1.90)

Table S12. Sensitivity analysis for the association of infertility, miscarriage, and stillbirth with combined outcome (first non-fatal and fatal stroke)

Infertility: 41,393 women from Australian Longitudinal Study on Women's Health 1946-51 cohort (ALSWH-mid), the Utrecht contribution to the European Prospective Investigation into Cancer and Nutrition cohort, the Netherlands (Prospect-EPIC), Japan Nurses' Health Study (JNHS) were included. Miscarriage: 246,781 women from Australian Longitudinal Study on Women's Health 1946-51 cohort (ALSWH-mid), the Utrecht contribution to the European Prospective Investigation into Cancer and Nutrition cohort, the Netherlands (Prospect-EPIC), and UK Biobank. Stillbirth: 236,697 women from the Utrecht contribution to the European Prospective Investigation into Cancer and Nutrition cohort, the Netherlands (Prospect-EPIC) and UK Biobank were included. HRs were adjusted for ethnicity (Caucasian, Asian, and other), body-mass index (underweight, normal, overweight, and obese), smoking status (current smoker and not current smoker), education level ( $\leq 10$ , 11-12, and >12 years), and study, and stratified by hypertension (yes and no).

	Non-fatal and fatal stroke			Haem	orrhagic stroke	Ischa	emic stroke	Unspecific stroke	
Comparison	Sample size	No. of events	HR (95% CI)	No. of events	HR (95% CI)	No. of events	HR (95% CI)	No. of events	HR (95% CI)
Never	796,760	23,600	Ref.	4,190	Ref.	10,390	Ref.	9,420	Ref.
Ever	165,110	4,660	1.14 (1.08,1.21)	920	1.11 (0.92,1.35)	2,220	1.15 (1.06,1.25)	1,650	1.15 (0.92,1.43)
Never	2,021,890	59,700	Ref.	12,060	Ref.	27,810	Ref.	20,720	Ref.
Ever	670,370	21,970	1.11 (1.07,1.15)	4,100	1.04 (1.02,1.06)	9,670	1.08 (1.04,1.13)	8,520	1.19 (1.10,1.28)
0	2,021,890	59,700	Ref.	12,060	Ref.	27,810	Ref.	20,720	Ref.
1	478,880	15,000	1.07 (1.04,1.10)	2,880	1.03 (0.97,1.09)	6,370	1.01 (0.96,1.06)	6,000	1.18 (1.12,1.25)
2	122,790	4,130	1.14 (1.08,1.19)	660	0.91 (0.78,1.07)	1,980	1.22 (1.11,1.33)	1,540	1.16 (1.02,1.32)
≥3	68,110	2,800	1.35 (1.26,1.44)	560	1.36 (1.05,1.77)	1,300	1.38 (1.22,1.57)	960	1.26 (1.03,1.54)
Never	2,496,240	72,510	Ref.	14,810	Ref.	34,380	Ref.	24,370	Ref.
Ever	87,930	4,260	1.32 (1.10,1.58)	680	1.16 (0.98,1.37)	1,990	1.37 (1.34,1.39)	1,620	1.33 (0.97,1.83)
0	2,496,240	72,510	Ref.	14,810	Ref.	34,380	Ref.	24,370	Ref.
1	75,170	3,610	1.33 (1.16,1.52)	600	1.19 (0.96,1.46)	1,660	1.32 (1.28,1.36)	1,380	1.38 (1.04,1.83)
≥2	12,640	650	1.31 (0.86,2.01)	80	1.03 (0.84,1.26)	330	1.68 (1.49,1.91)	240	1.11 (0.58,2.13)
	Comparison Never Ever 0 1 2 ≥3 Never Ever 0 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Non-faComparisonSample sizeNever796,760Ever165,110Never2,021,890Ever670,37002,021,8901478,8802122,790 $\geq 3$ 68,110Never2,496,240Ever87,93002,496,240175,170 $\geq 2$ 12,640	Non-fatal and fatComparisonNo. of eventsNever $796,760$ $23,600$ Ever $165,110$ $4,660$ Never $2,021,890$ $59,700$ Ever $670,370$ $21,970$ $0$ $2,021,890$ $59,700$ $1$ $478,880$ $15,000$ $2$ $122,790$ $4,130$ $\geq 3$ $68,110$ $2,800$ Never $2,496,240$ $72,510$ Ever $87,930$ $4,260$ $0$ $2,496,240$ $72,510$ $1$ $75,170$ $3,610$ $\geq 2$ $12,640$ $650$	Non-fatal and fatal strokeComparisonSample sizeNo. of eventsHR (95% CI) eventsNever796,76023,600Ref.Ever165,1104,6601.14 (1.08,1.21)Never2,021,89059,700Ref.Ever670,37021,9701.11 (1.07,1.15)02,021,89059,700Ref.1478,88015,0001.07 (1.04,1.10)2122,7904,1301.14 (1.08,1.19) $\geq 3$ 68,1102,8001.35 (1.26,1.44)Never2,496,24072,510Ref.Ever87,9304,2601.32 (1.10,1.58)02,496,24072,510Ref.175,1703,6101.33 (1.16,1.52) $\geq 2$ 12,6406501.31 (0.86,2.01)	$\begin{array}{ c c c c c c } & & & & & & & & & & & & & & & & & & &$	$\begin{array}{ c c c c c c } & & & & & & & & & & & & & & & & & & &$	$\begin{array}{ c c c c c c c } \hline \mbox{Non-fatal and fatal stroke} & Haemorrhagic stroke} & Ischa \\ \hline \mbox{Comparison} & \hline \mbox{Non-fatal and fatal stroke} & Ha (95\% CI) & No. of events \\ \hline \mbox{Sample size} & \hline \mbox{No. of events} & \mbox{No. of events} & \mbox{HR} (95\% CI) & events \\ \hline \mbox{events} & 2000 & 23,600 & Ref. & 4,190 & Ref. & 10,390 \\ \hline \mbox{Ever} & 165,110 & 4,660 & 1.14 (1.08,1.21) & 920 & 1.11 (0.92,1.35) & 2,220 \\ \hline \mbox{Never} & 2,021,890 & 59,700 & Ref. & 12,060 & Ref. & 27,810 \\ \hline \mbox{Ever} & 2,021,890 & 59,700 & Ref. & 12,060 & Ref. & 27,810 \\ \hline \mbox{Ever} & 670,370 & 21,970 & 1.11 (1.07,1.15) & 4,100 & 1.04 (1.02,1.06) & 9,670 \\ \hline \mbox{0} & 2,021,890 & 59,700 & Ref. & 12,060 & Ref. & 27,810 \\ \hline \mbox{1} & 478,880 & 15,000 & 1.07 (1.04,1.10) & 2,880 & 1.03 (0.97,1.09) & 6,370 \\ \hline \mbox{2} & 122,790 & 4,130 & 1.14 (1.08,1.19) & 660 & 0.91 (0.78,1.07) & 1,980 \\ \hline \mbox{2} & 368,110 & 2,800 & 1.35 (1.26,1.44) & 560 & 1.36 (1.05,1.77) & 1,300 \\ \hline \mbox{Never} & 2,496,240 & 72,510 & Ref. & 14,810 & Ref. & 34,380 \\ \hline \mbox{Ever} & 87,930 & 4,260 & 1.32 (1.10,1.58) & 680 & 1.16 (0.98,1.37) & 1,990 \\ \hline \mbox{0} & 2,496,240 & 72,510 & Ref. & 14,810 & Ref. & 34,380 \\ \hline \mbox{1} & 75,170 & 3,610 & 1.33 (1.16,1.52) & 600 & 1.19 (0.96,1.46) & 1,660 \\ \hline \mbox{2} & 12,640 & 650 & 1.31 (0.86,2.01) & 80 & 1.03 (0.84,1.26) & 330 \\ \hline \mbox{0} & \mbox{1} & 2,840 & 650 & 1.31 (0.86,2.01) & 80 & 1.03 (0.84,1.26) & 330 \\ \hline \mbox{1} & \mbox{1} & 2,640 & 650 & 1.31 (0.86,2.01) & 80 & 1.03 (0.84,1.26) & 330 \\ \hline \mbox{1} & \mbox{1} & 2,640 & 650 & 1.31 (0.86,2.01) & 80 & 1.03 (0.84,1.26) & 343 \\ \hline \mbox{1} & \mbox{1} & 2,640 & 650 & 1.31 (0.86,2.01) & 80 & 1.03 (0.84,1.26) & 330 \\ \hline \mbox{1} & \mbox{1} & 2,640 & 650 & 1.31 (0.86,2.01) & 80 & 1.03 (0.84,1.26) & 343 \\ \hline \mbox{1} & \mbox{1} $	$ \begin{array}{ c c c c c c c c c } \hline \mbox{Non-fatal and fatal stroke} & Haemorrhagic stroke & Ischaemic stroke \\ \hline \mbox{Sample size} & No. of events & Ischaemic stroke \\ \hline \mbox{Never} & 796,760 & 23,600 & Ref. & 4,190 & Ref. & 10,390 & Ref. \\ \hline \mbox{Ever} & 165,110 & 4,660 & 1.14 (1.08,1.21) & 920 & 1.11 (0.92,1.35) & 2,220 & 1.15 (1.06,1.25) \\ \hline \mbox{Never} & 2,021,890 & 59,700 & Ref. & 12,060 & Ref. & 27,810 & Ref. \\ \hline \mbox{Ever} & 670,370 & 21,970 & 1.11 (1.07,1.15) & 4,100 & 1.04 (1.02,1.06) & 9,670 & 1.08 (1.04,1.13) \\ \hline \mbox{Omm} & 2,021,890 & 59,700 & Ref. & 12,060 & Ref. & 27,810 & Ref. \\ \hline \mbox{Ind} & 2,021,890 & 59,700 & Ref. & 12,060 & Ref. & 27,810 & Ref. \\ \hline \mbox{Ind} & 2,021,890 & 59,700 & Ref. & 12,060 & Ref. & 27,810 & Ref. \\ \hline \mbox{Ind} & 2,021,890 & 59,700 & Ref. & 12,060 & Ref. & 27,810 & Ref. \\ \hline \mbox{Ind} & 2,021,890 & 59,700 & Ref. & 12,060 & Ref. & 27,810 & Ref. \\ \hline \mbox{Ind} & 2,021,890 & 59,700 & Ref. & 12,060 & Ref. & 27,810 & Ref. \\ \hline \mbox{Ind} & 2,021,890 & 59,700 & Ref. & 12,060 & Ref. & 27,810 & Ref. \\ \hline \mbox{Ind} & 2,021,890 & 1.07 (1.04,1.10) & 2,880 & 1.03 (0.97,1.09) & 6,370 & 1.01 (0.96,1.06) \\ \hline \mbox{Ind} & 2,22,790 & 4,130 & 1.14 (1.08,1.19) & 660 & 0.91 (0.78,1.07) & 1,980 & 1.22 (1.11,1.33) \\ \hline \mbox{Ind} & 2,800 & 1.35 (1.26,1.44) & 560 & 1.36 (1.05,1.77) & 1,300 & 1.38 (1.22,1.57) \\ \hline \mbox{Never} & 2,496,240 & 72,510 & Ref. & 14,810 & Ref. & 34,380 & Ref. \\ \hline \mbox{Ind} & 2,496,240 & 72,510 & Ref. & 14,810 & Ref. & 34,380 & Ref. \\ \hline \mbox{Ind} & 2,496,240 & 72,510 & Ref. & 14,810 & Ref. & 34,380 & Ref. \\ \hline \mbox{Ind} & 2,496,240 & 72,510 & Ref. & 14,810 & Ref. & 34,380 & Ref. \\ \hline \mbox{Ind} & 2,496,240 & 72,510 & Ref. & 14,810 & Ref. & 34,380 & Ref. \\ \hline \mbox{Ind} & 2,496,240 & 72,510 & Ref. & 14,810 & Ref. & 34,380 & Ref. \\ \hline \mbox{Ind} & 2,540 & 3.61 & 1.33 (1.16,1.52 & 600 & 1.19 (0.96,1.46) & 1.660 & 1.32 (1.28,1.36) \\ \hline \mbox{Ind} & 2,540 & 6.5 & 1.$	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$

Table S13. Multiple imputation for the association of infertility, miscarriage, and stillbirth with first non-fatal, subtypes of first non-fatal stroke

Education level, body-mass index, smoking status, ethnicity, hypertension, diabetes mellitus and study were included in the imputation procedure. Ten imputed datasets were created. HRs were adjusted for ethnicity (Caucasian, Asian, and other), body-mass index (underweight, normal, overweight, and obese), smoking status (current smoker and not current smoker), education level ( $\leq 10$ , 11-12, and >12 years), and study, and stratified by hypertension (yes and no)

		Non-fa	tal and fa	tal stroke	Haem	orrhagic stroke	Ischa	emic stroke	Unsp	ecific stroke
	Comparison	Sample size	No. of events	HR (95% CI)	No. of events	HR (95% CI)	No. of events	HR (95% CI)	No. of events	HR (95% CI)
History of miscarriage	Never	4,600,380	32,780	Ref.	19,740	Ref.	12,230	Ref.	1,420	Ref.
	Ever	916,050	7,150	1.17 (1.05,1.29)	4,310	1.22 (0.97,1.53)	2,810	1.12 (0.98,1.28)	190	-
Number of miscarriages	0	4,600,380	32,780	Ref.	19,740	Ref.	12,230	Ref.	1,420	Ref.
	1	673,620	4,810	1.07 (0.95,1.21)	2,890	1.11 (0.89,1.40)	1,900	1.04 (0.91,1.19)	130	-
	2	160,780	1,380	1.25 (1.06,1.49)	870	1.39 (1.05,1.83)	500	1.09 (0.84,1.42)	30	-
	≥3	81,100	960	1.78 (1.54,2.07)	550	1.82 (1.35,2.45)	410	1.79 (1.38,2.31)	30	-
History of stillbirth	Never	5,160,800	35,020	Ref.	20,760	Ref.	13,540	Ref.	1,410	Ref.
	Ever	249,120	4,520	1.06 (1.00,1.13)	3,020	1.19 (1.08,1.30)	1,370	0.89 (0.71,1.11)	200	-
Number of stillbirths	0	5,160,800	35,020	Ref.	20,760	Ref.	13,540	Ref.	1,410	Ref.
	1	199,500	2,760	0.97 (0.91,1.03)	1,830	1.07 (0.97,1.19)	840	0.81 (0.67,0.97)	140	-
	≥2	49,520	1,760	1.26 (1.15,1.38)	1,190	1.43 (1.34,1.53)	530	1.06 (0.74,1.51)	60	-

Table S14. Multiple imputation for the association of miscarriage and stillbirth with fatal, subtypes of fatal stroke

Education level, body-mass index, smoking status, ethnicity, hypertension, diabetes mellitus and study were included in the imputation procedure. Ten imputed datasets were created. HRs were adjusted for ethnicity (Caucasian, Asian, and other), body-mass index (underweight, normal, overweight, and obese), smoking status (current smoker and not current smoker), education level ( $\leq 10$ , 11-12, and >12 years), and study, and stratified by hypertension (yes and no)

#### Effect size in single study

Study	Comparison	Exposed	Unexposed		HR (95% CI)
ALSWH	Ever vs never	72/1,411	385/8,499		1.16 (0.90, 1.49)
WLH	Ever vs never	204/9,998	665/38,421	-	1.18 (1.01, 1.38)
NSHD	Ever vs never	<5/133	10/1,121	$\longrightarrow$	0.97 (0.42, 9.20)
SWAN	Ever vs never	19/739	81/2,382		0.83 (0.50, 1.37)
JNHS	Ever vs never	25/2,007	163/12,732	<b></b>	1.08 (0.71, 1.65)
Prospect-EPIC	Ever vs never	131/1,923	988/14,821		1.11 (0.92, 1.33)
Overall	Ever vs never	453/16,211	2,292/77,976	+	1.14 (1.08, 1.20)



ALSWH: Australian Longitudinal Study on Women's Health 1946-51 cohort; JNHS: Japan Nurses' Health Study; NSHD: MRC National Survey of Health and Development Study; Prospect-EPIC: the Prospect-European Prospective Investigation into Cancer and Nutrition cohort coordinated in the Netherlands; SWAN: Study of Women's Health Across the Nation; WLH: Women's Lifestyle and Health Study. Heterogeneity:  $I^2=0.0\%$ , p=0.82. HR in single study was adjusted for ethnicity (Caucasian, Asian, and other), body-mass index (underweight, normal, overweight, and obese), smoking status (current smoker and not current smoker), and education level ( $\leq 10$ , 11-12, and >12 years), and stratified by hypertension (yes and no). Overall HRs were additionally adjusted for study.

Study	Comparison	Exposed	Unexposed		HR (95% CI)
ALSWH	Ever vs never	207/3,957	258/6,272	+	1.26 (1.05, 1.51)
	1 vs 0	128/2,652	258/6,272	•	1.17 (0.95, 1.45)
	2 vs 0	44/781	258/6,272	*	1.36 (0.98, 1.87)
	≥3 vs 0	35/524	258/6,272		1.55 (1.08, 2.20)
NSHD	Ever vs never	<5/260	9/836	<b>→</b>	<ul> <li>0.91 (0.24, 3.38)</li> </ul>
	1 vs 0	<5/195	9/836	<b>→</b>	<ul><li>0.87 (0.19, 4.08)</li></ul>
	2 vs 0	<5/45	9/836	$\rightarrow$	<ul> <li>1.53 (0.19, 12.27)</li> </ul>
	≥3 vs 0	<5/20	9/836		
SWAN	Ever vs never	30/872	61/1,957		1.13 (0.73, 1.74)
	1 vs 0	19/614	61/1,957	-	1.02 (0.61, 1.71)
	2 vs 0	5/166	61/1,957		0.94 (0.38, 2.35)
	≥3 vs 0	6/92	61/1,957	+>	2.16 (0.93, 5.02)
UKBiobank	Ever vs never	1,574/54,750	4,553/166,904	•	1.12 (1.06, 1.19)
	1 vs 0	1,088/39,190	4,553/166,904	•	1.08 (1.01, 1.16)
	2 vs 0	285/10,031	4,553/166,904	+	1.12 (0.99, 1.26)
	≥3 vs 0	201/5,529	4,553/166,904		1.38 (1.20, 1.59)
ChinaBiobank	Ever vs never	36/1,580	207/10,332	•	0.89 (0.63, 1.28)
	1 vs 0	28/1,256	207/10,332	-	0.89 (0.60, 1.33)
	2 vs 0	7/249	207/10,332		1.04 (0.49, 2.22)
	≥3 vs 0	<5/75	207/10,332 •	• <u> </u>	<ul> <li>0.45 (0.06, 3.24)</li> </ul>
Prospect-EPIC	Ever vs never	274/3,896	724/11,002	+	1.00 (0.87, 1.14)
	1 vs 0	189/2,774	724/11,002	+	0.99 (0.84, 1.16)
	2 vs 0	53/716	724/11,002	- <del></del>	0.98 (0.74, 1.29)
	≥3 vs 0	28/348	724/11,002	-	1.07 (0.73, 1.56)
Overall	Ever vs never	2,124/65,315	5,812/197,303	•	1.11 (1.07, 1.15)
	1 vs 0	1,454/46,681	5,812/197,303	•	1.07 (1.04, 1.10)
	2 vs 0	395/11,988	5,812/197,303	•	1.12 (1.07, 1.17)
	≥3 vs 0	271/6,588	5,812/197,303	•	1.35 (1.27, 1.44)
			1	1 2	

Figure S12. Association between miscarriage and first non-fatal stroke in each study

ALSWH: Australian Longitudinal Study on Women's Health 1946-51 cohort; NSHD: MRC National Survey of Health and Development Study; SWAN: Study of Women's Health Across the Nation; Prospect-EPIC: the Utrecht contribution to the European Prospective Investigation into Cancer and Nutrition cohort, the Netherlands. Heterogeneity: Ever vs never:  $I^2=16.7\%$ , p=0.31; 1 vs 0:  $I^2=0.0\%$ , p=0.76; 2 vs 0:  $I^2=0.0\%$ , p=0.81;  $\geq 3$  vs 0:  $I^2=3.6\%$ , p=0.39. HR in single study was adjusted for ethnicity (Caucasian, Asian, and other), bodymass index (underweight, normal, overweight, and obese), smoking status (current smoker and not current smoker), and education level ( $\leq 10$ , 11-12, and >12 years), and stratified by hypertension (yes and no). Overall HRs were additionally adjusted for study.

Study	Comparison	Exposed	Unexposed	HR (95% CI)
ALSWH	Ever vs never	19/3,958	19/6,272	1.46 (0.78, 2.75)
	1 vs 0	9/2,653	19/6,272	1.07 (0.48, 2.37)
	2 vs 0	5/781	19/6,272	1.96 (0.73, 5.25)
	≥3 vs 0	5/524	19/6,272	◆ 2.49 (0.94, 6.60)
UKBiobank	Ever vs never	150/54,895	538/167,232	
	1 vs 0	93/39,278	538/167,232	• 0.80 (0.64, 1.00)
	2 vs 0	32/10,067	538/167,232	+ 1.09 (0.76, 1.55)
	≥3 vs 0	25/5,550	538/167,232	1.46 (0.98, 2.18)
ChinaBiobank	Ever vs never	491/27,666	2,605/271,945	
	1 vs 0	343/21,814	2,605/271,945	
	2 vs 0	91/4,323	2,605/271,945	→ 1.28 (1.04, 1.58)
	≥3 vs 0	57/1,529	2,605/271,945	+ 1.76 (1.36, 2.28)
Prospect-EPIC	Ever vs never	52/3,464	93/9,914	+ 1.46 (1.04, 2.05)
	1 vs 0	34/2,482	93/9,914	1.38 (0.93, 2.05)
	2 vs 0	9/634	93/9,914	<ul> <li>1.28 (0.65, 2.54)</li> </ul>
	≥3 vs 0	9/294	93/9,914	2.82 (1.43, 5.55)
Overall	Ever vs never	712/89,983	3,255/455,363	
	1 vs 0	479/66,227	3,255/455,363	<ul> <li>1.08 (0.96, 1.21)</li> </ul>
	2 vs 0	137/15,805	3,255/455,363	→ 1.26 (1.07, 1.49)
	≥3 vs 0	96/7,897	3,255/455,363	→ 1.82 (1.58, 2.10)

Figure S13. Association between miscarriage and fatal stroke in each study

ALSWH: Australian Longitudinal Study on Women's Health 1946-51 cohort; Prospect-EPIC: the Utrecht contribution to the European Prospective Investigation into Cancer and Nutrition cohort, the Netherlands. Heterogeneity: Ever vs never:  $I^2=72.6\%$ , p=0.01; 1 vs 0:  $I^2=72.7\%$ , p=0.01; 2 vs 0:  $I^2=0.0\%$ , p=0.80;  $\geq 3$  vs 0:  $I^2=0.0\%$ , p=0.55. HR in single study was adjusted for ethnicity (Caucasian, Asian, and other), body-mass index (underweight, normal, overweight, and obese), smoking status (current smoker and not current smoker), and education level ( $\leq 10$ , 11-12, and >12 years), and stratified by hypertension (yes and no). Overall HRs were additionally adjusted for study.

Study	Comparison	Exposed	Unexposed		HR (95% CI)
NSHD	Ever vs never	<5/45	10/925		<ul> <li>1.27 (0.16, 10.34)</li> </ul>
	1 vs 0	<5/42	10/925	<b>—</b>	<ul> <li>1.28 (0.16, 10.52)</li> </ul>
	≥2 vs 0	0/<5	10/925		
SWAN	Ever vs never	<5/81	88/2,746	•	0.72 (0.22, 2.30)
	1 vs 0	<5/75	88/2,746	• >	• 0.79 (0.25, 2.52)
	≥2 vs 0	0/6	88/2,746		
UKBiobank	Ever vs never	334/6,890	5,804/214,909	-	1.43 (1.28, 1.60)
	1 vs 0	283/5,948	5,804/214,909	-	1.41 (1.25, 1.59)
	≥2 vs 0	51/942	5,804/214,909		1.57 (1.19, 2.06)
ChinaBiobank	Ever vs never	25/1,007	218/10,905		0.64 (0.42, 0.97)
	1 vs 0	19/768	218/10,905		0.73 (0.46, 1.17)
	≥2 vs 0	6/239	218/10,905	•	0.46 (0.20, 1.04)
Prospect-EPIC	Ever vs never	48/524	950/14,374		1.20 (0.90, 1.60)
	1 vs 0	43/477	950/14,374	<b>.</b>	1.19 (0.87, 1.61)
	≥2 vs 0	5/36	950/14,374	$\rightarrow$	<ul> <li>1.68 (0.70, 4.05)</li> </ul>
Overall	Ever vs never	411/8,547	7,070/243,859		1.31 (1.10, 1.57)
	1 vs 0	349/7,310	7,070/243,859	-	1.32 (1.15, 1.51)
	≥2 vs 0	62/1,225	7,070/243,859		1.29 (0.84, 1.98)

Figure S14. Association between stillbirth and first non-fatal stroke in each study

NSHD: MRC National Survey of Health and Development Study; SWAN: Study of Women's Health Across the Nation; Prospect-EPIC: the Utrecht contribution to the European Prospective Investigation into Cancer and Nutrition cohort, the Netherlands. Heterogeneity: ever vs never:  $I^2=83.7\%$ , p<.001; 1 vs 0:  $I^2=67.6\%$ , p=0.02;  $\geq 2$  vs 0:  $I^2=85.3\%$ , p<.001. HR in single study was adjusted for ethnicity (Caucasian, Asian, and other), body-mass index (underweight, normal, overweight, and obese), smoking status (current smoker and not current smoker), and education level ( $\leq 10$ , 11-12, and >12 years), and stratified by hypertension (yes and no). Overall HRs were additionally adjusted for study.

Study	Comparison	Exposed	Unexposed		HR (95% CI)
UKBiobank	Ever vs never	35/6,913	655/215,359		1.22 (0.87, 1.72)
	1 vs 0	27/5,962	655/215,359	-	1.09 (0.74, 1.61)
	≥2 vs 0	8/951	655/215,359		↔ 2.04 (1.01, 4.09)
ChinaBiobank	Ever vs never	408/17,304	2,687/282,305	+	1.03 (0.93, 1.14)
	1 vs 0	243/13,376	2,687/282,305	*	0.94 (0.83, 1.08)
	≥2 vs 0	165/3,928	2,687/282,305	-	1.19 (1.01, 1.39)
Prospect-EPIC	Ever vs never	8/456	137/12,922		→ 1.33 (0.65, 2.70)
	1 vs 0	5/411	137/12,922		0.94 (0.38, 2.29)
	≥2 vs 0	<5/35	137/12,922	-	→ 5.14 (1.60, 16.49)
Overall	Ever vs never	451/24,673	3,479/510,586	+	1.07 (1.00, 1.13)
	1 vs 0	275/19,749	3,479/510,586	•	0.97 (0.91, 1.03)
	≥2 vs 0	176/4,914	3,479/510,586	*	1.26 (1.15, 1.39)
					)

#### Figure S15. Association between stillbirth and fatal stroke in each study

Prospect-EPIC: the Utrecht contribution to the European Prospective Investigation into Cancer and Nutrition cohort, the Netherlands. Heterogeneity: ever vs never:  $I^2=0.0\%$ , p=0.60, 1 vs 0:  $I^2=0.0\%$ , p=0.81;  $\geq 2$  vs 0:  $I^2=10.2\%$ , p=0.33. HR in single study was adjusted for ethnicity (Caucasian, Asian, and other), body-mass index (underweight, normal, overweight, and obese), smoking status (current smoker and not current smoker), and education level ( $\leq 10$ , 11-12, and >12 years), and stratified by hypertension (yes and no). Overall HRs were additionally adjusted for study.

#### Schoenfeld residuals

			Exposur	$e(\beta, p)$		Education 1	evel (β, p)		Body-mass in	$dex (\beta, p)$	Smoking $(\beta, p)$	Race	(β, p)
	Stroke	Ever	1	2/≥2	≥3	<=10	11-12	Underweight	Overweight	Obese	Current	Asian	Others
Infertility	Non-fatal	-0.00462				-0.01739	-0.013	0.01104	0.01807	-0.03713	0.00799	-0.00037	-0.02419
	(n=2,745)	0.81				0.36	0.50	0.56	0.34	0.05	0.68	0.98	0.21
Miscarriage	Non-fatal	-0.02868				-0.02257	0.00407	-0.00028	0.0181	-0.06761	-0.00881	0.0156	-0.03675
	(n=7,936)	0.01				0.04	0.72	0.98	0.11	<.001	0.43	0.16	0.001
			-0.01807	-0.01568	-0.0118	-0.02276	0.00458	-0.0001	0.01799	-0.068	-0.00869	0.01559	-0.03673
			0.11	0.16	0.29	0.04	0.68	0.99	0.11	<.001	0.44	0.17	0.001
	Fatal	0.01827				0.00192	-0.02227	0.01797	-0.003	0.00479	-0.01501	-0.01841	-0.01322
	(n=3,967)	0.25				0.90	0.16	0.26	0.85	0.76	0.34	0.25	0.41
			0.01397	0.00082	0.00936	0.00175	-0.02224	0.01776	-0.00258	0.00495	-0.0149	-0.01887	-0.0131
			0.38	0.96	0.56	0.91	0.16	0.26	0.87	0.76	0.35	0.23	0.41
Stillbirth	Non-fatal	-0.0331				-0.02608	0.01011	-0.00476	0.02089	-0.07456	-0.01035	0.01606	-0.03811
	(n=7,481)	0.004				0.02	0.38	0.68	0.07	<.001	0.37	0.16	0.001
			-0.03132	-0.00984		-0.02602	0.01004	-0.00475	0.02097	-0.07458	-0.01037	0.01611	-0.03811
			0.006	0.39		0.02	0.39	0.68	0.07	<.001	0.37	0.16	0.001

Table S15. Correlation between the Schoenfeld residuals and survival time

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Fatal	0.03857		0.00098	-0.02235	0.02054	-0.00151	0.00431	-0.00816	-0.02544	-0.0147
(n=3,930)	0.016		0.95	0.16	0.20	0.92	0.79	0.61	0.11	0.36
	0.0037	5 0.04997	0.00053	-0.02201	0.02037	-0.00136	0.0047	-0.00801	-0.02609	-0.0146
	0.8	0.002	0.97	0.17	0.20	0.93	0.77	0.62	0.10	0.36

Models were adjusted for ethnicity (Caucasian, Asian, and other), body-mass index (underweight, normal, overweight, and obese), smoking status (current smoker and not current smoker), education level ( $\leq 10, 11-12, and >12$  years), and study, and stratified by hypertension (yes and no). Miscarriage (yes or no) and non-fatal stroke: models with and without interaction term (survival time\*miscarriage, survival time\*education level, survival time\*body-mass index, and survival time\*race) fit the data similarly (AIC: 175570.7 vs 175700.9), and 95%CI for HR of interaction terms cross 1. Miscarriage (0, 1, 2, or  $\geq 3$ ) and non-fatal stroke: models with and without interaction term (survival time\*body-mass index, and survival time\*race) fit the data similarly (AIC: 175565.8 vs 175599.3), and 95%CI for HR of interaction term (survival time\*stillbirth) (yes or no) and non-fatal stroke: models with and without interaction term (survival time\*stillbirth, survival time\*education level, survival time\*race) fit the data similarly (AIC: 164789.0 vs 164832.6), and 95%CI for HR of interaction terms cross 1. Stillbirth (0, 1, or  $\geq 2$ ) and non-fatal stroke: models with and without interaction term (survival time\*stillbirth, survival time\*body-mass index, and survival time\*race) fit the data similarly (AIC: 164789.9 vs 164832.6), and 95%CI for HR of interaction terms cross 1. Stillbirth (0, 1, or  $\geq 2$ ) and non-fatal stroke: models with and without interaction term (survival time\*stillbirth, survival time\*body-mass index, and survival time\*race) fit the data similarly (AIC: 164789.9 vs 164832.3), and 95%CI for HR of interaction terms cross 1. Stillbirth (yes or no) and fatal stroke: models with and without interaction term (survival time\*stillbirth) fit the data similarly (AIC: 84670.1 vs 84678.5), and HR (95%CI) of interaction term was 1.02 (1.01,1.03). Stillbirth (0, 1, or  $\geq 2$ ) and fatal