

Supplementary Table 5. Sensitivity analysis in the 30–79-year age group

Stage	Participants	Events	Person-year	IR	Model 1			Model 2			Model 3		
					HR	95% CI	p value	HR	95% CI	p value	HR	95% CI	p value
Composite primary outcome													
0	182,166	6,281	2,310,984	2.72	1 (Ref.)			1 (Ref.)			1 (Ref.)		
1	193,653	8,798	2,453,519	3.59	1.04	1.01–1.08	0.016	1.04	1.00–1.07	0.036	1.08	1.04–1.11	< 0.001
2	813,172	89,021	10,034,858	8.87	1.55	1.51–1.59	< 0.001	1.52	1.48–1.56	< 0.001	1.34	1.30–1.38	< 0.001
3	83,509	37,350	876,441	42.62	2.32	2.25–2.39	< 0.001	2.14	2.07–2.20	< 0.001	1.67	1.62–1.72	< 0.001
4	43,546	17,478	450,046	38.84	3.61	3.50–3.72	< 0.001	3.52	3.41–3.63	< 0.001	2.64	2.55–2.73	< 0.001
All-cause death													
0	182,166	3,177	2,325,350	1.37	1 (Ref.)			1 (Ref.)			1 (Ref.)		
1	193,653	3,984	2,476,391	1.61	0.88	0.84–0.92	< 0.001	1.01	0.96–1.06	0.695	1.04	0.99–1.09	0.114
2	813,172	39,350	10,308,880	3.82	1.11	1.07–1.15	< 0.001	1.26	1.21–1.31	< 0.001	1.15	1.10–1.19	< 0.001
3	83,509	25,841	965,367	26.77	1.87	1.80–1.95	< 0.001	1.97	1.89–2.05	< 0.001	1.56	1.50–1.63	< 0.001
4	43,546	9,401	515,444	18.24	2.28	2.19–2.38	< 0.001	2.61	2.50–2.73	< 0.001	2.07	1.98–2.16	< 0.001
Hospitalization for HF													
0	182,166	1,916	2,319,301	0.83	1 (Ref.)			1 (Ref.)			1 (Ref.)		
1	193,653	2,781	2,466,983	1.13	1.11	1.05–1.18	0.001	0.99	0.93–1.05	0.756	1.05	0.99–1.12	0.085
2	813,172	33,314	10,184,706	3.27	1.90	1.81–1.99	< 0.001	1.66	1.58–1.74	< 0.001	1.32	1.25–1.38	< 0.001
3	83,509	14,164	919,687	15.40	2.85	2.70–3.00	< 0.001	2.41	2.29–2.54	< 0.001	1.66	1.57–1.75	< 0.001
4	43,546	9,124	475,924	19.17	6.03	5.72–6.35	< 0.001	5.20	4.93–5.48	< 0.001	3.22	3.05–3.41	< 0.001
Stroke (ischemic or hemorrhagic)													
0	182,166	1,749	2,317,692	0.75	1 (Ref.)			1 (Ref.)			1 (Ref.)		
1	193,653	2,647	2,464,336	1.07	1.15	1.08–1.22	< 0.001	1.10	1.04–1.17	0.002	1.14	1.08–1.22	< 0.001
2	813,172	28,116	10,173,659	2.76	1.81	1.73–1.91	< 0.001	1.71	1.62–1.79	< 0.001	1.52	1.44–1.60	< 0.001
3	83,509	10,628	920,469	11.55	2.48	2.35–2.62	< 0.001	2.21	2.09–2.34	< 0.001	1.73	1.63–1.83	< 0.001
4	43,546	6,044	487,222	12.41	4.29	4.06–4.54	< 0.001	4.04	3.81–4.27	< 0.001	3.02	2.84–3.20	< 0.001
Ischemic stroke													
0	182,166	1,205	2,320,206	0.52	1 (Ref.)	0.00–0.00		1 (Ref.)			1 (Ref.)		
1	193,653	1,927	2,467,677	0.78	1.19	1.11–1.28	< 0.001	1.12	1.04–1.21	0.002	1.17	1.09–1.26	< 0.001
2	813,172	22,651	10,199,327	2.22	2.00	1.89–2.12	< 0.001	1.84	1.73–1.95	< 0.001	1.62	1.52–1.72	< 0.001
3	83,509	9,333	924,957	10.09	2.73	2.56–2.91	< 0.001	2.37	2.22–2.53	< 0.001	1.81	1.69–1.94	< 0.001
4	43,546	5,273	490,569	10.75	4.84	4.54–5.17	< 0.001	4.44	4.15–4.74	< 0.001	3.21	2.99–3.44	< 0.001

Supplementary Table 5. Continued

Stage	Participants	Events	Person-year	IR	Model 1			Model 2			Model 3		
					HR	95% CI	p value	HR	95% CI	p value	HR	95% CI	p value
Hemorrhagic stroke													
0	182,166	618	2,322,554	0.27	1 (Ref.)			1 (Ref.)			1 (Ref.)		
1	193,653	857	2,472,585	0.35	1.13	1.02–1.25	0.020	1.17	1.05–1.30	0.004	1.19	1.07–1.33	0.001
2	813,172	6,835	10,278,092	0.67	1.52	1.40–1.65	<0.001	1.55	1.42–1.69	<0.001	1.41	1.29–1.55	<0.001
3	83,509	1,851	959,459	1.93	1.95	1.76–2.16	<0.001	1.91	1.72–2.12	<0.001	1.59	1.42–1.77	<0.001
4	43,546	1,204	510,665	2.36	3.38	3.04–3.74	<0.001	3.49	3.14–3.88	<0.001	2.86	2.55–3.20	<0.001
Myocardial infarction													
0	182,166	380	2,323,690	0.16	1 (Ref.)			1 (Ref.)			1 (Ref.)		
1	193,653	691	2,473,275	0.28	1.33	1.17–1.50	<0.001	1.16	1.02–1.31	0.025	1.22	1.07–1.38	0.003
2	813,172	8,172	10,267,221	0.80	2.84	2.56–3.15	<0.001	2.38	2.14–2.65	<0.001	2.14	1.92–2.39	<0.001
3	83,509	2,399	954,476	2.51	4.18	3.73–4.70	<0.001	3.12	2.78–3.51	<0.001	2.49	2.20–2.81	<0.001
4	43,546	1,446	508,102	2.85	6.47	5.75–7.27	<0.001	5.17	4.59–5.83	<0.001	3.68	3.25–4.17	<0.001
Coronary artery disease													
0	182,166	760	2,321,886	0.33	1 (Ref.)			1 (Ref.)			1 (Ref.)		
1	193,653	1,499	2,469,228	0.61	1.45	1.33–1.58	<0.001	1.21	1.11–1.33	<0.001	1.32	1.21–1.45	<0.001
2	813,172	21,250	10,192,847	2.08	3.55	3.30–3.82	<0.001	2.88	2.67–3.10	<0.001	2.30	2.13–2.48	<0.001
3	83,509	5,612	935,649	6.00	4.23	3.91–4.58	<0.001	3.22	2.97–3.50	<0.001	2.20	2.02–2.39	<0.001
4	43,546	4,604	487,459	9.44	9.62	8.89–10.41	<0.001	7.51	6.92–8.14	<0.001	4.16	3.82–4.52	<0.001
Peripheral artery disease													
0	182,166	61	2,325,054	0.03	1 (Ref.)			1 (Ref.)			1 (Ref.)		
1	193,653	66	2,476,099	0.03	0.74	0.52–1.05	0.088	0.90	0.64–1.28	0.567	1.04	0.73–1.48	0.826
2	813,172	1,479	10,302,363	0.14	2.64	2.04–3.41	<0.0001	3.12	2.41–4.05	<0.0001	1.95	1.50–2.55	<0.001
3	83,509	996	961,356	1.04	6.48	4.94–8.50	<0.0001	6.33	4.81–8.33	<0.0001	2.68	2.02–3.57	<0.001
4	43,546	542	512,877	1.06	10.11	7.70–13.27	<0.0001	12.03	9.13–15.85	<0.0001	4.02	3.01–5.38	<0.001
Atrial fibrillation													
0	182,166	2,444	2,313,424	1.06	1 (Ref.)			1 (Ref.)			1 (Ref.)		
1	193,653	3,725	2,457,993	1.52	1.18	1.12–1.25	<0.0001	1.03	0.98–1.09	0.265	1.07	1.02–1.13	0.012
2	813,172	33,549	1,0140,222	3.31	1.70	1.63–1.77	<0.0001	1.46	1.40–1.52	<0.0001	1.20	1.15–1.25	<0.001
3	83,509	9,748	924,349	10.55	2.02	1.93–2.12	<0.0001	1.75	1.66–1.83	<0.0001	1.32	1.25–1.39	<0.001
4	43,546	11,627	421,051	27.61	8.15	7.78–8.53	<0.0001	6.98	6.66–7.32	<0.0001	4.84	4.60–5.09	<0.001

Supplementary Table 5. Continued

Stage	Participants	Events	Person-year	IR	Model 1			Model 2			Model 3		
					HR	95% CI	p value	HR	95% CI	p value	HR	95% CI	p value
Hospitalization for AF													
0	182,166	1,045	2,320,952	0.45	1 (Ref.)			1 (Ref.)			1 (Ref.)		
1	193,653	1,722	2,468,971	0.70	1.23	1.13–1.32	<0.0001	1.06	0.98–1.15	0.136	1.10	1.02–1.19	0.019
2	813,172	16,725	10,238,480	1.63	1.72	1.62–1.84	<0.0001	1.46	1.37–1.56	<0.0001	1.22	1.14–1.30	<0.001
3	83,509	6,495	943,965	6.88	2.27	2.11–2.43	<0.0001	1.90	1.77–2.05	<0.0001	1.43	1.33–1.54	<0.001
4	43,546	7,425	474,889	15.64	8.59	8.03–9.19	<0.0001	7.29	6.80–7.81	<0.0001	5.13	4.76–5.52	<0.001

AF, atrial fibrillation; CI, confidence interval; HF, heart failure; HR, hazard ratio; IR, incidence rate; Ref., reference.

Model 1 was adjusted for age and sex. Model 2 was adjusted for age, sex, smoking status, alcohol consumption, physical activity, and household income. Model 3 was adjusted for age, sex, smoking status, alcohol consumption, physical activity, household income, use of antihypertensive drugs, glucose-lowering drugs, lipid-lowering drugs, and antiplatelet agents.