

**Supplementary file 1-4.** Multivariable hazards ratio for stroke associated with atrial fibrillation, according to ejection fraction groups

Variable	HFrEF		HFmrEF		HFpEF	
	HR (95% CI)	P-value	HR (95% CI)	P-value	HR (95% CI)	P-value
<b>Atrial fibrillation</b>	1.534 (1.028–2.290)	0.036	1.039 (0.567–1.906)	0.901	1.898 (1.125–3.203)	0.016
<b>Sex, male</b>	0.880 (0.546–1.419)	0.600	0.615 (0.294–1.285)	0.196	0.935 (0.485–1.804)	0.842
<b>Age, ≥80 yrs</b>	0.962 (0.591–1.566)	0.877	0.933 (0.503–1.733)	0.827	1.049 (0.630–1.747)	0.855
<b>NYHA functional class</b>						
III vs II	1.051 (0.582–1.899)	0.869	1.062 (0.429–2.629)	0.896	0.982 (0.523–1.846)	0.956
IV vs II	1.216 (0.682–2.168)	0.508	1.484 (0.616–3.576)	0.379	0.887 (0.471–1.672)	0.711
<b>Hypertension</b>	1.138 (0.769–1.684)	0.517	1.150 (0.616–2.147)	0.661	1.366 (0.780–2.394)	0.275
<b>Diabetes mellitus</b>	1.161 (0.772–1.744)	0.474	1.353 (0.725–2.527)	0.342	0.629 (0.350–1.131)	0.122
<b>Ischemic heart disease</b>	1.393 (0.905–2.144)	0.132	0.897 (0.448–1.798)	0.760	0.947 (0.536–1.671)	0.850
<b>Renal failure</b>	1.576 (0.964–2.576)	0.070	0.844 (0.337–2.117)	0.718	0.984 (0.429–2.256)	0.969
<b>Cancer</b>	1.668 (0.978–2.846)	0.060			1.935 (0.899–4.165)	0.092
<b>Prior stroke</b>	1.873 (1.238–2.834)	0.003	1.925 (1.090–3.400)	0.024	1.652 (0.948–2.879)	0.076
<b>Heart rate</b>	0.999 (0.992–1.006)	0.783	0.998 (0.987–1.009)	0.701	1.006 (0.996–1.015)	0.256
<b>Systolic blood pressure</b>	1.008 (0.999–1.017)	0.069	1.004 (0.991–1.016)	0.571	1.007 (0.997–1.018)	0.174
<b>diastolic blood pressure</b>	0.990 (0.976–1.003)	0.136	1.010 (0.991–1.030)	0.298	0.997 (0.980–1.015)	0.763
<b>Body mass index</b>	0.981 (0.932–1.031)	0.445	1.010 (0.943–1.082)	0.772	0.956 (0.898–1.018)	0.158
<b>White blood cells</b>	1.029 (0.986–1.075)	0.189	1.002 (0.938–1.072)	0.942	0.968 (0.895–1.047)	0.417
<b>HbA1c</b>	0.992 (0.939–1.048)	0.773	0.957 (0.882–1.038)	0.287	1.075 (0.993–1.165)	0.073
<b>Potassium</b>	1.193 (0.913–1.560)	0.196	0.948 (0.632–1.421)	0.796	0.981 (0.668–1.442)	0.923
<b>Sodium ≥135 mmol/L</b>	0.891 (0.578–1.371)	0.599	1.045 (0.525–2.084)	0.900	0.980 (0.518–1.853)	0.951
<b>Hemoglobin ≥12 g/dL</b>	1.262 (0.826–1.927)	0.282	0.848 (0.468–1.538)	0.588	0.833 (0.516–1.345)	0.455
<b>Blood urea nitrogen ≥26 mg/dL</b>	0.994 (0.651–1.517)	0.978	1.438 (0.747–2.768)	0.277	0.923 (0.494–1.726)	0.802
<b>Creatinine ≥2 mg/dL</b>	0.610 (0.315–1.182)	0.143	1.556 (0.558–4.342)	0.398	0.816 (0.251–2.656)	0.735
<b>BNP &gt;900 pg/mL or NTproBNP &gt;5000 pg/mL</b>	0.957 (0.651–1.406)	0.823	0.756 (0.430–1.328)	0.330	0.732 (0.419–1.276)	0.271
<b>ACEI or ARB</b>	1.013 (0.623–1.648)	0.959	0.807 (0.455–1.429)	0.462	0.760 (0.471–1.225)	0.260
<b>Beta-blockers</b>	1.057 (0.716–1.559)	0.781	1.009 (0.567–1.796)	0.974	1.167 (0.728–1.871)	0.521
<b>Aldosterone antagonist</b>	1.133 (0.775–1.656)	0.520	1.452 (0.843–2.500)	0.179	0.915 (0.573–1.460)	0.710
<b>Nitrate</b>	1.019 (0.702–1.478)	0.922	1.023 (0.592–1.767)	0.936	1.350 (0.829–2.199)	0.227
<b>Diuretic</b>	1.652 (0.508–5.369)	0.404	0.814 (0.297–2.229)	0.689	0.806 (0.340–1.909)	0.624

<b>Anticoagulant</b>	1.363 (0.910–2.041)	0.133	1.977 (1.048–3.731)	0.035	1.024 (0.633–1.657)	0.921
<b>Antiplatelet</b>	0.821 (0.528–1.275)	0.380	0.843 (0.432–1.645)	0.617	1.298 (0.778–2.167)	0.318
<b>Statin</b>	1.089 (0.731–1.622)	0.676	1.242 (0.673–2.290)	0.488	1.288 (0.766–2.164)	0.340
<b>Smoking status</b>						
Ex vs current	1.225 (0.740–2.027)	0.429	1.165 (0.498–2.725)	0.725	1.203 (0.499–2.902)	0.680
Never vs current	0.868 (0.498–1.512)	0.617	0.663 (0.279–1.578)	0.353	0.695 (0.284–1.700)	0.425
<b>Alcohol consumption</b>						
Social vs heavy	1.159 (0.561–2.393)	0.691	0.409 (0.173–0.965)	0.041	2.369 (0.543–10.336)	0.251
Never vs heavy	1.229 (0.569–2.652)	0.599	0.371 (0.153–0.897)	0.028	3.339 (0.751–14.853)	0.113

ACEI, Angiotensin-converting enzyme inhibitor; ARB, Angiotensin receptor blockers; BNP, brain natriuretic peptide; NT-proBNP, N-terminal prohormone of brain natriuretic peptide; EF, ejection fraction; HFrEF, heart failure with reduced ejection fraction; HFmrEF, heart failure with mid-range ejection fraction; HFpEF, heart failure with preserved ejection fraction; HR, hazard ratio; NYHA, New York Heart Association.