

**Supplementary file 1-2.** Multivariable hazards ratio for the composite of all-cause mortality and rehospitalization associated with atrial fibrillation, according to ejection fraction groups.

Variable	HFrfEF		HFmrEF		HFpEF	
	HR (95% CI)	P-value	HR (95% CI)	P-value	HR (95% CI)	P-value
<b>Atrial fibrillation</b>	0.967 (0.871–1.074)	0.535	1.135 (0.931–1.382)	0.210	1.027 (0.884–1.194)	0.724
<b>Sex, male</b>	1.082 (0.965–1.212)	0.176	0.966 (0.777–1.201)	0.756	1.147 (0.959–1.371)	0.134
<b>Age, ≥80 yrs</b>	1.233 (1.101–1.380)	<0.001	1.355 (1.114–1.647)	0.002	1.214 (1.048–1.408)	0.010
<b>NYHA functional class</b>						
III vs II	1.378 (1.194–1.591)	<0.001	0.931 (0.714–1.215)	0.599	1.369 (1.122–1.670)	0.002
IV vs II	1.414 (1.227–1.630)	<0.001	1.071 (0.824–1.392)	0.607	1.404 (1.152–1.711)	0.001
<b>Hypertension</b>	1.160 (1.055–1.275)	0.002	0.998 (0.814–1.224)	0.988	0.983 (0.840–1.150)	0.829
<b>Diabetes mellitus</b>	1.153 (1.042–1.276)	0.006	1.000 (0.813–1.230)	1.000	1.225 (1.043–1.439)	0.013
<b>Ischemic heart disease</b>	1.285 (1.154–1.431)	<0.001	1.611 (1.275–2.034)	<0.001	1.190 (1.002–1.413)	0.048
<b>Renal failure</b>	1.404 (1.234–1.598)	<0.001	1.510 (1.153–1.978)	0.003	1.331 (1.076–1.646)	0.008
<b>Cancer</b>	1.224 (1.058–1.416)	0.007	1.339 (1.006–1.781)	0.045	1.420 (1.121–1.799)	0.004
<b>Prior stroke</b>	1.087 (0.966–1.222)	0.166	1.224 (0.985–1.520)	0.068	1.320 (1.104–1.579)	0.002
<b>Heart rate</b>	0.999 (0.997–1.000)	0.142	0.998 (0.994–1.002)	0.266	1.000 (0.997–1.003)	0.920
<b>Systolic blood pressure</b>	1.001 (0.998–1.003)	0.502	1.000 (0.996–1.004)	0.840	1.000 (0.997–1.004)	0.804
<b>diastolic blood pressure</b>	0.993 (0.990–0.997)	<0.001	1.000 (0.993–1.006)	0.907	1.001 (0.995–1.006)	0.816
<b>Body mass index</b>	0.976 (0.964–0.988)	<0.001	0.998 (0.975–1.022)	0.882	0.986 (0.969–1.003)	0.105
<b>White blood cells</b>	0.996 (0.985–1.008)	0.536	1.004 (0.983–1.026)	0.711	0.975 (0.955–0.996)	0.019
<b>HbA1c</b>	0.983 (0.970–0.997)	0.016	0.994 (0.967–1.022)	0.680	0.985 (0.963–1.008)	0.201
<b>Potassium</b>	1.004 (0.942–1.071)	0.897	0.876 (0.769–0.997)	0.045	1.101 (0.993–1.220)	0.068
<b>Sodium ≥135 mmol/L</b>	0.884 (0.797–0.980)	0.019	0.828 (0.671–1.022)	0.080	0.950 (0.806–1.120)	0.541
<b>Hemoglobin ≥12 g/dL</b>	0.879 (0.798–0.970)	0.010	0.837 (0.691–1.014)	0.069	0.829 (0.719–0.955)	0.010
<b>Blood urea nitrogen ≥26 mg/dL</b>	1.143 (1.029–1.269)	0.013	1.110 (0.894–1.377)	0.345	1.342 (1.128–1.598)	0.001
<b>Creatinine ≥2 mg/dL</b>	1.035 (0.884–1.211)	0.670	1.215 (0.885–1.667)	0.229	0.859 (0.649–1.135)	0.284
<b>BNP &gt;900 pg/mL or NTproBNP &gt;5000 pg/mL</b>	1.123 (1.022–1.234)	0.015	1.208 (1.005–1.452)	0.044	1.135 (0.974–1.322)	0.105
<b>ACEI or ARB</b>	0.736 (0.660–0.821)	<0.001	0.929 (0.770–1.121)	0.442	0.885 (0.770–1.018)	0.086
<b>Beta-blockers</b>	0.792 (0.723–0.868)	<0.001	0.806 (0.667–0.972)	0.024	0.877 (0.765–1.005)	0.058
<b>Aldosterone antagonist</b>	1.075 (0.979–1.179)	0.128	1.012 (0.852–1.201)	0.894	1.092 (0.951–1.253)	0.214
<b>Nitrate</b>	0.948 (0.867–1.038)	0.251	0.971 (0.812–1.161)	0.745	1.005 (0.875–1.154)	0.944

<b>Diuretic</b>	1.030 (0.832–1.275)	0.788	1.284 (0.923–1.787)	0.138	0.869 (0.672–1.125)	0.287
<b>Anticoagulant</b>	1.034 (0.943–1.135)	0.475	1.084 (0.902–1.303)	0.389	0.952 (0.826–1.096)	0.491
<b>Antiplatelet</b>	0.984 (0.884–1.096)	0.773	0.846 (0.682–1.048)	0.125	0.936 (0.806–1.087)	0.385
<b>Statin</b>	0.933 (0.849–1.027)	0.158	0.755 (0.616–0.926)	0.007	0.862 (0.734–1.011)	0.068
<b>Smoking status</b>						
Ex vs current	1.075 (0.945–1.224)	0.270	1.244 (0.899–1.720)	0.187	1.226 (0.940–1.598)	0.133
Never vs current	1.075 (0.939–1.232)	0.295	1.106 (0.811–1.510)	0.525	1.291 (1.000–1.668)	0.050
<b>Alcohol consumption</b>						
Social vs heavy	1.019 (0.854–1.214)	0.838	1.505 (0.956–2.371)	0.078	1.265 (0.920–1.739)	0.148
Never vs heavy	1.079 (0.896–1.301)	0.423	1.615 (1.027–2.538)	0.038	1.267 (0.921–1.743)	0.146

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; HF<sub>r</sub>EF, heart failure with reduced ejection fraction; HF<sub>mr</sub>EF, heart failure with mid-range ejection fraction; HF<sub>p</sub>EF, heart failure with preserved ejection fraction; HR, hazard ratio; NYHA, New York Heart Association.