

**Supplementary material**

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**Table S1.** Patient characteristics by HF phenotype and etiology

	Total HF			HF <sub>r</sub> EF (n = 1604)			HF <sub>mr</sub> EF (n = 331)			HF <sub>p</sub> EF (n = 662)		
	Non-IE n = 1557	IE n = 1040	P- value	non-IE (n = 806)	IE (n = 798)	P- value	non-IE (n = 217)	IE (n = 114)	P- value	non-IE (n = 534)	IE (n = 128)	P- value
Male, n (%)	968 (62.1)	856 (82.1)	<0.001	631 (78.3)	672 (84.2)	0.002	130 (59.9)	96 (84.2)	<0.001	206 (38.6)	85 (66.4)	<0.001
Age, years, Me (IQR)	62.1 (49.2– 71.5)	65.7 (59.7– 74.3)	<0.001	57.1 (45.3– 65.3)	64.5 (59.2– 70.8)	<0.001	63.3 (48.9– 72.8)	69.4 (62.6– 77.7)	<0.001	69.8 (58.9– 79.1)	76.3 (66.3– 83.2)	<0.001
Chronic HF, n (%)	1285 (82.7)	945 (90.9)	<0.001	674 (83.6)	731 (91.6)	<0.001	175 (80.6)	97 (85.1)	0.32	436 (82.1)	117 (91.4)	0.01
Hypertension, n (%)	1201 (77.1)	914 (87.9)	<0.001	571 (70.8)	684 (85.7)	<0.001	173 (79.7)	109 (95.6)	<0.001	457 (85.6)	121 (94.5)	0.006
Coronary artery disease, n (%)	808 (51.9)	1040 (100)	<0.001	403 (50.0)	798 (100.0)	<0.001	114 (52.5)	114 (100.0)	0.001	291 (54.5)	128 (100.0)	<0.001
Atrial fibrillation, n (%)	937 (60.2)	577 (55.5)	0.017	474 (58.8)	416 (52.1)	0.007	125 (57.6)	72 (63.2)	0.33	338 (63.3)	89 (69.5)	0.19
Stroke, n (%)	167 (10.7)	147 (14.1)	0.009	83 (10.3)	120 (15.0)	0.004	24 (11.1)	10 (8.8)	0.52	60 (11.2)	17 (13.3)	0.52

Diabetes, n (%)	469 (30.1)	493 (47.4)	<0.001	249 (30.9)	371 (46.5)	<0.001	62 (28.6)	58 (50.9)	<0.001	158 (29.6)	64 (50)	<0.001
Renal failure, n (%)	476 (30.6)	404 (38.9)	0.31	246 (30.5)	293 (36.7)	0.009	55 (25.4)	42 (36.8)	0.03	175 (32.8)	69 (53.9)	<0.001
Asthma/COPD, n (%)	378 (24.3)	271 (26.1)	0.31	193 (24.0)	201 (25.2)	0.56	40 (18.4)	28 (24.6)	0.19	145 (27.2)	69 (53.9)	0.20
Cancer, n (%)	397 (25.5)	244 (23.5)	0.24	145 (18.0)	168 (21.1)	0.12	61 (28.1)	34 (29.8)	0.74	191 (35.8)	42 (32.8)	0.53
Number of comorbidities, Me (IQR)	4 (3–6)	5 (4–7)	<0.001	4 (2–5)	5 (4–6)	<0.001	4 (3–5)	5 (4–7)	<0.001	4 (3–6)	6 (4–7)	<0.001
ACEI, n (%)	1278 (83.3)	930 (89.9)	<0.001	716 (90.7)	725 (91.2)	0.76	183 (85.5)	101 (91.0)	0.16	379 (71.2)	104 (81.2)	0.02
Beta blockers, n (%)	1464 (95.4)	1004 (97.1)	0.027	775 (98.2)	775 (97.5)	0.31	198 (92.5)	109 (98.2)	0.03	491 (92.3)	120 (93.7)	0.57
MRA, n (%)	1118 (72.8)	781 (75.5)	0.13	684 (86.7)	654 (82.3)	0.02	142 (66.4)	68 (61.3)	0.36	292 (54.9)	59 (46.1)	0.07
Loops diuretics, n (%)	1312 (85.4)	929 (89.8)	0.001	728 (92.3)	724 (91.1)	0.39	172 (80.0)	92 (82.9)	0.53	412 (77.4)	113 (88.3)	0.006
Follow up time, years, Me (IQR)	4.39 (1.87–5.54)	3.60 (1.21–5.20)	<0.001	4.28 (1.50–5.54)	3.53 (1.20–5.21)	0.001	4.57 (2.35–5.53)	4.38 (2.68–5.35)	0.29	4.48 (2.53–5.55)	3.40 (1.20–5.16)	0.002
Deaths, n (%)	696 (44.7)	633 (60.9)	<0.001	391 (48.5)	500 (62.7)	<0.001	83 (38.2)	56 (49.1)	0.06	222 (41.6)	77 (60.2)	<0.001

Continuous variables were not normally distributed and are presented as medians (Me) with interquartile range (IQR)

Abbreviations: ACEI, angiotensin converting enzyme inhibitor; COPD, chronic obstructive pulmonary disease; HFmrEF, heart failure with mildly reduced ejection fraction; HFpEF, heart failure with preserved ejection fraction; HFrEF, heart failure with reduced ejection fraction; IE, ischemic etiology; MRA, mineralocorticoid receptor antagonist; non-IE, non-ischemic etiology

**Table S2.** Multivariable Cox proportional models by heart failure phenotypes

<b>Univariable models</b>						
	<b>HFrEF</b>		<b>HFmrEF</b>		<b>HFpEF</b>	
	<b>HR (95% CI)</b>	<b>P-value</b>	<b>HR (95% CI)</b>	<b>P-value</b>	<b>HR (95% CI)</b>	<b>P-value</b>
<b>Ischemic etiology</b>	1.42 (1.24–1.62)	<0.001	1.33 (0.95–1.86)	0.10	1.70 (1.31–2.21)	<0.001
<b>Multivariable models</b>						
	<b>HFrEF</b>		<b>HFmrEF</b>		<b>HFpEF</b>	
	<b>HR (95% CI)</b>	<b>P-value</b>	<b>HR (95% CI)</b>	<b>P-value</b>	<b>HR (95% CI)</b>	<b>P-value</b>
<b>Ischemic etiology</b>	1.05 (0.92–1.21)	0.45	0.85 (0.59–1.22)	0.38	1.25 (0.95–1.65)	0.11
<b>Sex (female)</b>	0.80 (0.67–0.95)	0.01	0.91 (0.62–1.33)	0.63	0.82 (0.65–1.04)	0.11
<b>Age (per year)</b>	1.017 (1.011– 1.023)	<0.001	1.036 (1.020– 1.052)	<0.001	1.038 (1.027– 1.049)	<0.001
<b>Number of comorbidities</b>	1.19 (1.15–1.23)	<0.001	1.15 (1.05–1.25)	0.003	1.10 (1.03–1.17)	0.005

Abbreviations: CI, confidence interval; HR, hazard ratio; other — see Table S1