

Supplementary Table 2. Cox proportional hazards regression analyses for HF event outcome within 365, 730, and 1,095 days follow-up

Variable	Univariate regression			Multivariate regression					
				Model 1 (I-PRESERVE)			Model 2		
	HR	95% CI	p value	HR	95% CI	p value	HR	95% CI	p value
365 Days									
Age, yr	0.99	0.96–1.02	0.596	0.99	0.96–1.02	0.412			
Male sex (yes)	0.92	0.49–1.74	0.804						
BMI, kg/m ²	0.98	0.89–1.07	0.586						
Previous hospitalization for HF (yes)	2.63	1.34–5.13	0.005	2.30	1.16–4.57	0.017	1.18	0.52–2.67	0.696
NYHA III or IV (yes)	2.95	1.53–5.70	0.001				2.05	0.98–4.30	0.057
Diabetes mellitus (yes)	0.58	0.27–1.27	0.177	0.65	0.30–1.43	0.287			
Hypertension (yes)	0.52	0.27–1.02	0.059						
Dyslipidemia (yes)	0.69	0.34–1.40	0.307						
IHD (yes)	0.35	0.17–0.70	0.003				0.40	0.19–0.85	0.018
Atrial fibrillation (yes)	1.92	1.01–3.65	0.048				1.03	0.50–2.12	0.931
SBP, mmHg	0.98	0.97–1.00	0.041				0.99	0.97–1.00	0.063
DBP, mmHg	0.99	0.96–1.01	0.298						
Hemoglobin, g/dL	0.94	0.80–1.12	0.492						
hs-CRP, mg/L	0.96	0.75–1.22	0.714						
eGFR, mL/min/1.73 m ²	1.01	0.99–1.02	0.286						
LVEF, %	0.94	0.89–1.00	0.036				0.95	0.90–1.01	0.102
SVI, mL/min	0.98	0.95–1.01	0.236						
ACE-I or ARB (yes)	0.93	0.48–1.79	0.838						
CCB (yes)	0.73	0.39–1.38	0.327						
Beta-blocker (yes)	1.39	0.73–2.62	0.316						
Statin (yes)	0.69	0.36–1.32	0.260						
High HFA-PEFF score (yes)	1.83	0.97–3.46	0.063	1.59	0.83–3.05	0.164			
TRVmax, m/sec (> 2.8)	1.25	0.54–2.91	0.599						
Averaged E/e' (≥ 15)	1.45	0.51–4.08	0.485						
High LVMI ^a (yes)	1.03	0.54–1.98	0.926						
LV wall thickness, mm (≥ 12)	1.41	0.73–2.73	0.307						
RWT (> 0.42)	1.21	0.56–2.64	0.629						
High BNP ^b (yes)	1.87	0.99–3.53	0.055						
730 Days									
Age, yr	1.00	0.97–1.03	0.986	1.00	0.97–1.02	0.694			
Male sex (yes)	0.75	0.46–1.23	0.249						
BMI, kg/m ²	0.97	0.90–1.04	0.325						
Previous hospitalization for HF (yes)	2.80	1.67–4.70	< 0.001	2.47	1.45–4.20	0.001	1.46	0.79–2.73	0.230
NYHA III or IV (yes)	3.04	1.82–5.07	< 0.001				1.95	1.07–3.54	0.029
Diabetes mellitus (yes)	0.68	0.38–1.21	0.185	0.76	0.42–1.36	0.355			
Hypertension (yes)	0.54	0.32–0.90	0.019				0.69	0.40–1.20	0.186
Dyslipidemia (yes)	0.70	0.40–1.21	0.198						

Supplementary Table 2. Continued

Variable	Univariate regression			Multivariate regression					
	HR	95% CI	<i>p</i> value	Model 1 (I-PRESERVE)			Model 2		
				HR	95% CI	<i>p</i> value	HR	95% CI	<i>p</i> value
IHD (yes)	0.40	0.25–0.70	0.001				0.61	0.32–1.16	0.129
Atrial fibrillation (yes)	2.02	1.22–3.32	0.006				1.15	0.65–2.03	0.627
SBP, mmHg	1.00	0.98–1.00	0.209						
DBP, mmHg	1.00	0.98–1.02	0.859						
Hemoglobin, g/dL	0.89	0.78–1.02	0.096						
hs-CRP, mg/L	0.98	0.84–1.14	0.758						
eGFR, mL/min/1.73 m ²	1.00	0.99–1.01	0.926						
LVEF, %	0.96	0.92–1.00	0.037				0.97	0.93–1.02	0.252
SVI, mL/min	0.98	0.96–1.01	0.203						
ACE-I or ARB (yes)	1.41	0.83–2.42	0.208						
CCB (yes)	0.65	0.44–1.07	0.090						
Beta-blocker (yes)	1.00	0.61–1.64	0.999						
Statin (yes)	0.54	0.33–0.89	0.015				0.86	0.48–1.52	0.601
High HFA-PEFF score (yes)	1.85	1.13–3.04	0.015	1.58	0.95–2.63	0.079	1.29	0.76–2.19	0.351
TRVmax, m/sec (> 2.8)	1.40	0.75–2.61	0.294						
Averaged E/e' (≥ 15)	0.80	0.42–1.54	0.505						
High LVMI ^a (yes)	1.44	0.88–2.36	0.150						
LV wall thickness, mm (≥ 12)	1.14	0.67–1.93	0.634						
RWT (> 0.42)	0.88	0.51–1.54	0.655						
High BNP ^b (yes)	1.77	1.08–2.90	0.023						
1,095 Days									
Age, yr	1.01	0.99–1.03	0.436	1.00	0.98–1.02	0.886			
Male sex (yes)	0.78	0.51–1.20	0.253						
BMI, kg/m ²	0.96	0.91–1.02	0.207						
Previous hospitalization for HF (yes)	2.28	1.43–3.64	0.001	1.87	1.16–3.01	0.011	1.10	0.63–1.92	0.738
NYHA III or IV (yes)	2.89	1.84–4.53	< 0.001				1.71	1.02–2.89	0.044
Diabetes mellitus (yes)	0.86	0.54–1.38	0.538	0.98	0.61–1.57	0.926			
Hypertension (yes)	0.62	0.39–0.99	0.048				0.72	0.44–1.19	0.206
Dyslipidemia (yes)	0.83	0.51–1.36	0.466						
IHD (yes)	0.51	0.33–0.79	0.002				0.65	0.40–1.06	0.084
Atrial fibrillation (yes)	1.77	1.14–2.74	0.011				1.21	0.74–2.00	0.450
SBP, mmHg	1.00	0.99–1.01	0.464						
DBP, mmHg	1.00	0.99–1.02	0.815						
Hemoglobin, g/dL	0.85	0.76–0.96	0.006				0.89	0.79–1.00	0.055
hs-CRP, mg/L	1.04	0.97–1.12	0.246						
eGFR, mL/min/1.73 m ²	1.00	0.98–1.01	0.413						
LVEF, %	0.96	0.92–0.99	0.019				0.97	0.93–1.01	0.117
SVI, mL/min	0.98	0.96–1.01	0.182						
ACE-I or ARB (yes)	1.46	0.91–2.32	0.116						
CCB (yes)	0.68	0.44–1.04	0.071						

Supplementary Table 2. Continued

Variable	Univariate regression			Multivariate regression					
				Model 1 (I-PRESERVE)			Model 2		
	HR	95% CI	<i>p</i> value	HR	95% CI	<i>p</i> value	HR	95% CI	<i>p</i> value
Beta-blocker (yes)	1.03	0.67–1.58	0.892						
Statin (yes)	0.68	0.44–1.05	0.082						
High HFA-PEFF score (yes)	2.67	1.72–4.13	< 0.001	2.41	1.54–3.78	< 0.001	1.97	1.23–3.16	0.005
TRVmax, m/sec (> 2.8)	1.66	0.98–2.81	0.062						
Averaged E/e' (≥ 15)	0.91	0.51–1.65	0.763						
High LVMI ^a (yes)	1.46	0.95–2.23	0.086						
LV wall thickness, mm (≥ 12)	1.37	0.88–2.15	0.164						
RWT (> 0.42)	0.86	0.53–1.39	0.534						
High BNP ^b (yes)	2.34	1.52–3.60	< 0.001						

Model 1: age, previous hospitalization for HF, diabetes mellitus and HFA-PEFF score; Model 2: variables of statistical significance in the univariate analyses (*p* < 0.05).

HF, heart failure; I-PRESERVE, Irbesartan in Patients with Heart Failure and Preserved Ejection Fraction; HR, hazard ratio; CI, confidence interval; BMI, body mass index; NYHA, New York Heart Association; IHD, ischemic heart disease; SBP, systolic blood pressure; DBP, diastolic blood pressure; hs-CRP, high-sensitivity C-reactive protein; eGFR, estimated glomerular filtration rate; LVEF, left ventricular ejection fraction; SVI, stroke volume index; ACE-I, angiotensin-converting enzyme inhibitor; ARB, angiotensin II receptor blocker; CCB, calcium channel blocker; HFA-PEFF, Heart Failure Association-PEFF; TRVmax, maximum velocity of tricuspid regurgitation; E/e', the ratio of early transmitral flow velocity to early diastolic mitral annular velocity; LVMI, left ventricular mass index; LV, left ventricular; RWT, relative wall thickness; BNP, brain natriuretic peptide.

^aHigh LVMI was defined as more than 149 and 122 g/m² in men and women, respectively.

^bHigh BNP was defined as more than 80 and 240 pg/mL in patients with sinus rhythm and atrial fibrillation, respectively.