

**Supplementary Table 1.** Baseline clinical, laboratory characteristics, treatment strategy, and outcomes on admission according to prescription of  $\beta$ -blocker

Characteristic	BB (n = 1,707)	No BB (n = 1,309)	p value
Age, yr	64.96 ± 14.7	67.34 ± 14.9	< 0.001 <sup>a</sup>
Male sex	1,036 (60.7)	809 (61.8)	0.560
Current smoker	405 (23.7)	248 (18.9)	0.002 <sup>a</sup>
Body mass index, kg/m <sup>2</sup>	23.5 ± 3.9	22.8 ± 3.8	< 0.001 <sup>a</sup>
Hypertension	958 (56.1)	703 (53.7)	0.199
Diabetes mellitus	644 (37.7)	466 (35.6)	0.245
Chronic kidney disease	214 (12.5)	212 (16.2)	0.005 <sup>a</sup>
Pulmonary disease	137 (8.0)	174 (13.3)	< 0.001 <sup>a</sup>
Prior HF admission	483 (28.3)	513 (39.2)	< 0.001 <sup>a</sup>
De novo HF	977 (57.2)	576 (44.0)	< 0.001 <sup>a</sup>
ICMP	696 (40.8)	551 (42.1)	0.489
Atrial fibrillation	507 (29.7)	367 (28.0)	0.338
NYHA ≥ 3	1,461 (85.6)	1,136 (86.8)	0.375
SBP, mmHg	131.5 ± 29.1	125.2 ± 28.2	< 0.001 <sup>a</sup>
DBP, mmHg	81.9 ± 18.9	76.9 ± 17.6	< 0.001 <sup>a</sup>
Pulse rate, beats/min	95.7 ± 24.6	95.5 ± 25.6	0.809
LVEF, %	26.7 ± 7.4	26.8 ± 7.5	0.758
Sodium, mmol/L	137.9 ± 4.4	137.1 ± 4.9	< 0.001 <sup>a</sup>
Creatinine, mg/dL	1.47 ± 1.4	1.52 ± 1.5	0.333
Hemoglobin, g/dL	12.9 ± 2.3	12.6 ± 2.3	< 0.001 <sup>a</sup>
AAs at discharge	970 (56.8)	610 (46.6)	< 0.001 <sup>a</sup>
RASB at discharge	1,408 (82.5)	885 (67.6)	< 0.001 <sup>a</sup>
Loop diuretics	1,615 (94.6)	1,232 (94.1)	0.615
Intravenous inotropes	470 (27.5)	562 (42.9)	< 0.001 <sup>a</sup>
Transfusion	238 (13.9)	280 (21.4)	< 0.001 <sup>a</sup>
Mechanical ventilation	186 (10.9)	215 (16.4)	< 0.001 <sup>a</sup>
Renal replacement therapy	99 (5.8)	89 (6.8)	0.294
Assist device <sup>b</sup>	89 (5.2)	83 (6.3)	0.214
ICU admission	786 (46.0)	671 (51.3)	0.005 <sup>a</sup>
Length of stay, day	12.1 ± 13.8	14.8 ± 18.4	< 0.001 <sup>a</sup>
SBP at discharge, mmHg	113.3 ± 16.9	111.9 ± 16.9	0.025 <sup>a</sup>

Values are presented as mean ± SD or number (%).

BB,  $\beta$ -blocker; HF, heart failure; ICMP, ischemic cardiomyopathy; NYHA, New York Heart Association; SBP, systolic blood pressure; DBP, diastolic blood pressure; LVEF, left ventricular ejection fraction; AA, aldosterone antagonist; RASB, renin angiotensin system blocker; ICU, intensive care unit.

<sup>a</sup>Statistically significance.

<sup>b</sup>Assist devices included intra-aortic balloon pumps, left ventricular assist devices, extracorporeal membrane oxygenation, and cardiac resynchronization therapy.