

**Table S1.** Univariate analysis of risk factors associated with 30-day mortality in the acute heart failure groups (n=627).

	<b>Alive N = 516</b>	<b>Deceased N = 111</b>	<b>P-value*</b>
Male	317 (61.4%)	74 (66.7%)	0.3
Age, years	68 (67-69)	71 (69-73)	0.03
BMI, Kg/m <sup>2</sup>	28.6 (28-29.2)	28.8 (27.4-30.1)	0.84
APACHE II	18 (17-18)	26 (23-29)	<0.001
Charlson comorbidity index	4 (3-4)	4 (4-5)	0.02
<b>Comorbidities</b>			
Hypertension	345 (66.9%)	74 (66.7%)	0.97
Diabetes	220 (42.6%)	46 (41.4%)	0.82
Dyslipidemia	261 (50.6%)	54 (48.6%)	0.71
Cardiomyopathy			
Ischemic	138 (26.7%)	44 (39.6%)	0.007
Valvular	102 (19.8%)	24 (21.6%)	0.66
Dilated	53 (10.3%)	10 (9%)	0.69
Hypertrophic	49 (9.5%)	7 (6.3%)	0.28
Chronic heart failure	168 (32.6%)	45 (40.5%)	0.61
Peripheral arterial disease	63 (12.2%)	20 (18%)	0.10
Stroke	57 (11%)	11 (9.9%)	0.73
Anemia	79 (15.3%)	23 (9.9%)	0.16
Chronic renal failure	111 (21.5%)	30 (27%)	0.21
COPD	83 (16.1%)	20 (18%)	0.62
<b>Symptoms/signs at onset</b>			
Pulmonary edema	398 (77.1%)	94 (84.7%)	0.08
Cardiogenic shock	183 (35.5%)	85 (76.6%)	<0.001
Peripheral edema	147 (28.5%)	61 (55%)	<0.001
<b>Underlying cardiac disease</b>			
Ischemic heart disease	187 (36.2%)	47 (42.3%)	0.23
Cardiomyopathy	212 (41.1%)	40 (36%)	0.32
Arrhythmia	174 (33.7%)	38 (34.2%)	0.92
Valvulopathy	112 (21.7%)	26 (23.4%)	0.69
<b>Precipitating factors</b>			
Not known	263 (51%)	58 (52.3%)	0.81
Sepsis/septic shock	120 (23.3%)	29 (26.1%)	0.52
Fluid overload	95 (18.4%)	18 (16.2%)	0.58
Renal failure	76 (14.7%)	17 (15.3%)	0.87
Anemia	46 (8.9%)	10 (9%)	0.97
Changes in chronic drugs	21 (4.1%)	5 (4.5%)	0.83

<b>Diagnosis and tests performed</b>			
Diagnostic delay	47 (9.1%)	27 (24.3%)	<0.001
NT-proBNP (ng/L)	3977 [1995-8575]	8269 [3542-21574]	0.058
Troponin (ng/L)	23 [0.8-217]	161 [5.6-2055]	0.61
Hemodynamic monitoring	107 (20.7%)	35 (31.5%)	0.014
Echocardiography	380 (73.6%)	80 (72.1%)	0.73
LVEF	44 (43-46)	38 (34-41)	<0.001
LVEF < 50%	191 (37%)	59 (53.2%)	0.07
DD	25 (4.8%)	5 (4.5%)	0.69
RVD	85 (16.5%)	21 (18.9%)	0.11
<b>Interventions</b>			
Oxygen	447 (86.6%)	102 (91.9%)	0.13
Morphine	253 (49%)	60 (54.1%)	0.34
Diuretic	406 (78.7%)	83 (74.8%)	0.37
Nitrates	159 (30.8%)	18 (16.2%)	0.002
Inotropes	120 (23.3%)	46 (41.4%)	<0.001
Vasopressors	161 (31.2%)	77 (69.4%)	<0.001
Antiarrhythmic	113 (21.9%)	35 (31.5%)	0.03
Beta blockers	103 (20%)	5 (4.5%)	<0.001
Coronary angiography	155 (30%)	27 (24.3%)	0.23
Mechanical support	11 (2.1%)	7 (6.3%)	0.017
Pacemaker	38 (7.4%)	8 (7.2%)	0.95
Cardioversion	18 (3.5%)	23 (20.7%)	<0.001
CPAP or NIV	180 (34.9%)	35 (31.5%)	0.5
Invasive MV	140 (27.1%)	70 (63.1%)	<0.001
RBC transfusion	107 (20.7%)	21 (18.9%)	0.66
Renal replacement therapy	40 (7.8%)	15 (13.5%)	0.05

Data are presented as n (%) with means (95% confidence interval) if normally distributed or medians [interquartile range] if non-normally distributed.

\* For univariate comparisons, we used the Student's t or Mann-Whitney U tests as appropriate based on the data distribution. Fisher's exact test was used to compare categorical data.

BMI: Body mass index; APACHE: Acute Physiology and Chronic Health Evaluation; COPD: Chronic obstructive pulmonary disease; NT-Pro-BNP: N terminal portion from brain natriuretic pro-peptide; LVEF: Left ventricular ejection fraction; DD: Diastolic dysfunction; RVD: Right ventricular dysfunction; CPAP: Continuous positive airway pressure; NIV: Non-invasive ventilation; MV: mechanical ventilation; RBC: Red blood cells.