SUPPLEMENTAL MATERIAL

Table S1. Characteristics of patients with or without stored serum for ST2 levels

	Have ST2 (n=174)	Missing ST2 (n=42)	p-value
Male	86 (49)	26 (62)	0.15
Age, y	68 (62 - 77)	70 (62 - 80)	0.41
Body Mass Index, Kg/m^2	32.9 (28.4 – 38.8)	33.6 (27.9 – 40.9)	0.79
Body Surface Area, m^2	2.11 (1.94 - 2.29)	2.10 (1.88 - 2.33)	0.74
HF hospitalization	55 (32)	24 (57)	0.002
Comorbidities			
Hypertension	146 (84)	37 (88)	0.50
Ischemic heart disease	67 (39)	17 (40)	0.81
Atrial fibrillation	85 (49)	26 (62)	0.13
COPD	32 (18)	10 (24)	0.43
Diabetes mellitus	71 (41)	22 (52)	0.17
Creatinine, mg/dl	1.1 (0.8 - 1.3)	1.3 (0.9 - 1.7)	0.005
Cystatin-C, mg/l	1.25 (1.04 - 1.66)	1.65 (1.19 - 1.95)	0.005
Medications			
ACE inhibitor or ARB	116 (67)	36 (86)	0.015
Aldosterone antagonist	19 (11)	4 (10)	1.00
Beta blocker	127 (73)	37 (88)	0.039
Loop diuretic	130 (75)	36 (86)	0.13
Congestion and Quality of Life			
NT-proBNP, pg/ml	633 (219-1372)	1334 (499 – 2350)	0.004
Elevated JVP (n=209)	73 (43)	22 (54)	0.69
≥ Moderate edema	35 (20)	9 (21)	0.45
NYHA class II	85 (49)	16 (38)	0.21
MLHFQ Score	43 (30 - 63)	45 (22 - 58)	0.69

Abbreviations: ACE, Angiotensin Converting Enzyme; ARB, Angiotensin Receptor Blocker; COPD, Chronic Obstructive Pulmonary Disease; HF, Heart Failure; NT-proBNP, N-terminal pro-brain natriuretic peptide; JVP, Jugular Venous Pressure; MLHFQ, Minnesota Living with Heart Failure Questionnaire; NYHA, New York Heart Association

Table S2. Association of ST2 with LV systolic function and geometry by cardiac magnetic resonance imaging

	N*	Low ST2 Tertile (n=58)	Mid ST2 Tertile (n=58)	High ST2 Tertile (n=58)	p-value	p-value†
CMRI						
Ejection fraction, %	96	67 (62 - 71)	65 (58 - 70)	67 (53 - 70)	0.54	0.53
LVEDV / BSA, ml/ m^2	96	54 (46 - 63)	55 (43 - 64)	53 (46 - 66)	1.00	0.93
LV mass/LV volume, g/ml	96	1.05 (0.87 - 1.31)	1.23 (1.00 - 1.71)	1.17 (0.99 - 1.32)	0.07	0.36
LV mass/BSA, g/m2	96	56 (52 - 65)	69 (53 - 84)	62 (56 - 79)	0.06	0.29

Data are median (IQR); * total N with data; † Adjusted for sex

Abbreviations: LV, Left Ventricle; LVEDV, Left Ventricular End Diastolic Volume

Table S3. Association of NT-proBNP levels with cardiac structure and function

		NT-proBNP*	
	N	Parameter estimate per log unit	Unadjusted p-value
Diastolic function parameters			
Log-transformed E/A ratio	117	0.21637	<0.0001
Log-transformed Medial E/e'	154	0.16177	<0.0001
Deceleration time, ms	158	-9.28482	0.0004
LA volume/BSA, ml/m^2	122	6.99614	<0.0001
LV structure and systolic function			
Ejection fraction	172	-0.32805	0.45
Log-transformed relative wall thickness	127	0.04831	0.003
LV mass/BSA, g/m^2 (echo)	127	3.94840	0.041
Right ventricular load and function			
PASP, mmHg	112	2.70231	0.005
TAPSE, mm	171	-2.03747	<0.0001

* Linear regression model with the imaging measure as the dependent variable and log-transformed NT-proBNP as the independent variable.

Abbreviations: LA, Left Atrium; LV, Left Ventricle; PASP, Pulmonary Artery Systolic Pressure; TAPSE, Tricuspid Annular Plane Systolic Excursion