

Table 1. Patient characteristics according to diastolic function at 1-year post-myocardial infarction in the subgroup of patients with normal diastolic function at baseline (n=61)

	Diastolic dysfunction n=22		Normal diastolic function n=39		P-value
	m±SD/ n(%)	median (Q1-Q3)	m±SD/ n(%)	median (Q1-Q3)	
Baseline characteristics					
Age	55±14	53 (45-68)	48±13	46 (38-56)	0.043
Male gender	17 (77%)		32 (82%)		0.74
BMI (kg/m ²)	26.6±4.3	26.3 (24.3-28.6)	27.0±4.5	26.8 (24.2-29.7)	0.74
Hypertension	10 (45%)		8 (21%)		0.04
Diabetes mellitus	4 (18%)		4 (10%)		0.44
Dyslipidemia	5 (23%)		14 (36%)		0.29
Current smoker	12 (55%)		27 (69%)		0.25
eGFR (ml/min/1.73m ²)	81±19	78 (68-88)	91±24	92 (75-105)	0.079
Myocardial infarction					
Killip class 2-4	8 (36%)		10 (26%)		0.38
CPK peak (UI/l)	3352±2084	2900 (2013-4593)	2757±1810	2237 (1272-4200)	0.31
Multivessel disease	11 (52%)		11 (29%)		0.075
PCI during hospitalization	21 (95%)		33 (85%)		0.40
Baseline hemodynamics					
Heart rate (bpm)	74±16	70 (60-86)	66±12	65 (59-74)	0.15
Systolic BP (mmHg)	110.7±17.9	110 (100-120)	107.8±11.7	110 (100-111)	0.79
Diastolic BP (mmHg)	66.0±12.2	63.5 (60-70)	59.1±8.4	60 (54-65)	0.013
LVEF (%)	50.50±10.28	49 (40 -61)	52.28±7.13	54 (47-58)	0.45
LVEF ≤45%	8 (36%)		8 (21%)		0.18
Septal e' (cm/s)	6.47±2.12	6.30 (4.9-8.7)	8.53±1.70	8.60 (8.00-9.10)	0.012
Lateral e' (cm/s)	9.71±3.08	10.50 (6.5-12.0)	10.67±2.15	10.00 (9.7-12.0)	0.54

LAVi	19.95±4.89	21.16 (16.43-22.26)	19.11±4.56	18.79 (15.69-21.02)	0.38
Biomarkers at 1 month					
BNP (ng/l)	194±139	185 (63-321)	60±53	43 (27-66)	0.0002
Galectin-3 (µg/l)	19.9±10.6	18.3 (12.7-22.2)	11.0±8.4	8.3 (3.9-15.8)	0.002
PINP (mg/l)	38.4±10.6	38.4 (32.0-45.1)	42.0±17.8	40.5 (33.1-47.6)	0.52
PIIINP (mg/l)	6.9±3.1	6.5 (4.3-8.1)	5.3±1.8	5.4 (3.6-6.3)	0.059
ICTP (mg/l)	5.7±3.3	5.3 (3.6-6.5)	5.0±2.6	4.4 (4.0-5.4)	0.28
PIIINP/ICTP ratio	1.59±1.59	1.25 (0.86-1.61)	1.15±0.49	1.05 (0.80-1.39)	0.34
Medication at discharge					
Aspirin	22 (100%)		38 (97%)		1.00
Anti-platelet agents	22 (100%)		38 (97%)		1.00
Beta-blockers	21 (95%)		38 (97%)		1.00
ACE-inhibitors	22 (100%)		39 (100%)		---
Mineralocorticoid receptor antagonists	6 (27%)		11 (28%)		0.94
Diuretics	5 (23%)		3 (8%)		0.12
Statins	22 (100%)		35 (90%)		0.29

Legend: BMI, body mass index; eGFR, estimated glomerular filtration rate; LVEF, left ventricular ejection fraction; LAVi, left atrial volume indexed to body surface area.

Table 2. Association of the studied biomarkers with diastolic dysfunction at 1-year post-myocardial infarction in the subgroup of patients with normal diastolic function at baseline (n=61)

Biomarker	Univariable Model		Backward Selected Model*	
	OR (95% CI)	P-value	OR (95% CI)	P-value
PIIINP >6 mg/l	3.85 (1.20 - 12.31)	0.023	5.29 (1.05 - 26.66)	0.044
ICTP >5 mg/l	3.30 (1.05 - 10.33)	0.040	NS	NS
PIIINP/ICTP ratio <1	0.94 (0.32 - 2.78)	0.91	NS	NS
Galectin-3 >13 µg/l	6.07 (1.82 - 20.20)	0.003	5.99 (1.18 - 30.45)	0.031
BNP >82 ng/ml	13.33 (3.68 - 48.29)	0.0001	10.25 (2.36 - 44.50)	0.002

*Model including estimated glomerular filtration rate and history of hypertension.

Thresholds were defined according to method combining the shape of the restricted cubic spline and percentiles corresponding to Q3 or median: ST-2 (Q3), PIIINP, ICTP, PIIINP/ICTP, BNP and Galectin-3 (median).

See Table 1 for abbreviations.