

SUPPLEMENTAL MATERIAL

Title: Global longitudinal strain predicts outcomes in patients with reduced left ventricular function undergoing transcatheter edge-to-edge mitral repair

Table S1

	Overall	LVGLS available n=172	LVGLS non available n=103	p
Age (years)	73.1 (67.5-79.8)	73 (69-79)	73.2 (67-79.9)	0.690
Sex (Male %)	71.3	73.4	67.7	0.310
Hypertension (%)	73.1	70.5	77.5	0.211
Diabetes Mellitus (%)	48.4	47	51	0.510
Glomerular filtrate rate <60 (%)	49.1	47.4	51.5	0.543
Smoking (%)	60.7	57.8	65.7	0.194
Hemodialysis (%)	1.1	0.6	2	0.297
Atrial Fibrillation (%)	54	54.3	54	0.947
Previous stroke (%)	12.7	14.5	9.8	0.256
Ischemic cardiomyopathy (%)	64.4	63	66.7	0.539
Previous PCI (%)	44.5	41.3	50	0.160
Previous CABG (%)	18.2	17.3	19.6	0.639
Previous valvular intervention (%)	9.1	10.4	6.9	0.315
NYHA Class (%)				0.883
I	0	0	0	
II	17.1	18	15.7	
III	58.8	58.1	59.8	
IV	24.1	23.8	24.5	
Previous Year Heart Failure Admission (%)	78.6	82.1	72.6	0.070
ProBNP	5017 (2906-9210)	5279 (2810-7990)	5000 (3931-11150)	0.308
STS score	3.6 (1.9-6.2)	3.6 (1.8-6.2)	3.7 (2.1-6.3)	0.375
EuroScore II	5.4 (2.9-9.3)	5.4 (2.8-9)	5.4 (3-9.8)	0.855

PCI: percutaneous cardiac intervention; CABG: coronary artery bypass grafting; NYHA: New York Heart Association; ProBNP: pro-brain natriuretic peptide; STS: Society of Thoracic Surgeons.

Table S2

	Overall	LVGLS available n=172	LVGLS non available n=103	p
LVEF (%)	31.6 (26.3-36.0)	33 (27-36.2)	30 (26-36)	0.088
EDLVV (ml)	180 (140-224)	186 (143-237)	161 (131-207)	0.162
ESLVV (ml)	110 (85-155)	118 (90-158)	104 (78-155)	0.162
EDLVD (mm)	62 (58-69)	63 (58-69)	62 (56-69)	0.493
ESLVD (mm)	48 (42-57)	45 (39-57)	48 (44.5-57)	0.152
MR Grade (%)				0.586
≤2	0	0	0	
3	18.3	17.3	20	
4	81.7	82.7	80	
MR mechanism (%)				<0.000
Primary	4.4	4.1	4.9	
Secondary	61.5	24.3	51	
Mixed	34.2	71.7	44.1	
Mitral annulus calcification (%)	26.6	26.2	28.4	0.816
Subvalvular apparatus calcification (%)	7	8.2	5.1	0.331
Excentric jet (%)	20.5	17.4	25.7	0.105
Multiple jets (%)	8.9	10.7	6	0.184
EROA (cm)	0.4 (0.3-0.6)	0.4 (0.3-0.5)	0.5 (0.3-0.6)	0.060
Mitral Mean Gradient (mmHg)	1.5 (1-2)	1.3 (1-2)	1.9 (1-2.1)	0.060
Mitral Valvular Area (cm2)	5.5 (4.5-6.7)	5.5 (4.5-6.7)	5.5. (4.5-6.7)	0.859
Sistolic Pulmonary Artery Pressure (mmHg)	48 (35-58)	50 (39-57)	45 (34-60)	0.667
LVGLS (%)	8.8+/-2.6			N/A
Tricuspid regurgitation grade (%)				0.091
0-1	51.9	52	51.7	
2	18.8	15.7	29	

3	17.3	19.6	9.7	
4	12	12.8	9.7	
TAPSE (mm)	17±4	17±4	16.9±4	0.839
Right Ventricle Fractional Area Change (%)	40±13.8	40.2±12.5	39.9±17.9	0.954
EDRVD (mm)	46.3±12.6	47±13.4	44.2±11	0.123
LAV (ml)	103.9±52.7	106.7±55.4	95.1±45.9	0.155

LVEF: left ventricular ejection fraction; EDLVV: end-diastolic left ventricular volume; ESLVV: end-systolic left ventricular volume; EDLVD: end-diastolic left ventricular diameter; ESLVD: end-systolic left ventricular volume; EROA: effective regurgitant orifice area; LVGLS: left ventricular global longitudinal strain; EDRVD: End-diastolic right ventricular diameter; LAV: left atrium volume.

Figure S1. Example of analysis of left ventricular global longitudinal strain being measured

