



## Supplementary material

## Tricuspid but not Mitral Regurgitation Determines Mortality After TAVR in Patients With Nonsevere Mitral Regurgitation

**Table 1 of the supplementary material**

Main Predictors of the Improvement in Mitral Regurgitation

	n	MR persistence n = 614	MR improvement n = 197	P
<i>Baseline characteristics</i>				
Sex, male	614/197	217 (35.3)	73 (37.1)	.662
Diabetes mellitus	606/193	230 (38)	74 (38.3)	.923
Hypertension	607/193	508 (83.7)	150 (77.7)	.059
Dyslipidemia	444/120	250 (56.3)	61 (50.8)	.285
Coronary artery disease	601/193	246 (40.9)	80 (41.5)	.899
Previous PCI	607/193	151 (24.9)	43 (22.3)	.463
Previous open heart surgery	605/193	68 (11.2)	27 (14)	.304
Chronic kidney disease	444/120	115 (25.9)	23 (19.2)	.128
Previous atrial fibrillation	560/190	160 (28.6)	41 (21.6)	.060
<i>Echocardiographic findings</i>				
Aortic peak gradient, mmHg	589/182	77.8 ± 23.2	78.9 ± 22.7	.544
Aortic mean gradient, mmHg	586/182	48.8 ± 16.2	46.8 ± 14.1	.191

LVEF, %	599/186	59.9 ± 14.2	55.6 ± 13.1	<b>&lt; .001</b>
Aortic valve area, cm <sup>2</sup>	601/176	21.9 ± 2.2	21.8 ± 2.3	.601
TR ≥ 2	612/196	133 (21.7)	75 (38.3)	<b>&lt; .001</b>
Organic MR	549/179	469 (85.4)	41 (22.9)	<b>&lt; .001</b>
<i>Procedural factors</i>				
Balloon valvuloplasty	573/197	427 (74.5)	177 (89.8)	<b>&lt; .001</b>
Self-expandable TAVI	608/193	464 (76.3)	144 (74.6)	.630
Successful device implantation	601/193	577 (96)	183 (94.8)	.478
<i>In-hospital outcomes</i>				
PPMI	538/172	117 (21.7)	56 (32.6)	<b>.004</b>
NOAF	351/179	37 (10.5)	11 (6.1)	.095
LBBB at discharge	358/179	185 (51.7)	57 (31.8)	<b>&lt; .001</b>

LBBB, left bundle branch block; LVEF, left ventricular ejection fraction; MR, mitral regurgitation; NOAF, new onset atrial fibrillation; PCI, percutaneous coronary intervention; PPMI, permanent pacemaker implantation; TAVI, transcatheter aortic valve implantation; TR, tricuspid regurgitation.

Data are expressed as mean ± standard deviation or No. (%).

**Table 2 of the supplementary material**

Main Baseline Characteristics in Patients With Respect to Tricuspid Regurgitation Grade

	TR < 2 n = 602	TR ≥ 2 n = 208	P
<i>Baseline characteristics</i>			
Age, y	80.7 ± 6.6	80.9 ± 7.6	.449
Sex, male	220/602 (36.5)	70/208 (33.7)	.453
BMI, kg/m <sup>2</sup>	28.4 ± 5	28.8 ± 5.8	.362
STS score, %	6.6 ± 4.1	8.5 ± 8.1	.622
Logistic EuroSCORE, %	16.1 ± 10.5	15.6 ± 10.5	.730
Diabetes mellitus, %	22.5/59.4 (37.9)	81/204 (39.7)	.643
Hypertension, %	493/595 (82.9)	165/204 (80.9)	.523
Coronary artery disease, %	249/590 (42.2)	78/203 (38.4)	.345
Previous PCI, %	153/595 (25.7)	41/204 (20.1)	.106
Previous CABG, %	73/593 (12.3)	23/204 (11.3)	.695
Chronic kidney disease, %	101/431 (23.4)	37/133 (27.8)	.304
Prior atrial fibrillation, %	154/560 (27.5)	47/188 (25)	.503
NYHA III-IV, %	319/440 (72.5)	110/160 (68.8)	.368
<i>Echocardiographic findings</i>			
Aortic peak gradient, mmHg	77 [65-91]	73 [60-95]	.366
Aortic mean gradient, mmHg	47 [39-56]	44 [36-59]	.307
LVEF, %	60 [52-70]	60 [50-65]	<b>.016</b>
Aortic valve area, cm <sup>2</sup>	0.62 [0.5-0.76]	0.64 [0.52-0.8]	.410
SPPA, mmHg	47.2 ± 16.8	49.8 ± 16.6	.153
Organic etiology of MR	396/547 (72.4)	113/179 (63.1)	<b>.019</b>
TAPSE, mm	21 [19-23]	20 [17-22]	.597

<i>Procedural/in-hospital outcomes</i>			
Valvuloplasty, %	441/569 (77.5)	162/200 (81)	.301
Self-expandable device, %	459/596 (77)	149/204 (73)	.251
Successful device, %	569/590 (96.4)	190/203 (93.6)	.084
Need for PPMI, %	134/523 (25.6)	39/186 (21)	.204
Persistent LBBB, %	179/386 (46.4)	63/150 (42)	.361
NOAF, %	41/386 (10.6)	7/142 (4.9)	<b>.044</b>

BMI, body mass index; CABG, Coronary artery bypass graft; LBBB, left bundle branch block; LVEF, left ventricular ejection fraction; MR, mitral regurgitation; NOAF, new onset atrial fibrillation; NYHA, New York Heart Association; PCI, percutaneous coronary intervention; PPMI, Permanent pacemaker implantation; SPPA, systolic pressure of pulmonary artery; STS, Society of Thoracic Surgeons; TAPSE, tricuspid annular plane systolic excursion; TR, tricuspid regurgitation.

Data are expressed as mean  $\pm$  standard deviation, No. (%), or median [interquartile range].

**Figure of the supplementary material.** Changes in MR grade depending on baseline TR grade. MR, mitral regurgitation; TR, tricuspid regurgitation.

