

Tabella 1 – Caratteristiche cliniche di base dei pazienti sottoposti a riparazione mitralica percutanea mediante sistema MitraClip: popolazione totale e sottogruppi (in relazione alla presenza o meno di fibrillazione atriale).

	Overall Population (n = 289)	AF (n = 121)	no AF (n = 168)	p value
Age, years ± standard deviation	72.4 ± 9.7	74.3 ± 8.4	71.0 ± 10.4	0.005
Elderly [¶] , %	50.5	60.3	43.5	0.005
Male, %	58.8	62.8	56.0	0.243
Comorbidities, %				
Systemic hypertension	76.8	80.2	74.4	0.252
Hypercholesterolemia	54.0	53.7	54.2	0.940
Diabetes mellitus	34.9	33.1	36.3	0.567
Chronic obstructive pulmonary disease	21.8	22.3	21.4	0.857
Peripheral artery disease	13.1	15.7	11.3	0.276
Chronic kidney disease *	58.1	62.0	55.4	0.260
Prior myocardial infarction	34.9	28.9	39.3	0.068
Previous percutaneous intervention	34.3	24.8	41.1	0.004
Previous coronary artery bypass graft	20.1	24.0	17.3	0.160
Previous heart valve surgery	9.3	9.9	8.9	0.776
NYHA functional class, %				
I	-			
II	13.8	13.2	14.3	0.796
III	75.1	73.6	76.2	0.609
IV	11.1	13.2	9.5	0.323
LV ejection fraction < 30 %	45.7	46.3	45.2	0.861
Functional MR	82.0	81.8	82.1	0.943
EuroSCORE II	7.7 ± 6.5	8.3 ± 7.5	7.3 ± 5.7	0.234
STS mortality risk	5.8 ± 6.4	7.3 ± 8.2	4.8 ± 4.5	0.001

MR= mitral regurgitation; NYHA = New York Heart Association; LV= left ventricular; STS= Society of Thoracic Surgeons.

*Estimated glomerular filtration rate < 60 ml/min/1.73m², [¶] age ≥ 75 years

Tabella 2. Caratteristiche ecocardiografiche di base: popolazione totale e sottogruppi (in relazione alla presenza o meno di fibrillazione atriale).

	Overall population (n = 289)	AF (n = 121)	no AF (n = 168)	p value
MR degree (+)	4.0 (3.0- 4.0)	4.0 (3.0 – 4.0)	4.0 (3.0 – 4.0)	0.369
LV ejection fraction (%)	33.0 (25.0 – 48.0)	33.0 (25.0 – 48.0)	33.5 (25.0 – 48.0)	0.753
LVEDD (mm)	58.0 (52.2 – 66.7)	59.5 (52.0 – 67.0)	58.0 (53.0 – 66.0)	0.858
LVESD (mm)	43.0 (35.0 – 53.0)	45.0 (34.0 – 54.0)	43.0 (35.0 – 52.0)	0.635
LVEDV (mL)	149.0 (110.0 – 195.0)	151.5 (103.5 – 193.7)	146.0 (115.0 – 195.0)	0.506
LVESV (mL)	95.0 (56.0 – 143.0)	99.0 (52.2 – 141.5)	92.0 (62.0 – 143.0)	0.624
LAV (mL)	91.0 (69.5 – 123.5)	108.0 (86.0 – 136.0)	79.5 (64.2 – 107.2)	< 0.001
PASP (mmHg)	45.0 (38.0 – 55.0)	45.0 (40.0 – 55.0)	45.0 (38.0 – 60.0)	0.744
TAPSE (mm)	18.0 (15.7 – 22.0)	17.0 (14.0 – 20.5)	19.0 (17.0 – 23.0)	< 0.001

MR = mitral regurgitation; LV = left ventricular; LVEDD = left ventricular end-diastolic diameter; LVESD = left ventricular end-systolic diameter; LVEDV = left ventricular end-diastolic volume; LVESV = left ventricular end-systolic volume; LAV= left atrial volume; PASP = pulmonary artery systolic pressure, TAPSE = tricuspid annular plane systolic excursion. Echocardiographic measurements are expressed as median (interquartile range).

Tabella 3. Eventi avversi maggiori ad un mese di follow-up: popolazione totale e sottogruppi (in relazione alla presenza o meno di fibrillazione atriale).

	Overall (n = 289)	AF (n = 121)	no AF (n = 168)	p value
Any MAE n, (%)	16 (5.5)	7 (5.8)	9 (5.4)	0.875
Death	9 (3.1)	4 (3.3)	5 (3.0)	0.874
Myocardial infarction	0	0	0	-
Reoperation for failed MitraClip	0	0	0	-
Urgent or emergency cardiovascular surgery for adverse event	2 (0.7)	1 (0.8)	1 (0.6)	0.815
Major stroke	1 (0.3)	1 (0.8)	0	0.238
Renal failure	1 (0.3)	0	1 (0.6)	0.395
Deep wound infection	0	0	0	-
Mechanical ventilation for >48h	1 (0.3)	1 (0.8)	0	0.238
Gastrointestinal complication requiring surgery	0	0	0	-
Pericardial effusion	1 (0.3)	1 (0.8)	0	0.238
New onset of atrial fibrillation	2 (0.7)	0	2 (1.2)	0.228
Septicemia	1 (0.3)	1 (0.8)	0	0.238
Transfusion of ≥ 2 U of blood	3 (1.0)	1 (0.8)	3 (1.8)	0.642

MAEs = major adverse events.

Tabella 4. Eventi avversi maggiori ad un anno di follow-up stimati mediante Kaplan Meier: popolazione totale e sottogruppi (in relazione alla presenza di fibrillazione atriale).

	Overall (n = 289)	AF (n = 121)	No AF (n = 168)	p value
Primary efficacy endpoint n, (%)	63 (21.8)	25 (20.7)	38 (22.6)	0.875
Death	41 (15.1)	20 (17.9)	21 (13.4)	0.312
Cardiac death	22 (8.7)	10 (9.0)	12 (7.9)	0.680
Reoperation for failed MitraClip	0	0	0	-
Grade 3+ or 4+ mitral regurgitation	22 (10.7)	5 (6.0)	17 (13.9)	0.087
Re-hospitalization for heart failure	34 (13.4)	17 (16.2)	17 (11.5)	0.250

Table 5. Eventi avversi maggiori ad un anno di follow-up stimati mediante Kaplan Meier dopo aver suddiviso la popolazione totale sulla base dell'eziologia della malattia mitralica: sottogruppo fibrillazione atriale vs. sottogruppo non fibrillazione atriale.

	Functional MR (n = 237)			Degenerative MR (n = 52)		
	AF (n = 99)	No AF (n = 138)	p value	AF (n = 22)	No AF (n = 30)	p value
Primary efficacy endpoint n, (%)	22 (22.3)	33 (23.9)	0.954	3 (13.6)	5 (16.7)	0.810
Death	18 (19.6)	18 (13.8)	0.271	2 (9.5)	3 (11.0)	0.966
Cardiac death	8 (9.0)	12 (9.5)	0.920	2 (9.5)	0	0.092
Reoperation for failed MitraClip	0	0	-	0	0	-
Grade 3+ or 4+ mitral regurgitation	4 (6.2)	15 (15.3)	0.086	1 (5.6)	2 (8.3)	0.733
Re-hospitalization for heart failure	17 (19.7)	17 (14.0)	0.240	0	0	-

Tabella 6 – Caratteristiche ecocardiografiche di base comparate al follow-up a sei mesi ed ad un anno: popolazione totale.

	Baseline	6-month FU	p value	1-year FU	p value
LV ejection fraction (%)	36.8 ± 13.2	39.5 ± 12.2	< 0.001	40.2 ± 12.0	< 0.001
LVEDD (mm)	60.1 ± 10.6	57.5 ± 9.9	< 0.001	56.4 ± 9.3	< 0.001
LVESD (mm)	44.9 ± 12.8	42.3 ± 12.5	< 0.001	40.8 ± 11.8	< 0.001
LVEDV (mL)	163.0 ± 72.5	141.2 ± 60.2	< 0.001	135.8 ± 56.1	< 0.001
LVESV (mL)	108.6 ± 65.6	89.8 ± 53.5	< 0.001	84.9 ± 48.2	< 0.001
LAV (mL)	100.9 ± 48.1	91.0 ± 41.2	0.039	93.6 ± 44.2	0.481
PASP (mmHg)	47.7 ± 13.9	41.3 ± 10.9	< 0.001	40.2 ± 11.1	< 0.001
TAPSE (mm)	18.8 ± 4.7	19.0 ± 4.4	0.597	19.5 ± 4.5	0.580

Tabella 7 – Differenze tra parametri ecocardiografici basali ed ad un anno di follow-up nelle coorti esaminate: sottogruppo fibrillazione atriale vs. sottogruppo non fibrillazione atriale.

	Baseline	One-year FU	p value
LV ejection fraction (%)	36.8 ± 13.2	40.2 ± 12.0	< 0.001
LVEDD (mm)	60.1 ± 10.6	56.4 ± 9.3	< 0.001
LVESD (mm)	44.9 ± 12.8	40.8 ± 11.8	< 0.001
LVEDV (mL)	163.0 ± 72.5	135.8 ± 56.1	< 0.001
LVESV (mL)	108.6 ± 65.6	84.9 ± 48.2	< 0.001
LAV (mL)	100.9 ± 48.1	93.6 ± 44.2	0.481
PASP (mmHg)	47.7 ± 13.9	40.2 ± 11.1	< 0.001
TAPSE (mm)	18.8 ± 4.7	19.5 ± 4.5	0.580

MR = mitral regurgitation; LV = left ventricular; LVEDD = left ventricular end-diastolic diameter; LVESD = left ventricular end-systolic diameter; LVEDV = left ventricular end-diastolic volume; LVESV = left ventricular end-systolic volume; PASP = pulmonary artery systolic pressure; LAV= left atrial volume; TAPSE = tricuspid annular plane systolic excursion.