

**Table S4: Clinical and procedural characteristics of female and male patients with concomitant atrial fibrillation before and after propensity score matching.** Data presented as percentages or mean  $\pm$  SD. \* - Data presented as median with interquartile range (IQR). # - MR grade according to American Society of Echocardiography (ASE) classification. AF – atrial fibrillation. COPD – chronic obstructive pulmonary disease. CABG – coronary artery bypass graft surgery. PCI – percutaneous coronary intervention. ICD – implantable cardioverter defibrillator. CRT – cardiac resynchronization therapy. GFR – glomerular filtration rate. LV function – left ventricular function. LA – left atrial. NT-proBNP – N-terminal pro-B-type natriuretic peptide. TR – tricuspid regurgitation. MR – mitral regurgitation. MACCE – major adverse cardiac and cerebrovascular events. AAD – antiarrhythmic drugs. ACE – angiotensin converting enzyme. AT1 – angiotensin II type 1 receptor. ARN – angiotensin receptor neprylisin. SGLT-II – sodium-glucose transporter 2.

Variable	Before Propensity-Score-Matching				After Propensity-Score-Matching		
	Overall (n=608)	Female (n=217)	Male (n=391)	<i>p</i> -value	Female (n=217)	Male (n=217)	<i>p</i> -value
Age (years)	78.8 $\pm$ 7.6	80.9 $\pm$ 5.8	77.6 $\pm$ 8.3	<b>&lt;0.001</b>	80.9 $\pm$ 5.8	81 $\pm$ 5	0.7
euroSCORE II*	15.9 (21.2)	13 (21)	16.5 (21.4)	0.08	13 (21)	14 (19)	0.8
STS Risk Score*	7 (8.5)	6.7 (8.6)	7 (8.5)	0.8	6.7 (8.6)	6 (5.9)	0.2
NYHA class I	0.2% (1)	0.5% (1)	0% (0)	0.2	0.5% (1)	0% (0)	0.7
NYHA class II	2.8% (17)	1.4% (3)	3.6% (14)		1.4% (3)	2.8% (6)	
NYHA class III	75% (456)	77.4% (168)	73.7% (288)		77.4% (168)	76% (165)	
NYHA class IV	22% (134)	20.7% (45)	22.8% (89)		20.7% (45)	21.2% (46)	
COPD	16.9% (103)	13.8% (30)	18.7% (73)	0.1	13.8% (30)	14.7% (32)	0.9
CAD	60.5% (368)	50.7% (110)	66% (258)	<b>&lt;0.001</b>	50.7% (110)	56.2% (122)	0.3
Prior CAB-OP	25.6% (156)	16.6% (36)	30.7% (120)	<b>&lt;0.001</b>	16.6% (36)	18% (39)	0.8
Prior PCI	52.6% (320)	47.9% (104)	55.2% (216)	0.09	47.9% (104)	53% (115)	0.3
Pre-existing ICD	23% (140)	10.1% (22)	30.2% (118)	<b>&lt;0.001</b>	10.1% (22)	12% (26)	0.6

Pre-existing CRT	15.1% (92)	8.8% (19)	18.7% (73)	<b>&lt;0.001</b>	8.8% (19)	11.1% (24)	0.5
Diabetes mellitus	29.4% (179)	28.1% (61)	30.2% (118)	0.6	28.1% (61)	27.2% (59)	0.9
Arterial hypertension	82.7% (503)	83.4% (181)	82.4% (322)	0.8	83.4% (181)	82.9% (180)	1
Prior Stroke	10.5% (64)	10.1% (22)	10.7% (42)	0.9	10.1% (22)	9.2% (20)	0.9
LVEF ≥50%	46% (280)	52.5% (144)	34.8% (136)	<b>&lt;0.001</b>	52.5% (144)	49.3% (107)	0.7
LVEF 41-49%	12.3% (75)	14.7% (32)	11% (43)		14.7% (32)	13.8% (30)	
LVEF ≤40%	46.5% (283)	32.7% (71)	54.2% (212)		32.7% (71)	36.9% (80)	
Paroxysmal AF	29.1% (177)	31.3% (68)	27.9% (109)	0.4	31.3% (68)	24.9% (54)	0.1
Persistent AF	32.1% (195)	33.6% (73)	31.2% (122)		33.6% (73)	30.9% (67)	
Permanent AF	38.8% (236)	35% (76)	40.9% (160)		35% (76)	44.2% (96)	
GFR (mL/Min)	49 ± 26	46 ± 20	51 ± 28	<b>0.02</b>	46 ± 20	50 ± 32	0.1
NT-proBNP (ng/L)*	2294 (4810)	1888 (3857)	2473 (5049)	0.1	1888 (3857)	2691 (4796)	0.1
TR grade III	21.4% (130)	24% (52)	19.9% (78)	0.3	24% (52)	20.7% (45)	0.5
Degenerative MR etiology	35.7% (217)	40.1% (87)	33.2% (130)	0.1	40.1% (87)	36.4% (79)	0.7
Functional MR etiology	51.4% (314)	46.1% (100)	54.7% (214)		46.1% (100)	47.9% (104)	
Mixed MR etiology	12.7% (77)	13.8% (30)	12% (47)		13.8% (30)	15.7% (34)	
Median procedure duration (min)*	80 (60)	74 (55)	83 (63)	<b>0.01</b>	74 (55)	80 (57)	0.2
Number of clips implanted*	1 (1)	1 (1)	2 (1)	<b>&lt;0.001</b>	1 (1)	2 (1)	<b>&lt;0.001</b>
Periprocedural MR reduction	Δ2 ± 0.6	Δ2 ± 0.5	Δ2 ± 0.6	0.3	Δ2 ± 0.5	Δ2 ± 0.6	0.4

(carpentier grade)							
Length of hospital stay (days)*	6 (5)	7 (5)	6 (5)	<b>0.03</b>	7 (5)	6 (5)	<b>0.03</b>
Overall-MACCE	4.9% (30)	4.1% (9)	5.4% (21)	0.6	4.1% (9)	6.5% (14)	0.4
<i>Cerebral/systemic thromboembolic event</i>	<i>0.6% (4)</i>	<i>0.5% (1)</i>	<i>0.8% (3)</i>	<i>1</i>	<i>0.5% (1)</i>	<i>0.5% (1)</i>	<i>1</i>
<i>Bleeding requiring intervention</i>	<i>2.9% (18)</i>	<i>2.8% (6)</i>	<i>3.1% (12)</i>	<i>1</i>	<i>2.8% (6)</i>	<i>2.7% (8)</i>	<i>0.8</i>
<i>In-hospital death from cardiovasc. cause</i>	<i>2.1% (13)</i>	<i>1.8% (4)</i>	<i>2.3% (9)</i>	<i>0.8</i>	<i>1.8% (4)</i>	<i>3.2% (7)</i>	<i>0.5</i>
In-hospital death from any cause	3.3% (20)	2.3% (5)	3.8% (15)	0.4	2.3% (5)	4.1% (9)	0.4
<b>Heart Failure Therapy</b>							
ACE-/AT1 Inhibitors	72% (439)	75.1% (163)	70.6% (276)	0.3	75.1% (163)	77.4% (168)	0.7
ARN Inhibitor	13.7% (83)	8.3% (18)	16.6% (65)	<b>0.004</b>	8.3% (18)	10.1% (22)	0.6
Beta Blockers	89.1% (542)	90.8% (197)	88.2% (345)	0.4	90.8% (197)	86.6% (188)	0.2
Loop diuretics	91.6% (557)	93.1% (202)	90.8% (355)	0.4	93.1% (202)	94% (204)	0.8
Thiazid diuretics	17.8% (108)	16.1% (35)	18.7% (73)	0.5	16.1% (35)	18% (39)	0.7
Aldosteron antagonists	48.8% (297)	46.5% (101)	50.1% (196)	0.4	46.5% (101)	44.7% (97)	0.8
Ivabradin	0.6% (4)	0.5% (1)	0.8% (3)	1	0.5% (1)	0.5% (1)	1
Digitalis	9% (55)	8.3% (18)	9.5% (37)	0.7	8.3% (18)	7.4% (16)	0.9
SGLT-II-Inhibitors	4.3% (26)	2.3% (5)	5.4% (21)	0.09	2.3% (5)	5.1% (11)	0.2
Vericiguat	0.2% (1)	0% (0)	0.3% (1)	1	0% (0)	0% (0)	1
<b>Atrial Fibrillation Therapy</b>							

Rate Control	49.2% (299)	52.1% (113)	52.4% (186)	0.9	52.1% (113)	57.1% (124)	0.3
Beta Blockers	47% (286)	47% (102)	46.5% (182)	0.7	47% (102)	48.8% (106)	1
Additional Pacemaker	8.1% (49)	7.4% (16)	8.4% (33)	0.8	7.4% (16)	8.8% (19)	0.7
Additional Digitalis	6.7% (41)	6.5% (14)	6.9% (27)	0.9	6.5% (14)	6.5% (1)	1
Rhythm Control	47.7% (290)	47.9% (104)	47.6% (186)	0.9	47.9% (104)	42.9% (93)	0.3
Class-I-AAD	0.3% (2)	0.9% (2)	0% (0)	0.1	0.9% (2)	0% (0)	0.5
Class-II-AAD	27.1% (165)	30.4% (66)	25.3% (99)	0.2	30.4% (66)	24.4% (53)	0.2
Class-III-AAD	2.3% (14)	3.2% (7)	1.8% (7)	0.3	3.2% (7)	2.8% (6)	1
Class-II + Class-III-AAD	14% (85)	11.5% (25)	15.3% (60)	0.2	11.5% (25)	12% (26)	1
Additional PVI	7.9% (48)	6.5% (14)	8.7% (34)	0.4	6.5% (14)	6.9% (15)	1
Oral anticoagulants							
VKA	45.1% (274)	45.2% (98)	45% (176)	1	45.2% (98)	42.9% (93)	0.7
NOAC	48% (292)	49.3% (107)	47.3% (185)	0.7	49.3% (107)	49.8% (108)	1