

Supplementary material

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Table S1. Clinical characteristics

	Study population n=89	SR maintenance n=42 (47.2%)	AF recurrence during 12 months n=47 (52.8%)	p-value
Age (years)	64.13±9.35	62.38±10.21	65.70±8.3	0.110
Age <65 (n, %)	39(43.82)	23(54.76)	16(34.04)	0.139
Age 65–74 (n, %)	38(42.7)	14(33.33)	24(51.06)	
Age ≥75 (n, %)	12(13.48)	5(11.9)	7(14.89)	
Male (n, %)	59(66.29)	33(78.57)	26(55.32)	0.021
BMI (kg/m ²)	31.17±4.95	30.39±4.33	31.88±5.39	0.237
Hypertension (n, %)	77(86.52)	34(80.95)	43(91.49)	0.146
Diabetes mellitus (n, %)	18(20.22)	8(19.05)	10(21.28)	0.794
Coronary artery disease (n, %)	12(13.48)	8(19.05)	4(8.51)	0.146
Stroke/TIA (n, %)	9(10.11)	6(14.29)	3(6.38)	0.217
CHA2DS2-VASC	2.67±1.42	2.50±1.58	2.83±1.26	0.181
CHA2DS2-VASC = 0 (n, %)	3 (3.37)	2(4.76)	1(2.13)	0.203
CHA2DS2-VASC =1 (n, %)	19(21.35)	12(28.57)	7(14.89)	
CHA2DS2-VASC ≥2 (n, %)	67(75.28)	28(66.67)	39(82.98)	
HAS-BLED	0.45±0.6	0.38±0.58	0.51±0.62	0.286
Smokers (n, %)	7(7.87)	4(9.52)	3(6.38)	0.583
Number of previous DCCVs	0.33±0.72	0.33±0.75	0.32±0.69	0.996
Total AF duration (months)	28.36±45.15	29.45±41.23	27.38±48.81	0.714
AF duration current episode (weeks)	12.58±16.45	13.68±18.97	11.60±13.98	0.979
GFR (ml/min)	85.32±35.5	88.65±33.13	82.35±37.6	0.161
Beta-blockers pre (n, %)	84(94.38)	41(97.62)	43(91.49)	0.210
Amiodarone pre (n, %)	9(10.11)	4(9.52)	5(10.64)	0.862
ACE inhibitors/ARB pre (n, %)	80(89.89)	37(88.1)	43(91.49)	0.596
Statins pre (n, %)	53(59.55)	27(64.29)	26(55.32)	0.390
Diuretics pre (n, %)	31(34.83)	12(28.57)	19(40.43)	0.241
Spirolactone/eplerenone pre (n, %)	17(19.1)	9(21.43)	8(17.02)	0.597
Beta-blockers post (n, %)	69(77.53)	33(78.57)	36(76.6)	0.824
Amiodarone post (n, %)	27(30.34)	12(28.57)	15(31.91)	0.732
Propafenone post (n, %)	31(34.83)	16(38.1)	15(31.91)	0.541
ACE inhibitors/ARB post (n, %)	82(92.13)	37(88.1)	45(95.74)	0.182
Statins post (n, %)	54(60.67)	27(64.29)	27(57.45)	0.510
Diuretics post (n, %)	32(35.96)	12(28.57)	20(42.55)	0.170
Spirolactone/eplerenone post (n, %)	19(21.35)	9(21.43)	10(21.28)	0.986
Creatinine (mg/dl)	1.13±0.2	1.12±0.19	1.15±0.2	0.409
Troponin T (ng/l)	11.11±3.39	10.65±7.7	11.53±10.75	0.758
HbA1c (%)	6.09±0.77	6.09±0.65	6.09±0.88	0.711
BNP (pg/ml)	230.76±409.87	302.60±562.1	156.45±97.46	0.660

SR, sinus rhythm; AF, atrial fibrillation; BMI, body mass index; DCCV, direct current cardioversion; GFR, glomerular filtration rate; TIA, transient ischemic attack; ACE inhibitors/ARB, angiotensin-

converting enzyme inhibitors/angiotensin II receptor blockers; pre, before cardioversion; post, after cardioversion; HbA1c, hemoglobin 1; BNP, B-type natriuretic peptide.

Table S2. Echocardiographic characteristics

	Study population n=89	SR maintenance n=42 (47.2%)	AF recurrence during 12 months n=47 (52.8%)	p-value
RV prox (mm)	31.1±4.36	31.81±4.47	30.61±4.22	0.198
IVS (mm)	10.77±1.93	10.61±1.83	10.91±2.02	0.699
LVEDD (mm)	50.88±6.25	51.74±6.24	50.09±6.22	0.217
LVEDS (mm)	34.77±7.1	35.9±7.86	33.74±6.23	0.154
LVEF (%)	60.78±9.72	59.67±10.51	61.77±8.95	0.312
LAAP (mm)	43.89±4.65	43.27±4.48	44.43±4.78	0.245
LAVI (ml/m ²)	50.73±10.96	49.72±11.58	51.64±10.42	0.410
LAEDVI (ml/m ²)	33.49±1.64	30.17±10.56	36.46±11.85	0.004
LAEF (%)	36.23±11.89	40.11±10.13	32.76±12.37	0.003
RAAs (cm ²)	23.93±5.3	24.77±5.72	23.24±4.89	0.197
RAAd (cm ²)	16±4.21	16.21±4.39	15.82±4.1	0.676
s' wave mean (cm/s)	6±1.17	6.24±1.23	5.78±1.09	0.156
e' wave mean (cm/s)	9.11±2.03	9.62±1.92	8.46±2.04	0.016
a' wave mean (cm/s)	5.23±2.46	6.05±2.85	4.49±1.77	0.015
E/e' mean ratio	10.12±4.04	8.85±3.77	11.31±3.95	<0.001
E wave (m/s)	0.87±0.22	0.81±0.35	0.92±0.18	0.001
A wave (m/s)	0.4±0.18	0.43±0.18	0.38±0.17	0.078
E/A ratio	2.58±1.28	2.16±0.88	2.95±1.46	0.004
E DT (ms)	188.36±46.49	205.17±50.38	173.34±37.2	<0.001
LASr 4c (%)	12.87±5.09	14.54±5.11	11.38±4.63	0.004
LAScd 4c (%)	9.14±3.63	9.45±3.32	8.87±3.91	0.460
LASct 4c (%)	3.73±3.08	5.09±3.29	2.51±2.3	<0.001
pLASRr 4c (s ⁻¹)	0.64±0.24	0.67±0.24	0.62±0.24	0.304
pLASRcd 4c (s ⁻¹)	-0.81±0.3	-0.83±0.29	-0.79±0.3	0.513
pLASRct 4c (s ⁻¹)	-0.49±0.35	-0.62±0.4	-0.36±0.24	<0.001
LASr 2c (%)	12.86±5.84	14.93±6.82	11.05±4.1	0.006
LAScd 2c (%)	8.3±3.79	9.26±4.47	7.45±2.87	0.117
LASct 2c (%)	4.56±3.74	5.67±4.23	3.6±2.98	0.008
pLASRr 2c (s ⁻¹)	0.65±0.25	0.71±0.29	0.6±0.21	0.107
pLASRcd 2c (s ⁻¹)	-0.73±0.33	-0.81±0.37	-0.67±0.28	0.077
pLASRct 2c (s ⁻¹)	-0.63±0.45	-0.79±0.53	-0.49±0.3	0.010
LASr mean (%)	12.83±4.92	14.68±5.33	11.22±3.93	0.001
LAScd mean (%)	8.69±2.94	9.29±3.06	8.16±2.75	0.044
LASct mean (%)	4.14±3.21	5.39±3.5	3.05±2.48	<0.001
pLASRr mean (s ⁻¹)	0.64±0.22	0.68±0.23	0.61±0.2	0.175
pLASRcd mean (s ⁻¹)	-0.77±0.26	-0.82±0.28	-0.73±0.24	0.116
pLASRct mean (s ⁻¹)	-0.55±0.38	-0.7±0.44	-0.42±0.26	0.001

2c, two-chamber view; 4c, four-chamber view; A wave, late mitral inflow wave; a' wave, late diastolic mitral annular velocity; cd; conduit phase; ct, contractile phase; E, early mitral inflow wave; e', early diastolic mitral annular velocity; E DT, deceleration time of E wave; LAAP, left atrial antero-posterior diameter; LAEF, left atrial emptying fraction; LAEDVI, left atrial end-diastolic volume index; LAVI, left atrial volume index; LAS, left atrial strain; LVEDD, left ventricular end-diastolic diameter; LVESD, left

ventricular end-systolic diameter; LVEF, left ventricular ejection fraction; IVS, intraventricular septum wall thickness; pLASR, peak left atrial strain rate; r, reservoir phase; RAA, right atrium area; d – diastolic; s – systolic; RV prox, right ventricular proximal diameter; s' wave, systolic mitral annular velocity.