

SUPPLEMENTAL MATERIAL

Table S1. Propensity Score Covariate List.

<p>Demographics:</p> <ul style="list-style-type: none"> • Age • Sex <p>Medical History:</p> <ul style="list-style-type: none"> • Smoking • Cancer • Hypertension • Diabetes • Obstructive sleep apnea • CPAP • Dialysis • Hyperlipidemia • Anemia • Cognitive impairment/dementia • Frailty • COPD <p>Cardiovascular history:</p> <ul style="list-style-type: none"> • Peripheral vascular disease • History of stroke/TIA • HF, NYHA class • Significant valvular disease • Prior valve replacement/repair <p>Coronary Artery Disease History:</p> <ul style="list-style-type: none"> • History of CAD • Prior MI • History of PCI 	<p>Vital Signs and AF Status:</p> <ul style="list-style-type: none"> • Height • Weight • Heart rate • Systolic blood pressure • Diastolic blood pressure • Intraventricular conduction <p>Echocardiographic Assessment:</p> <ul style="list-style-type: none"> • LVEF type • LAD type <p>Laboratory Data:</p> <ul style="list-style-type: none"> • eGFR • Hematocrit <p>Atrial Fibrillation Diagnosis:</p> <ul style="list-style-type: none"> • AF type • EHRA score • Rhythm control • Prior antiarrhythmic drug use • Atrio ventricular node or his bundle ablation • AF duration <p>Functional Status:</p> <ul style="list-style-type: none"> • Functional status <p>Device</p> <ul style="list-style-type: none"> • Implanted device type <p>Current Pharmacotherapy</p> <ul style="list-style-type: none"> • Calcium channel blockers • Statin • Diuretic
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AF = atrial fibrillation, CAD = coronary artery disease, CKD = chronic kidney disease, COPD = chronic obstructive pulmonary disease, CPAP = continuous positive airway pressure, eGFR = estimated glomerular filtration rate, HF = heart failure, HR = heart rate, LVEF = left ventricular ejection fraction, LAD = left atrial dimension, EHRA = European heart rhythm association, NYHA = New York Heart Association, PCI = percutaneous coronary intervention, MI = Myocardial infarction.

Table S2. Standardized differences of propensity matched pairs: New MRA use.

<i>Variable</i>	<i>MRA (N=258)</i>	<i>No MRA (N=1,287)</i>	<i>Standardize d difference</i>	<i>P-value</i>
Age (SD) years	72.3 (10.8)	72.3 (11.0)	0.1%	0.9836
Female (%)	128 (49.6)	632 (49.1)	1.0%	0.8821
Smoking (%)			9.7%	0.3943
Non-smoker	125 (48.4)	627 (48.7)		
Recent or former smoker	118 (45.7)	555 (43.1)		
Current Smoker	15 (5.8)	105 (8.2)		
Cancer (%)	51 (19.8)	241 (18.7)	2.6%	0.6965
Hypertension (%)	227 (88.0)	1,113 (86.5)	4.5%	0.5156
Diabetes (%)	93 (36.0)	470 (36.5)	1.0%	0.8855
Obstructive sleep apnea (%)	50 (19.4)	261 (20.3)	2.3%	0.7421
CPAP (%)	26 (10.1)	128 (9.9)	0.4%	0.9485
Dialysis (%)	2 (0.8)	14 (1.1)	3.3%	0.6508
Hyperlipidemia (%)	198 (76.7)	979 (76.1)	1.6%	0.8161
Anemia (%)	44 (17.1)	228 (17.7)	1.7%	0.7991
Cognitive impairment/dementia	5 (1.9)	27 (2.1)	1.1%	0.8692
Frailty (%)	9 (3.5)	45 (3.5)	0.0%	0.9948
COPD (%)	55 (21.3)	263 (20.4)	2.2%	0.7489
Peripheral vascular disease (%)	40 (15.5)	213 (16.6)	2.9%	0.6785
History of stroke/TIA (%)	37 (14.3)	189 (14.7)	1.0%	0.8864
NYHA class (%)			4.5%	0.9810
No HF	126 (48.8)	612 (47.6)		
Class I	39 (15.1)	213 (16.6)		
Class II	54 (20.9)	271 (21.1)		
Class III	36 (14.0)	174 (13.5)		
Class IV	3 (1.2)	17 (1.3)		
Etiology of cardiomyopathy			10.8%	0.2902
No HF	126 (48.8)	611 (47.5)		
Ischemic	66 (25.6)	289 (22.5)		
Non-inschemic	66 (25.6)	387 (30.1)		
HF hospitalizations in past year	27 (10.5)	138 (10.7)	0.8%	0.9027
Significant valvular disease (%)	72 (27.9)	360 (28.0)	0.1%	0.9830

<i>Variable</i>	<i>MRA (N=258)</i>	<i>No MRA (N=1,287)</i>	<i>Standardize d difference</i>	<i>P-value</i>
Prior valve replacement/repair (%)	26 (10.1)	120 (9.3)	2.5%	0.7057
History of CAD (%)	109 (42.2)	538 (41.8)	0.9%	0.8947
Prior MI (%)	48 (18.6)	227 (17.6)	2.5%	0.7110
History of PCI (%)	59 (22.9)	298 (23.2)	0.7%	0.9207
Height (SD)	170 (12.2)	170 (12.2)	0.3%	0.9596
Weight (SD)	90.7 (24.6)	91.8 (25.8)	4.4%	0.5270
Heart Rate (SD)	70.8 (12.5)	71.2 (13.2)	2.7%	0.6966
Systolic BP mmHg(SD)	128 (20.6)	126 (17.6)	9.7%	0.1344
Diastolic BP mmHg(SD)	72.3 (12.1)	72.4 (10.7)	0.8%	0.9065
Intraventricular conduction (%)			1.4%	0.9976
None	174 (67.4)	869 (67.5)		
RBBB	18 (7.0)	91 (7.1)		
LBBB	15 (5.8)	78 (6.1)		
Non-specific IVCD or unknown ventricularly paced	51 (19.8)	249 (19.3)		
LVEF type (%)			7.0%	0.7897
Normal ($\geq 50\%$)	156 (60.5)	765 (59.4)		
Mild dysfunction ($>40\%$, $<50\%$)	25 (9.7)	127 (9.9)		
Moderate dysfunction ($\geq 30\%$ to 40%)	48 (18.6)	269 (20.9)		
Severe dysfunction ($<30\%$)	29 (11.2)	126 (9.8)		
Left atrial diameter type (%)			3.0%	0.9780
Normal	67 (26.0)	346 (26.9)		
Mild enlargement	64 (24.8)	315 (24.5)		
Moderate enlargement	68 (26.4)	345 (26.8)		
Severe enlargement	59 (22.9)	281 (21.8)		
eGFR mg/dL (SD)	66.3 (23.1)	65.6 (22.7)	3.0%	0.6614
Hematocrit (SD)	39.1 (4.8)	39.1 (4.9)	0.7%	0.9171
AF type (%)			1.5%	0.8275
Paroxysmal	193 (74.8)	971 (75.4)		
Persistent	65 (25.2)	316 (24.6)		
EHRA score			2.0%	0.9935
No symptoms	101 (39.1)	516 (40.1)		
Mild	110 (42.6)	542 (42.1)		

<i>Variable</i>	<i>MRA (N=258)</i>	<i>No MRA (N=1,287)</i>	<i>Standardize d difference</i>	<i>P-value</i>
Severe	43 (16.7)	210 (16.3)		
Disabling	4 (1.6)	19 (1.5)		
AF management strategy			1.8%	0.7954
Rate control	145 (56.2)	712 (55.3)		
Rhythm control	113 (43.8)	575 (44.7)		
Prior antiarrhythmic drug use (%)	152 (58.9)	770 (59.8)	1.9%	0.7847
AV node/HIS bundle ablation (%)	4 (1.6)	26 (2.0)	3.5%	0.6177
AF duration	59.6 (53.7)	59.4 (62.6)	0.2%	0.9753
Functional status (%)	22 (8.5)	109 (8.5)	0.2%	0.9757
Implanted device	100 (38.8)	490 (38.1)	1.4%	0.8359
Calcium channel blockers (%)	69 (26.7)	366 (28.4)	3.8%	0.5808
Diuretics (%)	179 (69.4)	896 (69.6)	0.5%	0.9392
Statins (%)	150 (58.1)	770 (59.8)	3.4%	0.6138
Currently on Dabigatran (%)	21 (8.1)	125 (9.7)	5.5%	0.4305
Currently on Warfarin (%)	171 (66.3)	827 (64.3)	4.2%	0.5355
Currently on OAC (%)	192 (74.4)	951 (73.9)	1.2%	0.8605

AAD = antiarrhythmic drug, AF = atrial fibrillation, BMI = body mass index, CAD = coronary artery disease, CKD = chronic kidney disease, CPAP = continuous positive airway pressure, DBP = diastolic blood pressure, SBP = systolic blood pressure, eGFR = estimated glomerular filtration rate, HR = heart rate, MDRD = Modification of Diet in Renal Disease Study, LVEF = left ventricular ejection fraction, NYHA = New York Heart Association, OAC = oral anticoagulation, PCI = percutaneous coronary intervention, PVD = peripheral artery disease, SD = standard deviation, RBBB, right bundle branch block, LBBB left bundle branch block.

Table S3. Standardized differences of propensity matched pairs: New MRA use. (New-onset HF matched pairs).

<i>Variable</i>	<i>MRA N=(120)</i>	<i>No MRA (N=600)</i>	<i>Standardized difference</i>	<i>P-value</i>
Age (SD) years	73.4 (10.1)	73.4 (10.0)	0.4%	0.9709
Female (%)	70 (58.3)	354 (59.0)	1.4%	0.8922
Smoking (%)			7.9%	0.7311
Non-smoker	64 (53.3)	341 (56.8)		
Recent or former smoker	49 (40.8)	222 (37.0)		
Current Smoker	7 (5.8)	37 (6.2)		
Cancer (%)	25 (20.8)	135 (22.5)	4.0%	0.6885
Hypertension (%)	106 (88.3)	531 (88.5)	0.5%	0.9584
Diabetes (%)	27 (22.5)	127 (21.2)	3.2%	0.7451
Obstructive sleep apnea (%)	17 (14.2)	67 (11.2)	9.0%	0.3500
CPAP (%)	8 (6.7)	31 (5.2)	6.4%	0.5075
Dialysis (%)	1 (0.8)	5 (0.8)	0.0%	0.9999
Hyperlipidemia (%)	89 (74.2)	440 (73.3)	1.9%	0.8503
Anemia (%)	19 (15.8)	76 (12.7)	9.1%	0.3494
Cognitive impairment/dementia	4 (3.3)	21 (3.5)	0.9%	0.9275
Frailty (%)	6 (5.0)	20 (3.3)	8.3%	0.3717
COPD (%)	16 (13.3)	79 (13.2)	0.5%	0.9607
Peripheral vascular disease (%)	17 (14.2)	82 (13.7)	1.4%	0.8846
History of stroke/TIA (%)	15 (12.5)	77 (12.8)	1.0%	0.9205
Significant valvular disease (%)	23 (19.2)	104 (17.3)	4.7%	0.6305
Prior valve replacement/repair (%)	9 (7.5)	45 (7.5)	0.0%	0.9999
History of CAD (%)	35 (29.2)	172 (28.7)	1.1%	0.9120
Prior MI (%)	10 (8.3)	40 (6.7)	6.3%	0.5121
History of PCI (%)	20 (16.7)	93 (15.5)	3.2%	0.7484
Height (SD)	168 (13.5)	168 (11.8)	2.3%	0.8075
Weight (SD)	88.0 (23.1)	87.5 (24.7)	2.3%	0.8194
Heart Rate (SD)	70.4 (13.6)	69.3 (12.5)	8.1%	0.4062
Systolic BP mmHg(SD)	134 (22.2)	130 (17.1)	17.4%	0.0573
Diastolic BP mmHg(SD)	74.5 (12.0)	74.3 (10.7)	1.1%	0.9088

<i>Variable</i>	<i>MRA N=(120)</i>	<i>No MRA (N=600)</i>	<i>Standardized difference</i>	<i>P-value</i>
Intraventricular conduction (%)			4.6%	0.9720
None	91 (75.8)	455 (75.8)		
RBBB	10 (8.3)	49 (8.2)		
LBBB	2 (1.7)	7 (1.2)		
Non-specific IVCD or unknown ventricularly paced	17 (14.2)	89 (14.8)		
LVEF type (%)			8.6%	0.8245
Normal ($\geq 50\%$)	97 (80.8)	487 (81.2)		
Mild dysfunction ($>40\%$, $<50\%$)	13 (10.8)	72 (12.0)		
Moderate dysfunction ($\geq 30\%$ to 40%)	8 (6.7)	36 (6.0)		
Severe dysfunction ($<30\%$)	2 (1.7)	5 (0.8)		
Left atrial diameter type (%)			14.3%	0.5260
Normal	37 (30.8)	200 (33.3)		
Mild enlargement	28 (23.3)	146 (24.3)		
Moderate enlargement	33 (27.5)	175 (29.2)		
Severe enlargement	22 (18.3)	79 (13.2)		
eGFR mg/dL (SD)	67.9 (21.4)	67.2 (21.6)	3.3%	0.7455
Hematocrit (SD)	39.7 (4.8)	39.9 (4.6)	3.9%	0.6897
AF type (%)			0.4%	0.9667
Paroxysmal	96 (80.0)	481 (80.2)		
Persistent	24 (20.0)	119 (19.8)		
EHRA score			2.0%	0.9978
No symptoms	51 (42.5)	261 (43.5)		
Mild	54 (45.0)	265 (44.2)		
Severe	14 (11.7)	69 (11.5)		
Disabling	1 (0.8)	5 (0.8)		
AF management strategy			5.3%	0.5927
Rate control	62 (51.7)	326 (54.3)		
Rhythm control	58 (48.3)	274 (45.7)		
Prior antiarrhythmic drug use (%)	78 (65.0)	397 (66.2)	2.5%	0.8055
AV node/HIS bundle ablation (%)	56.2 (45.8)	56.7 (50.2)	1.0%	0.9228
AF duration (%)	9 (7.5)	42 (7.0)	1.9%	0.8455
Functional status (%)	22 (18.3)	113 (18.8)	1.3%	0.8981
Implanted device	42 (35.0)	217 (36.2)	2.4%	0.8079

<i>Variable</i>	<i>MRA N=(120)</i>	<i>No MRA (N=600)</i>	<i>Standardized difference</i>	<i>P-value</i>
Calcium channel blockers (%)	69 (57.5)	355 (59.2)	3.4%	0.7348
Diuretics (%)	66 (55.0)	322 (53.7)	2.7%	0.7891
Statins (%)	78 (65.0)	397 (66.2)	2.5%	0.8055
Currently on Dabigatran (%)	12 (10.0)	44 (7.3)	9.5%	0.3194
Currently on Warfarin (%)	75 (62.5)	394 (65.7)	6.6%	0.5064
Currently on OAC (%)	87 (72.5)	438 (73.0)	1.1%	0.9104

AAD = antiarrhythmic drug, AF = atrial fibrillation, BMI = body mass index, CAD = coronary artery disease, CKD = chronic kidney disease, CPAP = continuous positive airway pressure, DBP = diastolic blood pressure, SBP = systolic blood pressure, eGFR = estimated glomerular filtration rate, HR = heart rate, MDRD = Modification of Diet in Renal Disease Study, LVEF = left ventricular ejection fraction, NYHA = New York Heart Association, OAC = oral anticoagulation, PCI = percutaneous coronary intervention, PVD = peripheral artery disease, SD = standard deviation, RBBB, right bundle branch block, LBBB left bundle branch block.

Table S4. Standardized differences of propensity matched pairs: New and baseline MRA use combined.

<i>Variable</i>	<i>MRA</i>	<i>No MRA</i>	<i>Standardized</i>	
	<i>(N=534)</i>	<i>(N=2,658)</i>	<i>difference</i>	<i>P-value</i>
Age (SD) years	72.4 (11.4)	72.6 (11.4)	2.0%	0.6736
Female (%)	254 (47.6)	1,258 (47.3)	0.5%	0.9204
Smoking (%)			5.5%	0.5281
Non-smoker	265 (49.6)	1,327 (49.9)		
Recent or former smoker	237 (44.4)	1,138 (42.8)		
Current Smoker	32 (6.0)	193 (7.3)		
Cancer (%)	111 (20.8)	548 (20.6)	0.4%	0.9296
Hypertension (%)	476 (89.1)	2,366 (89.0)	0.4%	0.9332
Diabetes (%)	196 (36.7)	968 (36.4)	0.6%	0.9004
Obstructive sleep apnea (%)	129 (24.2)	641 (24.1)	0.1%	0.9837
CPAP (%)	74 (13.9)	361 (13.6)	0.8%	0.8703
Dialysis (%)	3 (0.6)	21 (0.8)	2.8%	0.5774
Hyperlipidemia (%)	407 (76.2)	2,014 (75.8)	1.0%	0.8261
Anemia (%)	113 (21.2)	579 (21.8)	1.5%	0.7502
Cognitive impairment/dementia	15 (2.8)	74 (2.8)	0.2%	0.9745
Frailty (%)	29 (5.4)	156 (5.9)	2.0%	0.6797
COPD (%)	112 (21.0)	553 (20.8)	0.4%	0.9302
Peripheral vascular disease (%)	81 (15.2)	418 (15.7)	1.5%	0.7461
History of stroke/TIA (%)	91 (17.0)	460 (17.3)	0.7%	0.8824
NYHA class (%)			3.7%	0.9600
No HF	222 (41.7)	1,099 (41.4)		
Class I	85 (15.9)	445 (16.8)		
Class II	136 (25.5)	691 (26.0)		
Class III	83 (15.6)	383 (14.4)		
Class IV	7 (1.3)	35 (1.3)		
Etiology of cardiomyopathy			4.5%	0.6393
No HF	222 (41.6)	1,098 (41.4)		
Ischemic	144 (27.0)	673 (25.4)		
Non-inschemic	168 (31.5)	883 (33.3)		
HF hospitalizations in past year	65 (12.2)	314 (11.8)	1.1%	0.8150

<i>Variable</i>	<i>MRA (N=534)</i>	<i>No MRA (N=2,658)</i>	<i>Standardized difference</i>	<i>P-value</i>
Significant valvular disease (%)	150 (28.1)	759 (28.6)	1.0%	0.8278
Prior valve replacement/repair (%)	60 (11.2)	299 (11.2)	0.0%	0.9930
History of CAD (%)	235 (44.0)	1,161 (43.7)	0.7%	0.8891
Prior MI (%)	114 (21.3)	540 (20.3)	2.5%	0.5897
History of PCI (%)	116 (21.7)	578 (21.7)	0.1%	0.9907
Height (SD)	170 (11.6)	170 (12.2)	0.6%	0.9046
Weight (SD)	90.9 (25.7)	91.1 (26.4)	0.8%	0.8606
Heart Rate (SD)	71.9 (12.3)	72.3 (13.1)	3.2%	0.5132
Systolic BP mmHg(SD)	125 (20.0)	124 (17.8)	4.9%	0.2835
Diastolic BP mmHg(SD)	71.5 (11.4)	71.4 (10.9)	0.9%	0.8436
Intraventricular conduction (%)			2.0%	0.9826
None	341 (64.5)	1,710 (64.5)		
RBBB	42 (7.9)	208 (7.8)		
LBBB	34 (6.4)	182 (6.9)		
Non-specific IVCD or unknown ventricularly paced	112 (21.2)	550 (20.8)		
LVEF type (%)			5.6%	0.7061
Normal ($\geq 50\%$)	300 (58.5)	1,519 (59.2)		
Mild dysfunction ($>40\%$, $<50\%$)	43 (8.4)	223 (8.7)		
Moderate dysfunction ($\geq 30\%$ to 40%)	105 (20.5)	546 (21.3)		
Severe dysfunction ($<30\%$)	65 (12.7)	280 (10.9)		
Left atrial diameter type (%)			1.6%	0.9912
Normal	115 (23.0)	567 (22.5)		
Mild enlargement	127 (25.4)	638 (25.3)		
Moderate enlargement	130 (26.0)	652 (25.9)		
Severe enlargement	128 (25.6)	660 (26.2)		
eGFR mg/dL (SD)	64.2 (23.4)	63.9 (22.9)	1.5%	0.7606
Hematocrit (SD)	39.2 (4.9)	39.2 (5.0)	0.5%	0.9134
AF type (%)			2.2%	0.9050
First detected / new onset	5 (0.9)	30 (1.1)		
Paroxysmal	381 (71.3)	1,905 (71.7)		
Persistent	148 (27.7)	723 (27.2)		
EHRA score			1.9%	0.9834

<i>Variable</i>	<i>MRA (N=534)</i>	<i>No MRA (N=2,658)</i>	<i>Standardized difference</i>	<i>P-value</i>
No symptoms	190 (35.6)	955 (36.1)		
Mild	236 (44.2)	1,169 (44.2)		
Severe	98 (18.4)	479 (18.1)		
Disabling	10 (1.9)	44 (1.7)		
AF management strategy			0.8%	0.8686
Rate control	315 (59.1)	1,560 (58.7)		
Rhythm control	218 (40.9)	1,097 (41.3)		
Prior antiarrhythmic drug use (%)	297 (55.6)	1,499 (56.4)	1.6%	0.7409
AV node/HIS bundle ablation (%)	17 (3.2)	85 (3.2)	0.1%	0.9863
AF duration (%)	63.9 (66.7)	64.6 (72.5)	1.0%	0.8387
Functional status (%)	53 (9.9)	276 (10.4)	1.5%	0.7484
Implanted device	224 (41.9)	1,097 (41.3)	1.4%	0.7723
Calcium channel blockers (%)	124 (23.2)	657 (24.7)	3.5%	0.4628
Diuretics (%)	378 (70.8)	1,874 (70.5)	0.6%	0.8961
Statins (%)	303 (56.7)	1,505 (56.6)	0.2%	0.9593
Currently on Dabigatran (%)	30 (5.6)	195 (7.3)	7.0%	0.1569
Currently on Warfarin (%)	381 (71.3)	1,810 (68.1)	7.1%	0.1394
Currently on OAC (%)	411 (77.0)	2,004 (75.4)	3.7%	0.4401

AAD = antiarrhythmic drug, AF = atrial fibrillation, BMI = body mass index, CAD = coronary artery disease, CKD = chronic kidney disease, CPAP = continuous positive airway pressure, DBP = diastolic blood pressure, SBP = systolic blood pressure, eGFR = estimated glomerular filtration rate, HR = heart rate, MDRD = Modification of Diet in Renal Disease Study, LVEF = left ventricular ejection fraction, NYHA = New York Heart Association, OAC = oral anticoagulation, PCI = percutaneous coronary intervention, PVD = peripheral artery disease, SD = standard deviation, RBBB, right bundle branch block, LBBB left bundle branch block.

Table S5. Standardized differences of propensity matched pairs: New and baseline MRA use combined (New-onset HF matched pairs).

Variable	MRA	No MRA	Standardized	
	(N=205)	(N=1,019)	difference	P-value
Age (SD) years	73.0 (11.0)	73.3 (10.7)	2.5%	0.7385
Female (%)	118 (57.6)	607 (59.6)	4.1%	0.5936
Smoking (%)			4.6%	0.8339
Non-smoker	113 (55.1)	583 (57.2)		
Recent or former smoker	80 (39.0)	375 (36.8)		
Current Smoker	12 (5.9)	61 (6.0)		
Cancer (%)	37 (18.0)	193 (18.9)	2.3%	0.7656
Hypertension (%)	186 (90.7)	936 (91.9)	4.0%	0.5955
Diabetes (%)	48 (23.4)	240 (23.6)	0.3%	0.9661
Obstructive sleep apnea (%)	45 (22.0)	202 (19.8)	5.2%	0.4885
CPAP (%)	25 (12.2)	110 (10.8)	4.4%	0.5593
Dialysis (%)	2 (1.0)	10 (1.0)	0.1%	0.9939
Hyperlipidemia (%)	146 (71.2)	729 (71.5)	0.7%	0.9259
Anemia (%)	32 (15.6)	144 (14.1)	4.2%	0.5821
Cognitive impairment/dementia	10 (4.9)	44 (4.3)	2.7%	0.7216
Frailty (%)	12 (5.9)	59 (5.8)	0.2%	0.9742
Chronic obstructive pulmonary disease (%)	26 (12.7)	121 (11.9)	2.5%	0.7452
Peripheral vascular disease (%)	21 (10.2)	112 (11.0)	2.4%	0.7538
History of stroke/TIA (%)	30 (14.6)	166 (16.3)	4.6%	0.5552
Significant valvular disease (%)	35 (17.1)	173 (17.0)	0.3%	0.9734
Prior valve replacement/repair (%)	16 (7.8)	80 (7.9)	0.2%	0.9822
History of CAD (%)	60 (29.3)	288 (28.3)	2.2%	0.7709
Prior myocardial infarction (%)	21 (10.2)	91 (8.9)	4.5%	0.5517
History of PCI (%)	26 (12.7)	127 (12.5)	0.7%	0.9308
Height (SD)	169 (12.5)	168 (12.1)	4.9%	0.5194
Weight (SD)	88.9 (25.3)	88.6 (25.9)	1.1%	0.8900

<i>Variable</i>	<i>MRA</i>	<i>No MRA</i>	<i>Standardized</i>	
	<i>(N=205)</i>	<i>(N=1,019)</i>	<i>difference</i>	<i>P-value</i>
Heart Rate (SD)	71.5 (12.6)	71.6 (13.3)	0.8%	0.9141
Systolic BP mmHg(SD)	130 (21.5)	128 (18.1)	8.7%	0.2283
Diastolic BP mmHg(SD)	73.9 (10.8)	73.7 (11.0)	1.7%	0.8274
Intraventricular conduction (%)			1.1%	0.9992
None	155 (75.6)	773 (76.1)		
RBBB	14 (6.8)	68 (6.7)		
LBBB	8 (3.9)	39 (3.8)		
Non-specific IVCD or unknown ventricularly paced	28 (13.7)	136 (13.4)		
LVEF type (%)			6.0%	0.8900
Normal ($\geq 50\%$)	157 (80.1)	795 (82.0)		
Mild dysfunction ($>40\%$, $<50\%$)	20 (10.2)	92 (9.5)		
Moderate dysfunction ($\geq 30\%$ to 40%)	15 (7.7)	68 (7.0)		
Severe dysfunction ($<30\%$)	4 (2.0)	14 (1.4)		
Left atrial diameter type (%)			4.4%	0.9578
Normal	57 (29.4)	288 (30.3)		
Mild enlargement	50 (25.8)	240 (25.2)		
Moderate enlargement	49 (25.3)	251 (26.4)		
Severe enlargement	38 (19.6)	173 (18.2)		
eGFR mg/dL (SD)	65.7 (22.1)	65.0 (22.8)	2.9%	0.7158
Hematocrit (SD)	40.1 (4.8)	40.0 (4.7)	1.7%	0.8251
AF type (%)			2.4%	0.9543
First detected / new onset	2 (1.0)	12 (1.2)		
Paroxysmal	160 (78.0)	788 (77.3)		
Persistent	43 (21.0)	219 (21.5)		
EHRA score			4.5%	0.9515
No symptoms	81 (39.5)	422 (41.5)		
Mild	89 (43.4)	435 (42.7)		
Severe	32 (15.6)	147 (14.4)		
Disabling	3 (1.5)	14 (1.4)		
AF management strategy			4.1%	0.5900

<i>Variable</i>	<i>MRA</i>	<i>No MRA</i>	<i>Standardized</i>	
	<i>(N=205)</i>	<i>(N=1,019)</i>	<i>difference</i>	<i>P-value</i>
Rate control	112 (54.6)	577 (56.7)		
Rhythm control	93 (45.4)	441 (43.3)		
Prior antiarrhythmic drug use (%)	127 (62.0)	633 (62.1)	0.3%	0.9638
AV node/HIS bundle ablation (%)	0 (0.0)	3 (0.3)	7.7%	0.4367
AF duration (%)	60.0 (47.8)	60.1 (60.1)	0.1%	0.9870
Functional status (%)	19 (9.3)	100 (9.8)	1.9%	0.8100
Implanted device	45 (22.0)	217 (21.3)	1.6%	0.8345
Calcium channel blockers (%)	71 (34.6)	353 (34.6)	0.0%	0.9983
Diuretics (%)	118 (57.6)	577 (56.6)	1.9%	0.8049
Statins (%)	100 (48.8)	489 (48.0)	1.6%	0.8359
Currently on Dabigatran (%)	16 (7.8)	70 (6.9)	3.6%	0.6326
Currently on Warfarin (%)	136 (66.3)	688 (67.5)	2.5%	0.7433
Currently on OAC (%)	152 (74.1)	757 (74.3)	0.3%	0.9661

AAD = antiarrhythmic drug, AF = atrial fibrillation, BMI = body mass index, CAD = coronary artery disease, CKD = chronic kidney disease, CPAP = continuous positive airway pressure, DBP = diastolic blood pressure, SBP = systolic blood pressure, eGFR = estimated glomerular filtration rate, HR = heart rate, MDRD = Modification of Diet in Renal Disease Study, LVEF = left ventricular ejection fraction, NYHA = New York Heart Association, OAC = oral anticoagulation, PCI = percutaneous coronary intervention, PVD = peripheral artery disease, SD = standard deviation, RBBB, right bundle branch block, LBBB left bundle branch block.

Table S6. Predictors of new MRA use.

<i>Characteristic</i>	<i>OR (95% CI)</i>	<i>P</i>
Age (truncated at 70 years)	0.96 (0.94-0.98)	0.0003
Female	1.03 (0.73-1.45)	0.8733
Current smoker	1.00 (0.81-1.24)	0.997
Cancer	0.94 (0.69-1.27)	0.6883
Hypertension	2.06 (1.35-3.12)	0.0007
Diabetes	1.02 (0.78-1.33)	0.8896
Dialysis	0.29 (0.06-1.33)	0.1111
Hyperlipidemia	1.16 (0.84-1.59)	0.3769
Anemia	1.29 (0.94-1.76)	0.1157
Cognitive impairment/Dementia	0.98 (0.50-1.95)	0.9622
Frailty	1.15 (0.70-1.88)	0.5831
Chronic obstructive pulmonary disease	0.89 (0.64-1.23)	0.4815
Peripheral vascular disease	0.83 (0.57-1.19)	0.3052
Stroke or transient ischemic attack	1.43 (1.04-1.95)	0.0275
Heart failure / Functional Status		
No Heart Failure	Reference	
NYHA Class I	0.41 (0.08-2.07)	0.2802
NYHA Class II	0.48 (0.09-2.41)	0.371
NYHA Class III	0.62 (0.12-3.16)	0.5627
NYHA Class IV	0.64 (0.09-4.29)	0.6421
Significant valvular disease	0.69 (0.51-0.94)	0.0194
Prior valve replacement/repair	1.36 (0.91-2.04)	0.1355
History of coronary artery disease	1.05 (0.73-1.51)	0.8011
Prior myocardial infarction	0.95 (0.65-1.38)	0.7728
Prior percutaneous coronary intervention	0.78 (0.54-1.12)	0.1794
Height, cm	0.99 (0.97-1.00)	0.0292
Weight, kg	1.00 (0.99-1.01)	0.8898
Heart rate (truncated at 70 beats per minute)	1.03 (1.01-1.06)	0.0105
Systolic blood pressure (truncated at 125 mmHg)	0.97 (0.96-0.98)	<.0001
Diastolic blood pressure	1.00 (0.98-1.01)	0.5644
Intraventricular conduction		
Right bundle branch block	Reference	
Left bundle branch block		0.5076
Left bundle branch block – Heart failure interaction		0.5272
Non-specific intraventricular conduction delay		0.134
Non-specific intraventricular conduction delay – heart failure interaction		0.3964
Unknown-ventricularly paced		0.3051

Unknown-ventricularly paced – heart failure interaction		0.0068
Left ventricular ejection fraction		
Normal		
Mild dysfunction	1.02 (0.64-1.61)	0.9412
Moderate dysfunction	2.27 (1.61-3.21)	<.0001
Severe dysfunction	1.93 (1.24-3.00)	0.0038
Left atrial diameter		
Normal	Reference	
Mild enlargement		0.9684
Mild enlargement – heart failure interaction		0.2529
Moderate enlargement		0.6164
Moderate enlargement – heart failure interaction		0.2648
Severe enlargement		0.1105
Severe enlargement – heart failure interaction		0.8627
eGFR ≤50	1.00 (0.98-1.03)	0.7186
50 < eGFR ≤ 90	0.98 (0.97-0.99)	<.0001
eGFR >90	1.01 (0.99-1.02)	0.2521
Hematocrit, %	1.02 (0.99-1.05)	0.1925
AF type		
First detected/New onset	Reference	
Paroxysmal		0.2455
Paroxysmal – heart failure interaction		0.1314
Persistent		0.2827
Persistent – heart failure interaction		0.1336
EHRA Score		
No symptoms	Reference	
Mild	0.97 (0.73-1.29)	0.8495
Severe	0.92 (0.64-1.33)	0.6712
Disabling	0.48 (0.20-1.18)	0.1093
Rhythm control	0.97 (0.74-1.28)	0.8361
Antiarrhythmic drug use in past	1.10 (0.84-1.44)	0.4983
AV node/HIS bundle ablation	2.54 (1.44-4.47)	0.0013
AF duration, months	1.00 (1.00-1.00)	0.2863
Functional status: not living independently	0.94 (0.62-1.42)	0.7682
Implanted device	1.10 (0.82-1.47)	0.5397
Obstructive sleep apnea	1.69 (1.12-2.54)	0.0122
On continuous positive airway pressure	1.10 (0.68-1.76)	0.7055
Statin	0.75 (0.57-0.99)	0.0445

Diuretic	1.71 (1.28-2.29)	0.0002
Calcium channel blockers	0.68 (0.50-0.92)	0.014

AF = atrial fibrillation, CAD = coronary artery disease, CKD = chronic kidney disease, COPD = chronic obstructive pulmonary disease, CPAP = continuous positive airway pressure, eGFR = estimated glomerular filtration rate, HF = heart failure, HR = heart rate, LVEF = left ventricular ejection fraction, LAD = left atrial dimension, EHRA = European heart rhythm association, NYHA = New York Heart Association, PCI = percutaneous coronary intervention, MI = Myocardial infarction.

Table S7. Predictors of new and baseline MRA use.

<i>Characteristic</i>	<i>OR (95% CI)</i>	<i>P</i>
Age (truncated at 70 years)	0.98 (0.96-1.01)	0.1938
Female	1.43 (1.00-2.05)	0.0503
Current smoker	1.07 (0.86-1.33)	0.5325
Cancer	0.91 (0.66-1.24)	0.5417
Hypertension	1.38 (0.92-2.06)	0.1176
Diabetes	1.16 (0.88-1.53)	0.2987
Dialysis	0.59 (0.14-2.59)	0.4865
Hyperlipidemia	1.18 (0.85-1.64)	0.3243
Anemia	0.73 (0.51-1.04)	0.0845
Cognitive impairment/Dementia	0.84 (0.34-2.10)	0.7144
Frailty	0.60 (0.30-1.20)	0.1469
Chronic obstructive pulmonary disease	1.22 (0.87-1.69)	0.2438
Peripheral vascular disease	1.17 (0.82-1.66)	0.3993
Stroke or transient ischemic attack	0.91 (0.64-1.31)	0.6246
Heart failure / Functional Status		
No Heart Failure	Reference	
NYHA Class I	0.61 (0.23-1.57)	0.3041
NYHA Class II	0.63 (0.24-1.61)	0.3306
NYHA Class III	1.01 (0.38-2.68)	0.9826
NYHA Class IV	1.81 (0.45-7.22)	0.4032
Significant valvular disease	1.01 (0.75-1.38)	0.9285
Prior valve replacement/repair	1.03 (0.66-1.62)	0.8977
History of coronary artery disease	0.91 (0.62-1.34)	0.6364
Prior myocardial infarction	0.81 (0.54-1.20)	0.2923
Prior percutaneous coronary intervention	1.17 (0.80-1.72)	0.4254
Height, cm	1.00 (0.99-1.02)	0.8672
Weight, kg	1.00 (0.99-1.01)	0.7088
Heart rate (truncated at 70 beats per minute)	0.99 (0.97-1.01)	0.4747
Systolic blood pressure (truncated at 125 mmHg)	0.99 (0.98-1.01)	0.2458
Diastolic blood pressure	1.00 (0.99-1.02)	0.8614
Intraventricular conduction		
Right bundle branch block	Reference	
Left bundle branch block		0.6302
Left bundle branch block – Heart failure interaction		0.1495
Non-specific intraventricular conduction delay		0.5633
Non-specific intraventricular conduction delay – heart failure interaction		0.5972
Unknown-ventricularly paced		0.9389
Unknown-ventricularly paced – heart failure interaction		0.7591

Left ventricular ejection fraction		
Normal	Reference	
Mild dysfunction	1.27 (0.82-1.98)	0.2881
Moderate dysfunction	2.23 (1.52-3.27)	<.0001
Severe dysfunction	2.45 (1.51-3.98)	0.0003
Left atrial diameter		
Normal	Reference	
Mild enlargement		0.5074
Mild enlargement – heart failure interaction		0.468
Moderate enlargement		0.1684
Moderate enlargement – heart failure interaction		0.4599
Severe enlargement		0.122
Severe enlargement – heart failure interaction		0.509
eGFR ≤50	1.01 (0.98-1.03)	0.4859
50 < eGFR ≤ 90	1.00 (0.99-1.01)	0.4977
eGFR >90	0.99 (0.98-1.01)	0.4029
Hematocrit, %	0.97 (0.94-1.00)	0.0483
AF type		
First detected/New onset	Reference	
Paroxysmal		0.9658
Paroxysmal – heart failure interaction		0.0489
Persistent		0.9654
Persistent – heart failure interaction		0.049
EHRA Score		
No symptoms	Reference	
Mild	1.17 (0.89-1.55)	0.2548
Severe	1.29 (0.88-1.89)	0.1834
Disabling	1.00 (0.36-2.78)	0.9945
Rhythm control	0.99 (0.75-1.31)	0.9395
Antiarrhythmic drug use in past	1.07 (0.80-1.42)	0.6553
AV node/HIS bundle ablation	0.80 (0.32-1.99)	0.6335
AF duration, months	1.00 (1.00-1.00)	0.1356
Functional status: not living independently	1.13 (0.71-1.78)	0.6089
Implanted device	1.31 (0.97-1.76)	0.078
Obstructive sleep apnea	1.19 (0.77-1.85)	0.4392
On continuous positive airway pressure	0.61 (0.34-1.06)	0.0815
Statin	0.83 (0.63-1.10)	0.2051
Diuretic	1.95 (1.45-2.60)	<.0001
Calcium channel blockers	0.90 (0.67-1.20)	0.4663

Abbreviations: AF = atrial fibrillation, CAD = coronary artery disease, CKD = chronic kidney disease, COPD = chronic obstructive pulmonary disease, CPAP = continuous positive airway pressure, eGFR = estimated glomerular filtration rate, HF = heart failure, HR = heart rate, LVEF = left ventricular ejection fraction, LAD = left atrial dimension, EHRA = European heart rhythm association, NYHA = New York Heart Association, PCI = percutaneous coronary intervention, MI = Myocardial infarction.