

## **SUPPLEMENT**

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**Supplemental Table 1. Initiation of AF therapies within 1 year for presumed incident AF, stratified by CKD status (N, %)**

	With baseline CKD N=39,490				Without baseline CKD N=76,074			
	Baseline exposure: Patients with AF therapy <b>prior to</b> index date		Newly initiated therapy ≤1 yrs from index date: Patients who received AF therapy <b>on or</b> after index date.		Baseline exposure: Patients with AF therapy <b>prior to</b> index date		Newly initiated therapy ≤1 yrs from index date: Patients who received AF therapy <b>on or</b> after index date.	
AF Therapy	N	%	N	%*	N	%	N	%
Rate control agent	29460	74.60%	5981	59.63%	44546	58.56%	20,946	66.44%
Warfarin	4880	12.36%	12929	37.65%	8122	10.68%	24,396	36.39%
Direct oral anticoagulant	315	0.80%	2940	8.56%	954	1.25%	10,050	14.99%
Anticoagulant (Warfarin or DOAC)	5148	13.04%	15078	43.91%	9036	11.88%	32,333	48.23%
Antiarrhythmic agent	1749	4.43%	3572	9.46%	3764	4.95%	9400	13.00%
Antiplatelet agent	4797	12.15%	1597	4.60%	5718	7.52%	2370	3.37%
Catheter ablation	0	0.00%	32	0.08%	1	0.00%	304	0.40%
Pacemaker and AV node ablation**	0	0.00%	14	0.04%	2	0.00%	28	0.04%
Cardioversion	128	0.32%	1290	3.28%	290	0.38%	4699	6.20%
Rate control agent + anticoagulation	4440	11.24%	3081	8.79%	7264	9.55%	11,468	16.67%
Rate control agent + antiarrhythmic agent	1603	4.06%	709	1.87%	3397	4.47%	3564	4.90%
Anticoagulation + antiarrhythmic agent	806	2.04%	2321	6.00%	1853	2.44%	6429	8.66%

**Supplemental Table 2. Median time (in days) to initiation of AF therapies in the cohort**

Treatment	# of events within 1 year	median(q1-q3) time in days
<b>Rate Control</b>	26,920	3 (1-12)
CKD	5980	4 (2-18)
No CKD	20,940	3 (1-10)
<b>Warfarin</b>	37,322	4 (2-18)
CKD	12,928	4 (2-20)
No CKD	24,394	4 (2-18)
<b>DOAC</b>	12,989	8 (2-46)
CKD	2940	9 (2-54)
No CKD	10,049	8 (2-44)
<b>Anticoagulant</b>	47,407	4 (2-19)
CKD	15,077	4 (2-20)
No CKD	32,330	4 (2-18)
<b>Antiarrhythmic</b>	12,969	25 (6-91)
CKD	3572	24 (7-90)
No CKD	9397	26 (6-91)
<b>Antiplatelet</b>	3967	25 (5-131)
CKD	1597	28 (5-140)
No CKD	2370	22 (5-126)
<b>Procedure</b>	6253	54 (8-109)
CKD	1320	56 (16-108)
No CKD	4933	54 (7-110)

<b>Overall treatment</b>	65,125	3 (1-14)
CKD	19,960	4 (2-18)
No CKD	45,165	3 (1-13)

**Supplemental Table 3.** Adjusted association of CKD stages with AF therapy initiation within 1 year (HR with 95% CI), censoring at end-stage-renal-disease

Therapy	Model 3: competing risk model censoring at death and ESRD*	Model 3: competing model censoring at death*
<b>Any AF therapy</b>		
eGFR>60	ref	ref
eGFR 45-59	1.00 (0.98-1.02)	1.01 (0.99-1.02)
eGFR 30-44	<b>0.90 (0.87-0.92)</b>	<b>0.91 (0.88-0.93)</b>
eGFR 15-29	<b>0.74 (0.70-0.77)</b>	<b>0.78 (0.75-0.82)</b>
eGFR<15	<b>0.48 (0.43-0.53)</b>	<b>0.64 (0.58-0.70)</b>
<b>Rate control agent</b>		
eGFR>60	ref	ref
eGFR 45-59	<b>0.90 (0.87-0.93)</b>	<b>0.90 (0.87-0.93)</b>
eGFR 30-44	<b>0.78 (0.75-0.82)</b>	<b>0.78 (0.75-0.82)</b>
eGFR 15-29	<b>0.59 (0.54-0.65)</b>	<b>0.61 (0.56-0.67)</b>
eGFR<15	<b>0.35 (0.28-0.44)</b>	<b>0.41 (0.33-0.51)</b>
<b>Warfarin</b>		
eGFR>60	ref	ref
eGFR 45-59	1.07 (1.04-1.10)	1.07 (1.05-1.10)
eGFR 30-44	1.00 (0.97-1.04)	1.02 (0.98-1.05)
eGFR 15-29	<b>0.85 (0.80-0.89)</b>	<b>0.89 (0.84-0.94)</b>

eGFR<15	<b>0.62 (0.55-0.70)</b>	<b>0.81 (0.73-0.90)</b>
<b>DOAC</b>		
eGFR>60	ref	ref
eGFR 45-59	<b>0.87 (0.83-0.91)</b>	<b>0.87 (0.83-0.91)</b>
eGFR 30-44	<b>0.55 (0.52-0.60)</b>	<b>0.55 (0.51-0.59)</b>
eGFR 15-29	<b>0.22 (0.18-0.26)</b>	<b>0.23 (0.19-0.27)</b>
eGFR<15	<b>0.04 (0.02-0.10)</b>	<b>0.05 (0.02-0.11)</b>
<b>Any Anticoagulant (Warfarin or DOAC)</b>		
eGFR>60	ref	ref
eGFR 45-59	1.01 (0.99-1.03)	1.02 (0.99-1.04)
eGFR 30-44	<b>0.87 (0.84-0.90)</b>	<b>0.88 (0.85-0.91)</b>
eGFR 15-29	<b>0.68 (0.65-0.72)</b>	<b>0.72 (0.68-0.76)</b>
eGFR<15	<b>0.48 (0.42-0.54)</b>	<b>0.62 (0.56-0.70)</b>
<b>Anti-arrhythmic</b>		
eGFR>60	ref	ref
eGFR 45-59	0.96 (0.91-1.00)	0.97 (0.92-1.01)
eGFR 30-44	<b>0.88 (0.83-0.94)</b>	<b>0.90 (0.85-0.96)</b>
eGFR 15-29	<b>0.81 (0.73-0.90)</b>	<b>0.93 (0.84-1.03)</b>
eGFR<15	<b>0.62 (0.49-0.79)</b>	<b>0.99 (0.82-1.20)</b>
<b>Anti-platelet</b>		
eGFR>60	ref	ref
eGFR 45-59	1.13 (1.04-1.23)	1.14 (1.05-1.24)
eGFR 30-44	1.05 (0.95-1.16)	1.09 (0.98-1.21)

eGFR 15-29	1.00 (0.86-1.17)	1.12 (0.97-1.30)
eGFR<15	0.67 (0.48-0.94)	1.12 (0.86-1.47)
<b>Catheter ablation/Pacemaker/Cardioversion</b>		
eGFR>60	ref	ref
eGFR 45-59	0.99 (0.92-1.06)	0.99 (0.93-1.06)
eGFR 30-44	<b>0.76 (0.68-0.85)</b>	<b>0.78 (0.70-0.87)</b>
eGFR 15-29	<b>0.66 (0.54-0.79)</b>	<b>0.73 (0.61-0.88)</b>
eGFR<15	<b>0.34 (0.20-0.56)</b>	<b>0.48 (0.31-0.74)</b>

Model 3 adjusts for age, gender, race, ethnicity, education, income, history of stroke, TIA, PVD, heart failure, MI, CABG, PCI, valvular disease, hypertension, diabetes, SBP, BMI, urine ACR and baseline use of cardiovascular medications