

SUPPLEMENTAL MATERIAL

Table of Contents

Supplemental Tables	Page
Supplemental Table I. Patient Characteristics Before and After Weighting in the Overall Cohort in OptumLabs	2
Supplemental Table II. Patient Characteristics Before and After Weighting in the Overall Cohort in the UKB	8
Supplemental Table III. Primary Composite Outcome (Crude Numbers)	10
Supplemental Table IV. Safety Outcomes (Crude Numbers)	12
Supplemental Table V. Sensitivity Analysis Replicating EAST-AFNET 4	15
Supplemental Table VI. Falsification Analysis	17

Supplemental Tables

Supplemental Table I. Patient Characteristics Before and After Weighting in the Overall Cohort in OptumLabs

	Before PS Weighting			After PS Weighting		
	No Early Rhythm Control (N=77,460)	Early Rhythm Control (N=24,382)	Standardized Difference	No Early Rhythm Control (N=77,460)	Early Rhythm Control (N=24,382)	Standardized Difference
Age						
Mean (SD)	73.0 (10.4)	70.7 (10.2)	0.228	71.2 (10.9)	71.2 (10.9)	0.000
Age group						
18-64 years	19.8%	26.6%	0.163	24.6%	24.6%	0.000
65-74 years	28.9%	33.9%	0.108	28.2%	28.2%	0.000
75+ years	51.3%	39.5%	0.240	47.2%	47.2%	0.000
Female	52.4%	43.9%	0.170	41.7%	41.7%	0.000
Race						
Asian	2.5%	2.1%	0.029	2.9%	2.9%	0.000
Black	12.0%	9.2%	0.089	10.7%	10.7%	0.000
Hispanic	6.6%	5.5%	0.046	7.1%	7.1%	0.000
Unknown	2.4%	2.4%	0.000	2.1%	2.1%	0.000
White	76.4%	80.7%	0.105	77.3%	77.3%	0.000
Region						
Midwest	29.3%	32.0%	0.060	28.8%	28.8%	0.000
Northeast	22.0%	12.6%	0.250	18.7%	18.7%	0.000
South	39.4%	44.5%	0.103	42.1%	42.1%	0.000
Unknown	0.1%	0.1%	0.007	0.0%	0.0%	0.000
West	9.3%	10.8%	0.050	10.4%	10.4%	0.000
Comorbidities						
Systolic HF	18.0%	24.9%	0.168	27.5%	27.5%	0.000

Cardiomyopathy						
None	79.6%	73.2%	0.152	67.6%	67.6%	0.000
Hypertrophic	1.3%	1.7%	0.036	2.9%	2.9%	0.000
Ischemic	4.9%	6.6%	0.072	8.7%	8.7%	0.000
Dilated	14.2%	18.5%	0.117	20.9%	20.9%	0.000
Implanted device						
None	86.4%	84.0%	0.068	73.6%	73.6%	0.000
CRT defibrillator	0.6%	1.0%	0.043	2.0%	2.0%	0.000
ICD	5.4%	6.1%	0.030	12.9%	12.9%	0.000
CRT pacemaker	0.1%	0.1%	0.004	0.3%	0.3%	0.000
Dual chamber pacemaker	5.5%	6.4%	0.035	8.0%	8.0%	0.000
Single chamber pacemaker	1.9%	2.4%	0.035	3.2%	3.2%	0.000
Indication for defibrillator						
No defibrillator	94.0%	92.9%	0.043	85.1%	85.1%	0.000
Primary	3.9%	3.9%	0.001	7.2%	7.2%	0.000
Secondary	2.1%	3.2%	0.065	7.1%	7.1%	0.000
Other supraventricular arrhythmia	11.0%	13.6%	0.079	22.4%	22.4%	0.000
Atrial flutter	9.9%	26.1%	0.433	25.9%	25.9%	0.000
Ventricular arrhythmia	12.6%	17.4%	0.136	25.6%	25.6%	0.000
Prior ablation for other arrhythmias	1.6%	10.7%	0.388	27.9%	27.9%	0.000
Cardioversion	5.5%	31.3%	0.706	12.9%	12.9%	0.000
Surgical ablation/Maze procedure	0.0%	0.4%	0.084	0.4%	0.4%	0.000
Hypertension	96.9%	95.8%	0.063	96.6%	96.6%	0.000
Diabetes mellitus	45.5%	40.8%	0.096	47.7%	47.7%	0.000
Thromboembolism	27.9%	23.0%	0.114	27.4%	27.4%	0.000
Stroke	22.4%	17.4%	0.126	21.8%	21.8%	0.000
Ischemic stroke	19.7%	14.8%	0.129	19.5%	19.5%	0.000
TIA	14.9%	12.6%	0.067	14.2%	14.2%	0.000
CAD	65.9%	72.1%	0.134	80.1%	80.1%	0.000
PAD	21.5%	16.7%	0.122	21.8%	21.8%	0.000
Vascular disease (CAD or PAD)	69.9%	74.4%	0.102	81.8%	81.8%	0.000

Myocardial infarction	26.3%	28.9%	0.058	36.4%	36.4%	0.000
CABG	15.1%	24.8%	0.244	35.9%	35.9%	0.000
PCI	17.5%	19.1%	0.042	26.4%	26.4%	0.000
Left ventricular hypertrophy	34.9%	43.1%	0.169	43.3%	43.3%	0.000
Prior valve procedure	3.1%	10.2%	0.290	6.4%	6.4%	0.000
Mitral stenosis	2.7%	3.9%	0.069	4.7%	4.7%	0.000
Mitral regurgitation	41.3%	52.7%	0.229	50.3%	50.3%	0.000
Major bleeding	32.5%	31.9%	0.013	33.1%	33.1%	0.000
Intracranial bleeding	3.8%	3.2%	0.035	3.4%	3.4%	0.000
Stage 3-5 CKD	21.2%	19.1%	0.053	22.1%	22.1%	0.000
Renal failure requiring dialysis	2.0%	1.7%	0.023	1.7%	1.7%	0.000
Liver disease	18.1%	18.1%	0.002	18.6%	18.6%	0.000
Non skin cancer	23.0%	21.6%	0.035	21.5%	21.5%	0.000
Fall	25.3%	19.8%	0.131	23.4%	23.4%	0.000
Anemia	60.8%	60.4%	0.009	64.2%	64.2%	0.000
Alcoholism	6.6%	6.4%	0.008	5.6%	5.6%	0.000
Smoking	38.4%	42.9%	0.092	43.2%	43.2%	0.000
Hypothyroidism	34.8%	33.7%	0.024	36.8%	36.8%	0.000
Thyrotoxicosis	5.9%	5.3%	0.023	6.6%	6.6%	0.000
Esophageal disease	57.0%	55.5%	0.030	58.1%	58.1%	0.000
Obesity	33.3%	37.9%	0.096	36.0%	36.0%	0.000
COPD	25.8%	24.9%	0.022	27.1%	27.1%	0.000
Obstructive sleep apnea	21.5%	28.2%	0.154	27.6%	27.6%	0.000
Hyperlipidemia	90.0%	90.3%	0.009	92.6%	92.6%	0.000
Osteoporosis	23.2%	19.0%	0.105	19.3%	19.3%	0.000
Pneumonia	29.2%	28.9%	0.007	32.6%	32.6%	0.000
Fracture	25.1%	22.1%	0.070	25.0%	25.0%	0.000
Dementia	14.9%	7.7%	0.232	12.7%	12.7%	0.000
Previous Drug Treatment						
N of previous AADs						
0	99.2%	1.5%	9.015	28.0%	28.0%	0.000

1	0.8%	89.3%	3.887	70.3%	70.3%	0.000
2+	0.0%	9.2%	0.448	1.8%	1.8%	0.000
Amiodarone use	0.6%	62.8%	1.797	50.7%	50.7%	0.000
N of previous rate control drugs						
0	*	*	0.434	0.1%	0.1%	0.000
1	60.0%	47.5%	0.252	46.6%	46.6%	0.000
2	29.1%	30.2%	0.023	33.9%	33.9%	0.000
3+	*	*	0.087	19.4%	19.4%	0.000
Concurrent Medication						
Oral anticoagulants						
none	69.6%	54.8%	0.310	71.1%	71.1%	0.000
Warfarin	15.5%	17.0%	0.039	13.2%	13.2%	0.000
NOAC	14.8%	28.3%	0.331	15.7%	15.7%	0.000
ACE inhibitors	29.3%	28.5%	0.019	29.8%	29.8%	0.000
ARB	18.2%	18.3%	0.005	18.8%	18.8%	0.000
Thiazides	18.1%	15.7%	0.065	14.2%	14.2%	0.000
Beta blockers (rate control)	71.4%	55.2%	0.340	69.5%	69.5%	0.000
Other beta blockers (not rate control)	5.1%	4.2%	0.042	4.0%	4.0%	0.000
Calcium channel blockers (rate control)	14.4%	10.3%	0.124	10.7%	10.7%	0.000
Other calcium channel blockers (not rate control)	18.8%	16.1%	0.070	15.9%	15.9%	0.000
Digitalis	6.7%	4.6%	0.090	7.1%	7.1%	0.000
Diuretics--aldosterone antagonist	5.3%	6.0%	0.032	6.3%	6.3%	0.000
Loop diuretics	24.8%	26.6%	0.041	29.1%	29.1%	0.000
Other antihypertensive drugs	9.4%	8.2%	0.044	8.3%	8.3%	0.000
Statin	50.7%	51.7%	0.019	55.3%	55.3%	0.000
Insulin	9.4%	6.9%	0.093	10.6%	10.6%	0.000
Metformin	13.0%	12.3%	0.020	12.4%	12.4%	0.000
Other antidiabetic drugs	11.7%	10.0%	0.052	10.4%	10.4%	0.000
Antiplatelet	13.1%	10.3%	0.088	14.5%	14.5%	0.000
NSAIDs	9.0%	7.9%	0.040	9.2%	9.2%	0.000

Antiulcer agents	28.5%	26.7%	0.042	28.0%	28.0%	0.000
Antidepressant	24.5%	19.3%	0.126	24.3%	24.3%	0.000
CHA₂DS₂-VASC						
Mean (SD)	5.0 (1.8)	4.7 (1.8)	0.183	5.0 (1.8)	5.0 (1.8)	0.000
CHA₂DS₂-VASC group						
2-3	22.9%	29.3%	0.146	22.6%	22.6%	0.000
4+	77.1%	70.7%	0.146	77.4%	77.4%	0.000
Baseline period duration, years						
Mean (SD)	4.9 (2.7)	5.2 (3.0)	0.096	5.1 (2.9)	5.1 (2.9)	0.000
Index year						
2012	6.2%	6.7%	0.021	7.0%	7.0%	0.000
2013	17.4%	17.9%	0.013	14.9%	14.9%	0.000
2014	17.0%	15.6%	0.038	17.5%	17.5%	0.000
2015	16.4%	16.2%	0.005	17.4%	17.4%	0.000
2016	20.3%	20.3%	0.000	20.8%	20.8%	0.000
2017	22.7%	23.3%	0.014	22.3%	22.3%	0.000
Health Utilization within past 12 months						
Number of emergency room visits						
Mean (SD)	0.8 (1.5)	0.8 (1.4)	0.030	0.9 (1.8)	0.9 (1.8)	0.000
Number of inpatient stays						
Mean (SD)	0.9 (1.2)	1.3 (1.3)	0.325	1.0 (1.5)	1.0 (1.5)	0.000
Number of days in hospital						
Mean (SD)	6.2 (12.3)	9.3 (13.7)	0.239	6.9 (15.0)	6.9 (15.0)	0.000
Number of HF hospitalizations						
Mean (SD)	0.1 (0.5)	0.2 (0.6)	0.139	0.2 (0.6)	0.2 (0.6)	0.000

Values are presented as mean (SD) or as absolute numbers (%). AAD indicates antiarrhythmic drug; ACE, angiotensin-converting enzyme; ARB, angiotensin II receptor blockers; CAD; coronary artery disease; CKD, chronic kidney disease; COPD, chronic obstructive pulmonary disease; CRT,

cardiac resynchronization therapy; ICD, implantable cardioverter-defibrillators; HF, heart failure; NOAC, non-vitamin K antagonist oral anticoagulant; PS, propensity score. * To maintain de-identification, OptumLabs does not allow researchers to disclose the number of events when the number is 10 or fewer.

Supplemental Table II. Patient Characteristics Before and After Weighting in the Overall Cohort in the UK Biobank

	Before PS Weighting			After PS Weighting		
	No Early Rhythm Control (N=10,398)	Early Rhythm Control (N=1,227)	Standardized Difference	No Early Rhythm Control (N=10,398)	Early Rhythm Control (N=1,227)	Standardized Difference
Age	67.4 (7.7)	64.6 (6.9)	0.381	64.9 (7.9)	64.9 (6.9)	<0.001
CHA ₂ DS ₂ -VASc	3.2 (1.2)	2.9 (1.0)	0.223	3.0 (1.0)	3.0 (1.0)	<0.001
Male sex	5743 (55.2)	690 (56.2)	0.02	572 (56.1)	572 (56.1)	<0.001
Hypertension	9625 (92.6)	1145 (93.3)	0.029	949 (93.3)	949 (93.3)	<0.001
Heart failure	5214 (50.1)	724 (59.0)	0.179	588 (57.7)	588 (57.7)	<0.001
CAD	2657 (25.6)	342 (27.9)	0.052	281 (27.6)	281 (27.6)	<0.001
CKD	1017 (9.8)	101 (8.2)	0.054	85 (8.3)	85 (8.3)	<0.001
Stroke/TIA	888 (8.5)	73 (5.9)	0.1	63 (6.2)	63 (6.2)	<0.001
Peripheral vascular disease	360 (3.5)	41 (3.3)	0.007	33 (3.2)	33 (3.2)	<0.001
Diabetes	1960 (18.8)	182 (14.8)	0.107	156 (15.3)	156 (15.3)	<0.001
Valvular disease	510 (4.9)	83 (6.8)	0.079	63 (6.2)	63 (6.2)	<0.001
Anticoagulation	3443 (33.1)	850 (69.3)	0.776	667 (65.5)	667 (65.5)	<0.001
Dyslipidaemia	2737 (26.3)	301 (24.5)	0.041	249 (24.4)	249 (24.4)	<0.001
Myocardial Infarction	1266 (12.2)	143 (11.7)	0.016	120 (11.8)	120 (11.8)	<0.001
Hypertrophic Cardiomyopathy	37 (0.4)	6 (0.5)	0.021	4 (0.4)	4 (0.4)	<0.001
Dilated Cardiomyopathy	81 (0.8)	20 (1.6)	0.078	14 (1.3)	14 (1.3)	<0.001
Hypothyroidism	725 (7.0)	44 (3.6)	0.152	39 (3.9)	39 (3.9)	<0.001
Hyperthyroidism	103 (1.0)	7 (0.6)	0.048	6 (0.6)	6 (0.6)	<0.001

COPD	867 (8.3)	52 (4.2)	0.17	47 (4.6)	47 (4.6)	<0.001
Obstructive Sleep Apnea	355 (3.4)	23 (1.9)	0.096	20 (2.0)	20 (2.0)	<0.001
Chronic Liver Disease	135 (1.3)	4 (0.3)	0.108	4 (0.4)	4 (0.4)	<0.001
Osteoporosis	426 (4.1)	18 (1.5)	0.16	16 (1.6)	16 (1.6)	<0.001
Gastrointestinal Ulcer	400 (3.8)	28 (2.3)	0.091	25 (2.4)	25 (2.4)	<0.001
Gastrointestinal Bleeding	401 (3.9)	27 (2.2)	0.097	24 (2.3)	24 (2.3)	<0.001
Alcohol Abuse	338 (3.3)	21 (1.7)	0.099	18 (1.7)	18 (1.7)	<0.001
Pulmonary Embolism	283 (2.7)	17 (1.4)	0.094	15 (1.5)	15 (1.5)	<0.001
History Of Endocarditis	89 (0.9)	12 (1.0)	0.013	10 (0.9)	10 (0.9)	<0.001
Cancer	1954 (18.8)	154 (12.6)	0.172	135 (13.2)	135 (13.2)	<0.001
Is Current Smoker	1007 (9.7)	98 (8.0)	0.06	84 (8.3)	84 (8.3)	<0.001

Values are presented as mean (SD) or as absolute numbers (%). CAD indicates coronary artery disease; CKD, chronic kidney disease; COPD, chronic obstructive pulmonary disease; PS, propensity score.

Supplemental Table III. Primary Composite Outcome (Crude Numbers)

	No Early Rhythm Control			Early Rhythm Control		
	No. of Events	Person Years	Event Rate per 100 person-years	No. of Events	Person Years	Event Rate per 100 person-years
OptumLabs	N=77,460			N=24,382		
Composite						
2-3	1,738	45,931	3.78	504	17,994	2.80
≥4	19,183	137,664	13.93	4746	41,036	11.57
Stroke						
2-3	333	47,065	0.71	87	18,375	0.47
≥4	2,785	147,754	1.88	600	43,975	1.36
Heart failure						
2-3	416	46,904	0.89	145	18,274	0.79
≥4	6,113	143,649	4.26	1816	42,445	4.28
Acute Coronary Syndrome						
2-3	309	46,975	0.66	98	18,347	0.53
≥4	2,465	147,914	1.67	554	44,012	1.26
Mortality						
2-3	918	47,514	1.93	238	18,503	1.29
≥4	12,754	151,169	8.44	2971	44,778	6.63
UK Biobank	N=10,495			N=1,237		
Composite						
2-3	2,020	36,888	5.48	301	6,366	4.73
≥4	1,079	8,342	12.94	117	1,404	8.34
Stroke						
2-3	391	40,628	0.96	57	7,113	0.80
≥4	162	9,506	1.70	25	1,532	1.63
Heart failure						
2-3	1,072	38,480	2.79	191	6,587	2.90
≥4	659	8,714	7.56	61	1,477	4.13

Acute Coronary Syndrome						
2-3	250	41,042	0.61	40	7,144	0.56
≥ 4	151	9,602	1.57	10	1,572	0.64
Mortality						
2-3	1,042	41,912	2.49	147	7,289	2.02
≥ 4	538	9,867	5.45	64	1,602	3.99

Primary composite outcome in the unweighted cohorts.

Supplemental Table IV. Safety Outcomes (Crude Numbers)

	No Early Rhythm Control			Early Rhythm Control		
	No. of Events	Person Years	Event Rate per 100 person-years	No. of Events	Person Years	Event Rate per 100 person-years
OptumLabs	N=77,460			N=24,382		
Composite						
2-3	2,296	44,861	5.12	729	17,571	4.15
≥4	20,767	133,739	15.53	5,302	39,600	13.39
Onset stroke						
2-3	387	46,973	0.82	99	18,355	0.54
≥4	3,191	147,176	2.17	179	43,795	0.41
Mortality						
2-3	918	47,514	1.93	238	18,503	1.29
≥4	12,754	151,169	8.44	2,971	44,778	6.63
Arrest						
2-3	98	47,500	0.21	25	18,500	0.14
≥4	853	151,104	0.56	226	44,756	0.50
Bradycardia						
2-3	62	47,416	0.13	43	18,437	0.23
≥4	543	150,368	0.36	169	44,520	0.38
Atrioventricular block						
2-3	34	47,456	0.07	15	18,479	0.08
≥4	327	150,635	0.22	105	44,620	0.24
Torsades de pointes tachycardia						
2-3	*	*	*	*	*	*
≥4	*	*	*	*	*	*

Pericardial tamponade						
2-3	*	*	*	*	*	*
≥4	*	*	*	*	*	*
Major bleed						
2-3	657	46,501	1.41	231	18,138	1.27
≥4	5,082	143,863	3.53	1,437	42,568	3.38
Blood pressure-related						
2-3	16	47,485	0.03	*	*	*
≥4	116	150,999	0.08	32	44,726	0.07
Syncope						
2-3	519	46,536	1.12	178	18,169	0.98
≥4	3,529	145,088	2.43	963	43,108	2.23
Cardiac device implantation						
2-3	171	47,196	0.36	71	18,378	0.39
≥4	1,210	149,161	0.81	515	43,899	1.17
UKB	N=10,495			N=1,237		
Composite						
2-3	1,524	39,113	3.90	237	6,760	3.51
≥4	724	9,159	7.91	93	1,473	6.31
Onset stroke						
2-3	327	40,602	0.81	47	7,062	0.67
≥4	135	9,435	1.43	21	1,535	1.37
Mortality						
2-3	1,029	41,581	2.47	145	7,206	2.01
≥4	530	9,718	5.45	64	1,600	4.00
Cardiac arrest						
2-3	15	41,558	0.04	7	7,192	0.10

≥ 4	9	9,707	0.09	4	1,596	0.25
Bradycardia						
2-3	50	41,359	0.12	9	7,179	0.13
≥ 4	14	9,691	0.14	5	1,584	0.32
Atrioventricular block						
2-3	60	41,375	0.15	12	7,162	0.17
≥ 4	26	9,682	0.27	5	1,587	0.31
Torsades de pointes tachycardia						
2-3	0	41,581	0.00	0	7,206	0.00
≥ 4	0	9,718	0.00	0	1,600	0.00
Pericardial tamponade						
2-3	0	41,581	0.00	0	7,206	0.00
≥ 4	0	9,718	0.00	0	1,600	0.00
Major bleed						
2-3	77	41,291	0.19	14	7,131	0.20
≥ 4	21	9,687	0.22	2	1,592	0.13
Blood pressure-related						
2-3	4	41,556	0.01	1	7,200	0.01
≥ 4	2	9,718	0.02	1	1,596	0.06
Syncope						
2-3	250	40,623	0.62	47	7,048	0.67
≥ 4	108	9,509	1.14	12	1,571	0.76
Cardiac device implantation						
2-3	431	39,817	1.08	83	6,797	1.22
≥ 4	157	9,407	1.67	26	1,534	1.69

Primary safety outcome and adverse events of special interest in the unweighted cohorts. * To maintain de-identification, OptumLabs does not allow researchers to disclose the number of events when the number is 10 or fewer.

Supplemental Table V. Sensitivity Analysis Replicating EAST-AFNET 4

No Early Rhythm Control			Early Rhythm Control			Absolute Rate Difference (95% CI)	Hazard Ratio (95% CI)	P-value	P-value for interaction
No. of Events	Person Years	Event Rate per 100 person-years	No. of Events	Person Years	Event Rate per 100 person-years				
OptumLabs N=61,157			N=17,986						
Composite									0.929
<4	9	357	2.66	8	335	2.41	-0.24 (-1.79, 1.29)	0.92 (0.51, 1.66)	0.779
≥4	155	1,139	13.63	134	1,118	12.02	-1.61 (-3.72, 0.50)	0.88 (0.75, 1.03)	0.123
Stroke									0.502
<4	1	362	0.41	2	341	0.45	0.04 (-0.58, 0.66)	1.10 (0.25, 4.87)	0.904
≥4	29	1,227	2.34	18	1,205	1.52	-0.83 (-1.67, 0.02)	0.66 (0.44, 0.99)	0.047
Heart failure									0.567
<4	2	362	0.68	2	341	0.49	-0.18 (-0.90, 0.54)	0.73 (0.24, 2.24)	0.586
≥4	54	1,192	4.52	54	1,159	4.64	0.12 (-1.13, 1.37)	1.03 (0.79, 1.36)	0.810
Acute coronary syndrome									0.005
<4	1	363	0.25	3	339	0.81	0.56 (-0.05, 1.17)	3.20 (1.15, 8.93)	0.027
≥4	25	1,239	1.99	16	1,207	1.33	-0.66 (-1.42, 0.09)	0.67 (0.44, 1.01)	0.058
All-cause mortality									0.382
<4	6	365	1.60	3	344	0.96	-0.64 (-1.81, 0.52)	0.62 (0.27, 1.42)	0.254
≥4	97	1,268	7.63	82	1,230	6.70	-0.93 (-2.41, 0.55)	0.88 (0.72, 1.08)	0.220

UK Biobank		N=8,736			N=868						
Composite										0.036	
<4	152	2,248	6.75		143	2,387	5.97	-0.78 (-0.79, -0.73)	0.88 (0.75, 1.04)	0.139	
≥4	80	707	11.38		86	896	9.56	-1.82 (-1.92, -1.79)	0.84 (0.68, 1.04)	0.112	
Stroke										0.810	
<4	25	2,509	1.00		24	2,608	0.91	-0.09 (-0.10, -0.08)	0.93 (0.62, 1.39)	0.715	
≥4	12	819	1.47		17	969	1.79	0.32 (0.28, 0.33)	1.25 (0.77, 2.02)	0.370	
Heart failure										0.047	
<4	89	2,327	3.80		88	2,458	3.60	-0.21 (-0.22, -0.17)	0.95 (0.77, 1.17)	0.636	
≥4	50	739	6.82		42	930	4.47	-2.35 (-2.4, -2.31)	0.66 (0.49, 0.89)	0.006	
Acute Coronary Syndrome										0.102	
<4	18	2,518	0.73		18	2,620	0.71	-0.03 (-0.05, -0.03)	1.00 (0.63, 1.57)	0.987	
≥4	13	813	1.57		5	999	0.53	-1.04 (-1.06, -1.03)	0.35 (0.15, 0.82)	0.015	
Mortality										0.672	
<4	68	2,566	2.65		68	2,664	2.55	-0.11 (-0.10, -0.07)	0.98 (0.77, 1.24)	0.864	
≥4	37	841	4.45		49	1,004	4.88	0.44 (0.36, 0.45)	1.13 (0.85, 1.51)	0.399	

Event rate was calculated as the number of events per 100 person-years. Propensity score weight was applied when calculating number of events, person-years, event rates, absolute reduction, and hazard ratios. CI indicates confidence interval.

Supplemental Table VI. Falsification Analysis

	No Early Rhythm Control	Early Rhythm Control	P-value for interaction
	Event Rate per 100 person-years	Event Rate per 100 person-years	
OptumLabs	N=77,460	N=24,382	
Asthma			0.158
2-3	0.14	0.06	
≥4	0.20	0.28	
Epilepsy			0.005
2-3	0.23	0.02	
≥4	0.18	0.18	
Lung cancer			0.230
2-3	0.29	0.07	
≥4	0.32	0.25	
Major fracture			0.782
2-3	1.37	1.79	
≥4	3.78	4.39	
Type 2 diabetes mellitus			0.004
2-3	0.58	0.12	
≥4	1.49	1.81	
UKB	N=10,398	N=1,227	
Asthma			0.075
2-3	1.31	1.22	
≥4	2.43	1.43	
Epilepsy			0.015
2-3	0.26	0.17	

>4	0.62	0.18	
Lung cancer			0.120
2-3	0.18	0.22	
≥4	0.28	0.60	
Major fracture			0.295
2-3	0.33	0.33	
≥4	0.90	1.26	
Type 2 diabetes mellitus			0.232
2-3	1.98	1.86	
≥4	7.83	6.89	