

Supplementary table 1: Full baseline characteristics of all variables used for propensity-score matching

		Full cohort (before propensity score matching)				Propensity score matched cohorts			
		Controls (n=48,676)	Cases (n=5,628)	<i>P</i>	std- diff	Controls (n=3,955)	Cases (n=3,955)	<i>P</i>	std- diff
Demographic characteristics on index date									
Age, years	mean (s.d.)	61.1 (10.0)	59.9 (10.0)	<0.001	0.114	61.7 (9.5)	60.9 (9.7)	<0.001	0.077
	median (IQR)	63 (56-68)	61 (54-67)			64 (57-68)	62 (55-68)		
Females		14902 (30.6%)	1564 (27.8%)	<0.001	0.062	1,182 (29.9%)	1168 (29.5%)	0.731	0.008
Year of index date	2008	2,662 (5.5%)	263 (4.7%)	<0.001	0.200	155 (3.9%)	166 (4.2%)	1.0	0.021
	2009	2,814 (5.8%)	284 (5.0%)			194 (4.9%)	198 (5.0%)		
	2010	4,804 (9.9%)	475 (8.4%)			312 (7.9%)	316 (8.0%)		
	2011	4,587 (9.4%)	462 (8.2%)			287 (7.3%)	292 (7.4%)		
	2012	5,093 (10.5%)	524 (9.3%)			376 (9.5%)	369 (9.3%)		
	2013	4,974 (10.2%)	517 (9.2%)			374 (9.5%)	376 (9.5%)		
	2014	5,920 (12.2%)	610 (10.8%)			456 (11.5%)	458 (11.6%)		
	2015	5,751 (11.8%)	634 (11.3%)			468 (11.8%)	464 (11.7%)		
	2016	5,553 (11.4%)	739 (13.1%)			522 (13.2%)	517 (13.1%)		
	2017	3,635 (7.5%)	570 (10.1%)			40 (10.6%)	406 (10.3%)		

	2018	2,884 (5.9%)	550 (9.8%)			392 (9.9%)	393 (9.9%)		
Education	Elementary	12,198 (25.1%)	822 (14.6%)	<0.001	0.374	652 (16.5%)	657 (16.6%)	0.952	0.013
	High school	22,030 (45.3%)	2243 (39.9%)			1,640 (41.5%)	1,617 (40.9%)		
	University	14,063 (28.9%)	2538 (45.1%)			1,641 (41.5%)	1,661 (42.0%)		
	Unknown	385 (0.8%)	25 (0.4%)			22 (0.6%)	20 (0.5%)		
Income (KSEK/year)	mean (s.d.)	273.2 (1,418.6)	415.2 (934.1)	<0.001*	-0.118	469.3 (4,842.9)	363.7 (649.8)	0.014*	0.031
	median (IQR)	211.7 (143.9- 305.8)	287.9 (192.8- 419.7)			261.3 (178.2- 362.8)	269 (179.3- 394.5)		
Civil status	Alone	21,863 (44.9%)	2,004 (35.6%)	<0.001	0.191	1,402 (35.4%)	1435 (36.3%)	0.439	-0.017
Born abroad		6,586 (13.5%)	480 (8.5%)	<0.001	0.160	352 (8.9%)	367 (9.3%)	0.557	-0.013
Health care utilization during 10 years prior to index date									
No. of outpatients visits	mean (s.d.)	8.1 (22.6)	12.1 (11.1)	<0.001*	-0.229	12.2 (43.2)	12.0 (10.2)	0.347*	0.001
	median (IQR)	4 (1-10)	10 (6-15)			8 (4-14)	10 (5-15)		
No. of hospitalizations	mean (s.d.)	2.9 (4.3)	4.4 (5.0)	<0.001*	-0.314	4.0 (5.2)	4.0 (4.5)	0.347	-0.001
	median (IQR)	2 (0-4)	3 (5)			3 (1-5)	3 (1-5)		
No. of hospital days	mean (s.d.)	10.8 (25.9)	7.1 (11.0)	<0.001*	0.186	8.0 (12.9)	7.6 (12.0)	0.032	0.038
	median (IQR)	3 (0-13)	4 (1-9)			4 (1-10)	4 (1-9)		
Comorbidities prior to index date									
Hypertension		21,002 (43.2%)	2409 (42.8%)	0.623	0.007	1,927 (48.7%)	1801 (45.5%)	0.005	0.064

Hyperlipidemia		357 (0.7%)	29 (0.5%)	0.065	0.028	23 (0.6%)	23 (0.6%)	1.000	0.000
COPD		2,356 (4.8%)	116 (2.1%)	<0.001	0.152	102 (2.6%)	91 (2.3%)	0.423	0.018
Heart failure		8,166 (16.8%)	738 (13.1%)	<0.001	0.103	619 (15.7%)	580 (14.7%)	0.221	0.028
Ischemic heart disease		6,195 (12.7%)	396 (7.0%)	<0.001	0.192	322 (8.1%)	316 (8.0%)	0.804	0.006
Chronic kidney disease		1,922 (4.0%)	82 (1.5%)	<0.001	0.154	75 (1.9%)	67 (1.7%)	0.498	0.015
Diabetes (type 1 and 2)		6804 (14.0%)	396 (7.0%)	<0.001	0.228	326 (8.2%)	331 (8.4%)	0.839	0.005
CHA ₂ DS ₂ -VASc		1.6±1.5	1.4±1.4	<0.001	0.162	1.6±1.3	1.5±1.4	<0.001	0.083
Drug prescriptions 6 months prior to index date									
Amiodarone		721 (1.5%)	887 (15.8%)	<0.001	-0.526	432 (10.9%)	423 (10.7%)	0.744	0.007
Flecainide		1,887 (3.9%)	1,220 (21.7%)	<0.001	-0.553	678 (17.4%)	653 (16.5%)	0.452	0.017
Sotalol		1,424 (2.9%)	389 (6.9%)	<0.001	-0.185	274 (6.9%)	265 (6.7%)	0.688	0.009
Dronedarone		774 (1.6%)	1,104 (19.6%)	<0.001	-0.612	500 (12.6%)	540 (13.7%)	0.183	-0.030
Betablocker		27,119 (55.9%)	4,051 (72.0%)	<0.001	-0.340	2,887 (73.0%)	2,801 (70.8%)	0.031	0.048
Calcium antagonist		1,179 (2.4%)	230 (4.1%)	<0.001	-0.094	157 (4.0%)	152 (3.8%)	0.772	0.007
Loop diuretic		6,741 (13.9%)	477 (8.5%)	<0.001	0.171	413 (10.4%)	389 (9.8%)	0.371	0.020
ACEI /ARB		20,871 (42.9%)	2,244 (39.9%)	<0.001	0.061	1,796 (45.4%)	1,681 (42.5%)	0.009	0.059
Antiplatelet		9,824 (20.2%)	554 (9.8%)	<0.001	0.293	335 (8.5%)	360 (9.1%)	0.321	-0.022

NOAC		4,299 (8.8%)	1982 (35.2%)	<0.001	-0.671	1,351 (34.2%)	1,269 (32.1%)	0.050	0.044
Warfarin		14,486 (29.8%)	3,750 (66.6%)	<0.001	-0.793	2562 (64.8%)	2,556 (64.6%)	0.888	0.003
Digoxin		3,965 (8.2%)	328 (5.8%)	<0.001	0.091	295 (7.5%)	272 (6.9%)	0.316	0.023
*Man-Whitney U test. ACE = angiotensin receptor enzyme inhibitor; ARB = angiotensin receptor blockers; COPD = chronic obstructive pulmonary disease; NOAC = non-vitamin K antagonist oral anticoagulants; std-diff = standardised differences.									

Supplementary table 2: Oral anticoagulation during the study period

Year	Full cohort (before propensity score matching)				Propensity score matched cohorts					
	Controls		Cases		Controls		Cases		Warfarin/NOAC	
	Warfarin	NOAC	Warfarin	NOAC	Warfarin	NOAC	Warfarin	NOAC	<i>P</i>	std-diff
2008	16.9%	0%	88.2%	0%	71.6%	0%	86.1%	0%	0.001	-0.361
2009	20.9%	0%	68.8%	0%	71.7%	0.3%	69.4%	0%	0.457	0.056
2010	23.9%	0.1%	65.8%	0%	70.4%	0%	65.8%	0%	0.072	0.099
2011	28.8%	0.2%	61.2%	0.2%	71.1%	0.3%	62.2%	0.2%	<0.001	0.191
2012	34.4%	1.5%	57.7%	3.1%	70.6%	3.1%	59.2%	3.2%	<0.001	0.246
2013	39.6%	5.2%	53.3%	6.3%	67.7%	7.9%	56.7%	5.8%	<0.001	0.288
2014	38.0%	9.1%	48.5%	13.0%	62.7%	15.5%	52.2%	12.2%	<0.001	0.309
2015	35.0%	14.4%	41.0%	21.7%	53.2%	25.2%	44.2%	20.9%	<0.001	0.296
2016	31.9%	20.2%	30.7%	32.0%	45.3%	34.6%	33.4%	31.0%	<0.001	0.352
2017	29.1%	25.9%	23.3%	40.0%	38.7%	43.1%	25.8%	39.4%	<0.001	0.382
2018	25.9%	31.7%	19.3%	45.8%	32.0%	51.3%	21.6%	45.8%	<0.001	0.375
F/U end	26.2%	29.3%	20.0%	45.0%	33.1%	49.5%	22.4%	44.8%	<0.001	0.360

Proportion of patients on oral anticoagulation as per pharmacy dispense records. Data is shown for the enrolled patients per year of the study period and at the end of follow-up (F/U) for all patients. NOAC = non-vitamin K antagonist oral anticoagulants; std-diff = standardised differences.

Supplementary table 3: Primary and secondary clinical outcomes in patients with atrial fibrillation receiving catheter ablation versus controls

	Full cohort before propensity score matching (n=54,311)			Propensity score matched cohorts (n=7,910)		
	No. events	Hazard ratio* (95% CI)	<i>P</i>	No. events	Hazard ratio* (95% CI)	<i>P</i>
Primary outcome						
Combined all cause-mortality or stroke	6,728	0.30 (0.26 – 0.34)	<0.001	466	0.55*** (0.46 – 0.67)	<0.001
Secondary outcomes						
All-cause mortality	5,503	0.27 (0.23 – 0.31)	<0.001	363	0.47*** (0.39 – 0.60)	<0.001
CV-mortality	2,583	0.25 (0.20 – 0.32)	<0.001	177	0.41*** (0.29 – 0.57)	<0.001
Stroke	1,670	0.38 (0.30 – 0.48)	<0.001	128	0.74**** (0.52 – 1.05)	0.095
Heart Failure**	3,456	0.47 (0.41 - 0.55)	<0.001	280	0.73 (0.57 – 0.92)***	0.009
*Hazard ratio using non-catheter ablation as the reference. **Excludes patients with a heart failure diagnosis prior to inclusion (full cohort n=45,402 and propensity score matched cohort n=6,544). ***Cox regression of propensity score matched cohort with covariates ****Using death as a confounding competing risk to stroke. CI = confidence interval; CV = cardiovascular.						