# SUPPLEMENTAL

# MATERIAL

### Table S1. Diagnoses and pharmacotherapy used for defining the population

Atrial fibrillation or	<i>ICD10</i> : I48
atrial flutter	<i>ICD8:</i> 427.93, 427.94
	Primary and secondary diagnoses and in- and outpatient contacts.
Ischemic stroke	Registered in the Danish Stroke Registry; Ischemic stroke or
(exposure)	unspecified stroke.
Prior ischemic-,	Found in the Danish Patient Registry. ICD10: I60-I64, S064-
hemorrhagic- and	S066, ICD8: 430, 431, 433, 434, 436, 852, 853. Primary and
unspecified stroke	secondary diagnose and in-hospital diagnoses.
C	

### Comorbidities

Primary and secondary diagnoses. In-hospital (full day hospitalization) and out-hospital

#### contacts.

Alcohol abuse	Defined from diagnosis and	<i>ICD10</i> : F10, K70, E52, T51,
	adverse alcohol consumption	K860, E244, G312, I426,
	during hospitalization and	O354, Z714, Z721, G621,
	prescription of anti-alcohol	G721, K292, L278A
	addiction medication	<i>ICD</i> 8: 303
		<i>ATC</i> : N07BB

Bleeding history	Defined from diagnosis of	<i>ICD10</i> : D62, D500, I312, N02,	
	hemopericardium, respiratory	R31, R04, H313, H356, H431,	
	or urinary tract bleeding,	H450, H052A, K228F, K250,	
	bleeding in the eye,	K252, K254, K256, K260, ,	
	gastrointestinal bleeding,	K262, K264, K266, K270,	
	intradural bleeding (not	K272, K274, K276, K280,	
	haemorrhagic stroke),	K282, K284, K286, K298A,	
	retroperitoneal bleeding,	K625, K638B, K638C, K661,	
	haemothorax, spinal cord	K838F, K868G, K920, K921,	
	haemorrhage and anaemia due	K922, I850, I864A, S064,	
	to bleeding.	S065, S066, G951A	
		S368D, J942, M321B	
		ICD8: 280.01, 531.90, 531.92,	
		531.95, 532.90, 533.90,	
		534.90, 535.01, 569.15	

Chronic kidney	Defined from diagnosis	<i>ICD10</i> : DM300, DM313,
disease		DM319, DM321B, E102,
		E112, E132, E142, I120,
		M321B, M300, M313, M319,
		M321B, N02-N08, N11-N12,
		N14, N18-19, N26, N158-
		N160, N162-N164, N168,
		Q61, Z992
		ICD-8: 403, 404, 581-584,
		753.10, 753.11, 753.19,
		250.02, 400.39, 590.09, 593.20

Diabetes mellitus	Defined from treatment	Treatment: ATC A10
Heart failure	Defined from diagnosis	<i>ICD10</i> : I110, I130, I132, I42,
		143, 150
		ICD8: 427.09, 427.10, 427.11,
		427.19, 428.99
Hypertension	Defined from combination	Treatment: Adrenergic α-
	treatment with a least two	antagonist, non-loop-diuretics,
	classes of antihypertensive	loop-diuretics, vasodilators,
	drugs. This definition of	beta blockers, calcium channel
	hypertension has a positive	blockers, and renin-
	predictive value of 80.0% and a	angiotensin system inhibitors.
	specificity of 94.7%. <sup>41</sup>	

Ischemic heart disease	Defined from diagnosis	<i>ICD10</i> : I20-I25
		<i>ICD8</i> : 410-414
Liver disease	Defined from diagnoses of liver	<i>ICD10</i> : B15-B19, C22, K70-
	cancer, chronic liver disease,	K77, Z944, I982B, D684C
	cirrhosis, and hepatitis	ICD8: 571-573, 155, 070
Peripheral artery	Defined from diagnosis	<i>ICD10</i> : I70
disease		<i>ICD8:</i> 440
Vascular disease	Defined from diagnoses of	
	ischemic heart disease and	
	peripheral artery disease	
Chronic obstructive	Defined from diagnoses	<i>ICD10:</i> DJ42-44
lung disease		ICD8: 490-492, 515-518
Cancer	Defined from diagnoses	<i>ICD10</i> : DC00-DC97
		ICD8: 140-199, 200-207
Dementia	Defined from diagnoses	<i>ICD10:</i> F00-F03, G30, F051,
		G311
		<i>ICD8</i> : 290.09, 290.10
Transient ischemic	Defined from diagnoses	<i>ICD10:</i> G458, G459
attack		<i>ICD8:</i> 435
Thromboembolism	Defined from diagnoses	<i>ICD10:</i> I26, I74
		<i>ICD</i> 8: 444, 450

CHA2DS2-VASc	Defined from diagnoses above	Heart failure: 1 point	
		Hypertension: 1 point	
		Age≥75: 2 points	
		Diabetes: 1 point	
		Stroke/TIA/thromboembolism:	
		2 points	
		Vascular disease (Ischemic	
		heart disease or peripheral	
		artery disease):1 point	
		65≤ age <75: 1 point	
		Female sex: 1 point	
Concomitant medicat	tion		
Antithrombotic		Acetylsalicylic acid:	
medication		B01AC06, N02BA01	
		Dipyridamole: B01AC07	
		Clopidogrel: B01AC04	
		Cangrelor: B01AC25	
		Prasugrel: B01AC22	

Ticagrelor: B01AC24

Oral

anticoagulants

Marevan: B01AA Marcoumar: B01AA04 Dabigatran: B01AE07 Rivaroxaban: B01AF01 Apixaban: B01AF02

ICD8: 8<sup>th</sup> revision of the International Classification of Diseases system

ICD10: 10<sup>th</sup> revision of the International Classification of Diseases system

ATC: The Anatomical Therapeutic Chemical code

## Table S2. Characteristics of patients with mild to severe stroke and patients with very

severe stroke

	Mild to severe stroke	Very severe stroke	P value
Number, No. (%)	26,185 (89.3%)	3,139 (10.7%)	< 0.01
Patient age, Median (25 <sup>th</sup> -75 <sup>th</sup> percentile)	79.1 (71.3-85.5)	83.7 (76.7-89.0)	< 0.01
Female, No. (%)	13,123 (50.1%)	2,069 (65.9%)	< 0.01
Comorbidities, No. (%)			
Heart failure	3,710 (14.2%)	576 (18.4%)	< 0.01
Hypertension	13,838 (52.9%)	1,764 (56.2%)	0.0004
Diabetes mellitus	2,924 (11.2%)	322 (10.3%)	0.13
Peripheral artery disease	2,028 (7.7%)	316 (10.1%)	< 0.01
Alcohol abuse	1,275 (4.9%)	125 (4.0%)	0.03
Liver disease	587 (2.2%)	62 (2.0%)	0.34
Chronic kidney disease	1,493 (5.7%)	218 (6.9%)	0.005
Prior bleeding	4,409 (16.8%)	621 (19.8%)	< 0.01
Cancer	4,923 (18.8%)	629 (20.0%)	0.09
Ischemic heart disease	7,901 (30.2%)	1,035 (33.0%)	< 0.01
Chronic obstructive lung disease	2,970 (11.3%)	382 (12.2%)	0.17
Dementia	1,282 (4.9%)	288 (9.2%)	< 0.01
Transient ischemic attach	1,686 (6.4%)	118 (3.4%)	< 0.01
Thromboembolism	411 (1.6%)	65 (2.1%)	0.04
Concomitant therapy, No. (%)			
Digoxin	2,872 (11.0%)	567 (18.1%)	< 0.01
Amiodarone	254 (1.0%)	27 (0.9%)	0.55
Beta-blockers	10,074 (38.5%)	1,419 (45.2%)	< 0.01
Renin angiotensin system inhibitor	10,907 (41.7%)	1,193 (38.0%)	< 0.01
Loop diuretics	5,668 (21.7 %)	987 (31.4%)	< 0.01
Thiazide	5,506 (21.0%)	713 (22.7%)	0.03
Spiron	1,293 (4.9%)	182 (5.8%)	0.04
Diuretics combi <sup>†</sup>	3,351 (12.8%)	362 (11.5%)	0.04
Statins	7,165 (27.4%)	732 (23.3%)	< 0.01
Calcium channel blockers	7,108 (27.2%)	823 (26.2%)	0.27
Anticoagulation therapy *			
No antithrombotic therapy	13,112 (50.1%)	1,462 (46.6%)	< 0.01
Antiplatelet therapy only	9,842 (37.6%)	1,290 (41.1%)	
Vitamin K antagonists	2,623 (10.0%)	328 (10.5%)	
Direct oral anticoagulants	608 (2.3%)	59 (1.9%)	
CHA <sub>2</sub> DS <sub>2</sub> -VASc score			
0	1068 (4.1%)	58 (1.9%)	< 0.01

1	2,383 (9.1%)	145 (4.6%)
$\geq 2$	22,734 (86.8%)	2,936 (93.5%)

Mild-severe stroke (15-58 points) and very severe stroke (0-14 points). \* ATC code C07C, C08G, C03B, C03X. <sup>1</sup> Prescription of oral anticoagulation therapy is based on the last prescription before the stroke of either vitamin K antagonist or direct oral anticoagulants, however these patients can additionally be on antithrombotic treatment. Patients categorized under antithrombotic treatment are not treated with any of the oral anticoagulants.  $CHA_2DS_2$ -VASc (congestive heart failure, hypertension, age  $\geq$ 75 years, diabetes mellitus, prior TIA or thromboembolism, vascular disease, age 65–74 years, sex category). SSS: Scandinavian stroke scale.

 Table S3: Atrial fibrillation patients stratified upon antithrombotic therapy (prior to stroke)

 and stroke severity

	AF, no AT	AF + antiplatelet	AF + VKA	AF + DOAC
	( <i>n=5,930</i> )	only (N=5,165)	( <i>n=2,900</i> )	( <i>n=667</i> )
SSS, No. (%)				
Very severe	820 (13.9%)	790 (15.3%)	330 (11.2%)	61 (9.2%)
Severe	836 (14.2%)	807 (15.7%)	352 (11.9%)	77 (11.5%)
Moderate	1,315 (22.3%)	1,149 (22.3%)	559 (18.9%)	154 (23.1%)
Mild	2,917 (49.5%)	2,410 (46.7%)	1,710 (58.0%)	375 (56.2%)
Total	100%	100%	100%	100%

AF; atrial fibrillation, AT; antithrombotics, VKA; vitamin K antagonist, DOAC; Direct oral anticoagulant

Table S4: Adjusted odds of very severe stroke in atrial fibrillation patients stratified upon prior
antithrombotic therapy.

	OR (95%CI)
Atrial fibrillation, no antithrombotic therapy	reference
Atrial fibrillation, antiplatelet therapy only	0.93 (0.82-1.04)
Atrial fibrillation, vitamin K antagonists	0.75 (0.65-0.86)
Atrial fibrillation, direct oral anticoagulants	0.62 (0.46-0.82)

Multivariable logistic regression model adjusted for chronic obstructive lung disease, chronic kidney disease, liver disease, cancer, alcohol abuse, prior bleeding and dementia) and prior use of statins conditional on the matching (i.e. comparing cases with their matched control subjects).

# Table S5: Baseline characteristics of patients with no atrial fibrillation (AF), new AF and prior AF

	No AF	New AF	Prior AF
Number, No. (%)	14,662 (50.0%)	5,571 (19.0%)	9,091 (31.0%)
Age, Median (25 <sup>th</sup> -75 <sup>th</sup> percentile)	79.6 (71.8-86.0)	79.0 (71.5-85.6)	80.0 (72.0-86.2)
Female, No. (%)	7,596 (51.8%)	2,960 (53.1%)	4,636 (51.0%)
Comorbidities, No. (%)	, , , , ,	, , ,	, , , , , , , , , , , , , , , , , , ,
Heart failure	2,143 (14.6%)	410 (7.4%)	1,733 (19.1%)
Hypertension	7,801 (53.2%)	2,299 (41.3%)	5,502 (60.5%)
Diabetes mellitus	1,623 (11.1%)	422 (7.9%)	1,181 (13.0%)
Peripheral artery disease	1,294 (8.8%)	284 (5.1%)	766 (8.4%)
Alcohol abuse	675 (4.6%)	218 (3.9%)	507 (5.6%)
Liver disease	302 (2.1%)	78 (1.4%)	269 (3.0%)
Chronic kidney disease	822 (5.6%)	195 (3.5%)	694 (7.6%)
Prior bleeding	2,248 (15.3%)	700 (12.6%)	2,082 (22.9%)
Cancer	2,717 (18.5%)	951 (17.1%)	1,884 (20.7%)
Ischemic heart disease	4,343 (29.6%)	1,102 (19.8%)	3,491 (38.4%)
Chronic obstructive lung disease	1,690 (11.0%)	436 (7.8%)	1,307 (14.4%)
Dementia	764 (5.2%)	180 (3.2%)	626 (6.9%)
Transient ischemic attach	902 (6.2%)	249 (4.5%)	653 (7.2%)
Thromboembolism	238 (1.6%)	74 (1.3%)	164 (1.8%)
Concomitant therapy, No. (%)			
Digoxin	231 (1.6%)	429 (7.7%)	2,779 (30.6%)
Amiodarone	35 (0.2%)	8 (0.1%)	238 (2.6%)
Beta-blockers	4,491 (30.6%)	1,745 (31.3%)	5,257 (57.8%)
Renin angiotensin system	6,421 (43.8%)	1,903 (34.2%)	3,776 (41.5%)
Loop diuretics	2,862 (19.5 %)	829 (14.9%)	2,964 (32.6%)
Thiazide	3,322 (22.7%)	1,136 (20.4%)	1,761 (19.4%)
Spiron	697 (4.8%)	160 (2.9%)	618 (6.8%)
Diuretics combi <sup>†</sup>	2,058 (14.0%)	743 (13.3%)	912 (10.0%)
Statins	4,067 (27.7%)	1,117 (20.1%)	2,713 (29.8%)
Calcium channel blockers	4,113 (28.1%)	1,274 (22.9%)	2,544 (28.0%)
Anticoagulation therapy*			
No antithrombotic therapy	8,686 (59.2%)	3,512 (63.0%)	2,376 (26.2%)
Antiplatelet therapy only	5,976 (40.8%)	1,671 (30.0%)	3,485 (38.3%)
Vitamin K antagonists	0.0 (0.0%)	317 (5.7%)	2,634 (29.0%)
Direct oral anticoagulants	0.0 (0.0%)	71 (1.3%)	596 (6.6%)
CHA <sub>2</sub> DS <sub>2</sub> -VASc score			
0	562 (3.8%)	303 (5.4%)	261 (2.9%)
1	1,263 (8.6%)	612 (11.0%)	653 (7.2%)
$\geq 2$	12,837 (87.6%)	4,656 (83.6%)	8,177 (90.0%)

Mild-severe stroke (15-58 points) and very severe stroke (0-14 points). \* ATC code C07C, C08G, C03B, C03X. <sup>1</sup>Prescription of oral anticoagulation therapy is based on the last prescription before the stroke of either vitamin K antagonist or direct oral anticoagulants, however these patients can additionally be on antithrombotic treatment. Patients categorized under antithrombotic treatment are not treated with any of the oral anticoagulants. CHA<sub>2</sub>DS<sub>2</sub>-VASc (congestive heart failure, hypertension, age  $\geq$ 75 years, diabetes mellitus, prior TIA or thromboembolism, vascular disease, age 65–74 years, sex category). SSS: Scandinavian stroke scale.

	No AF	New AF	Prior AF
	N=14,662 (50.0%)	N=5,571(19.0%)	N=9,091 (31.0%)
SSS, median (25 <sup>th</sup> -75 <sup>th</sup> percentile)	49.0 (37.0-55.0)	44.0 (26.0-52.0)	46 (27.0-54.0)
SSS, No. (%)			
Very severe	1,156 (7.9%)	767 (13.8%)	1,234 (13.6%)
Severe	1,403 (9.6%)	828 (14.9%)	1,244 (13.7%)
Moderate	2,892 (19.7%)	1,313 (23.6%)	1,864 (20.5%)
Mild	9,211 (62.8%)	2,663 (47.8%)	4,749 (52.2%)

#### Table S6: Stroke severity among patients with no AF, new AF, and prior AF

### Table S7: Female atrial fibrillation patients stratified upon stroke severity and age

Severity/Age	≥85 years	80-84 years	75-79 years	70-74 years	<70 years	
Very severe	655 (49.5%)	276 (20.9%)	195 (14.7%)	101 (7.6%)	97 (7.3%)	1,324 (100%)
Severe	608 (47.5%)	272 (21.2%)	164 (12.8%)	118 (9.2%)	119 (9.3%)	1,281 (100%)
Moderate	788 (44.7%)	382 (21.6%)	290 (16.4%)	143 (8.1%)	162 (9.2%)	1,765 (100%)
Mild	935 (29.0%)	656 (20.3%)	610 (18.9%)	444 (13.8%)	581 (18.0%)	3,226 (100%)
	2,986	1,586	1,259	806	959	
	(39.3%)	(20.9%)	(16.6%)	(10.6%)	(12.6%)	

≥85 years	80-84 years	75-79 years	70-74 years	<70 years	
178 (26.3%)	139 (20.5%)	124 (18.3%)	98 (14.5%)	138 (20.4%)	667 (100%)
195 (24.7%)	143 (18.1%)	135 (17.1%)	114 (14.4%)	204 (25.8%)	791 (100%)
311 (22.0%)	280 (19.8%)	248 (17.6%)	247 (17.5%)	326 (23.1%)	1,412 (100%)
589 (14.1%)	716 (17.1%)	771 (18.4%)	755 (18.0%)	1,355 (32.4%)	4,186 (100%)
1,273 (18.0%)	1,278 (18.1%)	1,278 (18.1%)	1,214 (17.2%)	2,023 (28.6%)	
	178 (26.3%) 195 (24.7%) 311 (22.0%) 589 (14.1%) 1,273	178 (26.3%)       139 (20.5%)         195 (24.7%)       143 (18.1%)         311 (22.0%)       280 (19.8%)         589 (14.1%)       716 (17.1%)         1,273       1,278	178 (26.3%)       139 (20.5%)       124 (18.3%)         195 (24.7%)       143 (18.1%)       135 (17.1%)         311 (22.0%)       280 (19.8%)       248 (17.6%)         589 (14.1%)       716 (17.1%)       771 (18.4%)         1,273       1,278       1,278	178 (26.3%)139 (20.5%)124 (18.3%)98 (14.5%)195 (24.7%)143 (18.1%)135 (17.1%)114 (14.4%)311 (22.0%)280 (19.8%)248 (17.6%)247 (17.5%)589 (14.1%)716 (17.1%)771 (18.4%)755 (18.0%)1,2731,2781,2781,214	178 (26.3%)139 (20.5%)124 (18.3%)98 (14.5%)138 (20.4%)195 (24.7%)143 (18.1%)135 (17.1%)114 (14.4%)204 (25.8%)311 (22.0%)280 (19.8%)248 (17.6%)247 (17.5%)326 (23.1%)589 (14.1%)716 (17.1%)771 (18.4%)755 (18.0%)1,355 (32.4%)1,2731,2781,2781,2142,023

 Table S8: Male atrial fibrillation patients stratified upon stroke severity and age

Severity/Age	≥85 years	80-84 years	75-79 years	70-74 years	<70 years	
Very severe	445 (58.5%)	133 (17.5%)	84 (11.0%)	58 (7.6%)	41 (5.4%)	761 (100%)
Severe	428 (52.1%)	139 (16.9%)	117 (14.2%)	70 (8.5%)	68 (8.3%)	822 (100%)
Moderate	788 (48.2%)	362 (22.1%)	234 (14.3%)	133 (8.1%)	119 (7.3%)	1,636 (100%)
Mild	1,333 (30.5%)	933 (21.3%)	823 (18.8%)	564 (12.9%)	724 (16.5%)	4,377 (100%)
	2,994 (39.4%)	1,567 (20.6%)	1,258 (16.6%)	825 (10.9%)	952 (12.5%)	

 Table S9: Female patients without AF stratified upon stroke severity and age

 Table S10: Male patients without AF stratified upon stroke severity and age

Severity/Age	≥85 years	80-84 years	75-79 years	70-74 years	<70 years	
Very severe	127 (32.2%)	81 (20.5%)	62 (15.7%)	39 (9.9%)	86 (21.8%)	395 (100%)
Severe	167 (28.7%)	104 (17.9%)	100 (17.2%)	86 (14.8%)	124 (21.3%)	581 (100%)
Moderate	290 (23.1%)	274 (21.8%)	235 (18.7%)	187 (14.9%)	270 (21.5%)	1,256 (100%)
Mild	671 (13.9%)	825 (17.1%)	886 (18.3%)	894 (18.5%)	1,558 (32.2%)	4,834 (100%)
	1,255 (17.8%)	1,284 (18.2%)	886 (18.3%)	894 (18.5%)	1,558 (32.2%)	

Variable	No AF	AF	P value
Number, No. (%)	69,253 (80.1%)	17,205 (19.9%)	< 0.01
Patient age, Median (25 <sup>th</sup> -75 <sup>th</sup> percentile)	70.6 (60.8-79.8)	80.4 (72.4-86.7)	< 0.01
Female, No. (%)	31,468 (45.4%)	9,060 (52.7%)	< 0.01
Comorbidities, No. (%)			
Heart failure	3,555 (5.1%)	4,003 (23.3%)	< 0.01
Hypertension	20,966 (30.3%)	9,744 (56.6%)	< 0.01
Diabetes mellitus	7,431 (10.7%)	2,215 (12.9%)	< 0.01
Peripheral artery disease	3,554 (5.1%)	1,504 (8.7%)	< 0.01
Alcohol abuse	4,804 (6.9%)	835 (4.9%)	< 0.01
Liver disease	1,616 (2.3%)	400 (2.3%)	0.95
Chronic kidney disease	2,635 (3.8%)	1,178 (6.9%)	< 0.01
Prior bleeding	8,279 (12.0%)	3,518 (20.5%)	< 0.01
Cancer	9,688 (14.0%)	3,371 (19.6%)	< 0.01
Ischemic heart disease	11,267 (16.3%)	5,888 (34.2%)	< 0.01
Chronic obstructive lung disease	5,678 (8.2%)	2,240 (13.0%)	< 0.01
Dementia	2,294 (3.3%)	990 (5.8%)	< 0.01
Transient ischemic attach	4,774 (6.9%)	1,431 (8.3%)	< 0.01
Thromboembolism	1,224 (1.8%)	756 (4.4%)	< 0.01
Concomitant therapy, No. (%)			
Digoxin	500 (0.7%)	4,170 (24.2%)	< 0.01
Amiodarone	57 (0.08%)	314 (1.8%)	< 0.01
Beta-blockers	12,505 (18.1%)	8,493 (49.4%)	< 0.01
Renin angiotensin system inhibitor	21,207 (30.6%)	6,960 (40.5%)	< 0.01
Loop diuretics	6,614 (9.6%)	5,271 (30.6%)	< 0.01
Thiazide	10,562 (15.3%)	3,344 (19.4%)	< 0.01
Spiron	1,581 (2.3%)	1,152 (6.7%)	< 0.01
Diuretics combi <sup>+</sup>	7,286 (10.5%)	1,861 (10.8%)	0.26
Statins	14,522 (21.0%)	4,671 (27.2%)	< 0.01
Calcium channel blockers	12,616 (18.2%)	4,574 (26.6%)	< 0.01
Anticoagulation therapy*			< 0.01
No antithrombotic therapy	51,049 (73.7%)	6,462 (37.6%)	< 0.01
Antiplatelet therapy only	18,204 (26.3%)	6,240 (36.3%)	
Vitamin K antagonists	0 (0%)	3,688 (21.4%)	
Direct oral anticoagulants	0 (0%)	815 (4.7%)	
CHA <sub>2</sub> DS <sub>2</sub> -VASc score	、 <i>'</i>	× /	
0	10,192 (14.7%)	564 (3.3%)	< 0.01
1	14,513 (21.0%)	1,295 (7.5%)	< 0.01
$\geq 2$	44,548 (64.3%)	15,356 (89.2%)	< 0.01
SSS, median, (25 <sup>th</sup> -75 <sup>th</sup> percentile)	46.5 (42.0-56.0)	44.0 (26.0-53.0)	< 0.01

### Table S11: Baseline characteristics of unmatched population

\* ATC code C07C, C08G, C03B, C03X. <sup>1</sup> Prescription of oral anticoagulation therapy is based on the last prescription before the stroke of either vitamin K antagonist or direct oral anticoagulants, however these patients can additionally be on antithrombotic treatment. Patients categorized under antithrombotic treatment are not treated with any of the oral anticoagulants. AF: atrial fibrillation. CHA<sub>2</sub>DS<sub>2</sub>-VASc (congestive heart failure, hypertension, age  $\geq$ 75 years, diabetes mellitus, prior TIA or thromboembolism, vascular disease, age 65–74 years, sex category). AF: atrial fibrillation. SSS: Scandinavian stroke scale.

#### Figure S1: Stroke severity over time

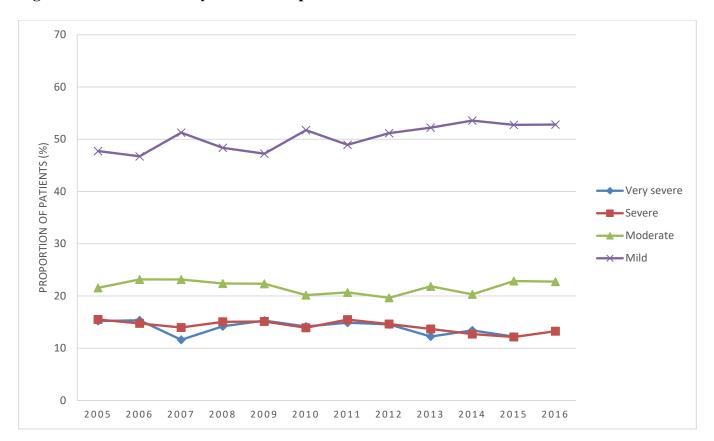


Figure S1.1: Stroke severity over time in patients with atrial fibrillation

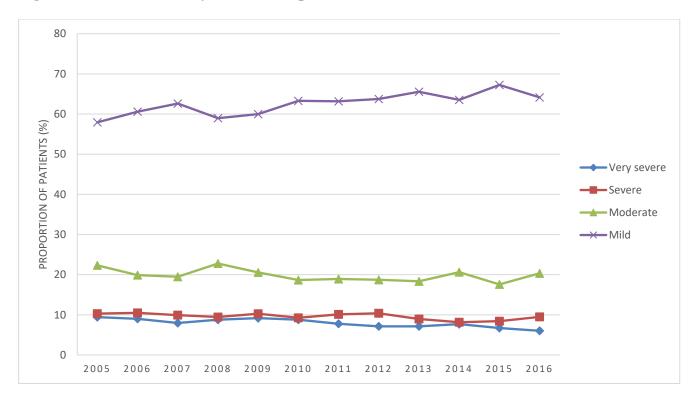
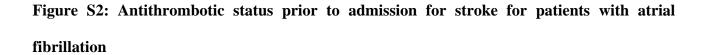
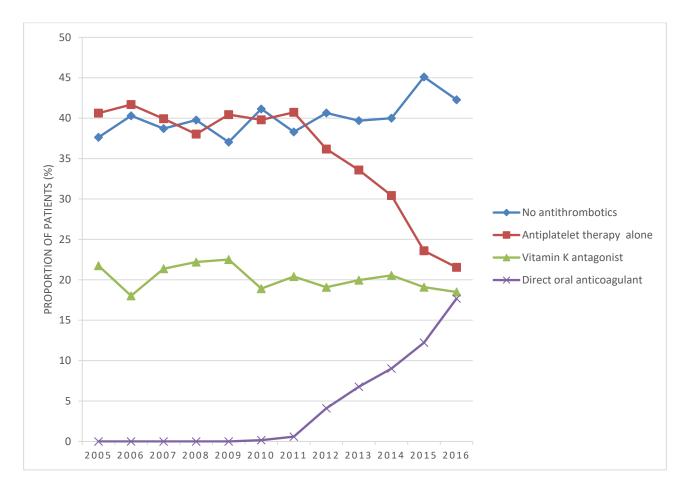


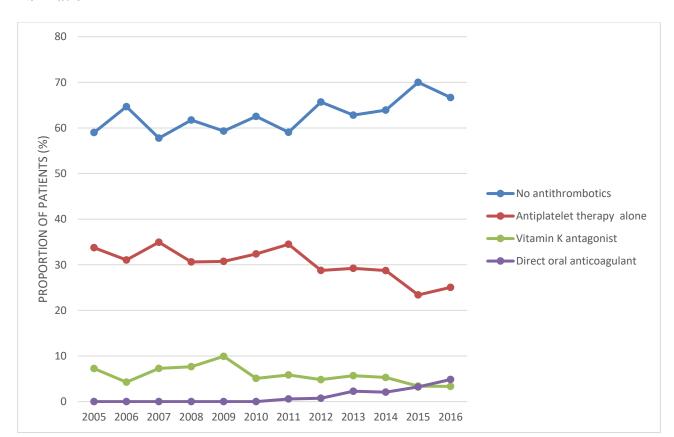
Figure S1.2: Stroke severity over time in patients without atrial fibrillation

Stroke severity divided into four categories: Very severe stroke (blue), severe stroke (red), moderate (green) and mild stroke (purple).





Stroke severity divided into four categories: Very severe stroke (blue), severe stroke (red), moderate (green) and mild stroke (purple).



# Figure S2.1.: Antithrombotic status prior to admission for stroke for patients with new atrial fibrillation

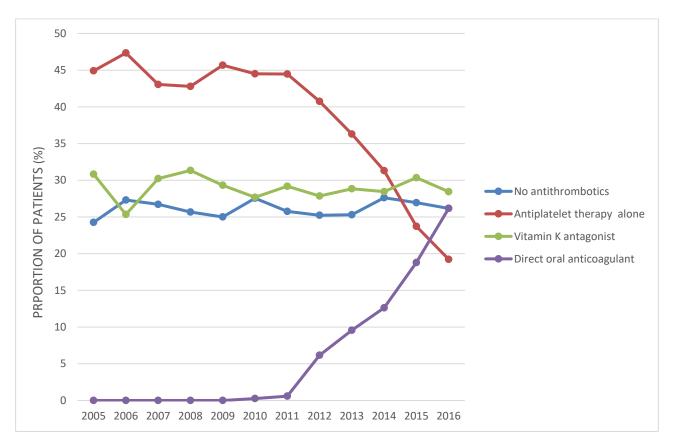
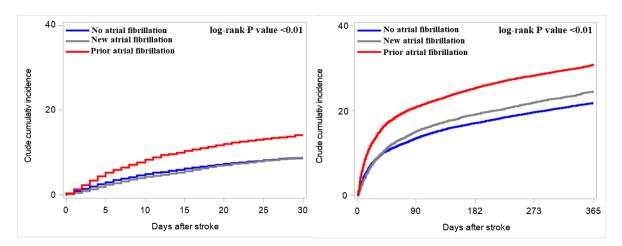


Figure S2.2.: Antithrombotic status prior to admission for stroke for patients with prior atrial fibrillation

Figure S3: A) 30-day and B) 1-year mortality among patients with no atrial fibrillation (AF), new atrial fibrillation and prior atrial fibrillation.



#### **B**:

A:

	<b>30-day mortality HR (95%CI)</b>	1-year mortality HR (95%CI)		
No AF	1.00 (reference)	1.00 (reference)		
New AF	1.23 (1.08-1.42)	1.35 (1.24-1.48)		
Prior AF	1.49 (1.36-1.63)	1.40 (1.32-1.50)		
Adjusting for chronic obstructive lung disease, chronic kidney disease, liver disease, cancer, alcohol				
abuse, prior	abuse, prior bleeding, dementia and prior use of statins conditional on the matching.			

	30-day mortality HR (95%CI)	1-year mortality HR (95%CI)	
No AF	1.00 (reference)	1.00 (reference)	
New AF	1.06 (0.88-1.27)	1.09 (0.99-1.22)	
Prior AF	1.13 (1.0-1.28)	1.19 (1.10-1.28)	
Adjusting for stroke severity, chronic obstructive lung disease, chronic kidney disease, liver disease,			

cancer, alcohol abuse, prior bleeding, dementia, and prior use of statins conditional on the matching.

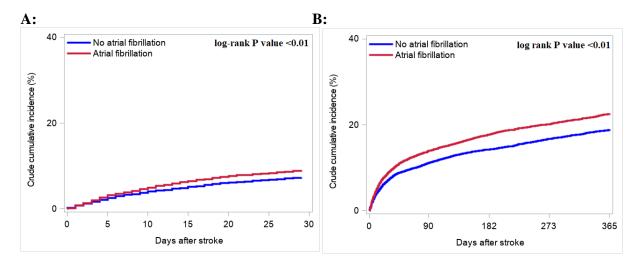
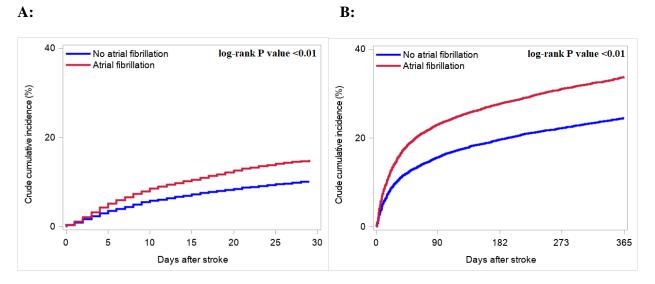


Figure S4.1: A) 30-day and B) 1-year mortality among male patients with atrial fibrillation (AF)

	30-day mortality HR (95%CI)	1-year mortality HR (95%CI)		
AF vs. non-AF	1.28 (1-13-1.44)	1.23 (1.13-1.33)		
Adjusted for chronic obstructive lung disease, chronic kidney disease, liver disease, cancer, alcohol				
abuse, prior bleeding, dementia, and prior use of statins conditional on the matching				

	<b>30-day mortality HR (95%CI)</b>	1-year mortality HR (95%CI)		
AF vs. non-AF	1.11 (0.94-1.32)	1.10 (1.00-1.21)		
Adjusted for stroke severity, chronic obstructive lung disease, chronic kidney disease, liver disease,				
cancer, alcohol abuse, prior bleeding, dementia, and prior use of statins conditional on the matching				

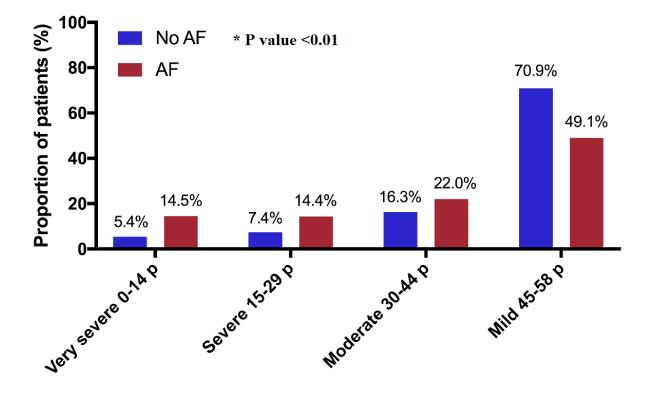


#### Figure S4.2: 30-day and 1-year mortality among female patients with atrial fibrillation (AF)

	<b>30-day mortality HR (95%CI)</b>	1-year mortality HR (95%CI)		
AF vs. non-AF	1.50 (1.36-1.66)	1.51 (1.41-1.62)		
Adjusted for chronic obstructive lung disease, chronic kidney disease, liver disease, cancer, alcohol				
abuse, prior bleeding, dementia, and prior use of statins conditional on the matching.				

	30-day mortality HR (95%CI)	1-year mortality HR (95%CI)
AF vs. non-AF	1.12 (0.97-1.28)	1.19 (1.10-1.30)
Adjusted for stroke severity, chronic obstructive lung disease, chronic kidney disease, liver disease,		
cancer, alcohol abuse, prior bleeding, dementia, and prior use of statins conditional on the matching.		

Figure S5: Stroke severity among patients with and without atrial fibrillation (AF) in an unmatched population



\*Chi square test for difference in the proportion of AF patients with very severe stroke versus non-AF patients with very severe stroke.

#### Figure S6: Cumulative incidence of 30-day and 1-year mortality in unmatched population

Figure S6.1: Cumulative incidence 30-day mortality

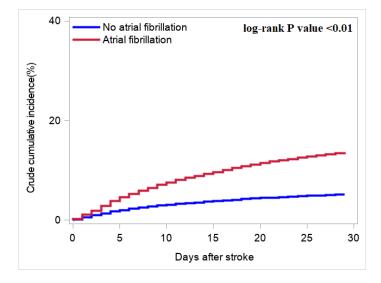
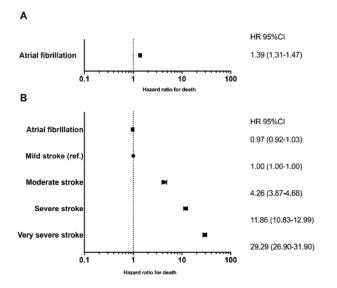


Figure S6.1.1: Adjusted rate of 30-day mortality



All analyses were adjusted for chronic obstructive lung disease, chronic kidney disease, liver disease, cancer, alcohol abuse, prior bleeding, dementia, use of statins and the factors previously matched upon (sex, age, calendar year, congestive heart failure, hypertension, diabetes mellitus, transient ischemic attack, thromboembolism and vascular disease [ischemic heart disease, peripheral artery disease]). Panel b is additionally adjusted for stroke severity.

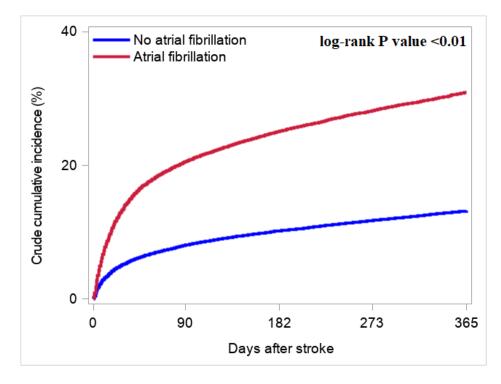
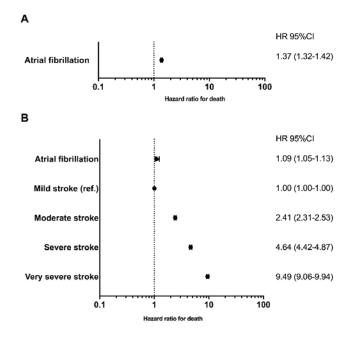


Figure S6.2: cumulative incidence 1-year mortality

Figure S6.2.1: Adjusted rate of 1-year mortality



All analyses were adjusted for chronic obstructive lung disease, chronic kidney disease, liver disease, cancer, alcohol abuse, prior bleeding, dementia, use of statins and the factors previously matched upon (sex, age, calendar year, congestive heart failure, hypertension, diabetes mellitus, transient ischemic attack, thromboembolism and vascular disease [ischemic heart disease, peripheral artery disease]). Panel b is additionally adjusted for stroke severity.