

SUPPLEMENTAL MATERIAL

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Online Table 1. International Classification of Diseases Codes, Ninth Revision, Clinical Modification (ICD-9-CM) Codes Used in the Study

ICD-9-CM codes	Descriptions
Atrial fibrillation	
427.3	Atrial fibrillation and flutter
Valvular heart diseases/replacement or hyperthyroidism	
242	Thyrotoxicosis with or without goiter
394.0	Mitral stenosis
Valvular heart surgery (procedure codes)	
35.20	Open and other replacement of unspecified heart valve
35.22	Open and other replacement of aortic valve
35.24	Open and other replacement of mitral valve
35.26	Open and other replacement of pulmonary valve
35.28	Open and other replacement of tricuspid valve
Transient or secondary atrial fibrillation	
Cardiac surgery (procedure codes)	
00.5	Other cardiovascular procedures
35	Operations on valves and septa of heart
36	Operations on vessels of heart
37	Other operations on heart and pericardium
Pericarditis	
391	Rheumatic fever with heart involvement
393	Chronic rheumatic pericarditis
420	Acute pericarditis
423.2	Constrictive pericarditis
036.41	Meningococcal pericarditis
074.21	Coxsackie pericarditis
093.81	Syphilitic pericarditis
098.83	Gonococcal pericarditis
Myocarditis	
130.3	Myocarditis due to toxoplasmosis
391.2	Acute rheumatic myocarditis
398.0	Rheumatic myocarditis
422	Acute myocarditis
429.0	Myocarditis, unspecified
032.82	Diphtheritic myocarditis
036.43	Meningococcal myocarditis
074.23	Coxsackie myocarditis
093.82	Syphilitic myocarditis
Pulmonary embolism	
415.1	Pulmonary embolism and infarction
Ischemic heart disease	
410-414	Ischemic heart disease
Ischemic stroke	
433.01	Occlusion and stenosis of basilar artery with cerebral infarction
433.11	Occlusion and stenosis of carotid artery with cerebral infarction
433.21	Occlusion and stenosis of vertebral artery with cerebral infarction
433.31	Occlusion and stenosis of multiple and bilateral precerebral arteries with cerebral infarction

433.81	Occlusion and stenosis of other specified precerebral artery with cerebral infarction
433.91	Occlusion and stenosis of unspecified precerebral artery with cerebral infarction
434	Occlusion of cerebral arteries
436	Acute, but ill-defined, cerebrovascular disease
437.0	Cerebral atherosclerosis
437.1	Other generalized ischemic cerebrovascular disease

Systemic embolism

444	Arterial embolism and thrombosis
445	Atheroembolism

Intracranial hemorrhage

430	Subarachnoid hemorrhage
431	Intracerebral hemorrhage
432	Other and unspecified intracranial hemorrhage

Gastrointestinal bleeding

531.0	Acute gastric ulcer with hemorrhage
531.2	Acute gastric ulcer with hemorrhage and perforation, without mention of obstruction
531.4	Chronic or unspecified gastric ulcer with hemorrhage
531.6	Chronic or unspecified gastric ulcer with hemorrhage and perforation
532.0	Acute duodenal ulcer with hemorrhage
532.2	Acute duodenal ulcer with hemorrhage and perforation
532.4	Chronic or unspecified duodenal ulcer with hemorrhage
532.6	Chronic or unspecified duodenal ulcer with hemorrhage and perforation
533.0	Acute peptic ulcer of unspecified site with hemorrhage
533.2	Acute peptic ulcer of unspecified site with hemorrhage and perforation
533.4	Chronic or unspecified peptic ulcer of unspecified site with hemorrhage
533.6	Chronic or unspecified peptic ulcer of unspecified site with hemorrhage and perforation
534.0	Acute gastrojejunal ulcer with hemorrhage
534.2	Acute gastrojejunal ulcer with hemorrhage and perforation, without mention of obstruction
534.4	Chronic or unspecified gastrojejunal ulcer with hemorrhage
534.6	Chronic or unspecified gastrojejunal ulcer with hemorrhage and perforation
535.01	Acute gastritis, with hemorrhage
535.11	Atrophic gastritis, with hemorrhage
535.21	Gastric mucosal hypertrophy, with hemorrhage
535.31	Alcoholic gastritis, with hemorrhage
535.41	Other specified gastritis, with hemorrhage
535.51	Unspecified gastritis and gastroduodenitis, with hemorrhage
535.61	Duodenitis, with hemorrhage
535.71	Eosinophilic gastritis, with hemorrhage
562.02	Diverticulosis of small intestine with hemorrhage
562.03	Diverticulitis of small intestine with hemorrhage
562.12	Diverticulosis of colon with hemorrhage
562.13	Diverticulitis of colon with hemorrhage
569.3	Hemorrhage of rectum and anus
569.85	Angiodysplasia of intestine with hemorrhage
569.86	Dieulafoy lesion (hemorrhagic) of intestine
578.0	Hematemesis

578.1	Melena
578.9	Hemorrhage of gastrointestinal tract, unspecified

Congestive heart failure

398.91	Rheumatic heart failure (congestive)
402.01	Malignant hypertensive heart disease with heart failure
402.11	Benign hypertensive heart disease with heart failure
402.91	Unspecified hypertensive heart disease with heart failure
404.01	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified
404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease
404.11	Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified
404.13	Hypertensive heart and chronic kidney disease, benign, with heart failure and chronic kidney disease stage V or end stage renal disease
404.91	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified
404.93	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease
428	Heart failure

Hypertension

401	Essential hypertension
402	Hypertensive heart disease
403	Hypertensive chronic kidney disease
404	Hypertensive heart and chronic kidney disease
405	Secondary hypertension
437.2	Hypertensive encephalopathy

Diabetes

250	Diabetes mellitus
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Transient ischemic attack

435	Transient cerebral ischemia
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Vascular disease

410-414	Ischemic heart disease
443.8	Other specified peripheral vascular diseases
443.9	Peripheral vascular disease, unspecified

Other bleeding

423.0	Hemopericardium
459.0	Hemorrhage NOS
593.81	Vascular disorders of kidney
599.7	Hematuria
623.8	Other specified noninflammatory disorders of vagina
626.2	Excessive menstruation
626.6	Metrorrhagia
719.1	Hemarthrosis
784.7	Epistaxis

784.8	Hemorrhage from throat
786.3	Hemoptysis

Renal disease

403	Hypertensive chronic kidney disease
404	Hypertensive heart and chronic kidney disease
580	Acute glomerulonephritis
581	Nephrotic syndrome
582	Chronic glomerulonephritis
583	Nephritis and nephropathy not specified as acute or chronic
584	Acute kidney failure
585	Chronic kidney disease (ckd)
586	Renal failure unspecified
590.0	Chronic pyelonephritis
753.1	Cystic kidney disease

Charlson comorbidity index

Myocardial infarction

410	Acute myocardial infarction
412	Old myocardial infarction

Congestive heart failure

398.91	Rheumatic heart failure (congestive)
402.01	Malignant hypertensive heart disease with heart failure
402.11	Benign hypertensive heart disease with heart failure
402.91	Unspecified hypertensive heart disease with heart failure
404.01	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified
404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease
404.11	Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified
404.13	Hypertensive heart and chronic kidney disease, benign, with heart failure and chronic kidney disease stage V or end stage renal disease
404.91	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified
404.93	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease
428	Heart failure

Peripheral vascular disease

441	Aortic aneurysm and dissection
443.9	Peripheral vascular disease, unspecified
785.4	Gangrene
V43.4	Blood vessel replaced by other means

Cerebrovascular disease

430-438	Cerebrovascular disease
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Chronic obstructive pulmonary disease

490-496	Chronic Obstructive Pulmonary Disease and Allied Conditions
500	Coal workers' pneumoconiosis
501	Asbestosis
502	Pneumoconiosis due to other silica or silicates
503	Pneumoconiosis due to other inorganic dust
504	Pneumonopathy due to inhalation of other dust
505	Pneumoconiosis, unspecified
506.4	Respiratory conditions due to chemical fumes and vapors

Dementia

290	Dementias
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Paralysis

342	Hemiplegia and hemiparesis
344.1	Paraplegia

Diabetes without chronic complication

250.0	Diabetes mellitus without mention of complication
250.1	Diabetes with ketoacidosis
250.2	Diabetes with hyperosmolarity
250.3	Diabetes with other coma
250.7	Diabetes with peripheral circulatory disorders

Diabetes with chronic complication

250.4	Diabetes with renal manifestations
250.5	Diabetes with ophthalmic manifestations
250.6	Diabetes with neurological manifestations

Chronic renal failure

582	Chronic glomerulonephritis
583.0	Nephritis and nephropathy, not specified as acute or chronic, with lesion of proliferative glomerulonephritis
583.1	Nephritis and nephropathy, not specified as acute or chronic, with lesion of membranous glomerulonephritis
583.2	Nephritis and nephropathy, not specified as acute or chronic, with lesion of membranoproliferative glomerulonephritis
583.4	Nephritis and nephropathy, not specified as acute or chronic, with lesion of rapidly progressive glomerulonephritis
583.6	Nephritis and nephropathy, not specified as acute or chronic, with lesion of renal cortical necrosis
583.7	Nephritis and nephropathy, not specified as acute or chronic, with lesion of renal medullary necrosis
585	Chronic kidney disease (ckd)
586	Renal failure, unspecified
588	Disorders resulting from impaired renal function

Mild liver disease (Various cirrhodites)

571.2	Alcoholic cirrhosis of liver
571.4	Chronic hepatitis
571.5	Cirrhosis of liver without mention of alcohol

571.6 Biliary cirrhosis

Moderate-severe liver disease

456.0 Esophageal varices with bleeding
456.1 Esophageal varices without bleeding
456.2 Esophageal varices in diseases classified elsewhere
572.2 Hepatic encephalopathy
572.3 Portal hypertension
572.4 Hepatorenal syndrome
572.8 Other sequelae of chronic liver disease

Ulcers

531 Gastric ulcer
532 Duodenal ulcer
533 Peptic ulcer site unspecified
534 Gastrojejunal ulcer

Rheumatoid arthritis and other inflammatory polyarthropathies

710.0 Systemic lupus erythematosus
710.1 Systemic sclerosis
710.4 Polymyositis
714.0 Rheumatoid arthritis
714.1 Felty's syndrome
714.2 Other rheumatoid arthritis with visceral or systemic involvement
714.81 Rheumatoid lung
725 Polymyalgia rheumatica

Acquired immune deficiency syndrome

042 Human immunodeficiency virus [HIV] disease

Malignancy

140-149 Malignant neoplasm of lip, oral cavity, and pharynx
150-159 Malignant neoplasm of digestive organs and peritoneum
160-165 Malignant neoplasm of respiratory and intrathoracic organs
170-172, 174-176 Malignant neoplasm of bone, connective tissue, and breast
179-189 Malignant neoplasm of genitourinary organs
190-195 Malignant neoplasm of other sites
200-208 Malignant neoplasm of lymphatic and hematopoietic tissue

Metastatic solid tumor

196 Secondary and unspecified malignant neoplasm of lymph nodes
197 Secondary malignant neoplasm of respiratory and digestive systems
198 Secondary malignant neoplasm of other specified sites
199 Malignant neoplasm without specification of site

HAS-BLED Score

Abnormal liver function

570	Acute and subacute necrosis of liver
571	Chronic liver disease and cirrhosis
572	Liver abscess and sequelae of chronic liver disease
573	Other disorders of liver
790.4	Nonspecific elevation of levels of transaminase or lactic acid dehydrogenase

Alcohol use

291	Alcohol-induced mental disorders
303	Alcohol dependence syndrome
305.0	Nondependent alcohol abuse
357.5	Alcoholic polyneuropathy
425.5	Alcoholic cardiomyopathy
535.3	Alcoholic gastritis
571.0	Alcoholic fatty liver
571.1	Acute alcoholic hepatitis
571.2	Alcoholic cirrhosis of liver
571.3	Alcoholic liver damage, unspecified
790.3	Excessive blood level of alcohol
977.3	Poisoning by alcohol deterrents
980	Toxic effect of alcohol
V11.3	Personal history of alcoholism

Online Table 2. Baseline Characteristics of Men and Women before Propensity Score Matching

	Men			Women		
	Warfarin	NOAC	Standardized difference	Warfarin	NOAC	Standardized difference
No. of patient	4,331	3,569		3,705	3,687	
Age* (mean $\pm$ SD)	70.33 $\pm$ 11.51	72.62 $\pm$ 10.52	0.208	74.27 $\pm$ 11.61	77.00 $\pm$ 9.32	0.259
CHA ₂ DS ₂ -VASc (mean $\pm$ SD)	2.99 $\pm$ 1.76	2.95 $\pm$ 1.66	0.018	4.29 $\pm$ 1.87	4.41 $\pm$ 1.72	0.068
CHADS ₂ (mean $\pm$ SD)	2.04 $\pm$ 1.43	1.96 $\pm$ 1.40	0.052	2.28 $\pm$ 1.54	2.33 $\pm$ 1.49	0.032
HAS-BLED (mean $\pm$ SD)	2.62 $\pm$ 1.34	2.56 $\pm$ 1.25	0.047	2.71 $\pm$ 1.32	2.75 $\pm$ 1.18	0.035
No. of inpatient visit* (mean $\pm$ SD)	2.42 $\pm$ 6.41	1.69 $\pm$ 1.67	0.158	2.33 $\pm$ 6.44	1.78 $\pm$ 1.80	0.117
CCI* (mean $\pm$ SD)	1.67 $\pm$ 1.65	1.33 $\pm$ 1.41	0.219	1.55 $\pm$ 1.58	1.35 $\pm$ 1.36	0.136
Comorbidities* (%)						
Congestive heart failure	1,356 (31.3)	686 (19.2)	0.281	1,160 (31.3)	874 (23.7)	0.171
Hypertension	2,146 (49.5)	1,733 (48.6)	0.020	2,046 (55.2)	2,092 (56.7)	0.031
Stroke	1,286 (29.7)	1,078 (30.2)	0.011	1,128 (30.4)	1,168 (31.7)	0.027
Vascular disease	1,145 (26.4)	789 (22.1)	0.101	802 (21.6)	708 (19.2)	0.061
Diabetes	1,022 (23.6)	754 (21.1)	0.059	896 (24.2)	878 (23.8)	0.009
Intracranial hemorrhage	142 (3.3)	98 (2.7)	0.031	97 (2.6)	87 (2.4)	0.017
Gastrointestinal bleeding	345 (8.0)	279 (7.8)	0.006	301 (8.1)	231 (6.3)	0.072
Other bleeding	388 (9.0)	324 (9.1)	0.004	267 (7.2)	283 (7.7)	0.018
Renal disease	578 (13.3)	216 (6.1)	0.248	365 (9.9)	189 (5.1)	0.180
Medication use within 90 days before the index date* (%)						
Antiplatelet	3,187 (73.6)	2,458 (68.9)	0.104	2,713 (73.2)	2,662 (72.2)	0.023
ACEI/ARB	2,132 (49.2)	1,689 (47.3)	0.038	1,720 (46.4)	1,779 (48.3)	0.037
Beta blocker	2,444 (56.4)	2,067 (57.9)	0.030	2,201 (59.4)	2,355 (63.9)	0.092
Calcium channel blocker	2,194 (50.7)	1,878 (52.6)	0.039	2,090 (56.4)	2,217 (60.1)	0.075
Amiodarone	549 (12.7)	330 (9.2)	0.110	577 (15.6)	417 (11.3)	0.125
Dronedarone	23 (0.5)	39 (1.1)	0.063	19 (0.5)	37 (1.0)	0.057
Statin	1,938 (44.7)	1,983 (55.6)	0.218	1,610 (43.5)	1,995 (54.1)	0.214
NSAID	272 (6.3)	219 (6.1)	0.006	232 (6.3)	189 (5.1)	0.049
H ₂ antagonist	2,220 (51.3)	1,873 (52.5)	0.024	2,087 (56.3)	2,127 (57.7)	0.027
Proton pump inhibitor	1,062 (24.5)	1,031 (28.9)	0.099	980 (26.5)	1,068 (29.0)	0.056
SSRI	44 (1.0)	73 (2.0)	0.084	135 (3.6)	140 (3.8)	0.008
HRT	NA	NA	NA	8 (0.2)	5 (0.1)	0.019

*These variables were included in the propensity score models, where the c-statistics for men and women were 0.76 and 0.74 respectively. ACEI/ARB=angiotensin converting enzyme inhibitor/angiotensin receptor blocker; CCI=Charlson comorbidity index; CHADS₂=Congestive heart failure, Hypertension, Age $\geq$ 75 years, Diabetes, Stroke; CHA₂DS₂-VASc=Congestive heart failure, Hypertension, Age $\geq$ 75 years (doubled), Diabetes, Stroke (doubled)-Vascular disease, Age (65-74 years), and Sex (female); NOAC=non-vitamin K antagonist oral anticoagulant; HAS-BLED=Hypertension, Abnormal liver or kidney function, Stroke history, Bleeding history, Labile INR (not included), Elderly (Age>65 years), Drug, and alcohol use; HRT=hormone replacement therapy; NSAID=non-steroidal anti-inflammatory drug; SD=standard deviation; SSRI=selective serotonin receptor inhibitor.

Online Table 3. Treatment Choices of the Matched Non-vitamin K Antagonist Oral Anticoagulant Users

		Men	Women
Apixaban*	Standard dose (10mg daily)	136 (60.2)	97 (42.5)
	Reduced dose (<10mg daily)	90 (39.8)	131 (57.5)
Dabigatran*	Standard dose (300mg daily)	369 (23.8)	252 (16.7)
	Reduced dose (<300mg daily)	1,183 (76.2)	1,261 (83.3)
Rivaroxaban*	Standard dose (20mg daily)	507 (73.5)	422 (64.6)
	Reduced dose (<20mg daily)	183 (26.5)	231 (35.4)

*There were 41 users (0.84%) with unspecified or invalid dosage (apixaban: n=9; dabigatran: n=6; rivaroxaban: n=26).

Online Table 4. Crude Estimates of Clinical Outcomes in Men and Women before Propensity Score

Matching

	Men (n=7,900)			Women (n=7,392)			P value for interaction
	No. of event / follow-up time* / incidence†	HR (95% CI)	P value	No. of event / follow-up time* / incidence†	HR (95% CI)	P value	
Ischemic stroke / systemic embolism							
Warfarin	300 / 6154 / 4.87	Reference		318 / 5324 / 5.97	Reference		-
NOAC	197 / 4209 / 4.68	0.81 (0.68-0.97)	0.025	232 / 4474 / 5.19	0.75 (0.63-0.89)	0.001	0.540
Intracranial hemorrhage							
Warfarin	85 / 6596 / 1.29	Reference		89 / 5747 / 1.55	Reference		-
NOAC	36 / 4405 / 0.82	0.61 (0.41-0.91)	0.015	30 / 4694 / 0.64	0.39 (0.26-0.60)	<0.001	0.133
Gastrointestinal bleeding							
Warfarin	163 / 6449 / 2.53	Reference		160 / 5625 / 2.84	Reference		-
NOAC	111 / 4344 / 2.55	0.94 (0.74-1.20)	0.626	134 / 4606 / 2.91	0.90 (0.72-1.14)	0.392	0.814
All-cause mortality							
Warfarin	335 / 6609 / 5.07	Reference		272 / 5771 / 4.71	Reference		-
NOAC	150 / 4418 / 3.39	0.63 (0.52-0.76)	<0.001	141 / 4700 / 3.00	0.60 (0.49-0.73)	<0.001	0.729

*Follow-up time is presented as total number of person-years. †Incidence is presented as no. of events per 100 person-years.

CI=confidence interval; HR=hazard ratio.

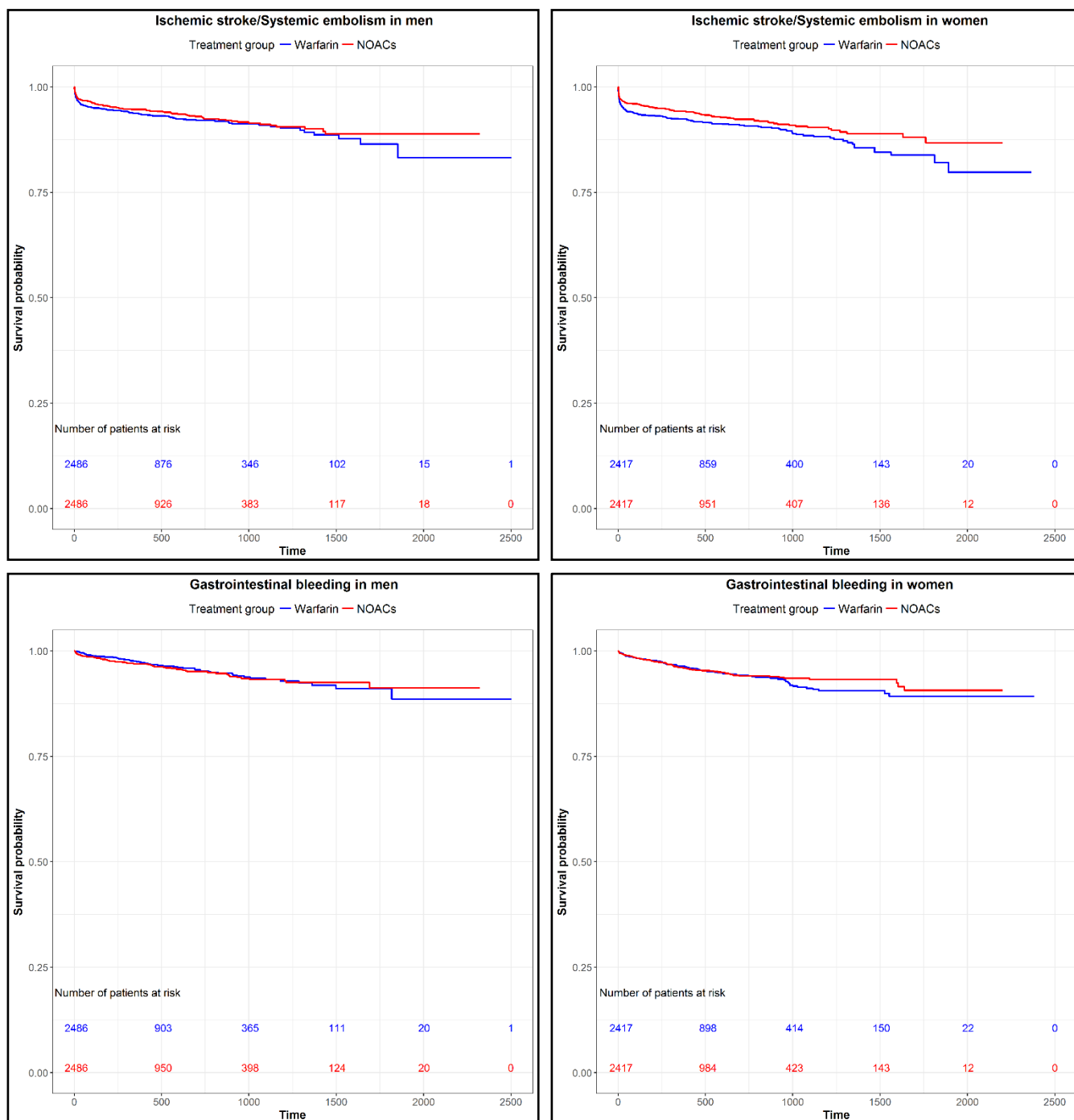
Online Table 5. Crude Estimates of Clinical Outcomes Stratified by TTR in Men and Women before Propensity Score Matching

		Men (n=6,360)			Women (n=5,958)			P value for interaction
		No. of event / follow-up time* / incidence [†]	HR (95% CI)	P value	No. of event / follow-up time* / incidence [†]	HR (95% CI)	P value	
Good INR control (TTR ≥ 60%)								
SSE	Warfarin	33 / 2,225 / 1.48	Reference		35 / 2,034 / 1.72	Reference		-
	NOAC	96 / 4,179 / 2.30	1.37 (0.91-2.04)	0.130	104 / 4,446 / 2.34	1.33 (0.90-1.97)	0.155	0.930
ICH	Warfarin	25 / 2,250 / 1.11	Reference		21 / 2,065 / 1.02	Reference		-
	NOAC	28 / 4,265 / 0.66	0.56 (0.32-0.98)	0.041	25 / 4,517 / 0.55	0.60 (0.33-1.09)	0.095	0.880
GIB	Warfarin	42 / 2,203 / 1.91	Reference		46 / 2,018 / 2.28	Reference		-
	NOAC	79 / 4,220 / 1.87	0.94 (0.64-1.39)	0.770	103 / 4,440 / 2.32	0.89 (0.63-1.27)	0.526	0.830
All-cause mortality	Warfarin	66 / 2,252 / 2.93	Reference		53 / 2,077 / 2.55	Reference		-
	NOAC	126 / 4,276 / 2.95	1.00 (0.73-1.36)	0.988	118 / 4,523 / 2.61	1.03 (0.74-1.44)	0.852	0.883
Poor INR control (TTR < 60%)								
SSE	Warfarin	74 / 3,638 / 2.03	Reference		69 / 3,049 / 2.26	Reference		-
	NOAC	96 / 4,179 / 2.30	1.09 (0.80-1.49)	0.578	104 / 4,446 / 2.34	1.02 (0.75-1.39)	0.896	0.762
ICH	Warfarin	35 / 3,760 / 0.93	Reference		33 / 3,105 / 1.06	Reference		-
	NOAC	28 / 4,265 / 0.66	0.76 (0.46-1.26)	0.292	25 / 4,517 / 0.55	0.55 (0.32-0.93)	0.026	0.380
GIB	Warfarin	82 / 3,685 / 2.23	Reference		63 / 3,061 / 2.06	Reference		-
	NOAC	79 / 4,220 / 1.87	0.83 (0.61-1.14)	0.247	103 / 4,440 / 2.32	1.04 (0.76-1.43)	0.793	0.317
All-cause mortality	Warfarin	146 / 3,763 / 3.88	Reference		97 / 3,112 / 3.12	Reference		-
	NOAC	126 / 4,276 / 2.95	0.78	0.040	118 / 4,523 / 2.61	0.87	0.317	0.537

			(0.61-0.99)			(0.66-1.14)		
Without routine INR monitoring								
SSE	Warfarin	37 / 256 / 14.46	Reference		40 / 212 / 18.84	Reference		-
	NOAC	96 / 4,179 / 2.30	0.22 (0.14-0.32)	<0.001	104 / 4,446 / 2.34	0.16 (0.11-0.23)	<0.001	0.274
ICH	Warfarin	10 / 319 / 3.13	Reference		20 / 261 / 7.67	Reference		-
	NOAC	28 / 4,265 / 0.66	0.20 (0.09-0.43)	<0.001	25 / 4,517 / 0.55	0.07 (0.04-0.13)	<0.001	0.038
GIB	Warfarin	21 / 305 / 6.88	Reference		25 / 240 / 10.42	Reference		-
	NOAC	79 / 4,220 / 1.87	0.28 (0.17-0.47)	<0.001	103 / 4,440 / 2.32	0.27 (0.17-0.42)	<0.001	0.868
All-cause mortality	Warfarin	67 / 320 / 20.93	Reference		67 / 265 / 25.29	Reference		-
	NOAC	126 / 4,276 / 2.95	0.15 (0.11-0.20)	<0.001	118 / 4,523 / 2.61	0.12 (0.08-0.16)	<0.001	0.271

*Follow-up time is presented as total number of person-years. †Incidence is presented as no. of events per 100 person-years. ‡Results are not available due to low number of events.

CI=confidence interval; GIB=Gastrointestinal bleeding; HR=hazard ratio; ICH=Intracranial hemorrhage; INR=international normalized ratio; SSE=Ischemic stroke/systemic embolism; TTR=time in therapeutic range.



Online Figure 1. Kaplan-Meier Curves for Ischemic Stroke/Systemic Embolism and Gastrointestinal Bleeding in Men and Women. NOAC=non-vitamin K antagonist oral anticoagulant.