

Supplemental Material

Antithrombotic therapy after myocardial infarction in patients with atrial fibrillation
undergoing percutaneous coronary intervention

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Table 1. Other antithrombotic agents or no antithrombotic agents at discharge

ATC-code	Substance	Nr. of dispenses	Nr. of patients
B01AB01	Heparin	8	3
B01AB04	Dalteparin	491	85
B01AB05	Enoxaparin	187	44
B01AB10	Tinzaparin	202	42
B01AC	Cilostazol	9	4
B01AC07	Dipyridamole	59	27
B01AC22	Prasugrel	470	112
B01AC24	Ticagrelor	1,291	317
B01AC30	Acetylsalicylic acid + Dipyridamole	31	14
B01AE07	Dabigatran etexilate	87	30
B01AF01	Rivaroxaban	6	5
B01AF02	Apixaban	3	2
B01AX05	Fondaparinux	5	3
Total number of patients			642
No antithrombotic agents at discharge			343
Total			985

Patients who dispensed other antithrombotic agents than aspirin, clopidogrel or warfarin during the follow-up period of one year were excluded from the analysis. However, patients who dispensed small packages (≤ 20) of heparin, dalteparin, enoxaparin or tinzaparin during the follow-up period were included in the analysis. If no antithrombotic agents were used at discharge (aspirin, clopidogrel or warfarin) the patients were excluded from the analysis. Table S1 depicts what other antithrombotic agents, except aspirin, clopidogrel and warfarin that were dispensed and the number of dispenses. The number of patients excluded from the analysis is also given in the Table S1.

Table 2. Comorbidities

Comorbidity	ICD-10 code	Comments
Bleeding events	I850, K226, K250, K252, K254, K256, K260, K262, K264, K266, K270, K272, K274, K276, K280, K284, K286, K290, K625, K661, K920, K921, K922, I60, I61, I62, N02, R310, R311, R318, R040, R041, R042, R048, R049, R58, T810, I983, D629	Defined from the National Patient Registry.
Cancer diagnosis within 3 years	C14 – C20	Defined from the National Patient Registry.
Chronic obstructive pulmonary disease	J40, J41, J42, J43, J44, J45, J46, J47	Defined from the National Patient Registry.
Congestive heart failure	I50, K761, I971, I110, P290	Defined from the National Patient Registry or according to SWEDEHEART.
Dementia	G30, G31	Defined from the National Patient Registry.
Diabetes mellitus	E10, E11, E12, E13, E14	Defined from the National Patient Registry or diabetes/diabetes medication at arrival according to SWEDEHEART.
Hypertension	I10 – I15	Defined from the National Patient Registry or according to SWEDEHEART.
Liver disease	K70, K71, K72, K73, K74, K75, K76, K77	Defined from the National Patient Registry.
Myocardial infarction	I21, I22	Defined from the National Patient Registry or according to SWEDEHEART.
Renal disease	N17, N18, N19, N990, O084, I120, I131, I132, T795, P960	Defined from the National Patient Registry.
Peripheral systemic emboli	I74	Defined from the National Patient Registry.
Peripheral vascular disease	I70, I71, I72, I73	Defined from the National Patient Registry.
Ischemic stroke	I63, I64	Defined from the National Patient Registry.
Transient ischemic attack	G45	Defined from the National Patient Registry.

Abbreviations: ICD-10, International Classification of Diseases 10th Revision

Table 3. Variables reflecting in-hospital course

Variable	Comments
Admission year	Defined from SWEDEHEART.
Age	Defined from SWEDEHEART.
Gender	Defined from SWEDEHEART.
Arrival antithrombotic medication (aspirin, clopidogrel or warfarin)	Defined from the National Dispensed Drug Registry or according to SWEDEHEART.
PCI indication (NSTEMI, STEMI)	Defined from SWEDEHEART.
Coronary angiography	Defined from SWEDEHEART.
PCI	Defined from SWEDEHEART.
Procedure related medication, Heparin	Defined from SWEDEHEART.
Procedure related medication, LMWH	Defined from SWEDEHEART.
Procedure related medication, Fondaparinux	Defined from SWEDEHEART.
Procedure related medication, Bivalirudin	Defined from SWEDEHEART.
Procedure related medication, GPIIb/IIIa inhibitors	Defined from SWEDEHEART.
PCI characteristics, vascular access approach	Defined from SWEDEHEART.
PCI characteristics, finding	Defined from SWEDEHEART.
PCI characteristics, number of stents	Defined from SWEDEHEART.
PCI characteristics, stent group (BMS, DES)	Defined from SWEDEHEART.

Abbreviations: BMS, bare metal stent; DES, drug eluting stent; GPIIb/IIIa, glycoprotein lib/IIIa; LMWH, low-molecular-weight heparin; NSTEMI, non-ST-elevation myocardial infarction; PCI, percutaneous coronary intervention; STEMI, ST-elevation myocardial infarction.

Table 4. CHA₂DS₂-VASc score(1)

Risk factor	Score
<u>C</u> ongestive heart failure (Table S2)	1
<u>H</u> ypertension (Table S2)	1
<u>A</u> ge ≥ 75 years (Table S3)	2
<u>D</u> iabetes mellitus (Table S2)	1
<u>S</u> troke/Transient ischemic attack/Thromboembolism (ischemic stroke, transient ischemic attack or peripheral systemic emboli, Table S2)	2
<u>V</u> ascular disease (prior myocardial infarction, peripheral artery disease, or aortic plaque, Table S2)	1
<u>A</u> ge 65-74 years (Table S3)	1
<u>S</u> ex category, female gender (Table S3)	1

Table 5. Definition of outcome

Outcome	ICD-10 code	Comments
All-cause mortality	-	Defined from the Swedish Cause of Death Registry.
Myocardial infarction	I21, I22	Defined from the National Patient Registry and the Swedish Cause of Death Registry.
Myocardial infarction (or death due to coronary disease)	I21, I22 (I20-I25)	Defined from the National Patient Registry and the Swedish Cause of Death Registry.
Stent thrombosis	-	Defined from SWEDEHEART.
Ischemic stroke	I63, I64	Defined from the National Patient Registry and the Swedish Cause of Death Registry.
Major bleeding events	I60, I61, I62, I850, K226, K250, K252, K254, K256, K260, K262, K264, K266, K270, K272, K274, K276, K280, K284, K286, K290, K625, K661, K920, K921, K922, N02, R310, R311, R318, R040, R041, R042, R048, R049, R58, T810, I983, D629, DR029	Defined from the National Patient Registry and the Swedish Cause of Death Registry.
Intracranial bleeding events	I60, I61, I62	Defined from the National Patient Registry and the Swedish Cause of Death Registry.
Gastrointestinal bleeding events	I850, K226, K250, K252, K254, K256, K260, K262, K264, K266, K270, K272, K274, K276, K280, K284, K286, K290, K625, K661, K920, K921, K922	Defined from the National Patient Registry and the Swedish Cause of Death Registry.

Table 6. Outcome in relation to antithrombotic therapy at discharge, intention-to-treat analysis

Drug	Nr. of patients	Nr. of events	Incidence rate (95% CI)	Unadjusted HR (95% CI)	Adjusted HR (95% CI)
Composite of mortality, myocardial infarction or ischemic stroke, 0– 90 days					
Dual AP	4,328	467	47.4 (43.2 - 51.8)	1.00	1.00
Single AP	874	151	80.5 (68.4 - 94.1)	1.66 (1.39 - 2.00)	1.43 (1.19 - 1.73)
Warfarin monotherapy	111	16	67.8 (40.3 - 107.5)	1.40 (0.85 - 2.30)	1.22 (0.74 - 2.02)
Aspirin + warfarin	134	18	60.0 (36.9 - 92.9)	1.26 (0.79 - 2.02)	1.22 (0.76 - 1.95)
Clopidogrel + warfarin	516	56	47.7 (36.4 - 61.5)	1.01 (0.76 - 1.33)	0.97 (0.73 - 1.28)
Triple therapy	1,153	99	37.1 (30.4 - 45.0)	0.79 (0.64 - 0.98)	0.82 (0.66 - 1.02)
Composite of mortality, myocardial infarction or ischemic stroke, 91 – 365 days					
Dual AP	3,950	526	19.5 (17.9 - 21.2)	1.00	1.00
Single AP	575	87	23.5 (18.9 - 28.8)	1.19 (0.95 - 1.50)	1.03 (0.82 - 1.30)
Warfarin monotherapy	128	9	19.5 (17.9 - 21.2)	0.54 (0.28 - 1.04)	0.52 (0.27 - 1.00)
Aspirin + warfarin	558	59	15.2 (11.7 - 19.4)	0.78 (0.60 - 1.02)	0.72 (0.55 - 0.94)
Clopidogrel + warfarin	454	44	14.0 (10.34 - 18.7)	0.72 (0.53 - 0.98)	0.62 (0.45 - 0.84)
Triple therapy	1,155	101	12.4 (10.1 - 15.0)	0.64 (0.52 - 0.79)	0.66 (0.53 - 0.82)
Major bleeding events, 0 – 90 days					
Dual AP	4,328	81	7.8 (6.3 - 9.7)	1.00	1.00
Single AP	874	18	9.0 (5.5 - 13.9)	1.14 (0.68 - 1.90)	0.98 (0.59 - 1.64)
Warfarin monotherapy	111	2	8.0 (1.6 - 25.8)	1.02 (0.25 - 4.13)	0.87 (0.21 - 3.53)
Aspirin + warfarin	134	6	18.9 (7.9 - 39.0)	2.41 (1.05 - 5.51)	2.37 (1.03 - 5.43)
Clopidogrel + warfarin	516	17	13.9 (8.4 - 21.7)	1.77 (1.05 - 2.99)	1.69 (1.00 - 2.86)
Triple therapy	1,153	43	15.7 (11.5 - 20.9)	2.00 (1.38 - 2.90)	2.07 (1.42 - 3.01)
Major bleeding events, 91 – 365 days					
Dual AP	3,950	86	3.1 (2.5 - 3.8)	1.00	1.00
Single AP	575	13	3.4 (1.9 - 5.6)	1.09 (0.61 - 1.94)	1.01 (0.56 - 1.82)
Warfarin monotherapy	128	1	1.12 (0.1 - 5.2)	0.36 (0.05 - 2.60)	0.34 (0.05 - 2.47)
Aspirin + warfarin	558	16	4.0 (2.4 - 6.4)	1.31 (0.77 - 2.23)	1.24 (0.72 - 2.12)
Clopidogrel + warfarin	454	11	3.4 (1.8 - 5.9)	1.11 (0.59 - 2.07)	1.01 (0.54 - 1.90)
Triple therapy	1,155	46	5.6 (4.1 - 7.4)	1.82 (1.27 - 2.60)	1.79 (1.24 - 2.57)

Abbreviations: AP, antiplatelet therapy; CI, confidence interval; HR, hazard ratio

Table 7. Outcome in relation to antithrombotic therapy over time including patients until their first change in antithrombotic regimen

Drug	Person years	Nr. of events	Event rate per 100 Person years (95% CI)	Unadjusted HR (95% CI)	Adjusted HR (95% CI)
Composite of mortality, myocardial infarction or ischemic stroke					
Dual AP	2,072.8	672	32.4 (30.0 - 34.9)	1.00	1.00
Single AP	189.5	129	68.1 (57.1 - 80.6)	1.54 (1.27 - 1.86)	1.34 (1.11 - 1.62)
Warfarin monotherapy	46.5	15	32.3 (18.9 - 51.9)	1.01 (0.61 - 1.69)	0.91 (0.54 - 1.51)
Aspirin + warfarin	66.1	22	33.3 (21.5 - 49.5)	1.06 (0.69 - 1.62)	1.04 (0.68 - 1.60)
Clopidogrel + warfarin	193.5	63	32.6 (25.2 - 41.4)	0.90 (0.69 - 1.16)	0.84 (0.65 - 1.09)
Triple therapy	344.6	108	31.3 (25.8 - 37.7)	0.76 (0.62 - 0.93)	0.79 (0.64 - 0.97)
Major bleeding events					
Dual AP	2,224.7	121	5.4 (4.5 - 6.5)	1.00	1.00
Single AP	200.3	16	8.0 (4.8 - 12.7)	1.17 (0.69 - 1.97)	1.09 (0.64 - 1.84)
Warfarin monotherapy	49.5	1	2.0 (0.2 - 9.4)	0.38 (0.05 - 2.70)	0.34 (0.05 - 2.41)
Aspirin + warfarin	70.1	7	10.0 (4.5 - 19.6)	1.85 (0.86 - 3.96)	1.80 (0.84 - 3.86)
Clopidogrel + warfarin	202.3	16	7.9 (4.7 - 12.5)	1.34 (0.79 - 2.25)	1.27 (0.75 - 2.14)
Triple therapy	359.6	50	13.9 (10.4 - 18.2)	2.14 (1.53 - 3.00)	2.20 (1.56 - 3.09)

Abbreviations: AP, antiplatelet therapy; CI, confidence interval; HR, hazard ratio

Table 8. Outcome in relation to antithrombotic therapy over time based on estimated maintenance dosage for warfarin of 28.91 mg per week(2)

Drug	Person years	Nr. of events	Event rate per 100 Person years (95% CI)	Unadjusted HR (95% CI)	Adjusted HR (95% CI)
Composite of mortality, myocardial infarction or ischemic stroke, 0 – 90 days					
Dual AP	984.6	486	49.4 (45.1 - 53.9)	1.00	1.00
Single AP	147.1	126	85.7 (71.7 - 101.6)	1.57 (1.30 - 1.91)	1.38 (1.13 - 1.68)
Warfarin monotherapy	23.2	19	82.1 (51.1 - 125.5)	1.70 (1.07 - 2.69)	1.55 (0.98 - 2.46)
Aspirin + warfarin	78.2	22	28.1 (18.1 - 41.8)	0.81 (0.53 - 1.25)	0.80 (0.52 - 1.23)
Clopidogrel + warfarin	112.7	52	46.1 (34.8 - 60.0)	0.93 (0.70 - 1.23)	0.90 (0.67 - 1.19)
Triple therapy	262.5	104	39.6 (32.6 - 47.8)	0.81 (0.65 - 1.00)	0.85 (0.69 - 1.06)
Composite of mortality, myocardial infarction or ischemic stroke, 91 – 365 days					
Dual AP	1,698.9	366	21.5 (19.4 - 23.8)	1.00	1.00
Single AP	1,200.2	229	19.1 (16.7 - 21.7)	1.04 (0.87 - 1.23)	0.99 (0.83 - 1.17)
Warfarin monotherapy	441.3	50	11.3 (8.5 - 14.8)	0.64 (0.47 - 0.86)	0.57 (0.42 - 0.78)
Aspirin + warfarin	700.1	94	13.4 (10.9 - 16.4)	0.71 (0.56 - 0.89)	0.70 (0.55 - 0.88)
Clopidogrel + warfarin	261.7	40	15.3 (11.1 - 20.6)	0.74 (0.53 - 1.02)	0.68 (0.49 - 0.94)
Triple therapy	319.4	57	17.8 (13.7 - 22.9)	0.76 (0.57 - 1.01)	0.81 (0.60 - 1.07)
Major bleeding events, 0 – 90 days					
Dual AP	1,031.8	84	8.1 (6.5 - 10.0)	1.00	1.00
Single AP	155.5	16	10.3 (6.1 - 16.3)	1.20 (0.70 - 2.05)	1.07 (0.62 - 1.84)
Warfarin monotherapy	24.5	2	8.2 (1.6 - 26.1)	1.03 (0.25 - 4.21)	0.94 (0.23 - 3.87)
Aspirin + warfarin	82.1	8	9.7 (4.6 - 18.4)	1.50 (0.72 - 3.11)	1.49 (0.72 - 3.11)
Clopidogrel + warfarin	117.7	13	11.1 (6.2 - 18.4)	1.35 (0.76 - 2.42)	1.28 (0.71 - 2.31s)
Triple therapy	275.2	44	16.0 (11.8 - 21.3)	1.97 (1.37 - 2.85)	2.07 (1.42 - 3.03)
Major bleeding events, 91 – 365 days					
Dual AP	1,765.7	65	3.7 (2.9 - 4.7)	1.00	1.00
Single AP	1,225.5	36	2.9 (2.1 - 4.0)	0.86 (0.57 - 1.31)	0.85 (0.56 - 1.29)
Warfarin monotherapy	450.2	12	2.7 (1.5 - 4.5)	0.79 (0.43 - 1.46)	0.74 (0.40 - 1.36)
Aspirin + warfarin	716.6	27	3.8 (2.5 - 5.4)	1.09 (0.69 - 1.72)	1.05 (0.66 - 1.68)
Clopidogrel + warfarin	270.8	12	4.4 (2.4 - 7.5)	1.22 (0.66 - 2.26)	1.15 (0.62 - 2.14)
Triple therapy	340.1	21	6.2 (3.9 - 9.3)	1.63 (1.00 - 2.67)	1.62 (0.99 - 2.65)

Abbreviations: AP, antiplatelet therapy; CI, confidence interval; HR, hazard ratio

References

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