

**SUPPLEMENTARY DATA**

**Table 1 of the supplementary data.** Definitions of covariates and clinical outcomes

<b>Diagnosis</b>	<b>ICD-10 code</b>	<b>Diagnostic definition</b>
Myocardial infarction	I21, I22, I23	Admission ≥ 1
Ischemic stroke	I63, I64, G45	Admission ≥ 1
Intracranial hemorrhage	I60-62	Admission ≥ 1 or ER visit ≥ 1
GI bleeding	K22.6, K25.0, K25.2, K25.4, K25.6, K26.0, K26.2, K26.4, K26.6, K27.0, K27.2, K27.4, K27.6, K28.0, K28.2, K28.4, K28.6, K29.0, K62.5, K92.0, K92.1, K92.2	Admission ≥ 1 and ER visit ≥ 1
Major bleeding	Intracranial bleeding or GI bleeding with transfusion	ICH, admission ≥ 1 or ER visit ≥ 1 GI bleeding, admission ≥ 1 and RBC transfusion ≥ 1, ER visit ≥ 1 and RBC transfusion
Hypertension	I10-I13, I15	Admission ≥ 1 or outpatient department ≥ 1 within 1 y
Diabetes mellitus	E11-E14	Admission or outpatient department ≥ 1 within 1 y
Dyslipidemia	E78	Admission or outpatient department ≥ 1 within 1 y
Liver cirrhosis	K74, K703	Admission or outpatient department ≥ 1 within 1 y
Chronic kidney disease	O7020, O9991, O7075, O3280, V001, V003	Admission or outpatient department ≥ 1 within 1 y
Cancer	C00- C97	Admission or outpatient department ≥ 1 within 1 y
Anemia	D50, D58, D59, D63, D64	Admission or outpatient department ≥ 1 within 1 y
Thrombocytopenia	D69	Admission or outpatient department ≥ 1 within 1 y
<b>Medications</b>	<b>ATC Codes</b>	
NSAID	M01AB16, M03BX, M01AB11, M01AC, M01AE14, M01AB05, S01BC03, M01AX, M01AB08, M01AE04, M01AG03, S01BC04, M01AE01, D10AX, N02BE51, C01EB16, N02BA16, M01AE03, M02AA10, N02AJ14, M01AE17, M01AB15, S01BC05, M01AE, M01AG01, M01AC06, M01AX01, M01AE52, M01AE02, N02CC51, M01AX17, M01AC01, M02AA07, S01BC09, M01AB14, M01AA, N02BA06, M01AB02, M01AC02, M01AE11, M01AG02, M01AC05, M01AX22, L04AK02, M01AB01, M01AE12, M01AB09, M01AE13, M01AB, M01AH, M01AH01, M01AH07, M01AH05, M01AH07, N02BA51	
Steroids	H02AB04, H02BX01, D07AC14, H02AB06, D07AA03, S01BA04, H02AB13, H02AB02, S01CA01, S01CA, S01BA01, S02CA06, R01AD03, D07CC01, H02AB01, D05AX52, H02BX, D07AC01, R01AD05, D07AC09, R03AK07, R03BA02, R03AL11, A07EA06, R03AK12, H02AB09, D11AX, S02CA03, D07AB02, D07CA, D07AA02, H02AB07, R01AD11, D07CB01, H02AB08, S01BA05, D01A, D07AB09	
Aspirin	B01AC30, B01AC56, N02BA01	
Clopidogrel	B01AC04, B01AC30	

Prasugrel	B01AC22
Ticagrelor	C07AA05
Beta blocker	C07AA01-03, C07AA05-07, C07AA12, C07AA14-17, C07AA19, C07AA23, C07AA27, C07AB01-14, C07AG01-02, C07BA02, C07BA05-07, C07BA12, C07BA68, C07BB02-04, C07BB06-07, C07BB12, C07BB52, C07BG01, C07CA02, C07CA03, C07CA17, C07CA23, C07CB03, C07CB02-03, C07CB53, C07CG01, C07DA06, C07DB01, C07FB02-03, C07FB07, C07FB12-13, C07FX01-06
Proton Pump Inhibitors	A02BC51, A02BC, A02BC04, A02BC02, M01AE52, A02BC05, A02BC53, A02BC03, A02BC01, A02BC06, N05AX12, A02BC54, B01AC56, N05AX16
H2 blocker	A02BA01, A02AH, A02AX, A02BA02, A02BA, A02BA03, A02BA53, A02BA04, A02BA06

CT, computed tomography; GI, gastrointestinal; MI, myocardial infarction; MRI, magnetic resonance imaging.

**Table 2 of the supplementary data.** Baseline characteristics of study population before propensity-score matching

	No therapy (n = 1639)	Antiplatelet therapy (n = 3018)	<i>P</i>	SMD
<i>Age, y</i>	67.2 (9.9)	66.0 (9.6)	<.001	0.118
<i>Sex, male</i>	1077 (65.7)	2027 (67.2)	.331	0.031
<i>Income, medical aid</i>	51 (3.1)	115 (3.8)	.252	0.038
<i>Residential area, metropolitan</i>	1100 (67.1)	1985 (65.8)	.372	0.028
<i>Smoking status (n = 3751)</i>			.425	
Never	695 (52.3)	1232 (50.9)		0.027
Former	380 (28.6)	739 (30.5)		0.043
Current	253 (19.0)	449 (18.5)		0.012
Unknown	2 (0.2)	1 (0.0)		0.035
<i>Heavy alcohol use (n = 3751)</i>	78 (5.9)	134 (5.5)	.730	0.014
<i>BMI (n = 3751)</i>			.468	
Underweight	19 (1.4)	27 (1.1)		0.028
Normal	375 (28.2)	632 (26.1)		0.047
Overweight	355 (26.7)	684 (28.3)		0.035
Obese	578 (43.5)	1075 (44.4)		0.019
Unknown	3 (0.2)	3 (0.1)		0.024
<i>LDL cholesterol, mg/dL (n = 2948)</i>	105.6 ± 39.2	111.1 ± 44.5	.001	0.129
<i>HDL cholesterol, mg/dL (n = 2974)</i>	51.5 ± 24.6	51.5 ± 13.2	.984	0.001
<i>Total cholesterol, mg/dL (n = 2974)</i>	184.2 ± 43.2	190.5 ± 44.2	<.001	0.145
<i>Comorbidities</i>				
Hypertension	975 (59.5)	1684 (55.8)	.016	0.075
Diabetes mellitus	586 (35.8)	894 (29.6)	<.001	0.131

Dyslipidemia	839 (51.2)	1587 (29.6)	.379	0.028
Chronic kidney disease	27 (1.6)	30 (1.0)	.072	0.057
Liver cirrhosis	19 (1.2)	36 (1.2)	.999	0.003
Cancer	221 (13.5)	308 (10.2)	.001	0.102
Anemia	168 (10.3)	238 (7.9)	.007	0.082
<i>Long-term NSAID use</i>	3 (0.2)	8 (0.3)	.814	0.017
<i>Long-term steroid use</i>	6 (0.4)	10 (0.3)	.999	0.027
<i>Family history of coronary artery disease (n = 3751)</i>	122 (9.2)	238 (9.8)	.551	0.022
<i>Concurrent use of proton pump inhibitor and H<sub>2</sub> blocker</i>	128 (7.8)	382 (12.7)	<.001	0.160
<i>Concurrent use of statin</i>	948 (57.8)	2700 (89.5)	<.001	0.769
<i>Type of hospital</i>				
Tertiary hospital	1129 (68.9)	2126 (70.4)	.2675	0.034
General hospital / hospital	510 (31.1)	892 (29.6)		

BMI, body mass index; HDL, high density lipoprotein; LDL, low density lipoprotein; NSAID, nonsteroidal anti-inflammatory drug; SMD, standardized mean difference.

Values were presented No. (%) or mean  $\pm$  standard deviation.

**Table 3 of the supplementary data.** Baseline characteristics of the study population according to type of antiplatelet agent

	No therapy (n = 1634)	Aspirin (n = 1281)	Clopidogrel (n = 353)	P	SMD
<i>Age, y</i>	67.2 (9.9)	65.6 (10.1)	66.6 (10.1)	<.001	0.104
<i>Sex, male</i>	1072 (65.6)	946 (73.8)	267 (75.6)	<.001	0.148
<i>Income, medical aid</i>	50 (3.1)	49 (3.8)	14 (4.0)	.457	0.033
<i>Residential area, metropolitan</i>	1097 (67.1)	840 (65.6)	245 (69.4)	.363	0.055
<i>Smoking status (n = 2628)</i>				.013	
Never	695 (52.4)	458 (44.7)	130 (46.9)		0.102
Former	378 (28.5)	339 (33.1)	89 (32.1)		0.007
Current	252 (19.0)	227 (22.2)	58 (20.9)		0.052
Unknown	2 (0.2)	0 (0.0)	0 (0.0)		0.037
<i>Heavy alcohol use (n = 2628)</i>	78 (5.9)	70 (6.8)	11 (4.0)	.193	0.085
<i>BMI (n = 2628)</i>				.855	
Underweight	19 (1.4)	17 (1.7)	4 (1.4)		0.012
Normal	374 (28.2)	279 (27.2)	72 (26.0)		0.033
Overweight	354 (26.7)	282 (27.5)	73 (26.4)		0.018
Obese	577 (43.5)	446 (43.6)	127 (45.8)		0.032
Unknown	3 (0.2)	0 (0.0)	1 (0.4)		0.059
<i>LDL cholesterol, mg/dL (n = 2057)</i>	105.6 ± 39.3	111.3 ± 49.5	100.1 ± 36.6	.001	0.176
<i>HDL cholesterol, mg/dL (n = 2080)</i>	51.5 ± 24.6	51.5 ± 13.0	50.7 ± 13.9	.859	0.033
<i>Total cholesterol, mg/dL (n = 2080)</i>	184.1 ± 43.2	184.11 ± 42.2	182.5 ± 51.0	.007	0.109
<i>Comorbidities</i>					
Hypertension	973 (59.5)	657 (51.3)	172 (48.7)	<.001	0.145
Diabetes mellitus	582 (35.6)	410 (32.0)	140 (39.7)	.014	0.107
Dyslipidemia	838 (51.3)	571 (44.6)	148 (41.9)	<.001	0.126
Chronic kidney disease	25 (1.5)	15 (1.2)	7 (2.0)	.477	0.044
Liver cirrhosis	18 (1.1)	19 (1.5)	4 (1.1)	.640	0.023
Cancer	217 (13.3)	168 (13.1)	51 (14.4)	.804	0.026
Anemia	165 (10.1)	129 (10.1)	42 (11.9)	.571	0.039
<i>Long-term NSAIDs use</i>	3 (0.2)	4 (0.3)	0 (0.0)	.495	0.055
<i>Long-term steroid use</i>	6 (0.4)	7 (0.5)	2 (0.6)	.739	0.020
<i>Family history of coronary artery disease (n = 2628)</i>	122 (9.2)	101 (9.9)	29 (10.5)	.75	0.052
<i>Concurrent use of proton pump inhibitor and H<sub>2</sub> blocker</i>	128 (7.8)	282 (11.8)	100 (16.2)	<.001	0.174
<i>Concurrent use of statin</i>	943 (57.7)	1,142 (89.2)	311 (88.1)	<.001	0.507
<i>Type of hospital</i>					
Tertiary hospital	1,127 (69.0)	903 (70.5)	237 (67.1)	.426	0.048
General hospital/hospital	507 (31.0)	378 (29.5)	116 (32.9)		

BMI, body mass index; HDL, high density lipoprotein; LDL, low density lipoprotein; NSAID: non-steroidal anti-inflammatory drug; SMD, standardized mean difference.

Values are presented as No. (%) or mean (standard deviation).

**Table 4 of the supplementary data.** Comparisons of clinical outcomes according to IPTW analysis

	<b>No therapy (n = 1639)</b>	<b>Antiplatelet therapy (n = 3018)</b>	<b>Hazard ratio (95%CI)<sup>a</sup></b>
<b>1-Year follow-up</b>			
<i>Major adverse cardiac and cerebrovascular event</i>	116 (7.1)	208 (6.9)	1.07 (0.85, 1.35)
Major adverse cardiac event	114 (7.0)	208 (6.9)	1.09 (0.86, 1.38)
All-cause death	32 (2.0)	37 (1.2)	0.75 (0.46, 1.22)
Cardiovascular death	11 (0.7)	12 (0.4)	0.70 (0.30, 1.64)
Myocardial infarction	36 (2.8)	70 (2.8)	1.34 (0.64, 2.82)
Unplanned revascularization	222 (16.3)	409 (15.6)	1.18 (0.91, 1.55)
Stroke	27 (2.3)	52 (2.4)	0.89 (0.63, 1.26)
<i>Safety outcomes</i>	9 (0.6)	14 (0.5)	0.96 (0.40, 2.29)
Any gastrointestinal bleeding	6 (0.4)	13 (0.4)	1.47 (0.52, 4.18)
With transfusion	6 (0.4)	9 (0.3)	1.02 (0.33, 3.17)
Without transfusion	0 (0.0)	5 (0.2)	-
Intracranial hemorrhage	4 (0.2)	2 (0.1)	0.21 (0.03, 1.60)
Major bleeding <sup>b</sup>	9 (0.6)	10 (0.3)	0.69 (0.27, 1.78)
<b>5-Year follow-up</b>			
<i>Major adverse cardiac and cerebrovascular event</i>	347 (25.5)	588 (22.7)	0.97 (0.85, 1.11)
Major adverse cardiac event	343 (25.0)	565 (21.7)	0.97 (0.85, 1.11)
All-cause death	119 (9.1)	171 (7.0)	0.90 (0.71, 1.15)
Cardiovascular death	27 (2.2)	35 (1.4)	0.75 (0.44, 1.28)
Myocardial infarction	11 (0.7)	24 (0.8)	1.12 (0.74, 1.69)
Unplanned revascularization	83 (5.1)	169 (5.6)	1.03 (0.87, 1.22)
Stroke	4 (0.2)	4 (0.1)	0.93 (0.67, 1.28)
<i>Safety outcomes</i>	24 (1.8)	59 (2.5)	1.59 (0.97, 2.62)
Any gastrointestinal bleeding	15 (1.2)	43 (1.8)	2.15 (1.15, 4.02)

With transfusion	13 (1.1)	25 (1.0)	1.58 (0.77, 3.24)
Without transfusion	4 (0.3)	22 (1.0)	4.09 (1.23, 13.61)
Intracranial hemorrhage	9 (0.6)	16 (0.7)	0.91 (0.39, 2.08)
Major bleeding <sup>b</sup>	22 (1.7)	41 (1.6)	1.24 (0.72, 2.14)

95%CI, 95% confidence interval; IPTW, inverse probability treatment weighting.

The cumulative incidence of clinical outcomes is presented as event number and Kaplan-Meier estimates from the index procedure.

<sup>a</sup>Adjusted for discharge medication of proton pump inhibitor/H<sub>2</sub> blocker and statin.

<sup>b</sup>Major bleeding was defined as a composite of intracranial bleeding or gastrointestinal bleeding with documented transfusion.



**Table 5 of the supplementary data.** Comparisons of clinical outcomes according to type of antiplatelet agent

	Number of events (cumulative incidence, %)			Hazard ratio (95%CI) <sup>a</sup>	
	No therapy	Aspirin	Clopidogrel	No therapy vs aspirin	No therapy vs clopidogrel
<b>1-year follow-up</b>					
<i>Major adverse cardiac and cerebrovascular event</i>	115 (7)	93 (7.3)	28 (7.9)	1.03 (0.78, 1.35)	1.02 (0.67, 1.56)
Major adverse cardiac event	113 (6.9)	93 (7.3)	28 (7.9)	1.05 (0.79, 1.38)	1.04 (0.68, 1.60)
All-cause death	31 (1.9)	20 (1.6)	5 (1.4)	0.83 (0.47, 1.46)	0.43 (0.16, 1.13)
Cardiovascular death	11 (0.7)	8 (0.6)	1 (0.3)	0.97 (0.38, 2.44)	0.79 (0.20, 3.18)
Myocardial infarction	11 (0.7)	11 (0.9)	1 (0.3)	1.10 (0.47, 2.61)	1.26 (0.32, 5.01)
Unplanned revascularization	83 (5.1)	72 (5.7)	23 (6.5)	1.11 (0.80, 1.53)	1.17 (0.73, 1.90)
Stroke	4 (0.2)	2 (0.2)	2 (0.6)	0.88 (0.57, 1.35)	0.95 (0.51, 1.78)
<i>Safety outcomes</i>	9 (0.6)	8 (0.6)	3 (0.9)	1.01 (0.39, 2.64)	0.91 (0.20, 4.14)
Any gastrointestinal bleeding	6 (0.4)	8 (0.6)	2 (0.6)	1.68 (0.59, 4.83)	0.86 (0.09, 8.16)
With transfusion	6 (0.4)	5 (0.4)	2 (0.6)	0.97 (0.31, 3.05)	0.99 (0.10, 10.05)
Without transfusion	0 (0.0)	1 (0.1)	0 (0.0)	-	-
Intracranial hemorrhage	4 (0.2)	0 (0.0)	1 (0.3)	0 (0, 0)	0.48 (0.16, 1.45)
Major bleeding <sup>b</sup>	9 (0.6)	5 (0.4)	3 (0.9)	0.57 (0.19, 1.66)	1.05 (0.23, 4.77)
<b>5-year follow-up</b>					
<i>Major adverse cardiac and cerebrovascular event</i>	342 (24.7)	269 (24.3)	78 (27.1)	0.94 (0.80, 1.11)	0.99 (0.77, 1.27)
Major adverse cardiac event	328 (23.7)	262 (23.5)	75 (26)	0.96 (0.82, 1.14)	1.00 (0.77, 1.29)
All-cause death	115 (8.8)	90 (8.6)	22 (9.2)	0.99 (0.74, 1.31)	0.69 (0.42, 1.14)
Cardiovascular death	27 (2.2)	21 (1.9)	6 (2.8)	0.96 (0.52, 1.78)	0.79 (0.30, 2.10)
Myocardial infarction	35 (2.7)	31 (3)	4 (1.1)	1.03 (0.62, 1.69)	0.66 (0.25, 1.73)
Unplanned revascularization	221 (16.3)	182 (16.4)	51 (16.9)	1.02 (0.83, 1.24)	1.04 (0.76, 1.43)

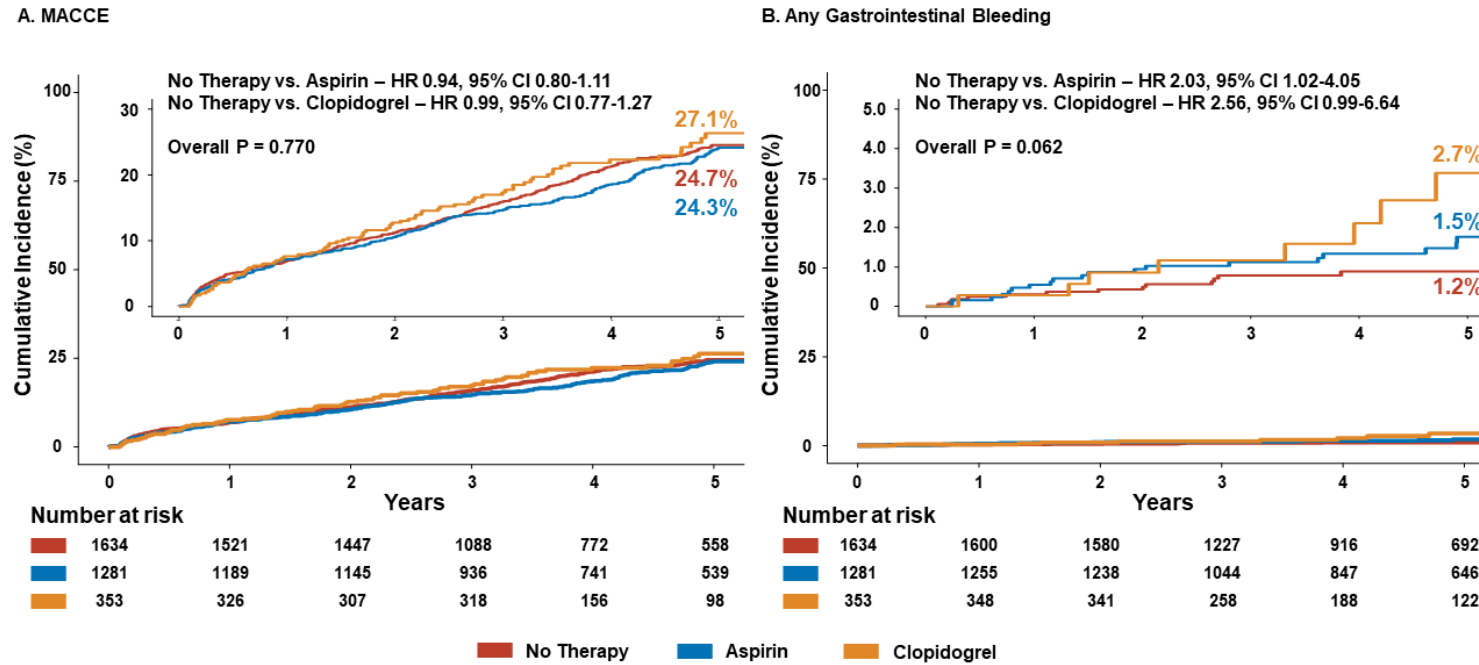
Stroke	27 (2.3)	21 (2.2)	10 (5)	0.85 (0.57, 1.27)	1.17 (0.64, 2.12)
<i>Safety outcomes</i>	24 (1.8)	26 (2.5)	12 (5.5)	1.48 (0.83, 2.64)	2.00 (0.93, 4.33)
Any gastrointestinal bleeding	15 (1.2)	17 (1.5)	7 (2.7)	2.03 (1.02, 4.05)	2.56 (0.99, 6.64)
With transfusion	13 (1.1)	11 (1)	6 (2.2)	1.44 (0.64, 3.20)	2.57 (0.86, 7.70)
Without transfusion	4 (0.3)	8 (0.6)	3 (1.6)	4.30 (1.12, 16.55)	3.90 (0.76, 20.12)
Intracranial hemorrhage	9 (0.6)	6 (0.6)	3 (1.1)	0.80 (0.26, 2.41)	1.25 (0.30, 5.11)
Major bleeding <sup>b</sup>	22 (1.7)	18 (1.8)	9 (3.3)	1.11 (0.57, 2.13)	1.89 (0.81, 4.41)

95%CI, 95% confidence interval.

<sup>a</sup> Adjusted for age, sex, comorbidities (hypertension, diabetes mellitus, dyslipidemia), chronic kidney disease, liver cirrhosis, cancer, anemia, thrombocytopenia, long-term nonsteroidal anti-inflammatory drug/steroid and discharge medication of proton pump inhibitor/H<sub>2</sub> blocker and statin.

<sup>b</sup> Major bleeding was defined as a composite of intracranial bleeding or gastrointestinal bleeding with documented transfusion.

**Figure 1 of the supplementary data.** Cumulative incidence of MACCE and gastrointestinal bleeding according to type of antiplatelet agents.



95%CI, 95% confidence interval, HR, hazard ratio; MACCE, major adverse cardiac and cerebrovascular events.

Kaplan-Meier curves and cumulative incidence of (A) MACCE and (B) gastrointestinal bleeding among 3 groups classified according to type of antiplatelet agent (no therapy vs aspirin vs clopidogrel). Hazard ratios were adjusted by age, sex, comorbidities (hypertension, diabetes mellitus, dyslipidemia), chronic kidney disease, liver cirrhosis, cancer, anemia, thrombocytopenia, long-term nonsteroidal anti-inflammatory drug/steroid and discharge medication with proton pump inhibitor/H<sub>2</sub> blocker.