Lahu S, et al. Body mass index and safety and efficacy of ticagrelor versus prasugrel in patients with acute coronary syndromes

SUPPLEMENTARY MATERIAL

The supplementary data contains the following items:

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ENDPOINT DEFINITIONS

Death

The primary endpoint includes death from any cause. In addition, the cause of death will be adjudicated. If autopsy has been performed autopsy reports should be solicited for determination of cause of death.

Cardiac death

Any death due to proximate cardiac cause (eg, myocardial infarction, low-output failure, fatal arrhythmia), unwitnessed death and death of unknown cause, and all procedure-related deaths, including those related to concomitant treatment, will be classified as cardiac death.

Vascular death

Death caused by noncoronary vascular causes, such as cerebrovascular disease, pulmonary embolism, ruptured aortic aneurysm, dissecting aneurysm, or other vascular diseases.

Noncardiovascular death

Any death not covered by the above definitions, such as death caused by infection, malignancy, sepsis, pulmonary causes, accident, suicide, or trauma.

All deaths are considered cardiac unless an unequivocal noncardiac cause can be established. Specifically, any unexpected death even in patients with coexisting potentially fatal noncardiac disease (eg, cancer, infection) should be classified as cardiac.

Myocardial infarction

The definition of myocardial infarction used in this study is adapted from the Third Universal Definition of Myocardial Infarction. Cardiac troponin will be used as the preferred biomarker. Creatine kinase-

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myocardial band (CK-MB) and creatine kinase (CK) values will be assessed concurrently and used if troponin values are not available.

1. Spontaneous myocardial infarction, not related to percutaneous coronary intervention or coronary artery bypass grafting

Detection of a rise and/or fall in cardiac biomarkers (preferably cardiac troponin) with at least 1 value above the 99th percentile upper reference limit (URL) and with at least 1 of the following:

- symptoms of ischemia

- development of pathological Q waves in the electrocardiogram (ECG)

- new or presumed new ST-segment-T-wave changes (ST-T changes) or new left bundle branch block

- imaging evidence of new loss of viable myocardium or new regional wall motion abnormality

2. Myocardial infarction after randomization and before percutaneous coronary intervention

Recurrent symptoms of cardiac ischemia or hemodynamic instability plus 1 of the following criteria:

- new or presumed new ST-segment-elevation or new left bundle branch block distinct from the last ECG or

- in patients with normal biomarkers and not presenting with ST-segment elevation myocardial infarction on admission: detection of a rise and/or fall in cardiac biomarkers (preferably cardiac troponin) with at least 1 value above the 99th percentile URL

- if the baseline troponin values are elevated and are stable or falling, then a rise of >20% is required

- development of new pathological Q waves in the ECG distinct from the coronary territory identified on admission

- imaging evidence of new loss of viable myocardium or new regional wall motion abnormality

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3. PCI-related myocardial infarction (within 48 hours after percutaneous coronary intervention)

Cardiac enzymes (troponin T or I, CK and CK-MB) will be determined on admission, 4 to 6 hours after admission [before angiography, in all patients with nonurgent percutaneous coronary intervention (PCI)] and from blood drawn from the arterial sheath in the cath lab immediately after sheath insertion and before PCI.

Biomarker course will be used for redefinition of baseline status in patients with non–ST-elevation acute coronary syndrome, ie, to differentiate unstable angina pectoris from non–ST-elevation acute myocardial infarction (NSTEMI) and to better describe biomarker course in NSTEMI patients.

Based on the 2 sets of biomarkers the baseline status will be redefined:

- If biomarkers on admission have been normal (initial diagnosis of unstable angina) and biomarkers are rising >99th percentile URL in the second sample (before catherization or from the arterial sheath) without recurrent symptoms of ischemia the initial diagnosis of unstable angina is revised to NSTEMI on admission.

- If biomarkers on admission have been elevated (diagnosis of NSTEMI) then it will be documented whether biomarker values are stable, rising or falling.

3.1. Unstable angina at baseline

In patients undergoing PCI with normal (<99th percentile URL) baseline troponin concentrations, elevations of troponin >5 x 99th percentile URL occurring within 48 hours of the procedure plus either

- evidence of prolonged ischemia (>20 minutes) as demonstrated by prolonged chest pain or

- ischemic ST-changes or new pathological Q waves, or

- angiographic evidence of a flow limiting complication, such as of loss of patency of a side branch, persistent slow-flow or no-reflow, embolization, or

- imaging evidence of new loss of viable myocardium or new regional wall motion abnormality will be defined as PCI-related myocardial infarction

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In patients with recent symptoms (<6 hours) before admission, no second blood sample before catherization, a short interval from biomarker assessment on admission and in the cath lab and normal values in both samples it will be challenging to differentiate an ongoing myocardial infarction from post-PCI myocardial infarction.

In this case the diagnosis of myocardial infarction requires criteria as defined in section 3.3 for patients with rising biomarkers.

3.2 NSTEMI with documented stable or falling biomarkers

If the baseline troponin values are elevated and are stable or falling, then a rise of >20% is required for the diagnosis of reinfarction. In addition, either

- symptoms suggestive of myocardial ischemia or hemodynamic instability, or

- new ischemic ECG changes or new left bundle branch block (LBBB), or

- angiographic loss of patency of a major coronary artery or a side branch or persistent slow- or no-flow or embolization, or

- imaging demonstration of new loss of viable myocardium or new regional wall motion abnormality are required.

3.3. NSTEMI with rising biomarkers or ST-segment elevation myocardial infarction:

- new symptoms suggestive of myocardial ischemia or hemodynamic instability ***plus***

- new ischemic ECG changes or new LBBB ***plus***

- angiographic loss of patency of a major coronary artery or a side branch or persistent slow- or

no-flow or embolization

4. Myocardial infarction related to coronary artery bypass grafting

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Myocardial infarction associated with coronary artery bypass grafting (CABG) is defined by elevation of cardiac biomarker values >10 x 99th percentile URL in patients with normal baseline Troponin values (<99th percentile URL) in addition to either

- new pathological Q waves or new LBBB, or

- angiographic documented new graft or new native coronary artery occlusion, or

- imaging evidence of new loss of viable myocardium or new regional wall motion abnormality.

5. Criteria for prior myocardial infarction

- pathological Q waves with or without symptoms in the absense of nonischemic causes –

- imaging evidence of a region of loss of viable myocardium that is thinned and fails to contract, in the absense of a nonischemic cause

- pathological findings of a prior myocardial infarction

- medical recording that clearly states that the patient had a myocardial infarction

Based on the Third universal definition, myocardial infarction will be classified into various types:

| Type 1 | Spontaneous myocardial infarction | Spontaneous myocardial infarction related to atherosclerotic plaque rupture, ulceration, fissuring, erosion, or dissection with resulting intraluminal thrombus in one or more of the coronary arteries leading to decreased myocardial blood flow or distal platelet emboli with ensuing myocyte necrosis. The patient may have underlying severe coronary artery disease (CAD) but on occasion nonobstructive or no CAD. |

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Type 2	Myocardial infarction secondary to an ischemic imbalance	In instances of myocardial injury with necrosis where a condition other than CAD contributes to an imbalance between myocardial oxygen supply and/or demand, eg, coronary endothelial dysfunction, coronary artery spasm, coronary embolism, tachy-/brady-arrhythmias, anemia, respiratory failure, hypotension, and hypertension with or without left ventricular hypertrophy.
Type 3	Myocardial infarction resulting in death when biomarker values are unavailable	Myocardial infarction resulting in death when biomarker values are unavailable Cardiac death with symptoms suggestive of myocardial ischemia and presumed new ischemic ECG changes or new LBBB, but death occurring before blood samples could be obtained, before cardiac biomarker could rise, or in rare cases cardiac biomarkers were not collected.
Type 4a	Myocardial infarction related to PCI	Myocardial infarction associated with PCI is arbitrarily defined by elevation of cardiac troponin (cTn) values 5 x 99th percentile URL in patients with normal baseline values (< 99th percentile

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URL) or a rise of cTn values 20% if the baseline values are elevated and are stable or falling. In addition, either (i) symptoms suggestive of myocardial ischemia, or (ii) new ischemic ECG changes or new LBBB, or (iii) angiographic loss of patency of a major coronary artery or a side branch or

persistent slow- or no-flow or embolization, or (iv) imaging demonstration of new loss of viable myocardium or new regional wall motion abnormality are required.

Type 4b	Myocardial infarction related to stent thrombosis	Myocardial infarction associated with stent thrombosis is detected by coronary angiography or autopsy in the setting of myocardial ischemia and with a rise and/ or fall of cardiac biomarkers values with at least one value above the 99th percentile URL.
Type 5	Myocardial infarction related to CABG	Myocardial infarction associated with CABG is arbitrarily defined by elevation of cardiac biomarker values 10 x 99th percentile URL in patients with normal baseline cTn values (99th percentile URL). In addition, either (i) new

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pathological Q waves or new LBBB, or (ii) angiographic documented new graft or new native coronary artery occlusion, or (iii) imaging evidence of new loss of viable myocardium or new regional wall motion abnormality.

Stroke

Stroke is defined as the new onset of focal or global neurological deficit caused by ischemia or hemorrhage within or around the brain and lasting for more than 24 hours or leading to death. The diagnosis of stroke requires confirmation by computed tomography, magnetic resonance imaging, or autopsy.

Stent thrombosis

Stent thrombosis will be classified according to the Academic Research Consortium:

Definite: Presence of an acute coronary syndrome with angiographic or autopsy evidence of thrombus or occlusion.

Probable: unexplained deaths within 30 days after the procedure or acute myocardial infarction involving the target-vessel territory without angiographic confirmation.

Possible: all unexplained deaths occurring at least 30 days after the procedure.

Early: 0 to 30 days

Late: 31 to 360 days

Very late >360 days

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Bleeding Academic Research Consortium definition of bleeding

Type 0: No bleeding

Type 1:	Bleeding that is not actionable and does not cause the patient to seek unscheduled performance of studies, hospitalization, or treatment by a health care professional; may include episodes leading to self-discontinuation of medical therapy by the patient without consulting a health care professional
Type 2:	Any overt, actionable sign of hemorrhage (eg, more bleeding than would be expected for a clinical circumstance, including bleeding found by imaging alone) that does not fit the criteria for type 3, 4, or 5 but does meet at least 1 of the following criteria: [51] requiring nonsurgical, medical intervention by a health care professional, *a)* leading to hospitalization or increased level of care, or *b)* prompting evaluation
Type 3	
Type 3a	Overt bleeding plus hemoglobin drop of 3 to <5 g/dL (provided hemoglobin drop is related to bleed)
	Any transfusion with overt bleeding
Type 3b	Overt bleeding plus hemoglobin drop ≥5 g/dL (provided hemoglobin drop is related to bleed)
	Cardiac tamponade
	Bleeding requiring surgical intervention for control (excluding dental, nasal, skin or hemorrhoid)
	Bleeding requiring intravenous vasoactive agents
Type 3c	Intracranial hemorrhage (does not include microbleeds or hemorrhagic transformation, does include intraspinal)
	Subcategories confirmed by autopsy or imaging or lumbar puncture

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        Intraocular bleed compromising vision

Type 4: CABG-related bleeding:

        Perioperative intracranial bleeding within 48 hours

        Reoperation after closure of sternotomy for the purpose of controlling bleeding

        Transfusion of ≥5 U whole blood or packed red blood cells within a 48-hour period

        Chest tube output ≥2L within a 24-hour period

Type 5: Fatal bleeding

Type 5a   Probable fatal bleeding; no autopsy or imaging confirmation but clinically suspicious

Type 5b   Definite fatal bleeding; overt bleeding or autopsy or imaging confirmation

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Table 1 of the supplementary data. Baseline characteristics according to BMI

Characteristic	Normal weight (BMI <25 kg/m^2) (n = 1084)	Overweight (BMI ≥25 to <30 kg/m^2) (n = 1890)	Obesity (BMI ≥30 kg/m^2) (n = 1013)	P
Age, y	67.0 ± 12.0	64.5 ± 11.8	62.1± 12.1	<.001
Sex				<.001
Female	360 (33.2)	348 (18.4)	241 (23.8)	
Male	724 (66.8)	1542 (81.6)	772 (76.2)	
Diabetes	162/1083 (15.0)	378 (20.0)	342/1012 (33.8)	<.001
Insulin-treated	49/1083 (4.5)	115 (6.1)	114/1012 (11.3)	<.001
Smoker	397/1077 (36.9)	622/1884 (33.0)	320/1009 (31.7)	.030
Hypertension	699/1082 (64.6)	1292/1887 (68.5)	804/1011 (79.5)	<.001
Hypercholesterolemia	591/1080 (54.7)	1069/1888 (56.6)	660/1011 (65.3)	<.001
Prior myocardial infarction	157/1083 (14.5)	299/1888 (15.8)	171 (16.9)	.322
Prior PCI	201/1082 (18.6)	447/1888 (23.7)	263 (26.0)	<.001
Prior CABG	54/1082 (5.0)	119 (6.3)	67 (6.6)	.233
Cardiogenic shock	26 (2.4)	30 (1.6)	8 (0.8)	.014
Systolic blood pressure, mmHg	142 ± 24.4	143 ± 24.4	145 ± 25.4	.005
Diastolic blood pressure, mmHg	81.0 ± 14.1	81.9 ± 14.0	83.0 ± 14.7	.005
Heart rate, beats/min	76.9 ± 16.6	75.7 ± 15.5	77.6 ± 15.2	.006
Body mass index, kg/m²	23.5 [22.0-24.4]	27.3 [26.1-28.4]	32.8 [31.1-35.4]	<.001
Weight < 60 kg	198 (18.3)	4 (0.2)	0	<.001
Creatinine, µmol/L	84.3 ± 29.1	88.8 ± 28.2	90.3 ± 29.9	<.001
Diagnosis at admission				.310
Unstable angina	128 (11.8)	238 (12.6)	144 (14.2)	
NSTEMI	488 (45.0)	888 (47.0)	465 (45.9)	
STEMI	468 (43.2)	764 (40.4)	404 (39.9)	
Coronary angiography	1079 (99.5)	1885 (99.7)	1009 (99.6)	.655
Treatment strategy				.211
PCI	904 (83.5)	1610 (85.3)	833 (82.3)	
CABG	20 (1.8)	40 (2.1)	23 (2.3)	
Conservative	159 (14.7)	237 (12.6)	156 (15.4)	

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BMI, body mass index; CABG, coronary artery bypass grafting; NSTEMI, non–ST-elevation myocardial infarction; PCI, percutaneous coronary intervention; STEMI, ST-elevation myocardial infarction.

Data are expressed as No. (%) or mean ± standard deviation, median [25th-75th] percentiles or counts (%).

Missing continuous data:

Normal weight group: diastolic blood pressure: 4 patients.

Overweight group: systolic blood pressure: 2 patients, diastolic blood pressure: 7 patients, heart rate: 2 patients.

Obesity group: systolic blood pressure: 1 patient, diastolic blood pressure: 3 patients.

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Table 2 of the supplementary data. Angiographic data according to BMI[a]

Characteristic	Normal weight (BMI <25 kg/m^2) (n = 1079)	Overweight (BMI ≥25 to <30 kg/m^2) (n = 1885)	Obesity (BMI ≥30 kg/m^2) (n = 1009)	*P*
Access site				.004
Femoral artery	705 (65.3)	1204 (63.9)	590 (58.5)	
Radial artery	368 (34.1)	676 (35.9)	411 (40.7)	
Other	6 (0.6)	5 (0.3)	8 (0.8)	
Number of diseased coronary arteries				.123
No obstructive CAD	104 (9.6)	133 (7.1)	96 (9.5)	
1-vessel disease	311 (28.8)	584 (31.0)	282 (27.9)	
2-vessel disease	290 (26.9)	507 (26.9)	271 (26.9)	
3-vessel disease	374 (34.7)	661 (35.1)	360 (35.7)	
Left ventricular ejection fraction[b]	51.2 ± 12.0	52.1 ± 11.0	51.9 ± 10.9	.145

Data are shown as counts (proportion; %) or mean ± standard deviation.

BMI, body mass index; CAD, coronary artery disease.

[a]Angiographic data were not available for 5 patients with normal weight, 5 patients with overweight, and 4 patients with obesity.

[b]Left ventricular ejection fraction was not available in 67 patients with normal weight, 107 patients with overweight, and 47 patients with obesity.

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Table 3 of the supplementary data. Procedural characteristics according to BMI

Characteristic	Normal weight (BMI <25 kg/m^2) (n = 904)	Overweight (BMI ≥25 to <30 kg/m^2) (n = 1610)	Obesity (BMI ≥30 kg/m^2) (n = 833)	*P*
Target vessel				.013
Left main coronary artery	23 (2.5)	39 (2.4)	11 (1.32)	
LAD coronary artery	418 (46.2)	706 (43.9)	327 (39.3)	
Left circumflex coronary artery	160 (17.7)	347 (21.6)	181 (21.7)	
Right coronary artery	287 (31.7)	494 (30.7)	296 (35.5)	
Bypass graft	16 (1.8)	24 (1.5)	18 (2.2)	
Complex lesion (type B2/C)	554 (61.3)	935 (58.1)	478 (57.4)	.188
More than 1 lesion treated	325 (36.0)	558 (34.7)	282 (33.9)	.647
TIMI flow grade before the intervention				.009
0	278 (30.8)	596 (37.0)	295 (35.4)	
1	71 (7.85)	121 (7.5)	83 (10.0)	
2	204 (22.6)	344 (21.4)	185 (22.2)	
3	351 (38.8)	549 (34.1)	270 (32.4)	
TIMI flow grade after the intervention				.407
0	8 (0.9)	15 (0.9)	9 (1.1)	
1	3 (0.3)	11 (0.7)	2 (0.2)	
2	29 (3.2)	42 (2.6)	15 (1.8)	
3	864 (95.6)	1542 (95.8)	807 (96.9)	
Type of intervention				
Drug-eluting stent	818 (90.5)	1433 (89.0)	762 (91.5)	.133
Bare-metal stent	1 (0.1)	7 (0.4)	4 (0.5)	.313
Bioresorbable vascular scaffold	53 (5.9)	96 (6.0)	44 (5.3)	.783
Drug-eluting balloon	23 (2.5)	29 (1.8)	10 (1.2)	.114
Plain balloon angioplasty	26 (2.9)	54 (3.4)	22 (2.6)	.586
Maximal stent diameter, mm	3.15 ± 0.49	3.19 ± 0.49	3.22 ± 0.52	.020
Total stented length, mm	30.7 ± 16.9	30.0 ± 16.6	31.0 ± 17.4	.298
Successful PCI	884 (97.8)	1577 (98.0)	812 (97.5)	.754

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Periprocedural antithrombotic medication				
Aspirin	806 (89.2)	1443 (89.6)	764 (91.7)	.158
Unfractionated heparin	838 (92.7)	1533 (95.2)	776 (93.2)	.018
Low molecular weight heparin	27 (3.0)	67 (4.2)	45 (5.4)	.042
Bivalirudin	79 (8.7)	117 (7.3)	70 (8.4)	.362
GPIIb/IIIa inhibitor	93 (10.3)	217 (13.5)	103 (12.4)	.066

Data are shown as counts (proportions; %) or mean ± standard deviation.

BMI, body mass index; GPIIb/IIIa, glycoprotein IIb/IIIa; LAD, left anterior descending; PCI, percutaneous

coronary intervention; TIMI, Thrombolysis in Myocardial Infarction.

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Table 4 of the supplementary data. Diagnosis and drug therapy at discharge according to BMI[a]

Characteristic	Normal weight (BMI <25 kg/m^2) (n = 1081)	Overweight (BMI ≥25 to <30 kg/m^2) (n = 1885)	Obesity (BMI ≥30 kg/m^2) (n = 1013)	*P*
Final diagnosis of acute coronary syndrome	974 (90.1)	1731 (91.8)	908 (89.6)	.097
Unstable angina	93/974 (9.6)	161/1731 (9.3)	107/908 (11.8)	
NSTEMI	426/974 (43.7)	811/1731 (46.9)	412/908 (45.4)	
STEMI	455/974 (46.7)	759/1731 (43.8)	389/908 (42.8)	
Therapy at discharge[b]				
Aspirin	995/1061 (93.8)	1774/1862 (95.3)	947/1002 (94.5)	.216
Ticagrelor	429/1061 (40.4)	768/1862 (41.2)	409/1002 (40.8)	.909
Prasugrel	423/1061 (39.9)	779/1862 (41.8)	399/1002 (39.8)	.447
Clopidogrel	65/1061 (6.1)	92/1862 (4.9)	49/1002 (4.9)	.324
Oral anticoagulant drugs	55/1061 (5.2)	73/1862 (3.9)	53/1002 (5.3)	.145
Beta blocking agents	837/1061 (78.9)	1561/1862 (83.8)	864/1002 (86.2)	<.001
ACE inhibitor/ARB	873/1061 (82.3)	1575/1862 (84.6)	879/1002 (87.7)	.003
Statin	965/1061 (91.0)	1723/1862 (92.5)	927/1002 (92.5)	.267

ACE, angiotensin-converting enzyme; ARB, angiotensin receptor blocker; BMI, body mass index; NSTEMI, non-ST-segment elevation myocardial infarction; STEMI, ST-segment elevation myocardial infarction.

Data are shown as counts (proportions; %).

[a] Not available for patients who withdrew consent before discharge.

[b] Shown for patients discharged alive, not available for patients who withdrew consent.

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Table 5 of the supplementary data. Angiographic data according to study drug[a]

Characteristic	Normal weight (BMI<25 kg/m^2) (n = 1079)			Overweight (BMI ≥25 to <30 kg/m^2) (n = 1885)			Obesity (BMI ≥30 kg/m^2) (n = 1009)		
	Ticagrelor (n = 548)	Prasugrel (n = 531)	*P*	Ticagrelor (n = 942)	Prasugrel (n = 943)	*P*	Ticagrelor (n = 501)	Prasugrel (n = 508)	*P*
Access site			.079			.447			.694
Femoral artery	341 (62.2)	364 (68.5)		614 (65.2)	590 (62.6)		290 (57.9)	300 (59.1)	
Radial artery	203 (37.0)	165 (31.1)		325 (34.5)	351 (37.2)		208 (41.5)	203 (40.0)	
Other	4 (0.7)	2 (0.4)		3 (0.3)	2 (0.2)		3 (0.6)	5 (1.0)	
Number of diseased coronary arteries			.144			.966			.536
No obstructive CAD	58 (10.6)	46 (8.7)		68 (7.2)	65 (6.9)		43 (8.6)	53 (10.4)	
1-vessel disease	163 (29.7)	148 (27.9)		287 (30.5)	297 (31.5)		149 (29.7)	133 (26.2)	
2-vessel disease	131 (23.9)	159 (29.9)		255 (27.1)	252 (26.7)		132 (26.3)	139 (27.4)	
3-vessel disease	196 (35.8)	178 (33.5)		332 (35.2)	329 (34.9)		177 (35.3)	183 (36.0)	
Left ventricular ejection fraction [b]	51.1 ± 12.1	51.3 ± 11.9	.763	51.6 ± 11.1	52.5 ± 10.8	.076	52.0 ± 10.7	51.8 ± 11.0	.762

BMI, body mass index; CAD, coronary artery disease.

Data are shown as counts (proportion; %) or mean ± standard deviation.

[a]Angiographic data were not available in 5 patients with normal weight (4 in the ticagrelor group and 1 in the prasugrel group), 5 patients with overweight (3 in the ticagrelor group and 2 in the prasugrel group), and 4 patients with obesity (2 in each group).

[b]Left ventricular ejection fraction was not available in 67 patients with normal weight (32 in the ticagrelor group and 35 in the prasugrel group), 107 patients with overweight (55 in the ticagrelor group and 52 in the prasugrel group), and 47 patients with obesity (23 in the ticagrelor group and 24 in the prasugrel group).

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Table 6 of the supplementary data. Procedural characteristics according to study drug

Characteristic	Normal weight (BMI <25 kg/m^2) (n = 904)			Overweight (BMI ≥25 to <30 kg/m^2) (n = 1610)			Obesity (BMI ≥30 kg/m^2) (n = 833)		
	Ticagrelor (n = 453)	Prasugrel (n = 451)	P	Ticagrelor (n = 791)	Prasugrel (n = 819)	P	Ticagrelor (n = 421)	Prasugrel (n = 412)	P
Target vessel			.659			.844			.754
Left main coronary artery	13 (2.9)	10 (2.2)		18 (2.3)	21 (2.6)		5 (1.2)	6 (1.5)	
LAD coronary artery	213 (47.0)	205 (45.5)		356 (45.0)	350 (42.7)		172 (40.9)	155 (37.6)	
Left circumflex coronary artery	85 (18.8)	75 (16.6)		166 (21.0)	181 (22.1)		93 (22.1)	88 (21.4)	
Right coronary artery	135 (29.8)	152 (33.7)		241 (30.5)	253 (30.9)		141 (33.5)	155 (37.6)	
Bypass graft	7 (1.5)	9 (2.0)		10 (1.3)	14 (1.7)		10 92.4)	8 (1.9)	
Complex lesion (type B2/C)	279 (61.6)	275 (61.0)	.904	459 (58.0)	476 (58.1)	>.999	233 (55.3)	245 (59.5)	.257
More than 1 lesion treated	161 (35.5)	164 (36.4)	.851	269 (34.0)	289 (35.3)	.626	137 (32.5)	145 (35.2)	.462
TIMI flow grade before the intervention			.647			.773			.403
0	140 (30.9)	138 (30.6)		295 (37.3)	301 (36.8)		154 (36.6)	141 (34.2)	
1	32 (7.1)	39 (8.7)		54 (6.8)	67 (8.2)		38 (9.0)	45 (10.9)	
2	98 (21.6)	106 (23.5)		172 (21.7)	172 (21.0)		86 (20.4)	99 (24.0)	
3	183 (40.4)	168 (37.3)		270 (34.1)	279 (34.1)		143 (34.0)	127 (30.8)	
TIMI flow grade after the intervention			.826			.206			>.999
0	3 (0.7)	5 (1.1)		9 (1.1)	6 (0.7)		5 (1.2)	4 (1.0)	
1	1 (0.2)	2 (0.4)		7 (0.9)	4 (0.5)		1 (0.2)	1 (0.2)	
2	15 (3.3)	14 (3.1)		26 (3.3)	16 (2.0)		8 (1.9)	7 (1.7)	
3	434 (95.8)	430 (95.3)		749 (94.7)	793 (96.8)		407 (96.7)	400 (97.1)	
Type of intervention									
Drug-eluting stent	405 (89.4)	413 (91.6)	.318	696 (88.0)	737 (90.0)	.230	385 (91.4)	377 (91.5)	>.999
Bare-metal stent	1 (0.2)	0 (0.0)	>.999	0 (0.0)	7 (0.9)	.016	3 (0.7)	1 (0.2)	.624

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Bioresorbable vascular scaffold	27 (6.0)	26 (5.8)	>.999	53 (6.7)	43 (5.3)	.261	19 (4.5)	25 (6.1)	.396
Drug-eluting balloon	15 (3.3)	8 (1.8)	.209	18 (2.3)	11 (1.3)	.223	3 (0.7)	7 (1.7)	.219
Plain balloon angioplasty	13 (2.9)	13 (2.9)	>.999	33 (4.2)	21 (2.6)	.098	11 (2.6)	11 (2.7)	>.999
Maximal stent diameter, mm	3.15 ± 0.5	3.15 ± 0.5	.967	3.18 ± 0.5	3.21 ± 0.5	.152	3.23 ± 0.5	3.20 ± 0.5	.535
Total stented length, mm	29.8 ± 15.5	31.7 ± 18.1	.097	30.7 ± 17.1	29.3 ± 16.0	.087	31.9 ± 17.7	30.2 ± 17.0	.179
Successful PCI	448 (98.9)	436 (96.7)	.041	771 (97.5)	806 (98.4)	.247	410 (97.4)	402 (97.6)	>.999
Periprocedural antithrombotic medication									
Aspirin	394 (87.0)	412 (91.4)	.044	711 (89.9)	732 (89.4)	.800	390 (92.6)	374 (90.8)	.396
Unfractionated heparin	425 (93.8)	413 (91.6)	.242	750 (94.8)	783 (95.6)	.533	395 (93.8)	381 (92.5)	.526
Low molecular weight heparin	17 (3.8)	10 (2.2)	.246	35 (4.4)	32 (3.9)	.693	22 (5.2)	23 (5.6)	.941
Bivalirudin	39 (8.6)	40 (8.9)	.984	53 (6.7)	64 (7.8)	.444	33 (7.8)	37 (9.0)	.639
GPIIb/IIIa inhibitor	47 (10.4)	46 (10.2)	>.999	117 (14.8)	100 (12.2)	.149	52 (12.4)	51 (12.4)	>.999

BMI, body mass index; GPIIb/IIIa, glycoprotein IIb/IIIa; LAD, left anterior descending; PCI, percutaneous coronary intervention; TIMI, Thrombolysis in Myocardial Infarction.

Data are shown as counts (proportions; %) or mean ± standard deviation.

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Table 7 of the supplementary data Diagnosis and drug therapy at discharge according to study drug[a]

Characteristic	Normal weight (BMI <25 kg/m^2) (n = 1081)			Overweight (BMI ≥25 to <30 kg/m^2) (n = 1885)			Obesity (BMI ≥30 kg/m^2) (n = 1013)		
	Ticagrelor (n = 549)	Prasugrel (n = 532)	P	Ticagrelor (n = 942)	Prasugrel (n = 943)	P	Ticagrelor (n = 503)	Prasugrel (n = 510)	P
Final diagnosis of acute coronary syndrome	497 (90.5)	477 (89.7)	.708	865 (91.8)	866 (91.8)	>.999	456 (90.7)	452 (88.6)	.339
Unstable angina	55/497 (11.1)	38/532 (8.0)		76/865 (8.8)	85/866 (9.8)		58/456 (12.7)	49/452 (10.8)	
NSTEMI	220/497 (44.3)	206/532 (43.2)		402/865 (46.5)	409/866 (47.2)		206/456 (45.2)	206/452 (45.6)	
STEMI	222/497 (44.7)	233/532 (48.8)		387/865 (44.7)	372/866 (43.0)		192/456 (42.1)	197/452 (43.6)	
Therapy at discharge[b]									
Aspirin	496/539 (92.0)	499/522 (95.6)	.023	882/825 (95.4)	892/937 (95.2)	.962	476/499 (95.4)	471/503 (93.6)	.281
Ticagrelor	425/539 (78.8)	4/522 (0.8)	<.001	760/825 (82.2)	8/937 (0.9)	<.001	407/499 (81.6)	2/503 (0.4)	<.001
Prasugrel	5/539 (0.9)	418/522 (80.1)	<.001	10/925 (1.1)	769/937 (82.1)	<.001	6/499 (1.2)	393/503 (78.1)	<.001
Prasugrel 5 mg	-	156/418 (37.3)	-	-	150/769 (19.5)	-	-	76/393 (19.3)	-
Clopidogrel	32/539 (5.9)	33/522 (6.3)	.894	36/925 (3.9)	56/937 (6.0)	.049	21/499 (4.2)	28/503 (5.6)	.395
Oral anticoagulant drugs	27/539 (5.0)	28/522 (5.4)	.903	31/925 (3.4)	42/937 (4.5)	.255	23/499 (4.6)	30/503 (6.0)	.414

Beta blocking agents	423/539 (78.5)	414/522 (79.3)	.797	774/925 (83.7)	787/937 (84.0)	.903	434/499 (87.0)	430/503 (85.5)	.554
ACE inhibitor/ARB	433/539 (80.3)	440/522 (84.3)	.108	780/925 (84.3)	795/937 (84.8)	.805	437/499 (87.6)	442/503 (87.9)	.962
Statin	482/539 (89.4)	483/522 (92.5)	.098	856/925 (92.5)	867/937 (92.5)	>.999	462/499 (92.6)	465/503 (92.4)	>.999

ACE, angiotensin-converting enzyme; ARB, angiotensin receptor blocker; BMI, body mass index; NSTEMI, non–ST-segment elevation myocardial infarction;

STEMI, ST-segment elevation myocardial infarction.

Data are shown as counts (proportions; %).

[a] Not available for patients who withdrew consent before discharge,

[b] Shown for patients discharged alive, not available for patients who withdrew consent.

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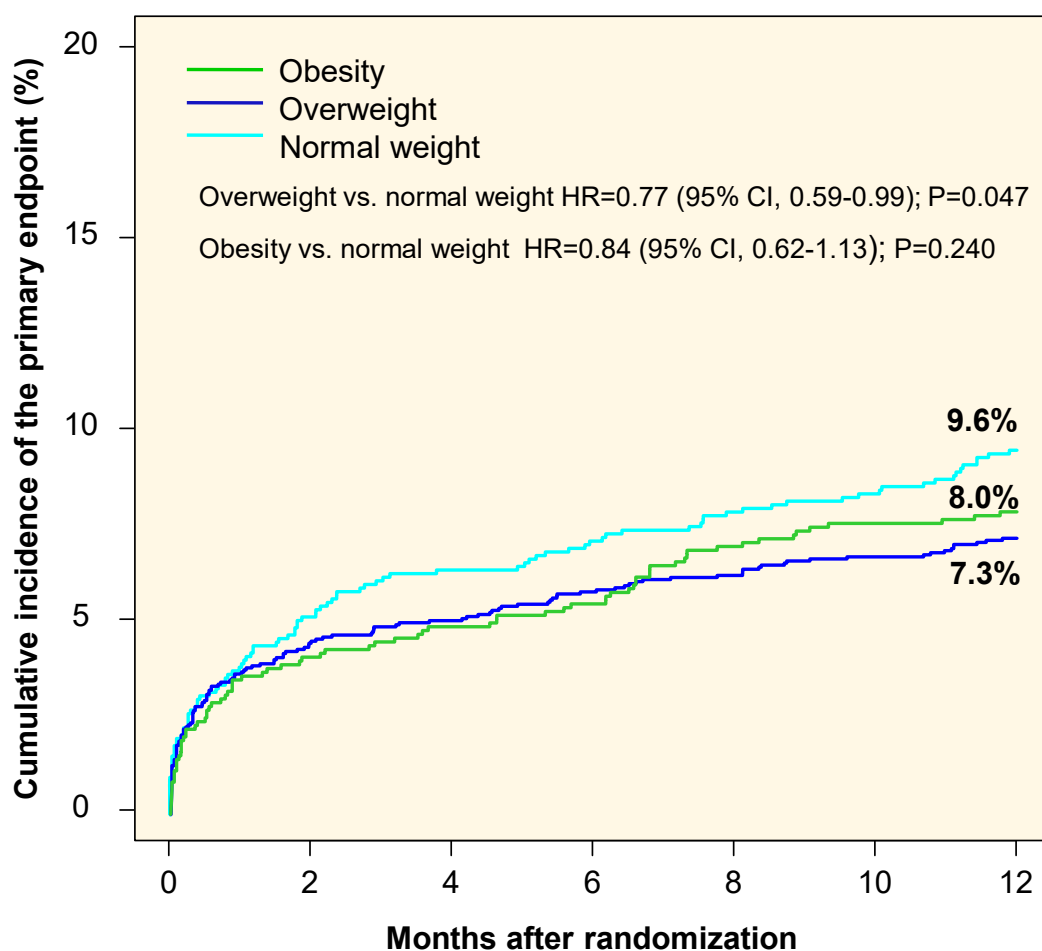
Figure 1 of the supplementary data. One-year cumulative incidence of the primary endpoint for patients with normal weight, overweight and obesity.

The primary endpoint was evaluated according to the intention-to-treat principle. 95%CI, 95%confidence interval; HR, hazard ratio.
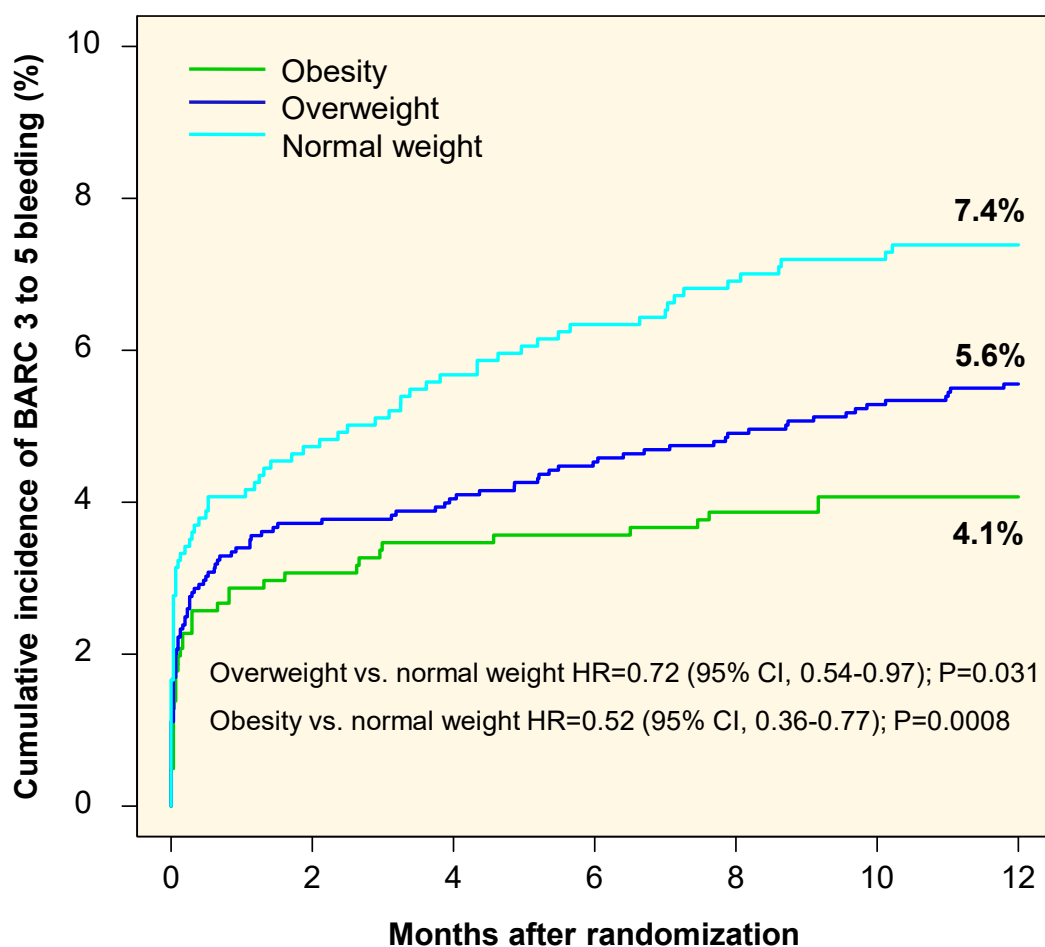
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Figure 2 of the supplementary data. Cumulative incidence of the secondary (safety) endpoint at 1 year for patients with normal weight, overweight, and obesity.

BARC, Bleeding Academic Research Consortium; 95%CI, 95%confidence interval; HR, hazard ratio.

BARC type 3 to 5 bleeding was analyzed according to the intention-to-treat principle.