## **Supplementary Online Content**

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This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1 Baseline patient characteristics in the per- protocol set population

	No.(%	)			
	Per protocol set				
Characteristic	Argatroban (n=292)		Control		
			(n=272)		
Age, median (IQR), y	66 (57	,74)	66 (56	,74)	
Men	185 (63.4)		173 (63.6)		
Currently smokes tobacco	99 (33	.9)	73 (26	(26.8)	
Comorbidities					
Hypertension	212 (7	2.6)	182 (6	82 (66.9)	
Diabetes	82 (28	.1)	77 (28.3)		
Prior ischemic or hemorrhagic stroke	37 (12	37 (12.7)		31 (11.4)	
Hyperlipidemia	33 (10	33 (10.9)		28 (10.3)	
Coronary heart disease	4 (1.4)	4 (1.4)		7 (2.6)	
Body mass index, median (IQR)	23.4	(21.0,	24.1	(22.0,	
	25.2)		26.1)		
Blood pressure at randomization					
Systolic					
Median (IQR), mmHg	150		150	(136,	
	(140,1)	67)	168)		
>140mmHg					
Diastolic					
Median (IQR), mmHg	84 (76,92)		84 (77, 94)		
>90mmHg					
Estimated premorbid function (mRS score)					
No symptoms (score of 0)	275 (9	4.2)	258 (9	4.6)	
Symptoms without any disability (score of 1)	17 (5.8)		14 (5.1)		
NIHSS score at randomization, median (IQR)	8 (6,10)		8 (5,10)		
NIHSS score before deterioration, median (IQR)	4 (2, 6)		3 (2, 6)		
Time from symptom onset to randomization, median	24 (15	,34)	23 (12	,31)	
(IQR), h					
Antiplatelet therapy throughout procedure					
Monotherapy	230 (7	8.8)	184 (6	7.6)	
Dual antiplatelet therapy	62 (21	.2)	88 (32.	.4)	
Reperfusion treatment	53 (18	.2)	58 (21	.3)	
Intravenous thrombolysis treatment	51 (17	.5)	56 (20	.6)	
Endovascular treatment	3 (1.0)		4 (1.5)		

eTable 2 . Primary Analysis of Outcomes in the per-protocol Set

	No.(%)		Unadjusted			Adjusted <sup>a</sup>		
Outcome	Argatroban (n=292)	Control (n=272)	Risk difference (95% CI)	Risk ratio (95% CI)	P value	Risk difference (95% CI)	Risk ratio (95% CI)	P value
Primary								
mRS score of 0 to 3 at $90d^{b,c}$	236/292(80.8%)	200/272(73.5%)	7.3% (0.4% to 14.2%)	1.099 (1.005 to 1.203)	0.038	7.1% (0.1% to 14.0%)	1.096 (1.001 to 1.201)	0.048
Secondary								
mRS score of 0 to 2 at 90d	163/292(55.8%)	138/272(50.7%)	5.1% (-3.2% to 13.3%)	1.100 (0.942 to 1.285)	0.228	4.3% (-3.9% to 12.5%)	1.087 (0.929 to 1.272)	0.299
NIHSS score at 90d, median (IQR) <sup>d</sup>	2 (0, 4)	2 (0, 4)	MD: -0.982 (-2.881 to 0.917)		0.311	AMD: -1.058 (-2.958 to 0.841)		0.275
Barthel scale score at 90d, median (IQR)	90 (70,100)	90 (55,100)	MD: 4.961 (-0.351 to 10.272)		0.068	AMD: 4.615 (-0.618 to 9.849)		0.084
mRS score distribution at 90de	2 (1-3)	2 (1-4)	OR: 0.707 (0.528 to 0.947)		0.020	OR: 0.723 (0.538 to 0.971)		0.031
Stroke or other vascular events within 90d	17/292(5.8%)	18/272(6.6%)	-0.8% (-4.8% to 3.2%)	0.879 (0.459 to 1.680)	0.696	-0.7% (-4.7% to 3.4%)	0.902 (0.465 to 1.743)	0.757

Abbreviations: mRS, modified Rankin Scale; NIHSS, National Institutes of Health Stroke Scale; MD, mean difference; AMD adjusted mean difference a Adjusted for prespecified prognostic variables (age, sex, NIHSS score at randomization, time from the onset of symptoms to randomization) b mRS scores range from 0 to 6; a score of 0 indicates no symptoms; 1, symptoms without clinical significant disability; 2, slight disability; 3, moderate disability; 4,

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moderately severe disability; 5, severe disability; and 6, death.

c calculated using a generalized linear model

d NIHSS scores range from 0 to 42, with higher scores indicating greater stroke severity. It is analyzed using a generalized linear model.

e as a post hoc analysis, this outcome was used to describe a shift in measures of functioning according to the full range of scores on the mRS at 90 days.

eTable 3 Primary Outcome by Subgroups in the Full Analysis Set

Subgroups	Patients	Argatroban	Control group	Adjusted Risk Ratio	P value	Interactio
	No.	group		(95% CI)		n p value
Age (years)						
< 65	282	122/143 (85.3)	110/139 (79.1)	1.068 (0.955 to 1.194)	0.248	0.747
≥65	319	118/155 (76.1)	112/164 (68.3)	1.110 (0.965 to 1.278)	0.144	
Sex						
Female	219	89/109 (81.7)	72/110 (65.5)	1.235 (1.049 to 1.455)	0.012	0.046
Male	382	151/189 (79.9)	150/193 (77.7)	1.023 (0.920 to 1.138)	0.671	
NIHSS score at randomization						
≤8	360	143/178 (80.3)	139/182 (76.4)	1.046 (0.936 to 1.169)	0.430	0.104
>8	241	97/120 (80.8)	83/121 (68.6)	1.170 (1.004 to 1.385)	0.045	
Reperfusion therapy						
Yes	118	40/54 (74.1)	46/64 (71.9)	1.005 (0.793 to 1.274)	0.964	0.384
No	483	200/244 (82.0)	176/239(73.6)	1.115 (1.012 to 1.229)	0.029	
Time from the onset of index event symptoms to						
randomization (hours)						
≤24	328	128/161 (79.5)	130/167 (77.8)	1.025 (0.913 to 1.151)	0.677	0.112
>24	273	112/137 (81.8)	92/136 (67.6)	1.188 (1.031 to 1.369)	0.018	
DAPT						0.412
Yes	167	53/63 (84.1)	74/104 (71.2)	1.169 (0.978-1.394)	0.087	
No	434	187/235 (79.6)	148/199 (74.4)	1.072 (0.967-1.190)	0.188	
TOAST						0.662
LAA	268	101/132 (76.5)	98/136 (72.1)	1.065 (0.923-1.228)	0.389	
SVO	241	101/121 (84.3)	90/120 (75.0)	1.128 (0.980-1.026)	0.071	

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	Other etiologies	69	31/38 (81.6)	24/31 (77.4)	1.026 (0.792-1.334)	0.845
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DAPT, dual antiplatelet therapy; TOAST, Trial of Org 10172 in Acute Stroke Treatment; LAA, large-artery atherosclerosis; SVO, small-vessel occlusion; Other etiologies, including cardioembolism, stroke of other determined etiology and stroke of undetermined etiology.