

On-line Table 1: Subgroup analysis of cardiac embolism occlusion before and after matching^a

	Before Matching			After Matching		
	ST 6 (n = 146)	ST 4 (n = 177)	P	ST 6 (n = 93)	ST 4 (n = 93)	P
Baseline characteristics						
Age (median) (IQR) (yr)	71 (61–77)	67 (59–75)	.053	69 (58–75)	67 (60–76)	.348
Women (No.) (%)	80 (54.8%)	95 (53.7%)	.84	45 (48.4%)	53 (57%)	.291
Hypertension (No.) (%)	85 (58.2%)	107 (60.5%)	.684	57 (61.3%)	62 (66.7%)	.458
Diabetes mellitus (No.) (%)	23 (15.8%)	35 (19.8%)	.349	16 (17.2%)	21 (22.6%)	.486
Current smoker (No.) (%)	31 (21.2%)	32 (18.1%)	.477	24 (25.8%)	15 (16.1%)	.151
SBP (median) (IQR) (mm Hg)	145 (125–160)	141 (128–160)	.791	144 (27)	146 (26)	.769
GLU (median) (IQR) (mmol/L)	7 (6.13–8.9)	6.7 (5.82–8.62)	.117	6.83 (6.08–9.10)	6.73 (5.83–8.62)	.534
ASPECTS (median) (IQR)	9 (7–10)	9 (8–10)	.101	9 (8–10)	9 (7–10)	.620
NIHSS (median) (IQR)	18 (14–23)	17 (13–21)	.267	16 (13–21)	18 (14–22)	.598
IV (No.) (%)	49 (33.6%)	55 (31.1%)	.634	30 (32.3%)	33 (35.5%)	.749
Workflow times						
Onset to visit (median) (IQR) (min)	120 (60–220)	117 (52–208)	.448	98 (40–185)	80 (39–194)	.602
Onset to treatment (median) (IQR) (min)	242 (186–341)	250 (195–328)	.697	230 (182–310)	240 (189–308)	1.000
Artery occlusion site						
ICA (No.) (%)	86 (58.9%)	46 (26%)	<.001	43 (46.2%)	37 (39.8%)	.146
MCA (No.) (%)	60 (41.1%)	131 (74%)	<.001	50 (53.8%)	56 (60.2%)	.146
Collateral flow grade (ASITN/SIR)						
0–1 (No.) (%)	103 (71%)	82 (46.6%)	<.001	57 (61.3%)	60 (64.5%)	.607
2–3 (No.) (%)	42 (29%)	94 (53.4%)		36 (38.7%)	33 (35.5%)	
Clinical outcomes						
mTICI			.171			.678
0–2a (No.) (%)	28 (19.2%)	24 (13.6%)		16 (17.2%)	13 (14%)	
2b–3 (No.) (%)	118 (80.8%)	153 (86.4%)		77 (82.8%)	80 (86%)	
Workflow times						
Time from puncture to revascularization (median) (IQR) (min)	100 (72–135)	92 (68–133)	.202	104 (70–133)	100 (71–157)	.836
Time from stent deployment to reperfusion (median) (IQR) (min)	57 (30–83)	43 (20–73)	.015	58 (30–83)	47 (23–100)	1.000
Passes of thrombectomy						
Median (IQR)	2 (2–3)	2 (1–3)	.082	2 (1–3)	2 (1–3)	1.000
≤2 (No.) (%)	82 (56.2%)	115 (65%)	.106	55 (59.1%)	62 (66.7%)	0.324
≤3 (No.) (%)	121 (82.9%)	149 (84.2%)	.753	81 (87.1%)	76 (81.7%)	.405
Rescue therapy (No.) (%)	59 (40.4%)	71 (40.1%)	.957	40 (43%)	38 (40.9%)	.877
Complications						
Arterial perforation (No.) (%)	2 (1.4%)	1 (0.6%)	.591	2 (2.2%)	0	.500
Vessel dissection (No.) (%)	2 (1.4%)	4 (2.3%)	.693	1 (1.1%)	2 (2.2%)	.625
Stent fracture (No.) (%)	1 (0.7%)	0	.270	1 (1.1%)	0	1.000
Isolated SAH (No.) (%)	4 (2.7%)	3 (1.7%)	.705	2 (2.2%)	1 (1.1%)	1.000
Symptomatic ICH (No.) (%)	28 (19.2%)	38 (21.5%)	.611	14 (15.1%)	21 (22.6%)	.23
Asymptomatic ICH (No.) (%)	57 (39%)	58 (32.8%)	.241	36 (38.7%)	30 (32.3%)	.44
mRS 90 days						
0–2 (No.) (%)	45 (30.8%)	71 (40.1%)	.083	32 (34.4%)	37 (39.8%)	.499
3–6 (No.) (%)	101 (69.2%)	106 (59.9%)		61 (65.6%)	56 (60.2%)	
In-hospital mortality (No.) (%)	52 (35.6%)	44 (24.9%)	.035	23 (24.7%)	27 (29%)	.617

Note:—ASITN/SIR indicates American Society of Interventional and Therapeutic Neuroradiology, Society of Interventional Radiology; GLU, glucose; SBP, systolic blood pressure; ICH, intracerebral hemorrhage.

^aThe logistic regression model used for the determination of the propensity score included the following factors: age, sex, time from onset to groin puncture, NIHSS score, ASPECTS, site of vessel occlusion, and collateral blood flow.

On-line Table 2: Subgroup analysis of ICA occlusion before and after matching^a

	Before Matching			After Matching		
	ST 6 (n = 155)	ST 4 (n = 86)	P	ST 6 (n = 74)	ST 4 (n = 74)	P
Baseline characteristics						
Age (median) (IQR) (yr)	68 (60–75)	65 (55–74)	.166	66 (56–73)	67 (57–76)	.403
Women (No.) (%)	70 (45.2%)	36 (41.9%)	.621	32 (43.2%)	33 (44.6%)	1.000
AF (No.) (%)	80 (51.6%)	39 (45.3%)	.351	41 (55.4%)	33 (44.6%)	.291
Hypertension (No.) (%)	92 (59.4%)	50 (58.1%)	.854	48 (64.9%)	44 (59.5%)	.596
Diabetes mellitus (No.) (%)	27 (17.4%)	14 (16.3%)	.821	12 (16.2%)	13 (17.6%)	1.000
Current smoker (No.) (%)	35 (22.6%)	21 (24.4%)	.746	16 (21.6%)	19 (25.7%)	.678
SBP (median) (IQR) (mm Hg)	143 (130–160)	147 (130–160)	.822	143 (130–165)	147 (130–160)	.906
GLU (median) (IQR) (mmol/L)	7 (5.9–8.86)	6.81 (5.71–8.70)	.214	6.64 (5.60–8.75)	6.86 (5.76–8.82)	.727
ASPECTS (median) (IQR)	9 (7–10)	10 (8–10)	.001	9 (8–10)	10 (8–10)	.755
NIHSS (median) (IQR)	17 (13–21)	18 (14–21)	.306	17 (13–21)	18 (14–21)	.275
IV (No.) (%)	49 (31.6%)	26 (30.2%)	.825	28 (37.8%)	22 (29.7%)	.361
Workflow times						
Onset to visit (median) (IQR) (min)	125 (83–224)	115 (50–206)	.033	120 (65–195)	120 (50–210)	.907
Onset to treatment (median) (IQR) (min)	281 (213–350)	247 (189–326)	.034	240 (201–314)	243 (185–331)	.815
Stroke subtype						
Atherosclerotic (No.) (%)	55 (35.5%)	33 (38.4%)	.655	27 (36.5%)	28 (37.8%)	1.000
Cardiac embolism (No.) (%)	86 (55.5%)	46 (53.5%)	.766	41 (55.4%)	40 (54.1%)	1.000
Other undetermined etiology (No.) (%)	14 (9%)	7 (8.1%)	.814	6 (8.1%)	6 (8.1%)	1.000
Collateral flow grade (ASITN/SIR)			.882			.864
0–1 (No.) (%)	97 (63%)	55 (64%)		49 (66.2%)	47 (63.5%)	
2–3 (No.) (%)	57 (37%)	31 (36%)		25 (33.8%)	27 (36.5%)	
Clinical outcomes						
mTICI			.826			1.000
0–2a (No.) (%)	38 (24.5%)	20 (23.3%)		16 (21.6%)	17 (23%)	
2b–3 (No.) (%)	117 (75.5%)	66 (76.7%)		58 (78.4%)	57 (77%)	
Workflow times						
Time from puncture to revascularization (median) (IQR) (min)	120 (88–165)	110 (82–166)	.556	120 (92–166)	117 (83–170)	.561
Time from stent deploy to reperfusion (median) (IQR) (min)	67 (38–102)	47 (26–100)	.046	75 (43–109)	50 (27–106)	.483
Passes of thrombectomy						
Median (IQR)	2 (2–3)	2 (1–3)	.164	2.5 (2–3)	2 (1–3)	.156
≤2 (No.) (%)	83 (53.5%)	52 (60.5%)	.301	37 (50%)	46 (62.2%)	.200
≤3 (No.) (%)	117 (75.5%)	66 (76.7%)	.827	58 (78.4%)	57 (77%)	1.000
Rescue therapy (No.) (%)	77 (49.7%)	53 (61.6%)	.075	36 (48.6%)	44 (59.5%)	.216
Complications						
Arterial perforation (No.) (%)	1 (0.6%)	1 (1.2%)	1.000	1 (1.4%)	1 (1.4%)	1.000
Vessel dissection (No.) (%)	3 (1.9%)	6 (7.0%)	.073	2 (2.7%)	5 (6.8%)	.180
Stent failure to deploy (No.) (%)	1 (0.6%)	0	1.000	1 (1.4%)	0	1.000
Stent fracture (No.) (%)	1 (0.6%)	0	1.000	1 (1.4%)	0	1.000
Isolated SAH (No.) (%)	3 (1.9%)	0	.555	3 (4.1%)	0	.250
Symptomatic ICH (No.) (%)	31 (20%)	14 (16.3%)	.478	15 (20.3%)	10 (13.5%)	.332
Asymptomatic ICH (No.) (%)	60 (38.7%)	41 (47.7%)	.177	33 (44.6%)	37 (50%)	.617
mRS 90 days						
0–2 (No.) (%)	47 (30.3%)	33 (38.4%)	.204	27 (36.5%)	28 (37.8%)	1.000
3–6 (No.) (%)	108 (69.7%)	53 (61.6%)		47 (63.5%)	46 (62.2%)	
In-hospital mortality (No.) (%)	54 (34.8%)	25 (29.1%)	.361	23 (31.1%)	22 (29.7%)	1.000

Note:—ASITN/SIR indicates American Society of Interventional and Therapeutic Neuroradiology, Society of Interventional Radiology; GLU, glucose; SBP, systolic blood pressure; AF, atrial fibrillation; ICH, intracerebral hemorrhage.

^a The logistic regression model used for the determination of the propensity score included the following factors: age, time from onset symptom to visit, time from onset to groin puncture, ASPECTS, subtype of stroke, and collateral blood flow.

On-line Table 3: Subgroup analysis of MCA occlusion before and after matching^a

	Before Matching			After Matching		
	ST 6 (n = 100)	ST 4 (n = 284)	P	ST 6 (n = 88)	ST 4 (n = 88)	P
Baseline characteristics						
Age (median) (IQR) (yr)	68 (56–75)	64 (53–73)	.046	68 (56–75)	66 (53–75)	.51
Women (No.) (%)	42 (42%)	113 (39.8%)	.698	37 (42%)	32 (36.4%)	.551
AF (No.) (%)	51 (51%)	99 (35%)	.005	43 (48.9%)	39 (44.3%)	.556
Hypertension (No.) (%)	65 (65%)	179 (63%)	.725	57 (64.8%)	59 (67%)	.88
Diabetes mellitus (No.) (%)	18 (18%)	52 (18.3%)	.005	17 (19.3%)	17 (19.3%)	1.000
Current smoker (No.) (%)	33 (33%)	71 (25%)	.122	29 (33%)	23 (26.1%)	.44
SBP (median) (IQR) (mm Hg)	150 (126–162)	143 (128–160)	.313	154 (123–165)	140 (123–155)	.106
GLU (median) (IQR) (mmol/L)	6.46 (5.47–9.65)	6.62 (5.77–8.30)	.821	6.46 (5.41–10.06)	6.49 (5.66–8.19)	.456
ASPECTS (median) (IQR)	9 (8–10)	9 (8–10)	.339	9 (7–10)	9 (7–10)	.45
NIHSS (median) (IQR)	17 (14–21)	16 (11–20)	.008	17 (13–21)	16 (12–21)	.326
IV (No.) (%)	32 (32%)	93 (32.7%)	.891	29 (33%)	35 (39.8%)	.47
Workflow times						
Onset to visit (median) (IQR) (min)	148 (62–240)	122 (60–230)	.339	148 (62–237)	141 (60–244)	.166
Onset to treatment (median) (IQR) (min)	267 (192–358)	280 (209–356)	.638	101 (70–128)	93 (66–130)	.83
Stroke subtype						
Atherosclerotic (No.) (%)	39 (39%)	136 (47.9%)	.125	34 (38.6%)	40 (45.5%)	.391
Cardiac embolism (No.) (%)	60 (60%)	131 (46.1%)	.017	53 (60.2%)	46 (52.3%)	.296
Other undetermined etiology (No.) (%)	1 (1%)	17 (6%)	.043	1 (1.1%)	2 (2.3%)	1.000
Collateral flow grade (ASITN/SIR)			<.001			.070
0–1 (No.) (%)	59 (59%)	100 (35.5%)		48 (54.5%)	42 (47.7%)	
2–3 (No.) (%)	41 (41%)	182 (64.5%)		40 (45.5%)	46 (52.3%)	
Clinical outcomes						
mTICI			.325			.424
0–2a (No.) (%)	13 (13%)	27 (9.5%)		10 (11.4%)	6 (6.8%)	
2b–3 (No.) (%)	87 (87%)	257 (90.5%)		78 (88.6%)	82 (93.2%)	
Workflow times						
Time from puncture to revascularization (median) (IQR) (min)	101 (68–128)	93 (68–130)	.617	101 (70–128)	93 (66–130)	.594
Time from stent deployment to reperfusion (median) (IQR) (min)	47 (26.5–83)	43 (20–71)	.241	47 (26–76)	47 (19–69)	.456
Passes of thrombectomy						
Median (IQR)	2 (1–3)	2 (1–2)	.816	2 (1–3)	2 (1–2)	.699
≤2 (No.) (%)	72 (72%)	220 (77.5%)	.271	65 (73.9%)	71 (80.7%)	.391
≤3 (No.) (%)	93 (93%)	256 (90.1%)	.394	82 (93.2%)	82 (93.2%)	1.000
Rescue therapy (No.) (%)	56 (56%)	129 (45.4%)	.069	48 (54.5%)	38 (43.2%)	.194
Complications						
Arterial perforation (No.) (%)	1 (1%)	5 (1.8%)	1.000	1 (1.1%)	0	1.000
Vessel dissection (No.) (%)	0	0	NA	0	0	NA
Isolated SAH (No.) (%)	1 (1%)	9 (3.2%)	.464	1 (1.1%)	1 (1.1%)	1.000
Symptomatic ICH (No.) (%)	10 (10%)	46 (16.2%)	.131	7 (8%)	14 (15.9%)	.143
Asymptomatic ICH (No.) (%)	32 (32%)	77 (27.1%)	.351	28 (31.8%)	21 (23.9%)	.36
mRS 90 days						
0–2 (No.) (%)	41 (41%)	139 (48.9%)	.171	36 (40.9%)	45 (51.1%)	.188
3–6 (No.) (%)	59 (59%)	145 (51.1%)		52 (59.1%)	43 (48.9%)	
In-hospital mortality (No.) (%)	20 (20%)	52 (18.3%)	.710	16 (18.2%)	19 (21.6%)	.664

Note:—NA indicates not applicable; ASITN/SIR, American Society of Interventional and Therapeutic Neuroradiology, Society of Interventional Radiology; GLU, glucose; SBP, systolic blood pressure; AF, atrial fibrillation.

^a The logistic regression model used for the determination of the propensity score included the following factors: age, sex, atrial fibrillation, hypertension, subtype of stroke, time from onset to groin puncture, ASPECTS, and collateral blood flow.

On-line Table 4: Logistic regression model of favorable reperfusion in patients with atherosclerosis-related occlusion after matching^a

Variables	Odds Ratio	95% CI	P
ST 4 device (vs ST 6)	3.217	1.129–9.162	.029
Propensity score	52.84	3.468–805.018	.004

^a Propensity score included variables as follows: age, time from onset symptom to visit, time from onset to groin puncture, NIHSS score, ASPECTS, site of vessel occlusion, and collateral blood flow. Logistic regression including the propensity score as a covariate used stepwise logistic regressions model, with entry and removal limits set at 0.05 and 0.10 separately.

On-line Table 5: Distribution of mTICI in patients with atherosclerosis-related occlusion after propensity score matching analysis

mTICI (No.) (%)	ST 6 (n = 66)	ST 4 (n = 66)
0	8 (12.1%)	1 (1.5%)
1	1 (1.5%)	3 (4.5%)
2a	7 (10.6%)	2 (3.0%)
2b	23 (34.8%)	23 (34.8%)
3	27 (40.9%)	37 (56.1%)