

Supplemental material

Table S1. Univariate analysis for final mTICI2c-3 in octogenarians

	Overall patients ≥80 yo (n=808)	Final mTICI 0-2b (n=221, 27.4%)	Final mTICI 2c-3 (n=587, 72.6%)	p-value
Age [years], median (IQR)	85 (83;88)	85 (83;89)	85 (83;88)	0.743
Female sex, n (%)	521 (64.5)	138 (62.4)	383 (65.2)	0.458
NIHSS score at admission, median (IQR)	17(12;21)	17(13;22)	17(12;20)	0.074
ASPECTS at admission, median (IQR)	9 (7;10)	8 (7;10)	9 (8;10)	<0.001
Last time seen well [min], median (IQR)	280 (180.75;589.25)	282 (187;608)	280 (179.5;569)	0.58
IV tPA administered, n (%)	212 (26.2)	85(38.4)	127(21.6)	0.001
General anesthesia, n (%)	262 (32.4)	45 (20.4)	217 (37)	<0.001
Local anesthesia, n (%)	160 (19.8)	51 (23.1)	109 (18.6)	
Conscious sedation, n (%)	386 (47.8)	125 (56.6)	261 (44.5)	
Right side occlusion, n (%)	388 (48)	120 (54.3)	268(45.7)	0.028
Level of vessel occlusion, n (%)				0.954
Carotid terminus	157 (19.5)	44 (19.9)	113 (19.3)	
MCA-M1	425 (52.7)	117 (52.9)	308 (52.6)	
MCA-M2	225 (27.9)	60 (27.1)	165 (28.2)	
GPTFR [min], median (IQR)	7 (5;12)	8 (5;14)	6 (5;12)	0.075
ET time [min], median (IQR)	25 (12;43)	43 (28.5;67.5)	20 (10;34)	<0.001
GTR [min], median (IQR)	35 (22;57)	57 (37;80)	29 (19.25;46)	<0.001
BGC use, n (%)	465 (57.5)	105 (47.5)	360 (61.3)	<0.001
SR use, n (%)	790 (97.8)	211 (95.5)	579 (98.6)	0.007
Combined technique use (CA+SR)	406 (50.2)	138 (62.4)	268 (45.7)	<0.001
Distal aspiration catheter use, n (%)	422 (52.2)	146 (66.1)	276 (47)	<0.001
Technique modification	134 (27.9)	68 (37.2)	66 (22.1)	<0.001
FPE (mTICI 2c-3), n (%)	350 (43.3)	1 (0.5)	349 (59.5)	<0.001
mFPE (mTICI 2b-3), n (%)	435 (53.8)	54 (24.4)	381 (64.9)	<0.001
sICH, n (%)	53 (7.1)	23 (11.3)	30 (5.6)	0.007
Complications:				0.386
Perforation	11 (29.7)	8 (36.4)	3 (20)	
Dissection	15 (40.5)	7 (31.8)	8 (53.3)	
NIHSS score at 24 h, median (IQR)	8 (3;16)	15 (7.75;21)	6 (2;14)	<0.001
mRS score 0-2 at 3 months, n (%)	303 (37.5)	51 (23.1)	252 (42.9)	<0.001
Mortality at 3 months, n (%)	225 (27.8)	91 (41.2)	134 (22.8)	<0.001

NIHSS, National Institutes of Health Stroke Scale; ASPECTS, Alberta Stroke Program Early CT Score; FPE, first-pass effect; BGC, balloon guide catheter; GPTFR, groin puncture to first run; mFPE, modified first-pass effect; ET, endovascular time; GTR, groin puncture to revascularization; mRS, modified Rankin score; mTICI, modified thrombolysis in cerebral infarction; SR, stent retriever; sICH, symptomatic intracranial hemorrhage.

Table S2. Univariate analysis according to technique approach

	Direct Aspiration only (n=16, 2.0%)	Stent retriever only (n=384, 47.6%)	Distal aspiration plus stent retriever (n=406, 50.4%)	p-value
Age [years], median (IQR)	85 (83.5-88.25)	86 (83-89)	85 (82-88)	0.013
Female sex, n (%)	11 (68.8)	251 (65.4)	258 (63.5)	0.814
NIHSS score at admission, median (IQR)	13 (9-15)	16 (11.75-21)	18 (13-21)	0.008
ASPECTS at admission, median (IQR)	9 (8-10)	9 (7-10)	9 (7-10)	0.516
Time from stroke onset to diagnosis [min], median (IQR)	271 (137.75-413)	280 (181-638.75)	280 (185-562)	0.479
IV tPA administered, n (%)	3 (18.8)	101 (26.3)	108 (26.6)	<0.001
General anesthesia during EVT, n (%)	5 (31.2)	153 (39.8)	103 (25.4)	<0.001
Right side occlusion, n (%)	7 (43.8)	182 (47.4)	199 (49)	0.847
Level of vessel occlusion, n (%)				0.001
Carotid terminus	2 (12.5)	61 (15.9)	92 (22.7)	
MCA-M1	11 (68.8)	190 (49.6)	224 (55.2)	
MCA-M2	3 (18.8)	132 (34.5)	90 (22.2)	
GPTFR [min], median (IQR)	10 (6.5-16.5)	6 (4-10)	9 (5-15)	<0.001
ET time [min], median (IQR)	16.5 (10-35.5)	21 (10-36)	31 (16-48.75)	<0.001
GTR [min], median (IQR)	31 (22.5-52)	29 (18-48)	42 (27-65)	<0.001
BGC use	8 (50.0)	341 (88.8)	114 (28.1)	<0.001
FPE (mTICI 3), n (%)	4 (25.0)	155 (40.4)	134 (33.0)	0.063
mFPE (mTICI 2c-3), n (%)	6 (37.5)	179 (46.6)	165 (40.6)	0.212
FPE (mTICI 2b-3), n (%)	11 (68.8)	216 (56.2)	208 (51.2)	0.179
Final number of passes, n (%)				0.755
1	9 (56.2)	181 (47.1)	189 (46.6)	
2	2 (12.5)	96 (25)	94 (23.2)	
>2	5 (31.2)	107 (27.9)	123 (30.3)	
Technique modification	6 (37.5)	34 (15.6)	94 (38.4)	<0.001
mTICI 0 after first pass	3 (18.8)	118 (30.7)	133 (32.8)	0.447
Final mTICI 0	0 (0)	13 (3.4)	15 (3.7)	0.725
Final mTICI ≥ 2b, n (%)	15 (93.8)	357 (93)	372 (91.6)	0.760
Final mTICI ≥ 2c, n (%)	8 (50)	311 (81)	268 (66)	<0.001
Emboli to new territory	8 (50)	51 (13.3)	70 (17.2)	<0.001
sICH, n (%)	0 (0)	15 (4.2)	38 (10.4)	0.003
Complications:				0.479
Perforation	1 (50)	2 (15.4)	8 (38.1)	
Dissection	0 (0)	7 (53.8)	8 (38.1)	
NIHSS score at 24 h, median (IQR)	8 (2.5-13)	7 (3-16)	10 (3-17)	0.139
mRS 0-1 at 3 months	4 (25)	93 (24.2)	94 (23.2)	0.933
mRS 0-2 at 3 months	7 (43.8)	136 (35.4)	160 (39.4)	0.448
Mortality at 3 months, n (%)	4 (25)	97 (25.3)	122 (30)	0.314

NIHSS, National Institutes of Health Stroke Scale; ASPECTS, Alberta Stroke Program Early CT Score; FPE, first-pass effect; BGC, balloon guide catheter; GPTFR, groin puncture to first run; mFPE, modified first-pass effect; ET, endovascular time; GTR, groin puncture to revascularization; mRS, modified Rankin score; mTICI, modified thrombolysis in cerebral infarction; SR, stent retriever; sICH, symptomatic intracranial hemorrhage.