

**On-line Table 1: M1 and M2 anatomic features and M2 features identified and recorded for analysis on the basis of post hoc analysis of pre- and postprocedure arteriograms of IMS III M2 occlusion**

Features
1) MCA segment classification
A) M1 trunk: MCA segment from the carotid terminus to the first M2 segment
MIP: M1 segment proximal to lenticulostriate arteries
MID: M1 segment distal to lenticulostriate arteries to the first M2 segment
B) M2 trunk: large M2 segment (simulating M1 trunk) extending from isolated posterior temporal or holotemporal branch to the next M2 segment as divisions or branches; present in 11.1% of patients
C) M2 division: dominant or codominant M2 segment arising at MID or M2 trunk bi-, tri-, or quadfurcation; subsequently dividing into $\geq 2$ M2 division-branches distributed over the insula or temporal lobe; angiographic M2 divisions typically represent the classic superior and/or inferior divisions
D) M2 division-branch: individual M2 segment arising from an M2 division, in classic M2 branch/artery distribution (orbitofrontal, operculofrontal, central sulcus or Rolandic, angular, posterior parietal, posterior temporal branches), which does not divide into additional M2 segments
E) M2 branch: independent M2 segment arising from MID or M2 trunk as part of bi- or trifurcation; does not divide into additional M2 branches
2) Estimate of the possibility that the occlusion is termed M1 on the basis of historical position and course criteria
3) ATA branch origin variability: ATA origin from M1 or M2 segments
4) Presence of holotemporal or posterior temporal branch arising as isolated vessel from M1, simulating ATA
5) Presence of lenticulostriate arteries from M1 or M2 trunk, division, or branch
6) M2 occlusion multiplicity: single or multiple M2 segment occlusion, independent of AOL treated
7) M2 occlusion proximity: proximal (horizontal to genu), mid (genu to midinsular), or distal (beyond midinsular) location of M2 segment occlusion
8) Estimated percentage MCA distribution hypoperfused and at risk, as the average reduced cortical contrast media opacification perfusion by both readers on lateral DSA

**Note:**—AOL indicates arterial occlusive lesion.

**On-line Table 2: Baseline clinical characteristics of M2 occlusion and 135 M1 occlusions proximal or distal to lenticulostriate origins**

	M2 Occlusions (n = 83 <sup>a</sup> )	M1 Distal to Striate Arteries (n = 68)	M1 Proximal to Striate Arteries (n = 67)
Age (mean) (SD) (yr)	66.7 (11.6)	63.4 (13.9)	67.6 (12.0)
Baseline glucose (mean) (SD) (mmol/L)	7.2 (2.7)	7.3 (2.7)	7.1 (2.2)
Diabetes (%)	20 (24.1)	10 (14.7)	14 (20.9)
Baseline SBP (mean) (SD) (mm Hg)	152.4 (20.7)	145.6 (22.2)	144.6 (19.9)
Hypertension (%)	65 (78.3)	48 (70.6)	50 (74.6)
Atrial fibrillation (%)	33 (39.8)	26 (38.2)	25 (37.3)
Coronary artery disease (%)	14 (16.9)	17 (25.0)	14 (20.9)
ASPECTS 8–10 (%)	52 (65.0)	35 (53.0)	28 (41.8)
Baseline NIHSS score $\geq 20$ (%)	27 (32.5)	23 (33.8)	26 (38.8)
NIHSS score (median) (IQR)	16 (13–21)	18.5 (14–20)	18 (16–22)
Historical mRS (No. of symptoms) (%)	74 (89.2)	59 (86.8)	59 (88.1)
Time from onset to IV tPA (mean) (SD) (min)	123.1 (33.5)	127.3 (34.2)	117.7 (35.2)
Time from onset to groin puncture (mean) (SD) (min)	209.5 (48.6)	218.5 (44.0)	194.8 (43.4)

**Note:**—IQR indicates interquartile range; SBP, systolic blood pressure.

<sup>a</sup> Two subjects with tandem cervical ICA and M2 and cervical ICA and occlusion not evaluated due to incomplete arteriograms.

**On-line Table 3: The relationship of M1 and M2 segment characteristics to efficacy and primary safety outcome**

	M2 Segment (n = 83)					M1 Segment (n = 135)				
	All <sup>a</sup>	Trunk	Division			Branch (n = 29)			MIP	MID
			All	Proximal	Mid-	Div-Branch	Branch			
No. (%)	81 <sup>a</sup>	9 (11.1)	43 (53.1)	37 (86.0)	6 (14.0)	16 (55.2)	13 (44.8)	67 (49.6)	68 (50.4)	
Percentage MCA at risk <sup>b</sup>	60	75	60	60	62.5	40	40	100	100	
mTICI 2–3 (%)	60 (74.1)	7 (77.8)	36 (83.7)	30 (81.1)	6 (100)	8 (50)	9 (75)	54 (80.6)	56 (82.4)	
mTICI 2b–3 (%)	32 (39.5)	6 (66.7)	18 (41.9)	15 (40.5)	3 (50)	3 (18.8)	5 (41.7)	26 (38.8)	34 (50)	
AOL 2–3 (%)	64 (79.0)	7 (77.8)	36 (83.7)	30 (81.1)	6 (100)	10 (62.5)	5 (38.5)	57 (85.1)	56 (82.4)	
90-day mRS (%)										
0–1 (%)	23 (28.4)	2 (22.2)	12 (27.9)	8 (21.6)	4 (66.7)	4 (25)	5 (38.5)	11 (16.4)	21 (30.9)	
0–2 (%)	33 (40.7)	3 (33.3)	20 (46.5)	16 (43.2)	4 (66.7)	5 (31.3)	5 (38.5)	18 (26.9)	26 (38.2)	
90-day mortality(%)	11 (13.6)	2 (22.1)	5 (11.6)	5 (13.5)	0	3 (18.8)	1 (7.7)	18 (26.9)	14 (20.6)	

**Note:**—Div indicates division.

<sup>a</sup> Eighty-one of 83 M2 subjects evaluable for post hoc subgroup analyses; 2 cervical ICA occlusions were not included due to inadequate images.

<sup>b</sup> Estimate (median) of underperfused percentage volume, including additional distal occlusive changes that may exist in other untreated MCA territories.