Supplemental material

Endovascular treatment: the role of dominant caliber M2 segment occlusion in ischemic stroke

Suppl. Table I. Baseline characteristics of patients with an M1, or dominant M2 division, or co- or non-dominant M2 division occlusion.

	M1 occlusion (n = 759)	**Dominant M2 division occlusion (n = 124)**	**Co- or non-dominant M2 division occlusion (n = 51)**	**P-value**
Superior dominant division – no. (%)	NA	63 (51)	NA	
Inferior dominant division – no. (%)	NA	61 (49)	NA	
Age (years) – median [IQR]	70 [60-79]	71 [60-77]	72 [62-79]	0.91
Sex (male) – no. (%)	404 (53)	64 (52)	25 (49)	0.81
Smoking – no. (%)	186 (33)	28 (28)	10 (28)	0.54
Diabetes mellitus – no. (%)	138 (18)	21 (17)	9 (18)	0.93
Atrial fibrillation – no. (%)	176 (24)	28 (23)	10 (20)	0.81
Hypertension – no. (%)	386 (52)	72 (59)	24 (48)	0.30
Previous myocardial infarction – no. (%)	122 (17)	16 (13)	10 (20)	0.53
Previous stroke – no. (%)	143 (19)	21 (17)	8 (16)	0.77
Hypercholesterolemia – no. (%)	239 (33)	33 (28)	10 (21)	0.19
Collateral grading score [a]				0.45
0	39 (6)	6 (5)	3 (6)	
1	223 (32)	46 (41)	15 (30)	
2	288 (41)	45 (40)	23 (46)	
3	153 (22)	16 (14)	9 (18)	
NIHSS score – median [IQR] [b]	16 [12-20]	14 [9-17]	14 [9-17]	<0.001
ASPECTS – median [IQR] [c]	9 [7-10]	9 [7-10]	9 [8-10]	0.03
Prestroke modified Rankin scale 0-2 – no. (%) [d]	657 (88)	107 (88)	44 (88)	>0.999
Treatment with IV thrombolysis – no. (%)	575 (76)	97 (78)	45 (88)	0.13
Time onset to groin (min) – median [IQR]	210 [160-260]	208 [152-275]	205 [171-268]	0.99
DSA-only – no. (%) [e]	12 (2)	9 (7)	12 (25)	<0.001

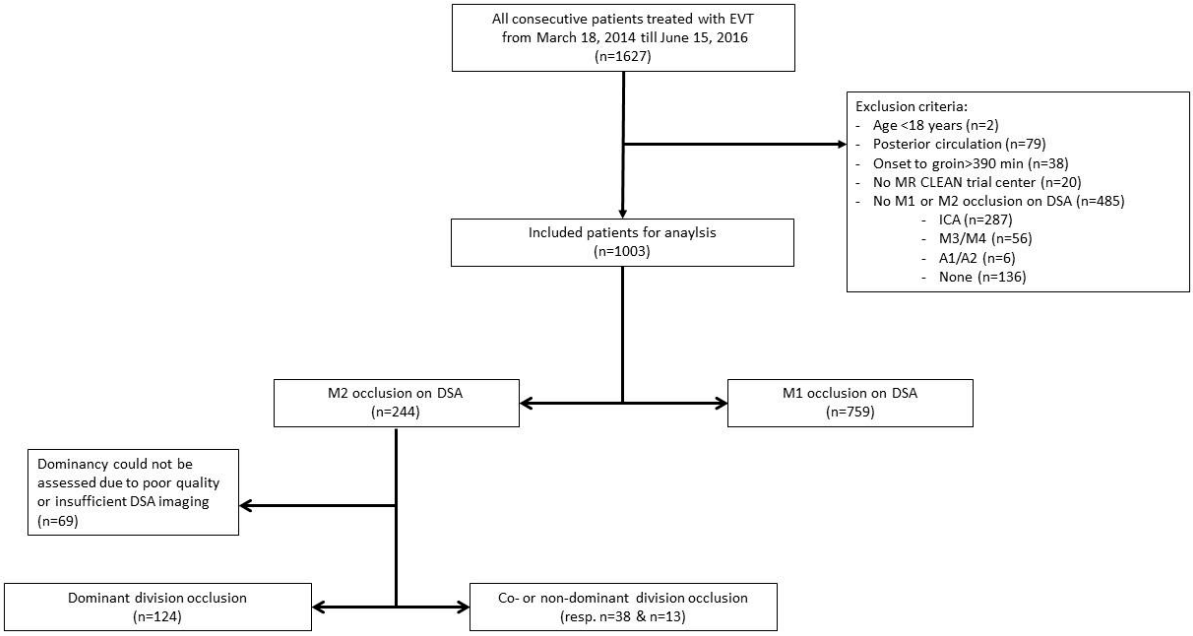
[a] Assessed at baseline CTA. A score of 0 indicated absent collateral supply to the occluded territory, 1: filling of >0% but ≤50%, 2: filling of >50% but <100%, 3: filling of 100% collateral supply of the occluded territory.

[b] National Institute of Health Stroke scale (Scores range from 0 to 42, higher scores indicating severe stroke).

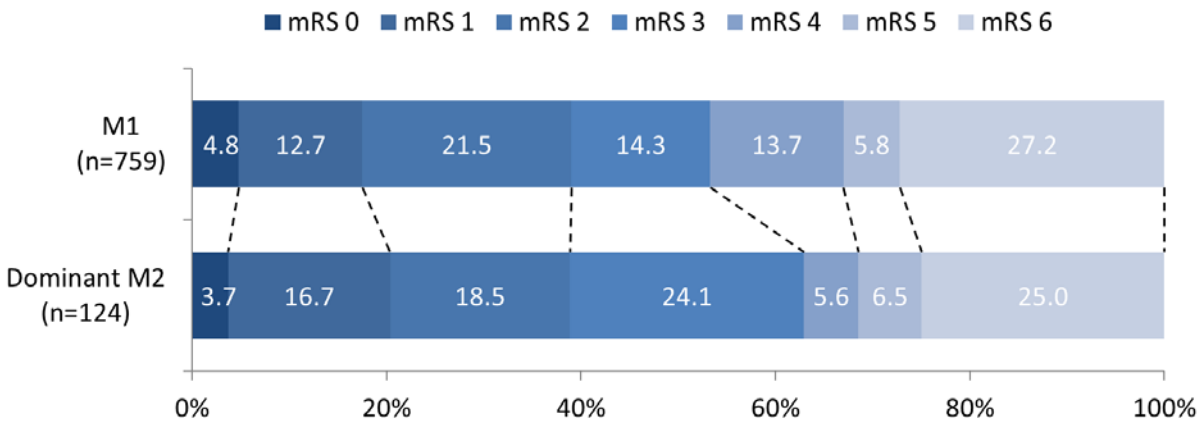
[c] Alberta Stroke Program Early Computed tomography Score (Scores range from 0 to 10lower scores indicating more early ischemic changes on baseline NCCT).

[d] Functional disability before stroke onset, score ≤2 indicates functional independence.

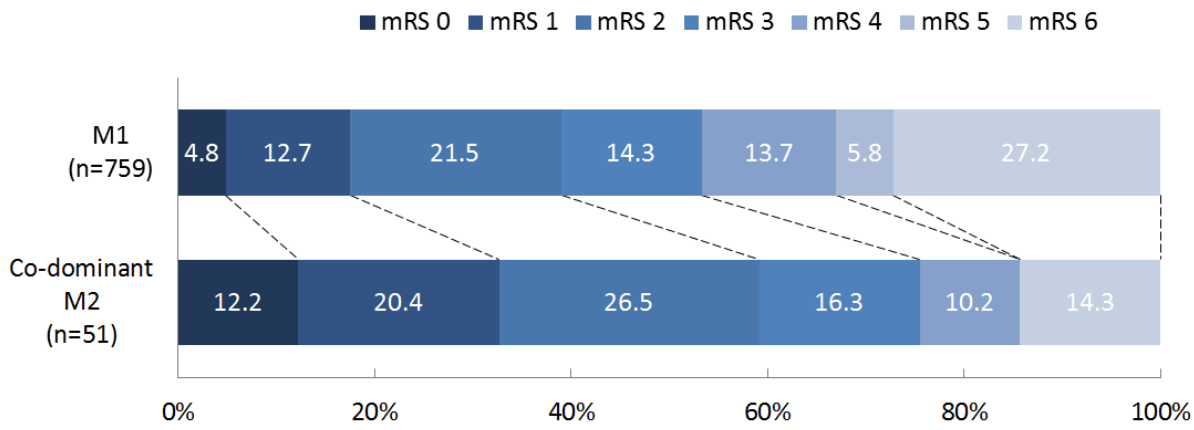
[e] Digital subtraction angiography without thrombectomy or aspiration, indicating spontaneous reperfusion.



Suppl. Figure I. Flow diagram of patient selection for analysis. EVT indicates endovascular treatment, DSA, digital subtraction angiography.



Suppl. Figure II. Modified Rankin Scale scores at 90 days: M1 versus dominant M2 division occlusion. Functional outcomes were statically significant different between patients with an M2 and M1 occlusion (common odds ratio, 1.15; 95%CI 0.80 - 1.64). However, after adjustment for age, sex, NIHSS baseline, time from stroke onset to groin puncture, intravenous thrombolysis (IVT), prestroke mRS and collateral status, functional outcome was no longer statistically different (adjusted common odds ratio, 1.19; 95%CI 0.79 – 1.80).



Suppl. Figure III. Modified Rankin Scale Sores at 90 days: M1 versus co- or non-dominant M2 division occlusion. Functional outcomes were statically significant different between patients with an M2 and M1 occlusion (common odds ratio, 2.41; 95%CI 1.44 - 4.03). After adjustment for age, sex, NIHSS baseline, time from stroke onset to groin puncture, intravenous thrombolysis (IVT), prestroke mRS and collateral status, functional outcome was no longer statistically different (adjusted common odds ratio, 2.22; 95%CI 1.27 – 3.87). No patient with a co- or non-dominant M2 division occlusion was observed with a mRS score of 5.