

SUPPLEMENTAL MATERIAL

Progression of cerebral infarction before and after thrombectomy is modified by pre-hospital pathways

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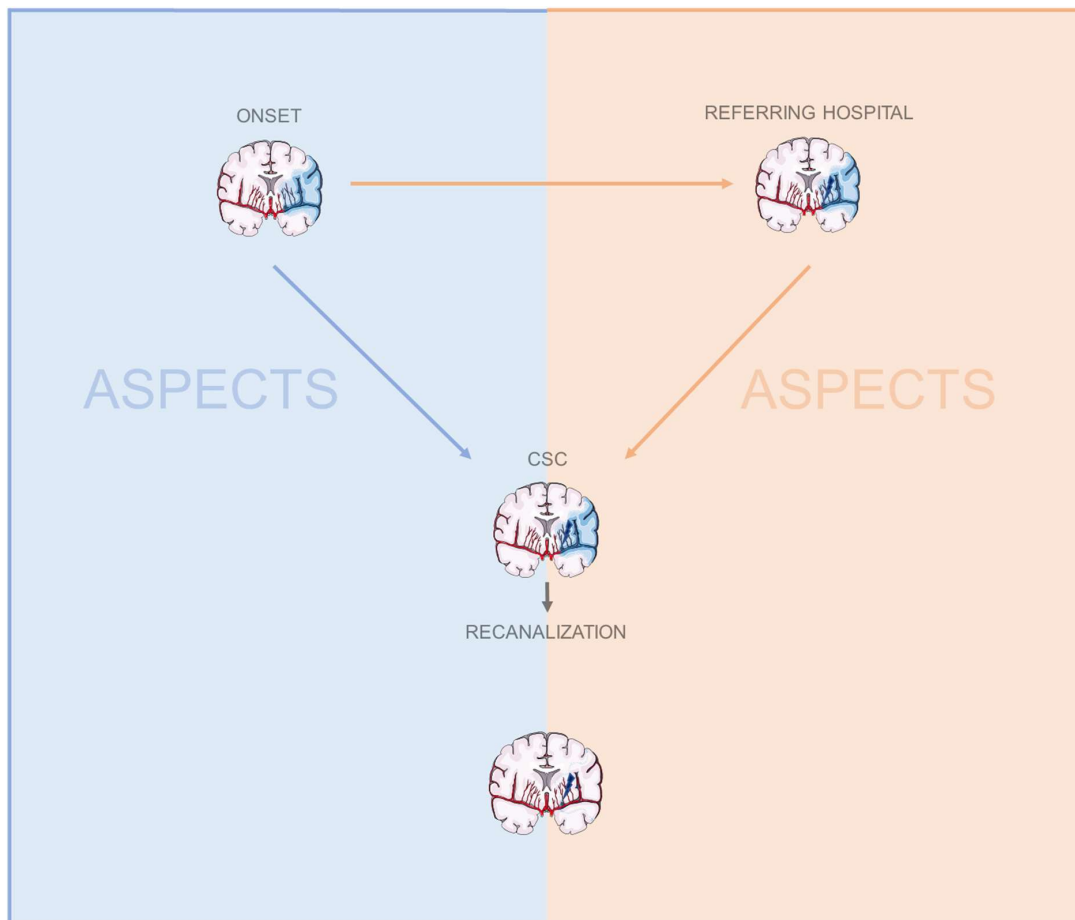
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Supplemental Figure 1: Treatment pathways for mechanical thrombectomy and the putative effect on infarct extent as assessed by ASPECTS.



Left panel, mothership pathway; Right panel, drip-and-ship pathway. ASPECTS, Alberta Stroke Program Early CT Score; CSC, comprehensive stroke center.

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Supplemental Table 1: ASPECTS according to the mothership and drip-and-ship treatment pathway for mechanical thrombectomy.

	MS n=221	DS n=314	p
ASPECTS-RH admission	-	9 (8-10)	
ASPECTS-CSC admission	9 (7-10)	7 (6-9)	<0.0001
ASPECTS-CSC FU	7 (4-8)	6 (3-7)	0.001
Δ -ASPECTS	2 (0-3)	3 (2-6)	<0.0001

ASPECTS, Alberta Stroke Program Early CT Score; MS, mothership; DS, drip-and-ship; RH, referring hospital; CSC, comprehensive stroke center; FU, follow-up.

^{||}Decline between baseline and postinterventional follow-up imaging.

Supplemental Table 2: Exploratory univariate regression analysis between recorded patient characteristics, interventional-, and logistic variables, and ASPECTS decline.

Variable	B	SE	t	R²	p
Male sex	0.392	0.249	1.573	0.005	0.117
Age	-0.011	0.01	-1.113	0.003	0.266
Inter-facility transfer (drip-and-ship)	1.514	0.242	6.249	0.077	<0.0001
Transport distance (ground bound)	0.009	0.004	2.015	0.014	0.045
Transfer time	0.000096	0.002	0.005	0.0000001	0.996
Air transport	1.491	0.317	4.702	0.047	<0.0001
Baseline ASPECTS (initial imaging)	0.168	0.085	1.983	0.008	0.048

Unknown time of symptom onset	-0.665	0.357	-1.862	0.007	0.063
NIHSS at CSC-presentation	0.091	0.018	5.053	0.059	<0.0001
Systolic blood pressure	0.005	0.005	1.001	0.003	0.3174
Diastolic blood pressure	0.014	0.009	1.654	0.008	0.099
Heart rate	0.005	0.007	0.731	0.002	0.465
Hypertension	0.289	0.334	0.866	0.002	0.387
Diabetes mellitus	0.387	0.301	1.286	0.004	0.199
Hyperlipidemia	-0.187	0.272	-0.686	0.001	0.493
Atrial fibrillation	0.409	0.255	1.602	0.006	0.11
Smoking history	-0.349	0.263	-1.332	0.004	0.184
Antithrombotic medication	-0.169	0.254	-0.666	0.00099	0.506
Antihypertensive drugs	-0.038	0.297	-0.129	0.000037	0.898
IV alteplase	-0.118	0.252	-0.47	0.00048	0.638
Onset-to-puncture time	-0.00016	0.00091	-0.171	0.000084	0.865
M1 occlusion	-0.404	0.254	-1.587	0.005	0.113
M2 occlusion	-0.363	0.328	-1.107	0.0026	0.269
ICA occlusion	0.746	0.252	2.963	0.018	0.003
Stent-retrieval maneuvers	0.357	0.069	5.151	0.063	<0.0001
mTICI	-0.861	0.163	-5.297	0.064	<0.0001
Duration of MT procedure	0.004	0.002	2.502	0.015	0.013
Onset-to-recanalization time	0.00137	0.00086	1.579	0.007	0.115
Cervical ICA stenting	0.322	0.3118	1.033	0.003	0.302

ASPECTS, Alberta Stroke Program Early CT Score; NIHSS, National Institutes of Health Stroke Scale; CSC, comprehensive stroke center; IV, intravenous; M1/M2,

middle cerebral artery segment; ICA, internal carotid artery; mTICI, modified treatment in cerebral ischemia scale.