

Summary of trials discussed during episode

Trial	Number of patients enrolled	Last known well to treatment (hours)		Stroke severity (NIHSS)	Imaging selection	Patients achieving functional independence (Modified Rankin Score ≤2)
		t-PA	MT			
IMS III (2013) ¹	656	<3	<3	≥10	Evidence of vessel occlusion not required for enrolment; CT-A performed at centres in which this investigation was part of routine work up	No difference
MR CLEAN (2015) ²	500	≤ 4.5	≤ 6	>1	Evidence of vessel occlusion	32.6% in MT arm v 19.1% control (p<0.01)
EXTEND-IA (2015) ³	70	≤ 4.5	≤ 6	No lower limit	Evidence of vessel occlusion and perfusion imaging demonstrating core <70ml and salvageable penumbra	71% in MT arm v 40% in control (p=0.01)
SWIFT-PRIME (2015) ⁴	196	≤3.5	≤6	≥6	Evidence of vessel occlusion	60% in MT arm v 35% in control (p<0.001)
ESCAPE (2015) ⁵	316	≤4.5	≤12	>5	Evidence of vessel occlusion	53% v 29.3%
REVASCAT (2015) ⁵	206	≤4.5	≤8	>5	Evidence of vessel	43.7% v 28.2% [adjusted OR 2.1 (95%CI 1.1 - 4.0)]
DAWN (2018) ⁶	206	6 – 24 hours from last known well	≥10 in subgroup A (>80 years old) and B (<80 years old) ≥20 in subgroup C (<80 years old)		Evidence of vessel occlusion and a mismatch between clinical deficit (NIHSS) and infarct volume using advanced stroke imaging. Group A volume <21ml, Group B <31ml, Group C 31-51ml	49% in MT group v 13% in control (pp of superiority >0.999)
DEFUSE III (2018) ⁷	182	6 – 16 hours from last known well	>5		Evidence of vessel occlusion, infarct size <70ml, penumbra >15ml and ratio of penumbra:core >1.8 using RAPID software	45% in MT arm v 17% in control (p<0.001)



References

1. Broderick JP, et al. Endovascular therapy after intravenous t-PA versus t-PA alone for stroke. N Engl J Med. 2013;368(10):893-903
2. Berkhemer OA, et al. A randomized trial of intraarterial treatment for acute ischemic stroke. N Engl J Med 2015; 372:11-20
3. Campbell BCV, et al. Endovascular therapy for ischemic stroke with perfusion-imaging selection. N Engl J Med 2015; 372:1009-1018
4. Saver JL, et al. Stent-retriever thrombectomy after intravenous t-PA vs. t-PA alone in stroke. N Engl J Med 2015; 372:2285-2295.
5. Goyal M, et al. Randomized assessment of rapid endovascular treatment of ischemic stroke. N Engl J Med 2015; 372:1019-1030
6. Jovin TG, et al. Thrombectomy within 8 hours after symptom onset in ischemic stroke. N Engl J Med 2015; 372:2296-2306.
7. Nogueira RG, et al. Thrombectomy 6 to 24 Hours after Stroke with a Mismatch between Deficit and Infarct N Engl J Med 2018; 378:11-21.
8. Albers GW, et al. Thrombectomy for stroke at 6 to 16 hours with selection by perfusion imaging. N Engl J Med 2018; 378:708-718