

SHRINE: Systemic Thrombolysis Randomization IN Endovascular Stroke Therapy Collaboration

Purpose: To evaluate the non-inferiority of endovascular treatment (EVT) alone (primary thrombectomy) versus intravenous alteplase followed by EVT (combined therapy) in large vessel occlusion stroke patients eligible for intravenous thrombolysis (IVT).

Trial Design: Pooled analysis of individual patient-level data from the SKIP (Japan) and DEVT (China) clinical trials. Primary Endpoint: Functional independence

Secondary Endpoint: Reduced disability on the mRS at 90 days in the pooled cohort

Results	N=221 Combined therapy "Bridging"	N=217 Primary Thrombectomy EVT alone	OR	Adjusted OR
90-day mRS 0-2	51.6% (114/221)	56.7% (123/217)	1.23 (0.84-1.79); p=.29	1.27 (0.84-1.92); p=.26
90-day mRS shift	-	-	1.07 (0.72-1.40); p=.68	1.01 (0.72-1.40); p=.99
90-day mRS 0-1	37.6% (83/221)	39.2% (85/217)	1.07 (0.73-1.57); p=.73	1.03 (0.67-1.58); p=0.89
90-day mRS 0-3	67.0% (148/221)	70.0% (152/217)	1.15 (0.77-1.73); p=.49	1.11 (0.70-1.77); P=.66

Results:

- The SHRINE collaboration provides additional data on the non-inferiority of primary thrombectomy versus combined therapy in patients presenting directly to thrombectomy-capable centers.
- The adjusted OR for 90-day Functional Independence was 1.27 (0.84 – 1.92), there is still the possibility that primary EVT is not non-inferior to bridging IVT/EVT. However, most point estimates favor primary EVT.

