Abstract LB-007 Table 1 Demographic and stroke characteristics of study patients (n=260)

Age, years, median (IQR)	69.5 (60 - 79)
ICA Occlusions	33 (12.7%)
MCA - M1 Occlusions	150 (57.7%)
MCA - M2 Occlusions	62 (23.8%)
Vertebral Occlusions	0 (0.0%)
Basilar Occlusions	11 (4.2%)
Multiple Territories	4 (1.5%)
Time from Symptom Onset to Groin Puncture, hours, median (IQR)	3 (2.4 - 4.3)
NIHSS score at admission, median (IQR)	15 (10 - 20)
Baseline ASPECTS, median (IQR)	8 (7 - 10)

numerically lower rate of rescue therapy than prior thrombectomy trials. Preliminary signal suggests super-large bore catheter positioning may influence the need for stent retrieval rescue therapy.

Disclosures W. Mack: 1; C; National Institutes of Health. 2; C; Imperative Care, Medtronic, Stryker, Viseon, Integra, Stream Biomedical, Egret Therapeutics, Spartan Micro. 4; C; Viseon, Q'Apel, Cerebrotech, Endostream, Stream Biomedical, Spartan Micro, Radical Catheters, Vastrax, Borvo, Egret Therapeutics. 5; C; University of Southern California. **R. Nogueira:** 2; C; Imperative Care. **J. Grossberg:** None. **S. Majidi:** 2; C; Imperative Care. **D. Tomalty:** None. **M. Mokin:** 2; C; Imperative Care. **J. Vargas:** 2; C; Imperative Care. **B. Cucchiara:** None. **K. Snyder:** None. **J. Mascitelli:** None. **V. Parada:** None. **H. Shakir:** 2; C; ImperativeCare. **D. Rosenbaum-HaLevi:** None. **N. Aghaebrahim:** None. **D. Hoit:** 2; C; Imperative Care. **B. Yim:** 2; C; Imperative Care. **M. Tenser:** None. **A. Al-Bayati:** None. **J. Milburn:** 2; C; Imperative Care. **J. Singer:** None. **S. Nimjee:** None. **N. Haranhalli:** None. **S. Sheth:** None. **D. Shaff:** None. **K. Layton:** None. **N. Beaty:** None. **R. Starke:** None. **H. Hawk:** 2; C; Imperative Care. **D. Haussen:** None. **A. Pabaney:** None. **C. Kellner:** None. **R. De Leacy:** 2; C; Imperative Care.

LB-008 ENHANCING THROMBECTOMY OUTCOMES WITH ADAPTIVE PULSATILE ASPIRATION (APA™): THE ROLE OF COMPLETE CLOT INGESTION (CCI) IN REDUCING THROMBECTOMY TIME AND DISTAL EMBOLIZATION

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Background Achieving radiographic reperfusion (TICI 3) in acute ischemic stroke thrombectomy may be an inadequate outcome measure. Unvisualized distal emboli even in the setting of TICI3 revascularization may lead to poor clinical outcomes. This study introduces a novel outcome metric, Complete Clot Ingestion (CCI). CCI is defined as full ingestion of the clot into the catheter or pump canister without any external clot remnants at the catheter tip. We hypothesizing that partially ingested ('corked') clots pose a higher risk of distal emboli.

Methods We evaluated two thrombectomy pump devices: the ALGO Smart Pump (Von Vascular, Inc, Sunrise, FL) and the Penumbra ENGINE Pump (Alameda, CA), focusing on their efficacy in achieving CCI using medium-bore aspiration catheters. The ALGO Smart Pump works by a novel mechanism of Adaptive Pulsatile Aspiration™ (APA). An in vitro model with a synthetic clot analog mimicking human thrombus was employed to conduct 300 thrombectomies across five catheters and the two pumps.

Results The ALGO Smart Pump demonstrated superior achievement of complete clot ingestion; CCI occurred in 80.0% of cases with the ALGO Smart pump compared to 38.6% with the Penumbra ENGINE Pump ($p<0.001$). In cases where CCI was achieved, thrombectomy pump and revascularization times were significantly reduced ($p<0.001$) and there were fewer distal emboli ($p<0.001$).

Conclusion Our findings suggest that the ALGO Smart Pump's Adaptive Pulsatile Aspiration (APA™) mode significantly enhances complete clot ingestion (CCI) leading to reduced procedure time and distal emboli. This study supports the adoption of CCI as a valuable metric for assessing thrombectomy efficacy, and emphasizes the need for further clinical validation to confirm these in vitro results.

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LB-009 BALLOON MOUNTED VERSUS SELF-EXPANDABLE STENT IN FAILED NEUROTHROMBECTOMY: A POST HOC ANALYSIS OF THE SAINT STUDY

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Background Previous studies demonstrated that rescue intracranial stenting in failed thrombectomy has better outcome compared to failed reperfusion. However, there is no data regarding type of stent and its impact on the outcome. We aimed to compare balloon mounted stents (BMS) to self-expandable stents (SES) in terms of clinical and procedural outcomes.

Methods It is a retrospective analysis of prospectively collected database from Stenting and Angioplasty in NeuroThrombectomy (SAINT) study. Patients were included if they had failed thrombectomy and underwent rescue stenting. Patients treated with SES or BMS were compared with inverse probability of treatment weighting. The primary outcome was the final reperfusion as measured by mTICI scale. Secondary outcomes included the shift in the degree of disability as measured by mRS, mRS0-2 and mRS0-3 at 90-days. Safety measures