

number of passes, predicts END, which suggests a casual pathway that requires further exploration.

**Disclosure of Interest** no.

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### THE NEW GENERATION BOBBY BALLOON GUIDE CATHETER FOR MECHANICAL THROMBECTOMIES: RESULTS OF THE INTERNATIONAL PROSPECTIVE STRAIT STUDY

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10.1136/jnis-2024-ESMINT.152

**Introduction** The use of a Balloon Guide catheter (BGC) in mechanical thrombectomy (MT) procedures might be associated with better technical and clinical results.

**Aim of Study** The next generation Bobby BGC (Microvention Inc.) has been evaluated in the prospective, multicenter, single-arm observational post-market STRAIT trial.

**Methods** Prospective data from 171 patients enrolled in the STRAIT study were analyzed. Key inclusion criteria included acute ischemic stroke (AIS) within the anterior cerebral circulation, occlusions ranging from M1 to proximal M2, treatment initiated within 8 hours of symptom onset, NIH Stroke Scale (NIHSS)  $\geq 5$ , ASPECT Score  $\geq 6$ . Angiographic and clinical characteristics, technical proficiency, and 90-day outcomes were evaluated and analyzed, controlled by an independent core lab and the clinical event committee.

**Results** The population of 171 patients (49,7% female) with a median age of 73 years and a median NIHSS of 15 presented in 58.2% with M1- and in 25,3% with M2-occlusions. The primary endpoint of final successful recanalization mTICI 2b/3 was reached in 94.7% of cases. Secondary outcome results included a modified First Pass Effect (mFPE) in 63.1% of cases, and a median procedure time of 40 minutes. 61,6% (N=164) showed independent functional outcome with modified Rankin Scale (mRS) of 0-2. ENTs were observed in 4.7%, verified by independent core lab assessment. No device malfunction-related adverse events were reported.

**Conclusion** As one of the new generation BGCs, the Bobby demonstrated a very high effectiveness and safety profile, further underlining the positive effect of Balloon Guidance support during mechanical thrombectomies.

**Disclosure of Interest** yes TBB: PI of the STRAIT study, STRAIT Study is industry sponsored by MicroVention.

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### ENHANCING NEUROTHROMBECTOMY PROCEDURES WITH IVASCULAR DEVICES (INEDIT, INDEEP, AND INTERCEPT): FIRST RESULTS FROM THE SEMTIC STUDY

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10.1136/jnis-2024-ESMINT.153

**Introduction** The iVascular neurothrombectomy devices, which include a balloon distal access catheter (iNedit), a microcatheter (iNdeep), and a stent retriever (iNtercept), have been strategically designed to incorporate the benefits of temporary proximal blood flow restriction via a balloon situated 5 cm from the catheter tip. This setup, paired with a guiding distal access catheter, facilitates clot removal through the combined action of a stent retriever and distal aspiration.

**Aim of Study** To assess the efficacy and safety of three devices (iNedit, iNdeep, and iNtercept) in mechanical thrombectomy for patients with acute ischemic stroke due to large vessel occlusion, presented within 24 hours from symptoms onset.

**Methods** SEMTIC is a prospective, single-arm, multi-center study with blinded outcomes assessment. Efficacy endpoints: successful reperfusion (eTICI $\geq$ 2b) within three passes and mRS 0-2 at 90 days. Safety endpoints: all-cause mortality at 90 days, symptomatic intracranial hemorrhage, and embolization in a new territory.

**Results** A total of 115 patients participated (mean age: 73.7  $\pm$  10.5 years; 53.9% female). Successful reperfusion was 80% (95% CI: 72% to 86%) surpassing non-inferiority proportion reported in literature. Good functional outcomes (mRS 0-2): 56% (46%, 65%). All-cause 90-day mortality: 13.9% (95% CI: 8.2% to 21.6%). Symptomatic intracranial hemorrhage: 1.7% (95% CI: 0.5% to 6.1%). Embolization in a new territory: 5.2% (95% CI: 2.1% to 11.1%).

**Conclusion** The combination of three iVascular devices proved to be highly effective in mechanical thrombectomy, demonstrating non-inferiority in successful reperfusion parameters with no safety concerns.

**Disclosure of Interest** no.

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### THE INSTROKE THROMBOASPIRATION CATHETER IN ACUTE ISCHEMIC STROKE—A SINGLE-CENTER PROSPECTIVE STUDY

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10.1136/jnis-2024-ESMINT.154

**Introduction** The iNstroke aspiration thrombus extraction device by iVascular is a single-lumen device (0.71') with variable stiffness from proximal to distal designed to extract emboli and thrombi from neurovascular blood vessels.

**Aim of Study** The aim of this study was to evaluate the efficacy and safety of the iNstroke aspiration device in mechanical thrombectomy for patients presenting with acute ischemic stroke due to large vessel occlusion within 24 hours from symptom onset.

**Methods** ASPIC-01 is a prospective, single-site, clinical trial. Efficacy endpoints: successful recanalization (mTICI $\geq$ 2b) and mRS 0-2 at 90 days. Safety endpoints: combined serious adverse events (SAE) at 24 hours and all-cause mortality at 90 days. The intention-to-treat (ITT) set included all subjects meeting inclusion criteria. The device implant population included all subjects in whom only iNstroke was used. An interim analysis was performed in 48 patients.

**Results** Mean age: 70.3  $\pm$  12.3 years, 62.5% male. Baseline: NIHSS median 19.5 [13.0-25.0], ASPECTS median 9.0 [7.0-10.0]. In ITT: recanalization 68.8% (95% CI 53.8-81.3), 90-day mRS 0-2 62.5% (95% CI 47.4-76.1%). Device implant population: recanalization 100% (95% CI 87.2-100.0), 90-day