Abstracts

LB003  MULTICENTER ASSESSMENT OF THE TIGERTRIEVER 13 FOR THROMBECTOMY IN PRIMARY MEDIUM VESSELS OCCLUSIONS

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Introduction/Purpose To evaluate the safety and efficacy of the Tigertriever 13 for thrombectomy in acute ischemic stroke (AIS) patients with a primary vessel occlusion (MeVO).

Methods A retrospective review of the DMVO Consortium, a synthesis of prospectively maintained databases at XX academic institutions in North America, Asia, and Europe, was performed to analyze consecutive AIS patients who underwent thrombectomy with the Tigertriever 13 for a primary MeVO. Patients’ characteristics, procedural complications, angiographic and clinical outcomes were reviewed.

Results Between January 2017 and January 2022, 58 patients and MeVO were included (53% female, median age 77 [63-83] years, 50% of ViPVI before thrombectomy). The Tigertriever 13 was used in 46/58 (79%), as a first-line stentretriever and in 12/58 (21%) as a rescue-therapy after failure of another technique. Overall, the successful reperfusion rate (mTICI 2b, 2c, 3) was 93% for the dedicated vessel. The first-pass effect was of 15/46 (33%) in the first-line Tigertriever group. At day 1, control imaging showed a subarachnoid-hemorrhage in 33%, a parenchymal hematoma in 9%, and a symptomatic intracranial hemorrhage (≥4 deterioration in NIHSS) in 3/58 (5%). At 3 months, 61% of the patients (33/58) had a favorable outcome (mRS 0-2).

Conclusion Mechanical thrombectomy using the Tigertriever 13 appears to be safe and effective for MeVO among different centers and physicians, as a first-line device or as a rescue-therapy after an other approach failure.


LB004  COMBINED RESULTS OF PRE-MARKET AND POST-MARKET CORE LAB ADJUDICATED EVALUATION OF THE NAUTILUS INTRASACULAR NECK COVER

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Introduction The Nautilus is a novel, CE-marked, self-conforming intrasacular neck cover.

Aim of Studies To combine pre- and post-market core lab adjudicated outcome data in order to assess the probable efficacy of the Nautilus for patients undergoing coil embolization of wide-neck cerebral aneurysms.

Methods Patients were enrolled in one pre-, or one post-, market approval clinical studies. Core lab adjudicated rate of adequate occlusion, (Raymond Roy grade I/II) after 3-6 months, was collected. Additionally, all device related adverse events were collected.

Results Thirty-eight patients with ruptured (37%) and unruptured (63%) aneurysms were enrolled. Three ruptured patients passed away in delayed fashion secondary to the course of their disease, in a manner unrelated to the aneurysm treatment itself. Thirty-five patients underwent delayed follow up imaging. Thirty-three (94%) of patients demonstrated core-lab adjudicated successful aneurysm occlusion at follow-up. There were no device-related serious adverse events, and no patients required the use of adjunctive bridging devices or retreatment.

Conclusions In these pre- and post-market cohorts of ruptured and unruptured aneurysms, the Nautilus appears to be effective in treating wide-neck aneurysms.

Disclosures J. Mocco: 2; C; EndoStream Medical Ltd. T. Shigematsu: None. N. Sakai: 2; C; EndoStream Medical Ltd. S. Sirakov: None.

LB005  REAL-WORLD OUTCOMES OF ENDOVASCULAR THROMBECTOMY FOR TREATMENT OF ACUTE BASILAR ARTERY OCCLUSION IN THE UNITED STATES: RESULTS OF THE BARONIS STUDY

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Introduction/Purpose Although previous evidence for treatment of acute basilar artery occlusion (BAO) had demonstrated clinical equipoise between endovascular thrombectomy (EVT) and medical management, recent clinical trial data have elucidated a clinical benefit to EVT in BAO patients for the first time.

Methods and Methods Weighted discharge data from the National Inpatient Sample were queried to identify adult patients with acute BAO during the period of 2015 to 2019 treated with EVT or medical management only. Complex samples statistical methods and propensity-score adjustment using inverse probability of treatment weighting (IPTW) were performed to assess clinical endpoints.

Results Among 3,950 BAO patients identified, 1,425 (36.1%) were treated with EVT (mean age 66.7 years, median NIHSS score 22). On unadjusted analysis, 155 (10.9%) EVT patients achieved favorable functional outcomes (discharge disposition to home without services), while 515 (36.1%) experienced in-hospital mortality, and 20 (1.4%) developed symptomatic intracranial hemorrhage (sICH). Following propensity-score adjustment by IPTW accounting for age, acute neurological condition, and comorbidity burden, EVT was independently associated with favorable functional outcome adjusted odds ratio (aOR) 1.25, 95% confidence interval (CI) 1.07, 1.46; p = 0.004), but not with in-hospital mortality or sICH. In an IPTW-adjusted sub-group analysis of patients with NIHSS
scores > 20, EVT was associated with both favorable functional outcome (discharge disposition to home or to acute rehabilitation) (aOR 1.55, 95% CI 1.24, 1.94; p < 0.001) and decreased mortality (aOR 0.78, 95% CI 0.69, 0.89; p < 0.001), but not with sICH.

Conclusions This population-based analysis using a large national registry demonstrates a clinical benefit of EVT in acute BAO patients, providing real-world confirmation of the findings of recently published clinical trial data.


**LB006**

**MICROVASCULAR CEREBRAL BLOOD FLOW RESPONSE TO INTRATHECAL NICARDIPINE IS ASSOCIATED WITH DELAYED CEREBRAL ISCHEMIA IN SUBARACHNOID HEMORRHAGE**

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**Abstract**

Intrathecal (IT) administration of nicardipine holds promise as a safe treatment for acute BAO patients, providing real-world confirmation of the desired effect of microvascular vasodilation in the majority of patients. Our results suggest that IT nicardipine achieves the desired effect of microvascular vasodilation in the majority of patients after the first dose of treatment, while those patients who did not respond developed a secondary stroke. DCS may be a powerful tool to monitor the therapeutic efficacy of nicardipine treatment and to better guide clinical decisions for reducing secondary stroke incidence.

**REFERENCES**

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**LB007**

**INTRASACCULAR FLOW DISRUPTION FOR RUPTURED ANEURYSMS: AN INTERNATIONAL MULTICENTER STUDY**

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**Background** The Woven EndoBridge (WEB) device is a novel intrasaccular flow disruptor tailored for bifurcation aneurysms.