

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

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Purpose To evaluate the safety and efficacy of the Tigertriever 13^{1 2} (Rapid Medical, Yoqneam, Israel) stent-retriever in acute ischemic stroke (AIS) patients with a primary medium vessel occlusion (MeVO).³

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 Tigertriever13 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 IVtPA before thrombectomy). The Tigertriever13 was used in 46/58 (79%), as a first-line stent retriever 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 Tigertriever13 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.

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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-forming intrasaccular 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.

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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