1.1 HAEMORRHAGIC – Aneurysms

O01/8 FLOW DIVERTING STENTS IN CEREBRAL SMALL CALIBRE VESSELS (< 2 MM) FOR ANEURYSM TREATMENT

[1]Sophia Hohenstatt*, [2]Sergio Vinci, [1]Dominik Vollherbst, [2]Agostino Tessitore, [1]Niclas Schmitt, [2]Antonio Pitrone, [2]Antonio Caragliano, [2]Mariano Velo, [1]Markus Möhlenbruch, [3]Aldo Paolucci. *[1]University Hospital Heidelberg, Neuroradiology, Heidelberg, Germany; [2]University Hospital A.O.U. 'G. Martino', Neuroradiology, Messina, Italy; [3]Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico di Milano, Milan, Italy*

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Introduction The off-label use of flow diverting stents (FDS) for treating cerebral aneurysms in small distal vessels is increasing with encouraging results. Data directly addressing the parent vessel size are still scarce.
Aim of Study Our aim was to evaluate the safety and efficacy of FDS placement in anterior and posterior circulation aneurysms with parent arteries ≤ 2 mm in a real-world representative setting.
Methods We retrospectively reviewed patients treated with FDS at the three participating university hospitals between 2009 and 2021. The inclusion criteria were the placement of at least one FDS in a parent vessel with a maximum diameter of 2 mm or less. The primary clinical safety endpoint was the absence of death, major or minor symptomatic stroke, transient ischemic attack and procedure-related intracranial hemorrhage. Clinical outcome was assessed using the modified Rankin Scale (mRS) score at the 1-year follow-up. The primary efficacy endpoint was complete and near-complete occlusion at the 1-year follow-up.
Results We identified 55 patients harboring 56 aneurysms. The primary clinical safety endpoint was obtained in 93% of cases. The hemorrhagic and thromboembolic complication rates were 4% and 9%, respectively. No patient died or had a relevant discrepancy at the pre- and post-treatment mRS. The primary efficacy endpoint was reached in 80% of cases.
Conclusion The use of FDS in vessels ≤ 2 mm is technically feasible with good aneurysm occlusion rates and an acceptable safety profile. Nevertheless, it is essential to be aware of the of the main complications associated when operating in small diameter vessels.
Disclosure of Interest Nothing to disclose.

O02/16 COATING STUDY (THE FIRST RCT EVALUATING A SURFACE-MODIFIED FLOW DIVERTER – P64-MW-HPC): CURRENT STATUS

Laurent Pierot*, Omer Eker, Laurent Spelle, Victoria Hellstern, Xavier Barreau, Marios Psychogios, Saleh Lamin, Peter Keston, Jean-Christophe Gentric, Christophe Cognard. *CHU Reims, Neuroradiology, Reims, France*

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Introduction Flow diversion (FD) is increasingly used for the treatment of intracranial aneurysms due to its efficacy and performance. Initially limited to large and giant ICA aneurysms, the FD approach has progressively enlarged to distal and bifurcation aneurysms. Due to the need for dual antiplatelet treatment (DAPT) to prevent thromboembolic complications, indications for FD are still limited to unruptured and recanalized aneurysms. To overcome this limitation, FDs with surface modification have been introduced and are currently under evaluation. The Hydrophilic Polymer Coating (HPC) is a glycocalyx-like surface modification that prevents platelet aggregation.
Aim of Study COATING is the unique randomized controlled trial dedicated to the assessment of a surface-modified FD (p64-MW-HPC; phenox GmbH, Bochum, Germany).
Methods The subjects are randomized 1:1 in 2 arms: p64-MW (bare) and DAPT (prasugrel or ticagrelor + aspirin), and p64-MW-HPC (surface-modified) under single antiplatelet treatment (SAPT; prasugrel or ticagrelor). The primary endpoint is the rate of thromboembolic complications as assessed by an independent core lab on DWI-MRI 48 hours after the procedure. Secondary endpoints are evaluating safety, performance and efficacy.

Maximum enrollment is 200 subjects.
Results Fourteen European centers are currently active. First inclusion occurred in September 2021. Today 82 subjects have been randomised.
Conclusion Surface-modified flow diverters will potentially change the treatment strategy for such aneurysmal subjects. COATING is the first RCT to evaluate a surface-modified FD under SAPT.
Disclosure of Interest LP is consultant for Wallaby-Phenox.

2.1 ISCHEMIC – Logistics

O03/28 COST-ECONOMICS ANALYSIS OF MECHANICAL THROMBECTOMY IN PATIENTS WITH LOW ASPECTS SCORE THROUGH EUROPE

[1]Manuel Moreu*, [1]Santiago Rosati, [1]Carlos Pérez-García, [1]Alfonso López-Frías López-Jurado, [1,2]Carlos Gómez-Escalonilla, [2]Patricia Simal Hernández, [2]José Antonio Egido Herrero, [1]Juan Arrazola, [3]Thomas Barthe, [3]Raffaele Scarica, [3]Anne-Laure Bocquet. *[1]Hospital Clinico Universitario San Carlos, Radiology, Madrid, Spain; [2]Hospital Clinico Universitario San Carlos, Neurology, Madrid, Spain; [3]@Stryker, Strokenomics, Paris, France*

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Introduction Treating with mechanical thrombectomy Low ASPECTS score (3–5) patients improve the prognosis and Rankin score. Results have been published in three recent clinical trials and furthermore are to be published regarding this specific group of patients.

Further studies should determine the economic viability of expanding the indication to Low ASPECTS score patients.
Aim of Study To demonstrate, by a cost-effectiveness analysis, the efficiency of mechanical thrombectomy (MT) versus medical management (MM) in patients with a low ASPECTS Score from the RESCUE Study.
Methods A cost-effectiveness model was designed to project both direct medical costs and quality-adjusted life-years (QALYs) of MT versus MM in eight European countries (Spain, UK, France, Italy, Belgium, Germany, Sweden, and the Netherlands). Our model was created based on previously published health-economic data in those countries. Procedure costs, acute, mid-term, and long- term care costs were projected based on expected modified Rankin Scale (mRS) scores as reported in the RESCUE- Japan LIMIT trial.
Results MT was found to be a cost- effective option in eight different countries across Europe with a lifetime incremental cost- effectiveness ratio varying from US$2 875 to US$11 202/QALY depending on the country. A cost-effectiveness