acceptability curve showed 100% acceptability of MT at the willingness to pay (WTP) of US$40 000 for the eight countries.
Conclusion MT is efficient versus MM alone for patients with low ASPECTS in eight countries across Europe. Patients with a large ischemic core could be treated with MT because it is both clinically beneficial and economically sustainable.
Disclosure of Interest Nothing to disclose.

1.1 HAEMORRHAGIC – Aneurysms

004/35 COMPARISON OF ARTERIAL WALL INTEGRATION OF DIFFERENT FLOW DIVERTERS IN RABBITS : THE CICAFLOW STUDY

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Introduction New coated flow-diverters (FDs) claim for antithrombotic properties and increased arterial wall integration.
Aim of Study This study aims to compare in vivo endothelial coverage of coated and uncoated FD in the setting of different antiplatelet regiments.
Methods In rabbit aortas, 3 different FDs (Silk Vista – SV; Pipeline with Shield technology – PED shield; Surpass Evolve – SE) were implanted in each animal with 3 different antiplatelet regimens: no antiplatelet therapy, aspirin alone, or aspirin and ticagrelor. Four weeks after FD implantations, angiography, flat-panel CT and Optical Coherence Tomography (OCT) were performed before harvest of the aorta. Extensive histopathology analyzes were performed including Environmental Scanning Electron Microscopy (ESEM), Multiphoton Microscopy (MPM) and histological staining with qualitative and/or quantitative assessment of device coverage.
Results All 23 included FDs remained patent without hyperplasia. Qualitative stent coverage assessment revealed that there were no statically significant differences between all FD groups (p=0.19, p=0.45, p=0.40, and p=0.84 for OCT, ESEM, MPM and histology, respectively). Quantitative neointimal measurement histopathologic sections also showed similar results between all 3 FD groups (p=0.70); but was significantly different between the 3 groups of antiplatelet regimens (p=0.07) with higher rate in the no antiplatelet group (p=0.05 versus aspirin alone and p=0.03 versus aspirin and ticagrelor).
Conclusion Our study provides evidence that FD integration into the arterial wall is similar between coated (PED shield) and uncoated devices (SV, SE) despite the use of coated surfaces, whichever the antiplatelet regiment. There is a need to promote FD integration with specific surface coverage.
Disclosure of Interest Nothing to disclose.

2.2 ISCHEMIC – Imaging

005/57 VALIDATION OF A NOVEL MULTIPHASE CTA PERFUSION TOOL COMPARED TO CTP IN PATIENTS WITH SUSPECTED ACUTE ISCHEMIC STROKE

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Introduction A recently developed multiphase-computed-tomography-angiography(mCTA) tool generates perfusion maps, similar to CT-perfusion(CTP) (i.e., mCTA-perfusion [mCTAp]).
Aim of Study To validate the clinical utility of mCTAp.
Methods In this multi-reader-multi-case analysis, we included baseline images: mCTAp(*StrokeSENS*-algorithm) and CTP (4D; GE-Healthcare) from 121 randomly selected patients whose scans were not part of algorithm-development. After excluding 2/121 scans due to poor image-quality, three experienced radiologists read Tmax-and rCBF-maps generated by the test(mCTAp) and reference(CTP) modality. The two reading sessions were separated by 5-days with randomized reading order. Core-laboratory imaging assessments-that used NCCT, mCTA and CTP-were considered as ground-truth. We used 'reader' as a random-effect to calculate the diagnostic performance for both modalities(mCTAp/CTP) regarding ischemia detection and side/location. Interpretation-time and inter-rater variability were compared across the modalities.
Results AUCs(95%CI) for detecting ischemia using mCTAp and CTP were 0.85(95%CI0.8–0.9) and 0.84(0.8–0.9) respectively(p=0.43). AUCs for the affected side were 0.94(0.92–0.97) and 0.96(0.94–0.98) (p=0.69) respectively; for detecting LVO were 0.84(0.8–0.9) and 0.86(0.8–0.9), (p=0.31) respectively; M2-or-distal occlusion were 0.79(0.73–0.84) and 0.88 (0.83–0.92) (p=0.22) respectively, for ACA-occlusion 0.82 (0.66–0.98) and 0.93(0.82–1.00) (p=0.15) respectively and for PCA-occlusions 0.9(0.8–1) and 0.99(0.98–0.99) (p=0.01) respectively. The median(IQR) time for image interpretation was 62s(IQR 46–78) and 59s(IQR 42–69) for mCTAp and CTP respectively (p=0.15). Fleiss` Kappa-values for inter-rater reliability in detecting ischemia were 0.5 and 0.8 for mCTAp and CTP respectively.

Conclusion mCTAp shows similar performance compared to CTP in assisting readers to detect ischemia and its side/location, requiring less radiation exposure, acquisition time and contrast-dose compared to additional-CTP, but mainly as it relates to proximal vessel occlusions.
Disclosure of Interest Dr. Menon holds patents on systems of triage in acute stroke, for LVO detection and for mCTAp, and stock ownership in Circle Cardiovascular Inc. Dr. Bala has nothing to declare. Dr. Duszynski is an employee of, and holds stock options for Circle Cardiovascular Imaging Inc. Dr. Nayem Pinky, Dr. Golan and Luis A Souto Maior Neto are

employees of Circle Cardiovascular Imaging Inc. All other co-authors have nothing to disclose.

O06/60 DIAGNOSIS OF INTRACRANIAL ATHEROSCLEROSIS RELATED LARGE VESSEL OCCLUSION BEFORE ENDOVASCULAR TREATMENT

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Introduction The diagnosis of large vessel occlusion (LVO) with underlying intracranial atherosclerotic disease (ICAD) before endovascular treatment (EVT) continues to be a challenge.

Aim We aimed to analyze baseline clinical-radiological variables associated with ICAD-LVO before EVT.

Methods Retrospective study of consecutive patients with stroke treated with EVT from January-2020 to April-2022. We included anterior intracranial LVO (ICA, MCA-M1,2) and analyzed baseline clinico-radiological variables associated with ICAD-LVO. We evaluated the diagnostic value of a multivariate regression model and a weighted scale to diagnose ICAD-LVO before EVT. ICAD-LVO was defined as the presence of angiographic residual stenosis or a trend to re-occlusion during EVT.

Results Of 338 patients included, 28 patients (8.3%) presented with ICAD-LVO. After adjusting for confounders, absence of atrial fibrillation (OR 10.19, 95%CI 1.12–86.6; p=0.033), lower hypoperfusion intensity ratio (HIR [Tmax>10s/Tmax>6s ratio], OR 0.02, 95%CI 0.00–0.41; p=0.013), presence of symptomatic intracranial artery calcification (IAC, OR 6.94, 95%CI 1.69–28.45, p=0.007), presence of a more proximal occlusion (ICA, MCA-M1: OR 3.16, 95%CI 1.03–9.67; p=0.044) and smoking (OR 3.26, 95%CI 1.21–8.75; p=0.019) were associated with ICAD-LVO. A weighted scale based on the covariates such as HIR (3points), absence of AF (2p), IAC (1p), occlusion location (1p) and smoking (1p) predicted ICAD-LVO with good accuracy (AUC=0.88, 95%CI 0.83–0.94; p<0.001).

Conclusion A combination of clinical and radiological variables available before EVT can accurately predict the presence of an ICAD-LVO. The ICAD-Scale could be useful to perform a rapid assessment of underlying etiology and suggest specific pathophysiology-based measures (adjunctive pharmacological treatment, angioplasty and/or intracranial stenting).

Disclosure of Interest Dr Molina reported receiving personal fees from AstraZeneca for consultant services outside the submitted work. Dr Tomasello reported receiving personal fees from Anaconda Biomed, Balt, Medtronic, Perflow, and Stryker outside the submitted work. Dr Ribo reported receiving personal fees from Anaconda Biomed, AptaTargets, Cerenovus, Medtronic, Methinks, Philips, Sanofi, Stryker, Balt, and Rapid AI outside the submitted work; he has a modest ownership of NoraHealth. The other authors report no conflicts. The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

2.3 ISCHEMIC – Treatment

O07/69 PROCEDURAL, CLINICAL AND SAFETY OUTCOMES IN ACUTE ISCHEMIC STROKE STRATIFIED BY OPERATOR TECHNIQUES AND CLOT LOCATION – INSIGHTS FROM THE ASSIST REGISTRY

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Introduction The ASSIST registry is a prospective, global registry that assessed clinical and procedural outcomes associated with various operator techniques for mechanical thrombectomy (MT) in acute ischemic stroke (AIS) patients with large vessel occlusion (LVO) where Stryker Neurovascular devices were used for the first pass.

Aim of Study An analysis of the registry data aims to determine if procedural outcomes, including first-pass effectiveness, safety, and clinical outcomes, vary by clot location among the three MT techniques.

Methods ASSIST patients were grouped in three cohorts: Stent Retriever (SR) Classic [SR + Balloon Guide Catheter (BGC)], SR Combination [SR + Aspiration Catheter (AC) ± Pump + BCG or Long Sheath (LS)] and Direct Aspiration [AC ± Pump + BGC or LS]. The procedural endpoint of eTICI 2c or greater on the first pass was stratified by clot location (MCA-M1, MCA-M2 and ICA). Similar analyses were performed on the primary clinical endpoint (mRS 0–2 at Day 90) and other secondary and safety endpoints.

Results A total of 1492 patients met the ASSIST eligibility criteria. First pass eTICI scores across the three different techniques, stratified by clot location, will be presented. Stratification by clot location will be also provided for other procedural, clinical and safety endpoints.

Conclusion ASSIST provides insights into the effectiveness and safety of different MT techniques as stratified by clot location to improve reperfusion rates, functional outcomes and quality of life for AIS patients worldwide.

ClinicalTrials gov ID: NCT03845491

Disclosure of Interest DFV reports consultancy for Medtronic, paid lectures for Cerenovus, and a research grant by MicroVention (unrelated to this work). DSL is a consultant as imaging core lab for Cerenovus, Genentech, Medtronic, Rapid Medical, Stryker, Vesalio. LLP is a Principal Biostatistician employed by Stryker Neurovascular. All other authors report no disclosures.