

$r=0.194$ , 95%-CI=-0.314;0.615). Systemic BP did not correlate with the MAP distal to the clot ( $p=0.899$ ,  $R^2<0.001$ , 95%-CI=-0.676;0.764) but with the MAP in the artery proximal to occlusion (e.g.,  $p<0.001$ ,  $R^2=0.441$ , 95%-CI=0.315;0.939).

**Conclusion** The intracerebral BP measured in the ischemic tissue distal to the LVO in AIS patients correlates with the extent of the ischemic core (i.e., ASPECTS), but not with collateral scores or systemic BPs. These results support the theory of impaired autoregulation in ischemic tissue and shed light on the pathophysiology of the BP mechanisms in AIS.

## 2.2. Imaging

### P124 PICTORIAL OVERVIEW OF DUAL-ENERGY CT HEAD IMAGING IN POST-MECHANICAL THROMBECTOMY: A SPECTRUM OF BLOOD BRAIN BARRIER INJURY

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**Introduction** Dual-energy computed tomography (DECT) has emerged as a promising modality for evaluating patients following mechanical thrombectomy (MT) for acute ischemic stroke. This pictorial overview aims to demonstrate the diagnostic capabilities and clinical implications of DECT in this critical post-procedural phase.

**Aim of Study** To illustrate the utility of DECT in post-MT patients, highlighting its role in assessing post thrombectomy CT hyperattenuating lesion by delineating post-procedural contrast staining (CS) and haemorrhage transformation, thereby providing an assessment of the grade of underlying blood brain barrier (BBB) disruption.

**Methods** A retrospective analysis between December 2023 and March 2024 was conducted on a cohort of post-MT patients who underwent DECT imaging after 24 hours post procedure. Imaging data were assessed for underlying CS, HT and established infarct using DECT-derived iodine maps and virtual non-contrast (VNC) images.

**Results** A total of 61 studies were identified. 8 studies were excluded due to clot resolution on catheter angiogram or clinical deterioration post-MT requiring decompressive craniectomy. Post-MT DECT imaging performed demonstrates ability to delineate areas of parenchymal CS and HT, allowing differentiation between viable and infarcted brain tissue, and thereby enabling treatment stratification. Differentiation between subarachnoid space contrast leak and haemorrhage was also highlighted in this case series.

**Conclusion** Dual-energy CT head imaging emerges as a valuable adjunct in the post-MT evaluation of acute ischemic stroke patients. Its integration into routine clinical practice holds promise for enhancing diagnostic accuracy and guiding therapeutic planning, thereby improving patient outcome by ensuring the right anti-platelet/anti-coagulant strategy is deployed.

**Disclosure of Interest** no.

## 2.1. Logistics

### P125 QUALITY IMPROVEMENT PROJECT YIELDS SIGNIFICANT, SUSTAINED STROKE TREATMENT ADVANCES ACROSS NATIONAL NETWORK

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**Introduction** Swift intervention is critical in acute ischemic stroke (AIS) management. Ireland's 'Door to Decision in under 30!' initiative aimed to expedite AIS assessment for thrombectomy, crucial for optimizing outcomes.

**Aim of Study** This study evaluates the five-year efficacy of the initiative on stroke treatment timelines.

**Methods** This longitudinal study spanned 22 Irish hospitals participating in an 8-month QI program, underpinned by the IHI Breakthrough Series Collaborative model. Multidisciplinary teams systematically mapped existing care processes, pinpointing key areas for enhancement. Utilizing Plan-Do-Study-Act (PDSA) cycles, targeted interventions were implemented, including pre-hospital alerts, patient pre-registration optimization, efficient staff paging and role allocation, immediate availability of decision-makers, administration of thrombolytic therapy in the CT room, and preparation of blood tests and imaging. The study meticulously tracked 'Door to CT', 'Door to Needle', and 'Door to Decision' times in AIS cases.

**Results** The period saw an increase in treated patients from 145 to 276. Concurrently, median Door to CT time significantly declined by 32.3% (from 31 to 21 minutes,  $p=0.02$ ). Similarly, Door to Needle time decreased by 36.1% (from 61 to 39 minutes,  $p=0.006$ ), Door to Mothership Contact by 38.5% (from 78 to 48 minutes,  $p=0.013$ ), and Door to Decision by 37.8% (from 82 to 51 minutes,  $p=0.008$ ). These improvements demonstrate the initiative's substantial impact on stroke care.

**Conclusion** The initiative led to significant and lasting improvements in AIS treatment efficiency, substantiating the collaborative, structured QI approach's role in clinical advancements.

## 2.3. Treatment

### P126 THE PEGASUS – HPC STENT SYSTEM FOR INTRACRANIAL ARTERIAL STENOSIS – A SINGLE-CENTER CASE SERIES

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**Introduction** Intracranial arterial stenting is a technique for treatment of symptomatic stenosis causing acute and/or