Results There were 22 males/23 females, age 69, ±16, median NIHSS 10.6. All occlusions were in the anterior circulation; 64% on the left.

There was a significant effect of phase on the TAC for both absolute and relative conspicuity of ischemic (Figure 2) vs normally-perfused areas (P < 0.00001).

The median absolute and relative conspicuity of ischemic:normally-perfused tissue was greatest at the peak arterial (8.6 HU, 1.15), notch (9.4 HU, 1.17) and peak venous phases (7 HU, 1.13) vs other portions of the TAC (2.5–3.3 HU, 1.04–1.09).

Conclusion The conspicuity of ischemic areas distal to a large artery occlusion in acute stroke is dependent on the phase of contrast arrival on time-resolved dynamic CTASI. The greatest conspicuity of areas of hypoattenuation between ischemic and normally perfused tissue is in the middle of the TAC.

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Disclosures C. Lum: None. P. Dave: None. R. Thornhill: None. S. Chakraborty: None. D. Dowlatshahi: None.

P-004 | **PUBLISHING TITLE: INCIDENCE OF LARGE VESSEL OCCLUSIONS AMONGST ALL HOSPITAL DISCHARGES FOR ACUTE ISCHEMIC STROKE – ESTIMATING A THROMBECTOMY ELIGIBLE POPULATION**

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Background Endovascular therapy has been endorsed for emergent large vessel occlusions (ELVO). However the incidence of ELVO is ill defined and speculative. A methodical estimate of these patients is important for developing systems of care, resource allocation and market projections.

Objective To determine the national burden of ELVO by extrapolating these rates from a tertiary rural health system that captures over 85% of all ischemic strokes within its large rural catchment area to the national inpatient sample (NIS) database.

Methodology All hospital discharges with a primary or secondary diagnosis of AIS (ICD-9 433.xx, 434.xx, 435.xx) over a 3 year period in a rural tertiary health system in the "stroke-belt" were evaluated for ELVO (ICA-T, MCA, BA) based on admission CT or MR angiography. For anterior circulation strokes, an ASPECTS ≥6 was considered favorable for thrombectomy. The same ICD-9 codes were utilized to query the NIS-database to determine all AIS hospital discharges nationally and the ELVO rates were estimated based on the results from our catchment population.

Results There were 2757 AIS hospital discharges over a 3 year period (March 2012 to March 2015) based on the selected ICD-9 codes. An ELVO was present in 324 (11.8%) of these patients. Out of these, M1-occlusion was present in 232 (71.6%), ICA-T in 37 (11.4%) and BA in 55 (17%) patients. The majority of ELVO patients (n = 174, 53.7%) presented within 6 hours of last seen normal (LSN). Of the remaining 150 (46.3%) patients: 45 (13.6%) presented at 6–12 hours, 60 (18.5%) at 12–24 hours and 27 (8.3%) at

greater than 24 hours of LSN. There were 19 (5.9%) patients with unknown LSN. For anterior circulation (n = 269, 83%) an ASPECTS ≥6 was observed in 118 of 150 (78.7%) patient presenting within 6 hours of LSN and in 66 of 1119 (55.5%) patients presenting after 6 hours of LSN (p < 0.0001). The same ICD-9 codes for the NIS-database returned 1,135,030 AIS discharges nationally for 2013. Applying the statistics from our population to the NIS-database yields 133,388 large vessel strokes nationally (95,512 M1, 15,233 ICA-T and 22,643 BA). Of these, 71,634 patients are estimated to present within 6 hours and 61,754 after 6 hours of LSN. There could be 48,579 patients within 6 hours and 27,172 patients after 6 hours with an ASPECTS ≥6 resulting in a total of 75,751 potential thrombectomy eligible patients in the anterior circulation.

Conclusion Almost 12% of the patients in our large rural sample of AIS hospital discharges presented with an ELVO. This translated to 133,388 patients when extrapolated to the NIS-database for 2013. An estimated 48,579 patients within 6 hours and 27,172 patients after 6 hours could be thrombectomy eligible based on ASPECTS ≥6. An additional 22,643 patients were estimated to have a basilar occlusion. These are estimates based on a stroke center within a healthcare system serving a large rural population and probably represent the upper limit since the area under study has one of the highest ischemic stroke rates in the country. These numbers can also be subject to regional variations but nonetheless serve as a starting point for estimating the ELVO stroke burden and for planning systems of care.

Disclosures A. Rai: 1; C; Stryker Neurovascular. 2; C; Stryker Neurovascular. P. Link: None. S. Boo: None. J. Domico: None. N. Lucke-Wold: None. A. Tarabishy: None. J. Carpenter: None.

P-005 | **AFTER MR SELECTION, FINAL INFARCT VOLUME IS INDEPENDENT OF TIME TO THROMBECTOMY FOR ANTERIOR LARGE VESSEL OCCLUSION STROKE**

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Purpose With thrombectomy for anterior circulation large vessel occlusion (ACLVO) stroke, time to recanalization is considered important, but collateral status may be a greater driver of outcome than time. We tested the hypothesis that patients with ACLVO stroke who present with a small core infarct on DWI would show similar good outcomes after thrombectomy, regardless of time from onset.

Materials and methods A cohort of 49 patients treated with thrombectomy after MR selection for ACLVO stroke from 11/1/2012 until 5/15/2015 was retrospectively reviewed. Patients were selected for thrombectomy based on DWI screening with presentation core volume ≤100 age considered favorable. Patients were divided into early (n = 24) or extended (n = 25) treatment groups, with intention to treat ≤6 hours = early, and comparisons made with final infarct volume the primary outcome.

Results Baseline characteristics were similar (early versus extended), including admission NIHSS (IQR 13–19 versus 11–18). Recanalization ≥ TICI2B was 79% and 83% respectively. There was no significant difference in median final infarct volume (16 mL versus 22 mL, estimated difference