SUPPLEMENTAL MATERIAL

Tables

Table I. Clinical outcomes

	Repeated imaging, n=165	**No repeated imaging, n=386**	**Unadjusted OR (95% CI)**	**Adjusted OR‡ (95% CI)**
Functional independence (90 day mRS 0-2) – no./total (%)	45/95 (47%)	113/279 (41%)	1.57 (1.01 – 2.44)	1.10 (0.61 – 1.99)
mRS score at 90 days* – median (IQR)	3 (1-6)	3 (1-6)	1.55† (0.95 – 2.54)	1.14† (0.70 – 1.88)
Symptomatic ICH – no./total (%)	2/164 (1%)	30/383 (8%)	0.15 (0.03 – 0.62)	0.29 (0.07 – 1.31)
Mortality at 90 days – no./total (%)	31/95 (33%)	78/279 (28%)	0.94 (0.61 – 1.46)	0.82 (0.45 – 1.50)

CI = confidence interval; ICH = intracranial hemorrhage; IQR = interquartile range; mRS = modified Rankin scale; OR = odds ratio.

Number of missing values: *177.

†Odds of 1-point shift towards a favorable outcome on the mRS for the repeated imaging group.

‡All analyses were adjusted for: age, blood pressure, previous stroke, NIHSS score, location of occlusion on first CTA, time of presentation (within or outside office hours), treatment with IVT, treatment with EVT.

Table II. Reasons for refraining from EVT

	Repeated imaging (n=90)	**No repeated imaging (n=60)**	***p* value**
Reason for refraining from EVT			<0.01
Clinical characteristics – no./total (%)	21/90 (23%)	37/60 (62%)	
Combination of clinical and radiological characteristics – no./total (%)	6*/90 (7%)	9/60 (15%)	
Radiological characteristics – no./total (%)	63†/90 (70%)	13/60 (22%)	
LVO resolved	55/90 (61%)	0/60 (0%)	
No LVO on PSC imaging‡	0/90 (0%)	10/60 (17%)	
Unfavorable imaging characteristics§	3/90 (3%)	2/60 (3%)	
EVT not technically feasible	3/90 (3%)	1/60 (2%)	
Other	2/90 (2%)	1/60 (2%)	

ASPECTS = Alberta stroke program early CT score; EVT = endovascular treatment; LVO = large vessel occlusion; no. = number; PSC = primary stroke center.

*In 3/6 patients, repeated imaging contributed to the decision to refrain from EVT; in the other 3/6 patients, the imaging factors contributing to the decision to refrain from EVT were (also) visible on PSC imaging.

†In 58/63 patients, repeated imaging contributed to the decision to refrain from EVT; in the other 5/63 patients, the imaging factors contributing to the decision to refrain from EVT were (also) visible on PSC imaging.

‡Upon reassessment by the neuro-interventional radiologist at the CSC

§Low ASPECTS, poor collateral status and/or unfavorable CT perfusion characteristics.

Figures

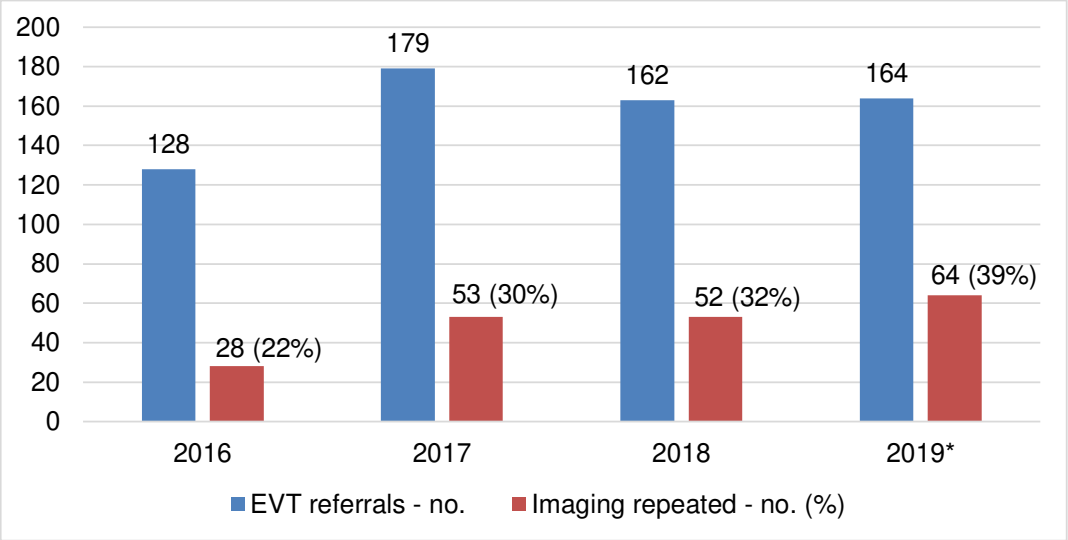

Figure 2. Referrals for EVT per year during the study period. Number of referrals (blue) and number and percentage of patients with repeated imaging (red) are reported for our hospital during the study period (January 2016 – June 2019). *For 2019, data were extrapolated for the remainder of the year. EVT = endovascular treatment; no. = number.

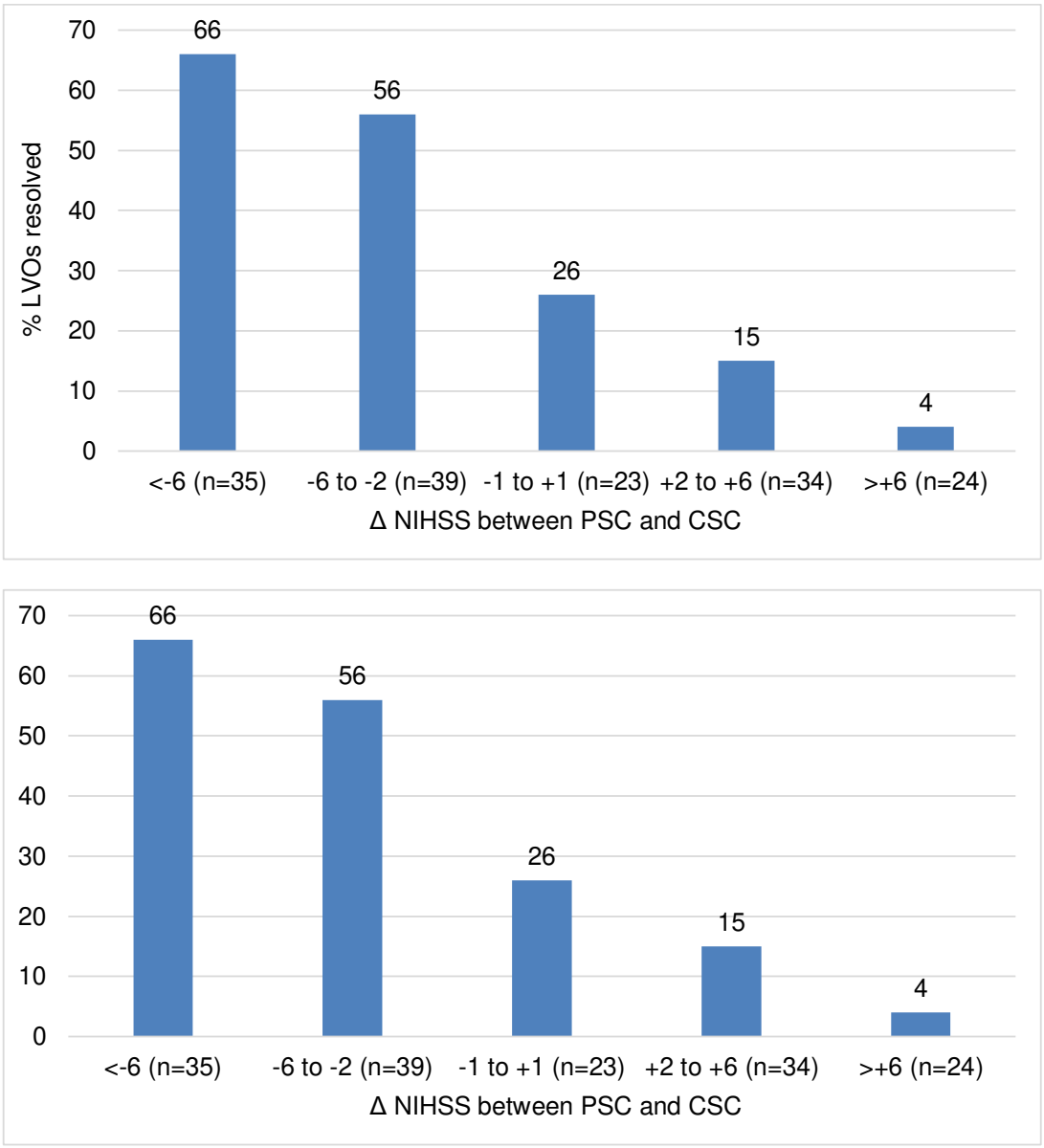

Figure 3. Percentage of resolved LVOs per Δ NIHSS sub group. The percentage of LVOs that were resolved on repeated CTA related to the change in NIHSS score between PSC and CSC. A negative Δ NIHSS value signifies clinical improvement; a positive value means clinical deterioration. The lower the Δ NIHSS, the higher the percentage of patients with a resolved LVO on repeated imaging ($p<0.01$). CSC = comprehensive stroke center; CTA = computed tomography angiography; LVO = large vessel occlusion; NIHSS = National Institutes of Health Stroke Scale; PSC = primary stroke center.