time to treatment increases the risk of parenchymal hematoma and hemorrhage in ischemic territory. Parenchymal hematoma is distinctly associated with IV TPA. Of all ICH subtypes, sICH has the strongest impact on functional independence.

Abstract O-022 Table 1 Predictors of ICH

Predictor	Odds ratio	Lower CI	Upper CI	p-value
Any ICH (HI, PH, SAH, IVH, RIH)				
ASPECTS	0.80	0.66	0.98	0.032
General anesthesia	0.36	0.18	0.71	0.003
Collateral grade	0.71	0.50	1.01	0.057
Hemorrhage in ischemic territory (HI and PH)				
ASPECTS	0.78	0.68	0.91	0.001
General anesthesia	0.54	0.31	0.92	0.023
Onset to groin puncture (per 15 min)	1.08	1.03	1.12	0.001
Parenchymal hematoma				
IV TPA	7.63	1.52	17.35	0.013
Onset to groin puncture (per 15 min)	1.11	1.02	1.20	0.015

Abbreviations: HI – hemorrhagic infarction; PH – parenchymal hematoma; SAH – subarachnoid hemorrhage; IVH – intraventricular hemorrhage; RIH – remote intracranial hemorrhage

Abstract O-022 Table 2 Clinical outcome

ICH subtype	Functional independence with ICH	Functional independence without ICH	p-value
Any ICH (HI, PH, SAH, IVH, RIH)	32.1% (27/84)	61.4% (183/298)	<0.001
HIT (HI + PH)	30.7% (23/75)	60.9% (187/307)	<0.001
SAH	44.4% (4/9)	55.2% (206/373)	0.74
PH	19.0% (4/21)	57.1% (206/361)	0.001
SICH	0.0% (0/4)	55.6% (210/378)	0.040

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O-023 THE CURRENT STATE OF NEUROINTERVENTIONAL SURGERY RESEARCH HIGHLIGHTS THE NEED FOR COLLABORATION

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Introduction No studies have sought to provide a quantitative or qualitative critique of the research produced in the field of neurointerventional (NI) surgery. We designed a pilot study to analyze recent publications from the *Journal of Neurointerventional Surgery* (JNIS) to understand the current state of NI research and collaboration.

Methods We reviewed all *JNIS* Online First publications from February 25, 2015 to February 24, 2016. All publications including human or non-human research, systematic reviews, meta-analyzes or literature reviews were included; editorials and commentaries were excluded. For each publication, study design, number of patients, authors, and contributing centers and study subject were recorded. Level of evidence was defined for each study using a novel scale (Table 1).

Results A total of 206 *JNIS* research articles met inclusion criteria. The average number of centers and authors per study was 2.1 (standard deviation 1.6, range 1–10) and 6.8 (SD 2.9, range 1–17), respectively. Only 4% of published studies were prospective studies (Table 2). Twenty-eight percent of scientific research published featured patient series of 9 or less. Forty-seven percent of publications involved individuals from a single center, with the vast majority (87%) having collaboration of individuals from 3 centers or less (Table 3). While 256 distinct institutions from all over the world were represented, 66% of centers were represented in only a single publication. The majority of publications were categorized as poor quality (level 4 or 5) evidence (91%; Table 4).

Conclusions This pilot study designed to assess the quality of research and inter-institution collaboration suggests that most published NI research is of low quality with few contributing institutions. Observations from this study therefore support the need for collaborative, multicenter prospective databases of NI cases.

Abstract O-023 Table 1 Modified level of evidence scale for NI research

Level of evidence	Study type
1	Systematic reviews or meta-analyzes of randomized controlled trials or individual randomized controlled trials
2	Systematic reviews or meta-analyzes of predominantly prospective studies, or individual prospective studies
3	Systematic reviews or meta-analyzes of predominantly retrospective studies, or restrospective case-control studies
4	Retrospective non-case-control studies of 10 or more patients
5	Case reports, case series of 9 patients or less, national or state retrospective database studies, animal studies, or other non-human studies

Abstract O-023 Table 2 Types of studies

Study type	Number of studies	Percent
Randomized controlled trial	1	0.5
Prospective series (10+ pts)	7	3.4
Retrospective series (10+ pts)	91	44.2
Case report	35	17.0
Case series (2–9 pts)	23	11.2
Animalstudy	9	4.4
Non-humanor imaging study	21	10.2
Systematic reviewor meta-analysis	7	3.4
National or state database analysis or literature review	12	5.8

Abstract O-023 Table 3 Number of centers represented in studies

Number of centers represented	Number of studies	Percent
10	2	1.0
9	1	0.5
7	3	1.5
6	2	1.0
5	4	1.9
4	15	7.3
3	31	15.0
2	51	24.8
1	97	47.1

Abstract O-023 Table 4 Level of evidence of the research studies

Level of evidence	Number of studies	Percent of total	Mean number of centers (SD)	Mean number of authors (SD)
1	3	1.5	4.0 (2.0)	6.0 (1.7)
2	7	3.4	4.6 (3.8)	8.6 (4.0)
3	9	4.4	2.0 (0.9)	6.0 (2.5)
4	97	47.1	2.2 (1.6)	7.8 (2.8)
5	90	43.7	1.7 (1.1)	5.5 (2.5)
Total	206	100	2.1 (1.6)	6.8 (2.9)

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O-024 SYSTEMS OF CARE EFFICIENCY AND INTERHOSPITAL TRANSFER DELAYS IN THE STRATIS REGISTRY

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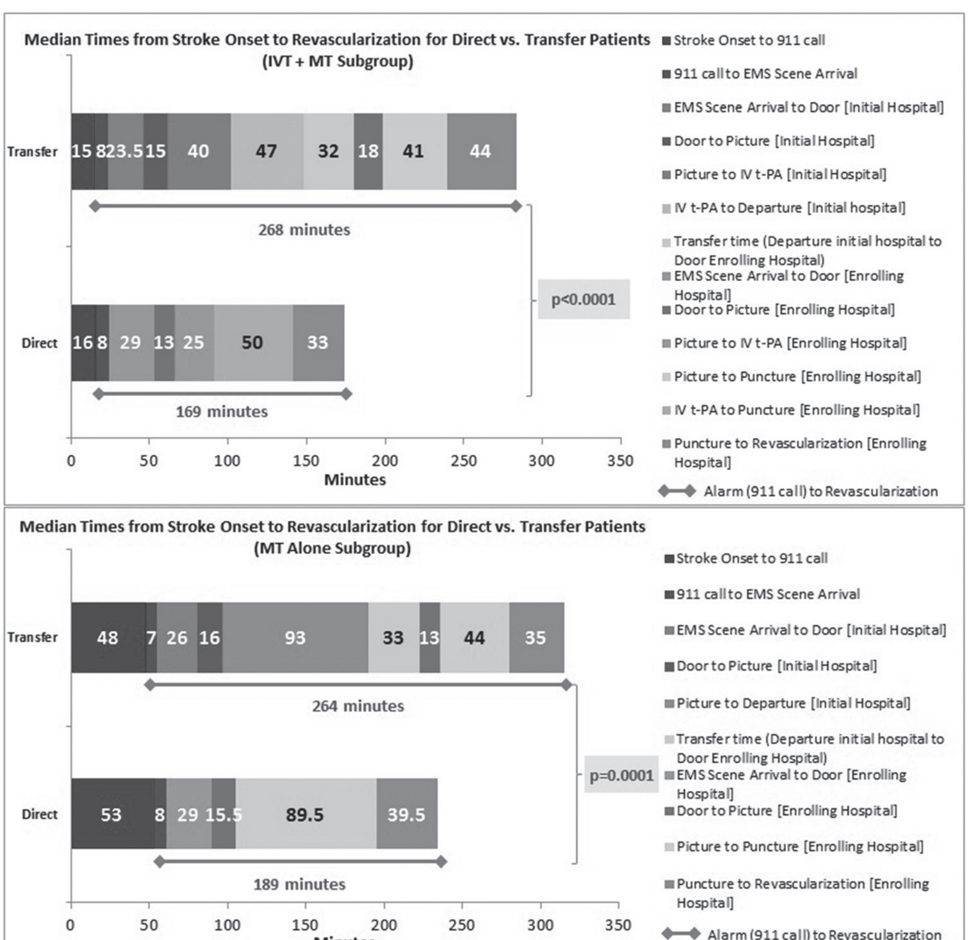
Introduction/purpose The efficacy of endovascular stroke treatment is highly time-dependent. Thus optimizing systems of care to deliver appropriate treatment as swiftly as possible is a key goal of stroke care providers. We aim to analyze timeliness of treatment in a large endovascular cohort by assessing 1) real-world time metrics of care delivery, 2) specific causes of delays to treatment, and 3) time lost due to interhospital transfer.



Abstract O-024 Figure 1