

Data Supplement

TABLES

On-line Table 1: Search Strategies

Databse	Search Strategy
Pubmed	((((((((((("gender identity"[MeSH Terms] OR ("gender"[All Fields] AND "identity"[All Fields])) OR "gender identity"[All Fields]) OR "gendered"[All Fields]) OR "gender s"[All Fields]) OR "gendering"[All Fields]) OR "genderized"[All Fields]) OR "genders"[All Fields]) OR "sex"[MeSH Terms]) OR "sex"[All Fields]) OR "gender"[All Fields]) OR ("sex"[MeSH Terms] OR "sex"[All Fields])) AND (((("mechanical"[All Fields] OR "mechanically"[All Fields]) OR "mechanicals"[All Fields]) OR "mechanics"[MeSH Terms]) OR "mechanics"[All Fields]) OR "mechanic"[All Fields]) OR "endovascular"[All Fields])) AND (((("stroke"[MeSH Terms] OR "stroke"[All Fields]) OR "strokes"[All Fields]) OR "stroke s"[All Fields]))
OVID Medline	((stroke.kw) AND (thrombectomy OR endovascular OR ADAPT).kw) OR ((stroke.sh) AND (thrombectomy OR endovascular OR ADAPT).sh) - limit to (English language and humans)
CCTR	(stroke) in Title Abstract Keyword AND (thrombectomy OR endovascular OR ADAPT) in Title Abstract Keyword
DARE	(stroke)) OR ((endovascular OR thrombectomy OR ADAPT))

On-line Table 2: Newcastle Ottawa Assessment Scale for Cohort Studies for the observational studies

Author	Title	Year	Selection /4	Comparability /2	Exposure/Outcome /3	Newcastle Ottawa Scale /9
Bai et al.	Impact of Retriever Passes on Efficacy and Safety Outcomes of Acute Ischemic Stroke Treated with Mechanical Thrombectomy	2018	4	2	3	9
Barral et al.	Predictors of favorable outcome after mechanical thrombectomy for anterior circulation acute ischemic stroke in octogenarians	2018	4	2	3	9
Brouwer et al.	Thrombectomy using the EmboTrap device: Core laboratory-assessed results in 201 consecutive patients in a real-world setting	2018	4	2	2	8
Carvalho et al.	Is the Efficacy of Endovascular Treatment for Acute Ischemic Stroke Sex-Related	2018	4	2	3	9
Choi, Im et al.	Comparison of Outcomes After Mechanical Thrombectomy Alone or Combined with Intravenous Thrombolysis and Mechanical Thrombectomy for Patients with Acute Ischemic Stroke due to Large Vessel Occlusion	2018	4	2	3	9
Davison et al.	Arterial diameter and the gender disparity in stroke thrombectomy outcomes	2018	4	2	3	9
Gory et al.	Contact Aspiration with the New ARC Catheter for Thrombectomy of Acute Ischemic Stroke: Single-Center Results	2018	4	0	3	7
Blanc et al.	Predictors of the Aspiration Component Success of a Direct Aspiration First Pass Technique (ADAPT) for the Endovascular Treatment of Stroke Reperfusion Strategy in Anterior Circulation Acute Stroke	2017	4	2	3	9
Angermaier et al.	Intravenous Thrombolysis and Passes of Thrombectomy as Predictors for Endovascular Revascularization in Ischemic Stroke	2016	4	2	2	8
Gerber et a.	Collateral state and the effect of endovascular reperfusion therapy on clinical outcome in ischemic stroke patients	2016	4	2	3	9
Goyal, Tsivgoulis et al.	Admission hyperglycemia and outcomes in large vessel occlusion strokes treated with mechanical thrombectomy	2018	4	2	3	9

Hussein et al.	Rates and predictors of futile recanalization in patients undergoing endovascular treatment in a multicenter clinical trial	2018	4	2	3	9
Imahori et al.	Mechanical Thrombectomy for Acute Ischemic Stroke Patients Aged 80 Years or Older	2017	4	2	2	8
Jiang et al.	Predictors of Outcome and Hemorrhage in Patients Undergoing Endovascular Therapy with Solitaire Stent for Acute Ischemic Stroke	2015	4	2	3	9
Kabra et al.	Mechanical thrombectomy for anterior circulation stroke: 5-year experience in a statewide service with differences in pretreatment time metrics across two hospitals sites	2017	4	2	3	9
Kim et al.	Clinical implications of CT hyperdense artery sign in patients with acute middle cerebral artery occlusion in the era of modern mechanical thrombectomy	2017	4	2	3	9
Kuntze et al.	Mechanical Thrombectomy in Acute Ischemic Stroke-Patients with Wake-Up Stroke and the Elderly May Benefit as Well	2016	4	2	3	9
Lima et al.	Endovascular Therapy for Large Vessel Stroke in the Elderly: Hope in the New Stroke Era. Cerebrovascular Diseases	2016	4	2	3	9
Linfante, Starosciak et al.	Predictors of poor outcome despite recanalization: a multiple regression analysis of the NASA registry	2016	4	2	3	9
Lowhagen Henden et al.	Hypotension During Endovascular Treatment of Ischemic Stroke Is a Risk Factor for Poor Neurological Outcome	2015	4	2	3	9
Madsen et al.	Sex differences in 90-day outcomes after mechanical thrombectomy for acute ischemic stroke	2018	4	2	3	9
Manceau et al	Is there a benefit of mechanical thrombectomy in patients with large stroke (DWI-ASPECTS <= 5)?	2018	4	2	3	9
Mokin, Kan et al	Endovascular therapy of wake-up strokes in the modern era of stent retriever thrombectomy	2016	4	2	3	9
Mokin, Primiani et al	Endovascular treatment of middle cerebral artery M2 occlusion strokes: Clinical and procedural predictors of outcomes	2017	4	2	3	9
Mundiyanapurath et al	Endovascular stroke therapy may be safe in patients with elevated international normalized ratio	2017	4	2	3	9
Sillanpaa et al.	Chronic Infarcts Predict Poor Clinical Outcome in Mechanical Thrombectomy of Sexagenarian and Older Patients	2018	4	2	3	9
Sung et al	Clinical predictors for favorable outcomes from endovascular recanalization in wake-up stroke	2017	4	2	3	9
Sung et al	Functional outcome after recanalization for acute pure M1 occlusion of the middle cerebral artery as assessed by collateral CTA flow	2015	4	2	3	9
Todo et al	National Institutes of Health Stroke Scale-Time Score Predicts Outcome after Endovascular Therapy in Acute Ischemic Stroke: A Retrospective Single-Center Study	2016	4	2	3	9

Zi et al	Clinical Effectiveness and Safety Outcomes of Endovascular Treatment for Acute Anterior Circulation Ischemic Stroke in China	2017	4	2	3	9
Uchida et al	Sex Differences in Management and Outcomes of Acute Ischemic Stroke With Large Vessel Occlusion	2019	4	2	3	9

On-line Table 3: Cochrane Collaboration's tool for assessing risk of bias in Randomized Controlled Trials

Author	Title	Year	Random sequence generation	Allocation	Blinding of outcome assessment	Incomplete outcome data	Selective reporting	Other bias	Overall Risk
Chalos et al.	Does Sex Modify the Effect of Endovascular Treatment for Ischemic Stroke? A Subgroup Analysis of 7 Randomized Trials	2019	Yes	No	Yes	Yes	Yes	No	Low
Albers et al.	Thrombectomy for Stroke at 6 to 16 Hours with Selection by Perfusion Imaging (DEFUSE 3)	2018	Yes	No	Yes	Yes	Yes	No	Low

On-line Table 4: Summary characteristics of included studies

Study	Year	Country	Study design	Sample size	Female (%)	NIHSS score
Chalos et al. ⁶	2019	Worldwide	Meta-analysis	871	47%	/
Uchida et al. ⁷	2019	Japan	Prospective	1278	40.8	16
Albers et al. ²⁰	2018	USA	Prospective	92	50.0	16
Bai et al. ²¹	2018	China	Retrospective	472	44.7	17
Barral et al. ²²	2018	France	Retrospective	169	59.8	18
Brouwer et al. ²³	2018	France	Prospective	201	43.3	15
Carvalho et al. ²⁴	2018	Portugal	Retrospective	145	55.9	/
Choi et al. ²⁵	2018	Korea	Retrospective	81	43.2	/
Davison et al. ²⁶	2018	USA	Retrospective	92	45.7	20
Gory et al. ²⁷	2018	France	Retrospective	20	35.0	15
Goyal et al. ²⁸	2018	Worldwide	Retrospective	231	49.0	16
Hussein et al. ²⁹	2018	Worldwide	Retrospective	130	52.3	/
Madsen et al. ³⁰	2018	USA	Prospective	279	52.0	17

Manceau et al. ³¹	2018	France	Retrospective	82	47.6	18
Sillanpää et al. ³²	2018	Finland	Prospective	62	47.0	15
Blanc et al. ³³	2017	France	Retrospective	347	54.2	17
Imahori et al. ³⁴	2017	Japan	Retrospective	80	46.0	15
Kabra et al. ³⁵	2017	Australia	Retrospective	100	47.0	15
Kim et al. ³⁶	2017	Korea	Retrospective	212	49.5	13
Mokin et al. ³⁷	2017	USA	Retrospective	117	42.0	15
Mundiyanapurath et al. ³⁸	2017	Germany	Retrospective	435	48.3	17
Sung et al. ³⁹	2017	Korea	Retrospective	41	43.9	16
Zi et al. ⁴⁰	2017	China	Retrospective	698	39.4	16
Angermaier et al. ⁴¹	2016	Germany	Retrospective	63	63.5	/
Gerber et al. ⁴²	2016	Germany	Retrospective	93	48.0	17
Kuntze et al. ⁴³	2016	Sweden	Retrospective	192	45.8	16
Lima et al. ⁴⁴	2016	USA	Retrospective	111	67.0	19
Linfante et al. ⁴⁵	2016	Multiple countries in North America	Retrospective	234	51.1	/
Mokin et al. ⁴⁶	2016	USA	Retrospective	52	51.9	/
Todo et al. ⁴⁷	2016	Japan	Retrospective	128	33.6	/
Jiang et al. ⁴⁸	2015	China	Retrospective	89	38.2	19
Lowhagen et al. ⁴⁹	2015	Sweden	Retrospective	108	38.9	21
Sung et al. ⁵⁰	2015	Korea	Retrospective	30	43.3	17

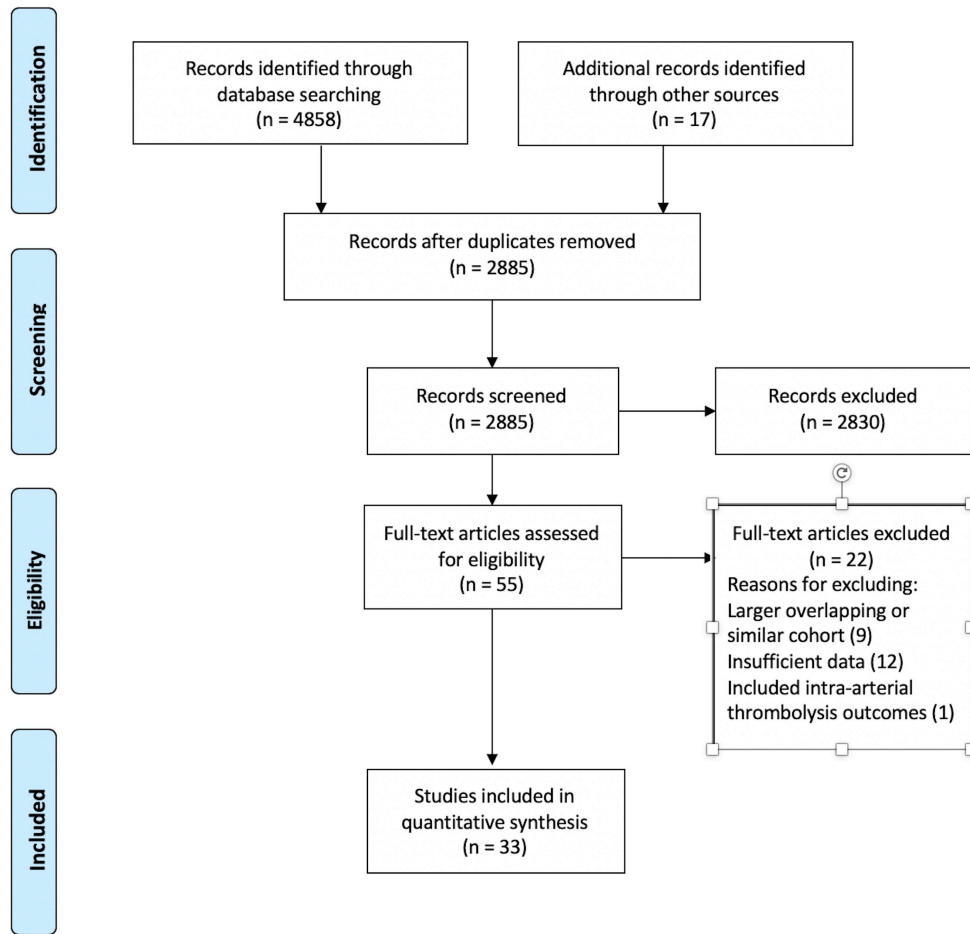
On-line Table 5: Assessment of risk of bias

Variable	Egger's test	Begg and Mazumdar rank correlation test p-value (Kendall's tau)
90-day mortality	p=0.62	1.00 (0.0476)
Good outcome	p=0.77	0.20 (0.1656)
sICH	p=0.22	0.40 (-0.2857)
Recanalization	p=0.83	0.86 (0.0667)

Note: sICH, symptomatic intracranial hemorrhage.

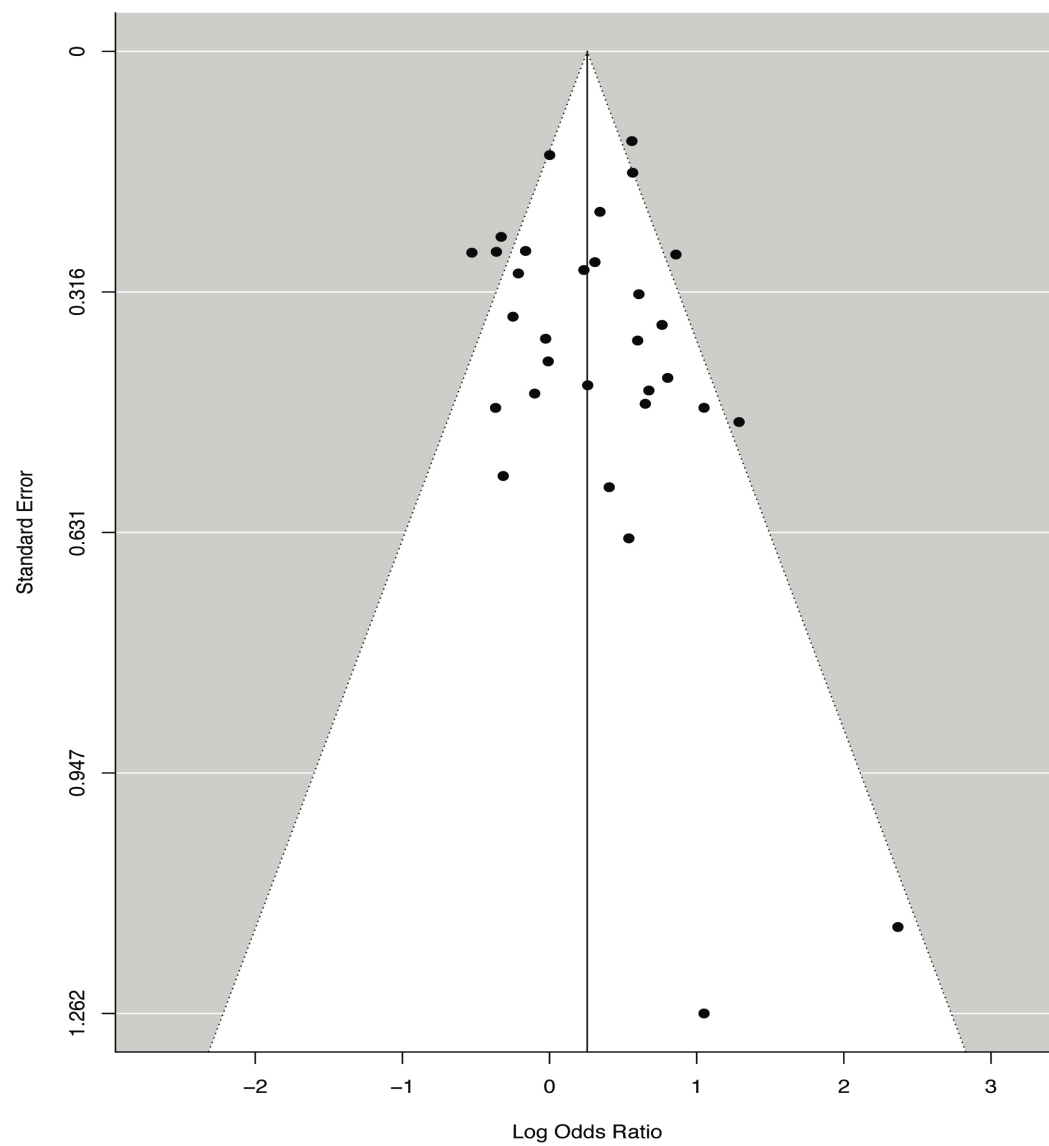
FIGURES

Supplemental Figures

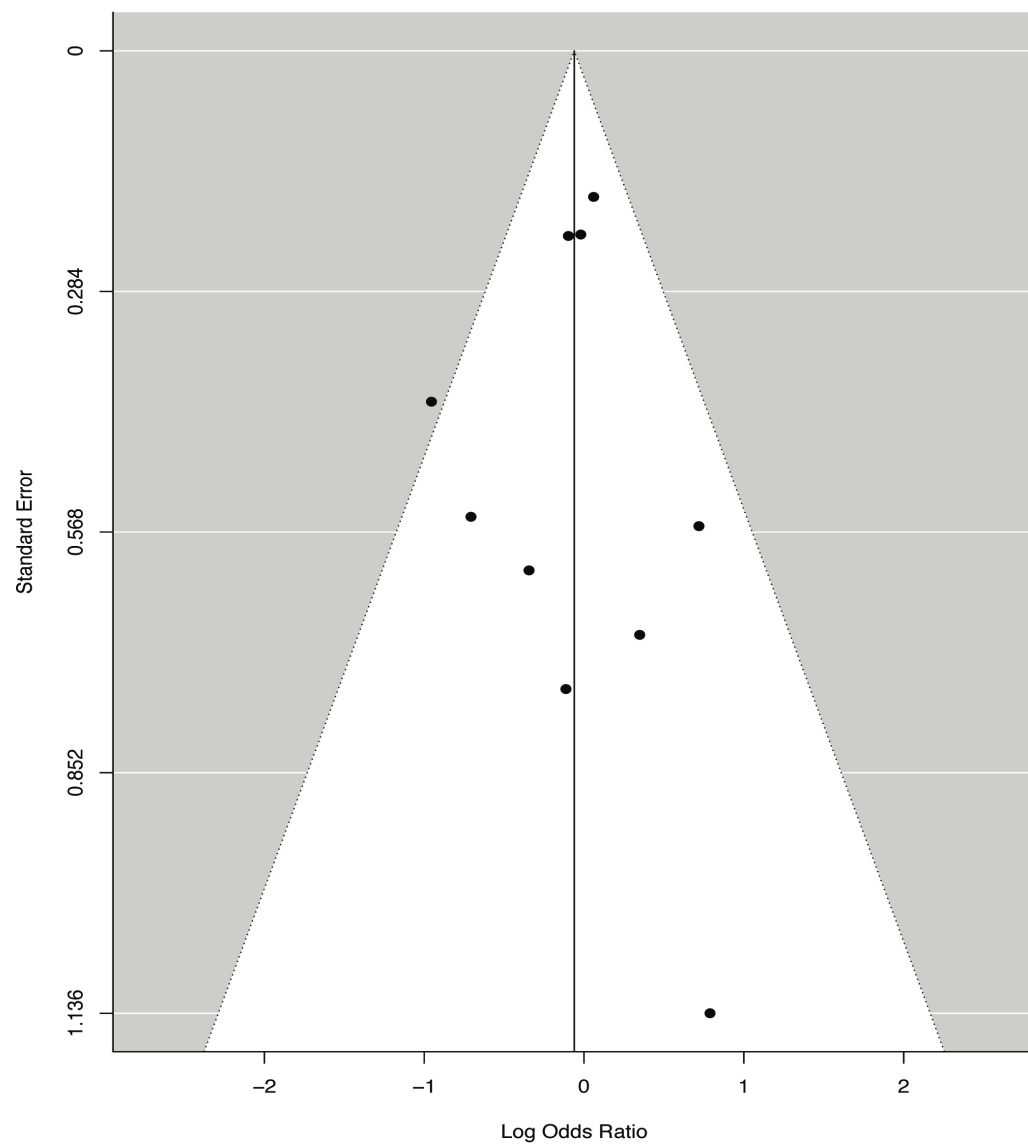


ON-LINE FIG 1. Flow diagram of study selection

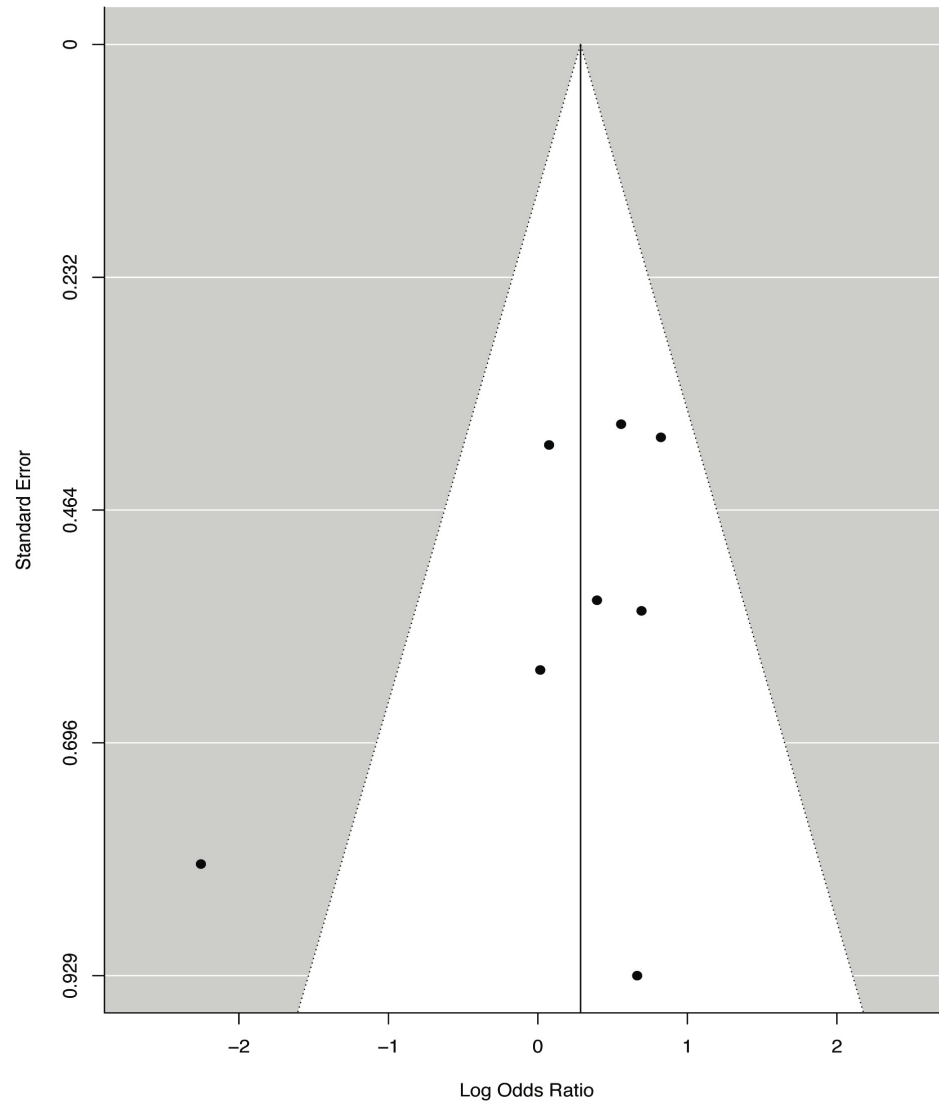
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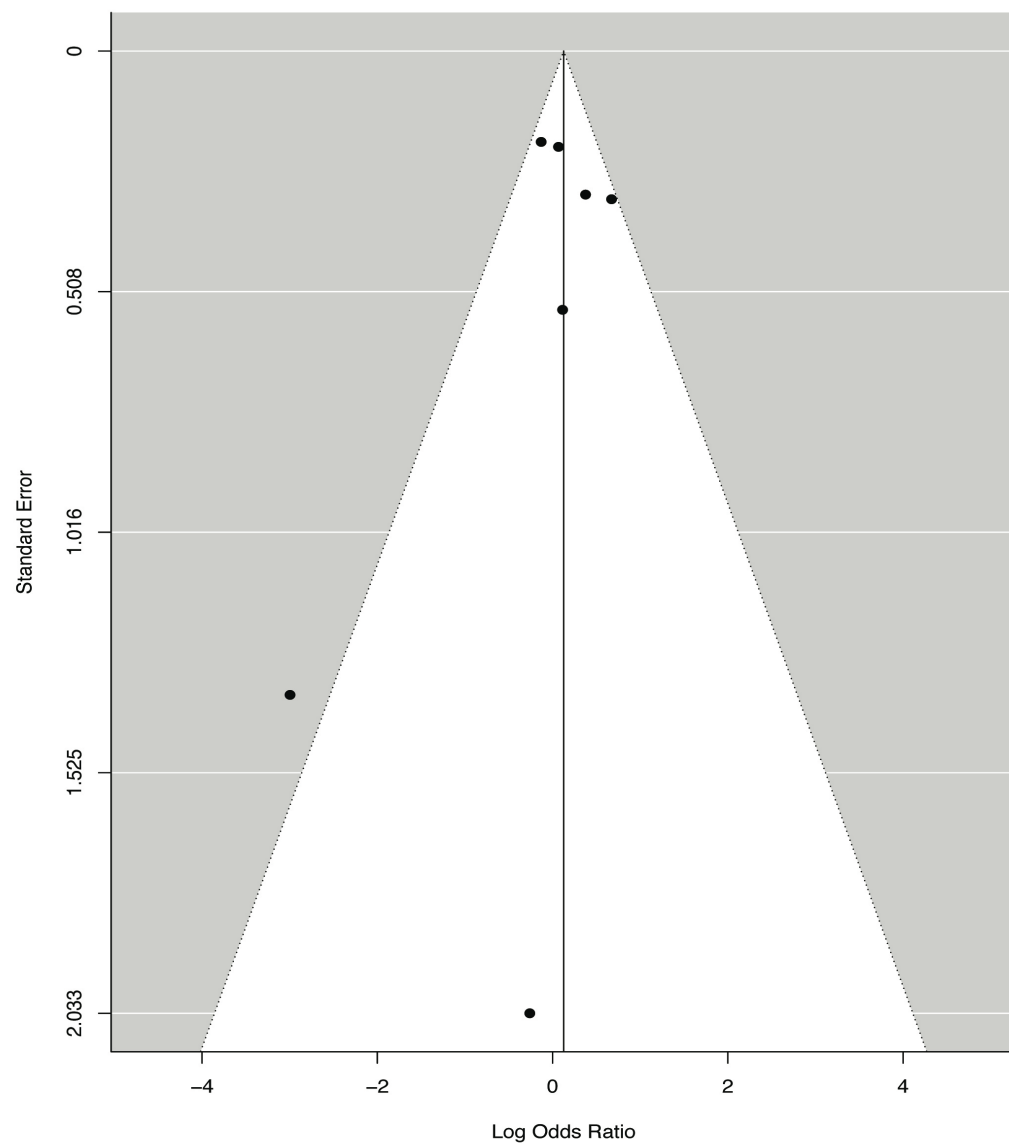
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D



C



ON-LINE FIG 2 Funnel plots to assess for publication bias A. Good outcome ($mRS \leq 2$) at 90 days B. Recanalization ($TICI \geq 2b$) C. Mortality at 90 days D. Symptomatic Intracranial Hemorrhage