Supplementary Online Content

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This supplementary material has been provided by the authors to give readers additional information about their work.

eMethods

Complete MEDLINE search algorithm

((endovascular[All Fields] AND ("therapy"[Subheading] OR "therapy"[All Fields] OR "treatment"[All Fields] OR "therapeutics"[MeSH Terms] OR "therapeutics"[All Fields])) OR (("thrombectomy"[MeSH Terms] OR "thrombectomy"[All Fields]) AND

("instrumentation"[Subheading] OR "instrumentation"[All Fields] OR "devices"[All Fields] OR "equipment and supplies"[MeSH Terms] OR ("equipment"[All Fields] AND "supplies"[All Fields]) OR "equipment and supplies"[All Fields])) OR (intra-arterial[All Fields] AND revascularization[All Fields]) OR (retrievable[All Fields] AND ("stents"[MeSH Terms] OR "stents"[All Fields]))) AND ((emergent[All Fields] AND large[All Fields] AND ("blood vessels"[MeSH Terms] OR ("blood"[All Fields] AND "vessels"[All Fields]) OR "blood vessels"[All Fields] OR "vessel"[All Fields]) AND ("dental occlusion"[MeSH Terms] OR ("dental"[All Fields] AND "occlusion"[All Fields]) OR "dental occlusion"[All Fields] OR "occlusion"[All Fields])) OR (acute[All Fields] AND ("ischemia"[MeSH Terms] OR "ischemia"[All Fields] OR "ischemic"[All Fields]) AND ("stroke"[MeSH Terms] OR "stroke"[All Fields])) OR (proximal[All Fields] AND intracranial[All Fields] AND "occlusion"[All Fields]) OR "dental occlusion"[All Fields] OR "occlusion"[All Fields])) OR (anterior[All Fields] AND ("blood circulation"[MeSH Terms] OR ("blood"[All Fields] AND "circulation"[All Fields]) OR "blood circulation"[All Fields] OR "circulation"[All Fields]))) AND ((low[All Fields] AND NIHSS[All Fields]) OR (mild[All Fields] AND ("stroke"[MeSH Terms] OR "stroke"[All Fields])) OR severity[All Fields])

Methods:

The decision to offer MT or bMM for mild strokes with EVLO (NIHHS <6) was based on individual center's protocol and treating physicians discretions. The tertiary stroke centers included in our study tended to offer MT on case to case basis depending on type of initial deficit, collateral status and presentation time window. The patients who were offered bMM received IVT when time from symptom onset to treatment was less

then 4 hours and 30 minutes. Otherwise antithrombotic medication was given based on treating physician's discretion. It was a common practice to monitor these patients in intensive care unit. In the endovascular arm, all patients received IVT prior to MT when time from symptom onset was below 4 hours 30 minutes and mELVO patients fulfilled eligibility criteria for IVT. Treating physicians performing MT in mELVO patients used stent retriever or catheter aspiration according to their discretion.

Procedural technical details/efficiency data included onset to groin puncture time, groin puncture to reperfusion time, and type of primary endovascular therapy (stent retriever or direct aspiration). Reperfusion was assessed using modified thrombolysis in cerebral Infarction (mTICI) scale, and successful reperfusion was defined as mTICI ≥2b. The reperfusion scales were obtained from the reports of endovascular specialists at different centers that were recorded during the endovascular procedures as part of the clinical duties of the interventionalists. There was no central adjudication of radiological outcomes.

Statistical analysis

We compared the baseline characteristics and outcomes among AIS patients with mELVO treated with either MT or bMM. Continuous variables are presented as mean±SD (normal distribution) and as median with interquartile range (skewed distribution). Categorical variables are presented as percentages with their corresponding 95% confidence intervals (CIs). Statistical comparisons between the 2

groups were performed using the χ^2 test or, in case of small expected frequencies, the Fisher exact test. Continuous variables were compared by the use of the unpaired t test or Mann-Whitney U-test, as indicated. The distribution of the 3-month mRS scores among the two groups was compared using the Cochran-Mantel Haenszel test and univariable/multivariable ordinal logistic regression (shift analysis). Univariable and multivariable binary logistic regression analyses were also used to evaluate the associations between baseline characteristics and safety or efficacy outcomes. In multivariable regression analysis we adjusted for a priori defined confounders of age, admission NIHSS-score, pretreatment with IVT, admission glucose, admission systolic blood pressure, collateral status and ASPECTS on baseline neuroimaging. We also performed alternative multivariable analyses using as confounders all baseline characteristics that contributed to the outcome of interest in the initial univariable analyses at p values <0.1. All baseline characteristics that contributed to the outcome of interest in the initial univariable analyses at p values <0.1 were included in the multivariable model as candidate variables. The final variables that were independently associated in the multivariable logistic regression analyses with the outcome of interest were selected using a p value <0.05. The goodness-of-fit of the multivariable regression models was assessed with the Pearson χ^2 statistic. We also performed ordinal regression analysis on discharge and 90-day functional outcome to identify independent predictors of functional improvement defined as 1-point decrease in the mRS-score in a shift analysis. To confirm the findings of the aforementioned regression models we performed additional sensitivity analyses on the outcomes of interest in propensity score matched (PSM) groups. Patients in the active group (MT treatment) were matched to control group patients (bMM) using a structured, iterative propensity score model with the primary objective to maximize the balance in the distribution of possible

confounders between the two aforementioned groups. In the PSM algorithm we included all baseline characteristics, except for treatment modality (MT vs. bMM), and calculated the corresponding propensity score of MT treatment for each subject. A nearest neighbor matching algorithm was then used to match patients receiving MT treatment to patients receiving bMM on a 1:1 ratio (with no replacement) within 0.2*SD of the logit of the propensity score. To determine whether PSM achieved balance in all potential confounders, we compared all baseline characteristics of patients receiving MT treatment to their PSM counterparts.

Sensitivity analyses involved the use of both regression-based multiple imputation and last-observation carried forward (LOCF) imputation of missing three-month follow-up evaluations. We also conducted additional subgroup analyses stratified by location of occlusion (proximal vs. distal) and baseline stroke severity (4-5 points in NIHSS-score vs. 0-3 points) to investigate for potential heterogeneity on the outcomes of interest between the two treatment groups.

In our meta-analysis we calculated relative odds ratios (OR) and their corresponding 95% confidence intervals (CI) to measure the effect size of all the outcomes. We also performed sensitivity analyses according to the status of three-month follow-up evaluations after excluding patients with missing 3-month mRS-scores. We additionally performed adjusted analyses for those studies that provided OR of MT vs. bMM after adjusting for confounding variables. For the qualitative interpretation of heterogeneity, $I^2 > 50\%$ and $I^2 > 75\%$ indicated substantial and considerable heterogeneity, respectively. We performed equivalent z test for each pooled OR, and a two-tailed p value <0.05 was considered statistically significant. We also performed sensitivity analysis by excluding the patient who were lost to follow up to effectively compare our retrospective cohort with the findings of metanalysis. All

statistical analyses were conducted using Cochrane Collaboration's Review Manager Software Package (RevMan 5.3) and the Stata Statistical Software Release 13 (College Station, TX, StataCorp LP).

Supplementary Tables

eTable 1. Percentage of missing variables in baseline characteristics and outcomes

Baseline Characteristics	**Mechanical Thrombectomy (n=138)**	**Best Medical Management (n=113)**
Age	0%	0%
Females (%)	0%	0%
Hypertension (%)	0%	0%
Diabetes Mellitus (%)	2.2%	0.9%
Hyperlipidemia (%)	0%	0%
Atrial fibrillation (%)	1.4%	0%
Coronary artery disease (%)	0%	0%
Congestive heart failure (%)	12.3%	0%
End-stage renal disease (%)	8.7%	1.8%
Current smoking (%)	0%	0.9%
Admission Glucose	3.6%	1.8%
Admission SBP	15.9%	4.4%
Admission DBP	16.7%	5.3%
Antiplatelet pretreatment	4.3%	0%
Anticoagulant pretreatment	8.0%	0.9%
NIHSS admission	0%	0%
ASPECTS admission	29.7%	33.6%
Good collaterals on CTA	28.3%	46.0%
IVtPA	0.7%	0%
Onset-to-tPA*	10.8%	8.5%
Occlusion location	0%	0%
Outcomes		
Length of Hospital stay	0%	0%
Length of ICU stay**	0%	0%
Successful reperfusion	0%	-
Asymptomatic ICH	0.7%	3.5%
Symptomatic ICH	0.7%	5.3%
Discharge NIHSS	15.0%	14.5%
Discharge mRS	8.0%	1.8%
3 month mRS	3.6%	22.1%
3-month FFO	3.6%	22.1%
3-month FI	3.6%	22.1%
3-month Mortality	3.6%	22.1%

* among patients treated with intravenous thrombolysis

** among patients admitted to the ICU

ICU: intensive care unit; ICH: Intracranial hemorrhage; mRS: modified Rankin Scale score; FFO: favorable functional outcome defined as modified Rankin Stroke scale scores of 0-1 at 3 months; FI: functional independence defined as modified Rankin Stroke scale scores of 0-2 at 3 months

eTable 2. Baseline Characteristics and outcomes between patients receiving treatment with mechanical thrombectomy and those receiving best medical management before and after the publication of mechanical thrombectomy trials.

Baseline Characteristics	**Until June 2015**			**Following June 2015**		
	Mechanical thrombectomy (n=35)	**Best medical management (n=31)**	**p-value**	**Mechanical thrombectomy (n=103)**	**Best medical management (n=82)**	**p-value**
Age	62.2±16.7	63.9±12.9	0.642	66.2±16.6	65.2±12.8	0.645
Females (%)	48.6%	48.4%	0.988	46.6%	43.9%	0.714
Hypertension (%)	68.5%	77.4%	0.420	76.7%	68.3%	0.201
Diabetes Mellitus (%)	28.6%	22.6%	0.579	29.0%	27.2%	0.784
Hyperlipidemia (%)	34.2%	58.1%	0.053	52.4%	43.9%	0.249
Atrial fibrillation (%)	28.6%	22.6%	0.579	29.7%	20.7%	0.167
Coronary artery disease (%)	17.1%	32.2%	0.153	17.4%	25.6%	0.178
Congestive heart failure (%)	16.1%	12.9%	0.718	10.0%	13.4%	0.485
End-stage renal disease (%)	9.1%	0%	0.085	4.3%	2.5%	0.519
Current smoking (%)	20.0%	33.3%	0.223	28.1%	42.7%	0.039
Admission Glucose	122.7±37.8	131.0±76.8	0.587	128.0±47.0	138.5±59.0	0.182
Admission SBP	144.8±21.3	153.2±25.8	0.192	148.8±22.9	145.9±32.6	0.495
Admission DBP	82.0±13.2	83.0±23.1	0.840	83.7±14.8	82.6±19.4	0.681
Antiplatelet pretreatment	53.1%	48.4%	0.707	50.0%	36.6%	0.070
Anticoagulant pretreatment	31.2%	13.3%	0.092	13.7%	13.4%	0.958
NIHSS admission	4 (3-5)	3 (2-4)	0.278	4 (3-5)	3 (2-4)	<0.001
ASPECTS admission	10 (9-10)	9 (8-10)	0.073	10 (8-10)	10 (9-10)	0.633

Good collaterals on CTA	87.5%	88.9%	0.891	80.0%	76.7%	0.677
IVtPA	54.2%	41.9%	0.316	53.9%	41.5%	0.093
Onset-to-tPA*	144.3±74.0	113.4±43.1	0.201	129.8±64.3	134.3±57.3	0.752
Proximal Occlusion	74.3%	64.5%	0.389	75.7%	58.5%	0.013
Outcomes						
Length of Hospital stay	6 (3-11)	4 (3-6)	0.050	5 (4-9)	5 (3-8)	0.017
Length of ICU stay**	3 (2-5)	3 (0-4)	0.230	2 (1-3)	3 (1-4)	0.053
Successful reperfusion	82.9%	-	-	85.4%	-	-
Asymptomatic ICH	14.2%	3.2%	0.119	18.6%	5.1%	0.007
Symptomatic ICH	5.7%	0%	0.183	3.9%	1.3%	0.292
Discharge mRS	1 (0-2)	1 (0-2)	0.258	1 (1-3)	1 (0-2)	0.003
3 month mRS	1 (0-2)	1 (0-2)	0.394	1 (0-2)	1 (0-2)	0.137
3-month FFO	73.5%	73.1%	0.969	59.6%	69.4%	0.211
3-month FI	79.4%	84.6%	0.606	75.7%	85.4%	0.137
3-month Mortality	11.8%	3.8%	0.271	9.1%	6.4%	0.550

* Collateral score (CS) for anterior circulation ELVO were reported in a dichotomized fashion (ie, poor (CS = 0, 1) vs good (CS = 2, 3 and 4)) using ASITN methodology that has been shown to predict outcomes.

**Internal carotid artery, M1 middle cerebral artery

NA: not applicable

ICU: intensive care unit

ICH: Intracranial hemorrhage

mRS: modified Rankin Scale score

FFO: favorable functional outcome defined as modified Rankin Stroke scale scores of 0-1 at 3 months

FI: functional independence defined as modified Rankin Stroke scale scores of 0-2 at 3 months

eTable 3. Univariable and multivariable logistic regression analyses presenting the association of baseline characteristics with the likelihood of asymptomatic intracranial hemorrhage

Characteristic	**Univariable analysis**		**Multivariable analysis**	
	Odds Ratio (95%CI)	**p-value**	**Odds Ratio (95%CI)**	**p-value**
Age	1.02 (0.99, 1.05)	0.183	-	-
Female gender	0.57 (0.25, 1.29)	0.177	-	-
Hypertension	1.92 (0.70, 5.26)	0.204	-	-
Diabetes Mellitus	0.70 (0.27, 1.83)	0.473	-	-
Hyperlipidemia	0.75 (0.34, 1.65)	0.479	-	-
Atrial fibrillation	1.65 (0.72, 3.77)	0.235	-	-
Coronary artery disease	1.18 (0.47, 2.94)	0.718	-	-
Congestive heart failure	1.77 (0.61, 5.15)	0.290	-	-
End-stage renal disease	4.14 (0.97, 17.65)	0.054	3.28 (0.74, 14.55)	0.118
Current smoking	0.79 (0.33, 1.88)	0.601	-	-
Admission Glucose	1.00 (0.99, 1.01)	0.149	-	-
Admission SBP	1.00 (0.98, 1.01)	0.611	-	-
Admission DBP	0.99 (0.97, 1.02)	0.621	-	-
Antiplatelet pretreatment	0.96 (0.60, 1.52)	0.851	-	-
Anticoagulant pretreatment	0.96 (0.51, 1.82)	0.905	-	-
NIHSS-score admission	1.27 (0.95, 1.69)	0.105	-	-
ASPECTS admission	1.10 (0.71, 1.72)	0.661	-	-
Good collaterals on CTA	1.55 (0.43, 5.64)	0.502	-	-
Intravenous thrombolysis	1.79 (0.81, 3.98)	0.150	-	-
Onset to tPA-bolus time	1.00 (0.99, 1.01)	0.960	-	-
Proximal occlusion	1.04 (0.45, 2.39)	0.934	-	-
MT (vs. bMM)	4.42 (1.62, 12.00)	0.004	4.13 (1.50, 11.40)	0.006

SBP: systolic blood pressure

DBP: diastolic blood pressure

NIHSS: National Institute of Health Stroke Scale

ASPECTS: Alberta Stroke Program Early CT Score

tPA: tissue plasminogen activator

MT: mechanical tihrombectomy

bMM: best medical management

eTable 4. Univariable and multivariable ordinal regression analyses presenting the association of baseline characteristics with the likelihood of 3-month functional independence (mRS-scores of 0-2). Patients with missing three-month follow-up evaluations were included in this analysis using last-observation carried forward methodology.

Characteristic	**Univariable analysis**		**Multivariable analysis**	
	common Odds Ratio (95%CI)	**p-value**	**common Odds Ratio (95%CI)**	**p-value**
Age	0.96 (0.94, 0.98)	0.002	0.96 (0.93, 0.99)	0.007
Female gender	0.74 (0.38, 1.41)	0.359	-	-
Hypertension	0.54 (0.24, 1.23)	0.143	-	-
Diabetes Mellitus	0.67 (0.33, 1.35)	0.262	-	-
Hyperlipidemia	1.24 (0.64, 2.39)	0.518	-	-
Atrial fibrillation	0.54 (0.27, 1.08)	0.081	1.10 (0.44, 2.68)	0.847
Coronary artery disease	0.52 (0.25, 1.06)	0.073	0.55 (0.22, 1.34)	0.191
Congestive heart failure	0.61 (0.24, 1.54)	0.291	-	-
End-stage renal disease	0.70 (0.14, 3.52)	0.669	-	-
Current smoking	1.04 (0.52, 2.09)	0.912	-	-
Admission Glucose	1.00 (0.99, 1.01)	0.363	-	-
Admission SBP	0.99 (0.97, 1.00)	0.050	0.99 (0.97, 1.01)	0.124
Admission DBP	1.00 (0.98, 1.02)	0.741	-	-
Antiplatelet pretreatment	0.86 (0.61, 1.20)	0.372	-	-

Anticoagulant pretreatment	0.83 (0.54, 1.28)	0.401	-	-
NIHSS admission	0.75 (0.58, 0.96)	0.021	0.75 (0.57, 0.99)	0.048
ASPECTS admission	1.26 (0.95, 1.67)	0.108	-	-
Good collaterals on CTA	1.76 (0.66, 4.68)	0.255	-	-
Intravenous thrombolysis	2.07 (1.05, 4.09)	0.036	2.48 (1.12, 5.48)	0.025
Onset to tPA-bolus time	1.00 (0.99, 1.01)	0.379	-	-
Proximal occlusion	1.01 (0.50, 2.04)	0.973	-	-
MT (vs. bMM)	0.44 (0.22, 0.90)	0.024	0.42 (0.18, 0.96)	0.040

SBP: systolic blood pressure

DBP: diastolic blood pressure

NIHSS: National Institute of Health Stroke Scale

ASPECTS: Alberta Stroke Program Early CT Score

tPA: tissue plasminogen activator

MT: mechanical tihrombectomy

bMM: best medical management

eTable 5. Univariable and multivariable ordinal regression analyses presenting the association of baseline characteristics with the likelihood of 3-month functional improvement defined as 1-point decrease in modified Rankin Scale scores at three months (shift analysis). Patients with missing three-month follow-up evaluations were included in this analysis using last-observation carried forward methodology.

Characteristic	**Univariable analysis**		**Multivariable analysis**	
	Odds Ratio (95%CI)	**p-value**	**Odds Ratio (95%CI)**	**p-value**
Age	0.98 (0.96, 0.99)	0.001	0.97 (0.95, 0.99)	0.007
Female gender	1.13 (0.72, 1.78)	0.584	-	-
Hypertension	0.84 (0.51, 1.39)	0.501	-	-
Diabetes Mellitus	0.95 (0.57, 1.59)	0.851	-	-

Hyperlipidemia	1.06 (0.67, 1.67)	0.803	-	-
Atrial fibrillation	0.57 (0.34, 0.97)	0.037	1.10 (0.53, 2.27)	0.795
Coronary artery disease	0.65 (0.38, 1.12)	0.126	-	-
Congestive heart failure	0.74 (0.36, 1.54)	0.419	-	-
End-stage renal disease	1.82 (0.48, 6.67)	0.378	-	-
Current smoking	0.94 (0.58, 1.51)	0.808	-	-
Admission Glucose	1.00 (0.99, 1.01)	0.338	-	-
Admission SBP	1.00 (0.99, 1.01)	0.051	0.99 (0.98, 1.01)	0.277
Admission DBP	1.00 (0.98, 1.01)	0.763	-	-
Antiplatelet pretreatment	1.07 (0.81, 1.41)	0.611	-	-
Anticoagulant pretreatment	0.82 (0.58, 1.15)	0.241	-	-
NIHSS admission	0.84 (0.72, 0.98)	0.028	0.81 (0.65, 1.01)	0.061
ASPECTS admission	1.22 (0.98, 1.51)	0.070	1.25 (0.98, 1.59)	0.072
Good collaterals on CTA	1.45 (0.69, 3.03)	0.332	-	-
Intravenous thrombolysis	1.75 (1.11, 2.78)	0.016	1.81 (0.96, 3.45)	0.067
Onset to tPA-bolus time	1.00 (0.99, 1.01)	0.248	-	-
Proximal occlusion	1.39 (0.86, 2.27)	0.174	-	-
MT (vs. bMM)	0.79 (0.51, 1.25)	0.312	-	-

SBP: systolic blood pressure

DBP: diastolic blood pressure

NIHSS: National Institute of Health Stroke Scale

ASPECTS: Alberta Stroke Program Early CT Score

tPA: tissue plasminogen activator

MT: mechanical tihrombectomy

bMM: best medical management

eTable 6. Baseline characteristics and outcomes of the propensity score matched population

	Mechanical Thrombectomy (n=94)	**Best Medical Management (n=94)**	**P value**
Baseline Characteristics			
Age	63.5±16.6	63.6±13.6	0.950
Females (%)	50.0%	40.3%	0.187
Hypertension (%)	70.2%	73.4%	0.627
Diabetes Mellitus (%)	26.4%	25.5%	0.896
Hyperlipidemia (%)	43.6%	49.5%	0.423
Atrial fibrillation (%)	30.1%	24.5%	0.387
Coronary artery disease (%)	16.0%	23.4%	0.199
Congestive heart failure (%)	10.2%	13.8%	0.456
End-stage renal disease (%)	5.7%	2.2%	0.218
Current smoking (%)	26.6%	37.2%	0.118
Admission Glucose	128.3±47.9	127.8±50.8	0.945
Admission SBP	143.9±24.2	147.2±29.7	0.410
Admission DBP	81.4±13.8	82.2±20.7	0.762
Antiplatelet pretreatment	56.3%	56.9%	0.941
Anticoagulant pretreatment	26.4%	14.9%	0.053
NIHSS admission	3 (2-4)	3 (2-4)	0.586
ASPECTS admission	10 (9-10)	10 (9-10)	0.669
Good collaterals on CTA*	78.8%	76.5%	0.782
IVtPA	52.1%	50.0%	0.770
Onset-to-tPA	124.2±78.5	120.0±53.7	0.772
Onset-to-groin puncture time	225 (160-436)	-	-
Groin puncture-to-reperfusion time	42 (28-67)	-	-
Extracranial ICA Intracranial ICA M1-MCA M2-MCA	9.6% 8.5% 42.5% 33.0%	19.1% 7.4% 31.9% 24.4%	NA NA NA NA
Proximal occlusion**	62.8%	60.6%	0.764
Tandem occlusion	5.3%	1.1%	0.097
Outcomes			
Length of Hospital stay	5 (4-9)	4 (3-7)	0.005
Length of ICU stay	2 (1-4)	2 (0-3)	0.231
Successful reperfusion	83.0%	-	-
Asymptomatic ICH	22.6%	3.3%	<0.001
Symptomatic ICH	3.2%	2.2%	0.677
Discharge NIHSS	1 (0-4)	1 (0-3)	0.984

Neurological improvement during Hospitalization***	2 (0-3)	1 (0-3)	0.987
Discharge mRS#	1 (0-3)	1 (1-2)	0.356
3 month mRS#	1 (0-2)	1 (0-2)	0.764
3-month FFO	69.0%	65.6%	0.659
3-month FI	80.9%	82.0%	0.877
3-month Mortality	11.9%	8.2%	0.469

* Collateral score (CS) for anterior circulation ELVO were reported in a dichotomized fashion (ie, poor (CS = 0, 1) vs good (CS = 2, 3 and 4)) using ASITN methodology that has been shown to predict outcomes.[20]

**Internal carotid artery, M1 middle cerebral artery

*** decrease in the baseline NIHSS score at hospital discharge (baseline NIHSS-score−discharge NIHSS-score)

#Statistical comparisons were performed using Cochran-Mantel Haenszel test

NA: not applicable

ICU: intensive care unit

ICH: Intracranial hemorrhage

mRS: modified Rankin Scale score

FFO: favorable functional outcome defined as modified Rankin Stroke scale scores of 0-1 at 3 months

FI: functional independence defined as modified Rankin Stroke scale scores of 0-2 at 3 months

eTable 7. Subgroup analyses comparing different outcomes between mechanical thrombectomy and best medical management stratified by location of occlusion

Location of occlusion	Mechanical thrombectomy	Best medical management	P value
Proximal occlusions* (n=173)			
Symptomatic ICH, %	4.9%	1.6%	0.410
Asymptomatic ICH, %	16.5%	4.6%	0.026
3-month FFO, %	67.0%	69.1%	0.790
3-month FI	78%	85.5%	0.295
3-month mortality, %	7%	5.5%	>0.999
Distal occlusions** (n=78)			
Symptomatic ICH, %	2.9%	0%	0.436
Asymptomatic ICH, %	20.6%	4.5%	0.036
3-month FFO, %	51.5%	72.7%	0.076
3-month FI	72.7%	84.8%	0.367
3-month mortality, %	18.2%	6.1%	0.258

ICH: intracranial hemorrhage; FFO: favorable functional outcome (mRS-scores of 0-1)

*Internal carotid artery, M1 middle cerebral artery

**M2 middle cerebral artery

eTable 8. Subgroup analyses comparing different outcomes between mechanical thrombectomy and best medical management stratified by admission stroke severity

Admission Stroke Severity	Mechanical thrombectomy	Best medical management	P value
NIHSS-score 0-3 points (n=117)			
Symptomatic ICH, %	3.8%	1.6%	0.591
Asymptomatic ICH, %	15.4%	4.7%	0.062
3-month FFO, %	67.3%	75.5%	0.363
3-month FI	83.7%	88.7%	0.569
3-month mortality, %	12.2%	3.8%	0.149
NIHSS-score 4-5 points (n=134)			
Symptomatic ICH, %	4.7%	0%	0.298
Asymptomatic ICH, %	18.8%	4.2%	0.031
3-month FFO, %	60.7%	62.8%	0.827
3-month FI	72.6%	80%	0.491
3-month mortality, %	8.3%	8.6%	>0.999

ICH: intracranial hemorrhage; FFO: favorable functional outcome (mRS-scores of 0-1); FI: functional independence (mRS-scores of 0-1)

eTable 9. Excluded studies from the meta-analysis with specific reasons for exclusion

Study Name	**Reasons for exclusion**
Dargazanli et al, 2017 [1]	Different NIHSS cut-off
Haussen et al, 2017 [2]	Overlapping data with the study of Nagel et al [5]
Haussen et al, 2018 [3]	Overlapping data with the study of Nagel et al [5]
Messer et al, 2017 [4]	Overlapping data with the study of Sarraj et al [6]

NIHSS: National Institutes of Health Stroke Scale

eTable 10. Assessment of risk of bias of included studies using the Newcastle-Ottawa Scale.

Study name	Selection	Comparability	Outcome	Overall score
Goyal et al	****	**	**	8/9
Nagel et al [5]	****	**	***	9/9
Sarraj et al [6]	****	**	***	9/9
Urra et al [7]	****	*	**	7/9
Total	16/16	7/8	10/12	33/36

Supplementary References

1. Dargazanli C, Arquizan C, Gory B, Consoli A, Labreuche J, Redjem H, et al. Mechanical Thrombectomy for Minor and Mild Stroke Patients Harboring Large Vessel Occlusion in the Anterior Circulation: A Multicenter Cohort Study. Stroke. 2017;48:3274-3281.

2. Haussen DC, Bouslama M, Grossberg JA, Anderson A, Belagage S, Frankel M, et al. Too good to intervene? Thrombectomy for large vessel occlusion strokes with minimal symptoms: an intention-to-treat analysis. J Neurointerv Surg. 2017;9:917-921.

3. Haussen DC, Lima FO, Bouslama M, Grossberg JA, Silva GS, Lev MH, et al. Thrombectomy versus medical management for large vessel occlusion strokes with minimal symptoms: an analysis from STOPStroke and GESTOR cohorts. J Neurointerv Surg. 2018;10:325-329.

4. Messer MP, Schönenberger S, Möhlenbruch MA, Pfaff J, Herweh C, Ringleb PA, Nagel S. Minor Stroke Syndromes in Large-Vessel Occlusions: Mechanical Thrombectomy or Thrombolysis Only? AJNR Am J Neuroradiol. 2017;38:1177-1179.

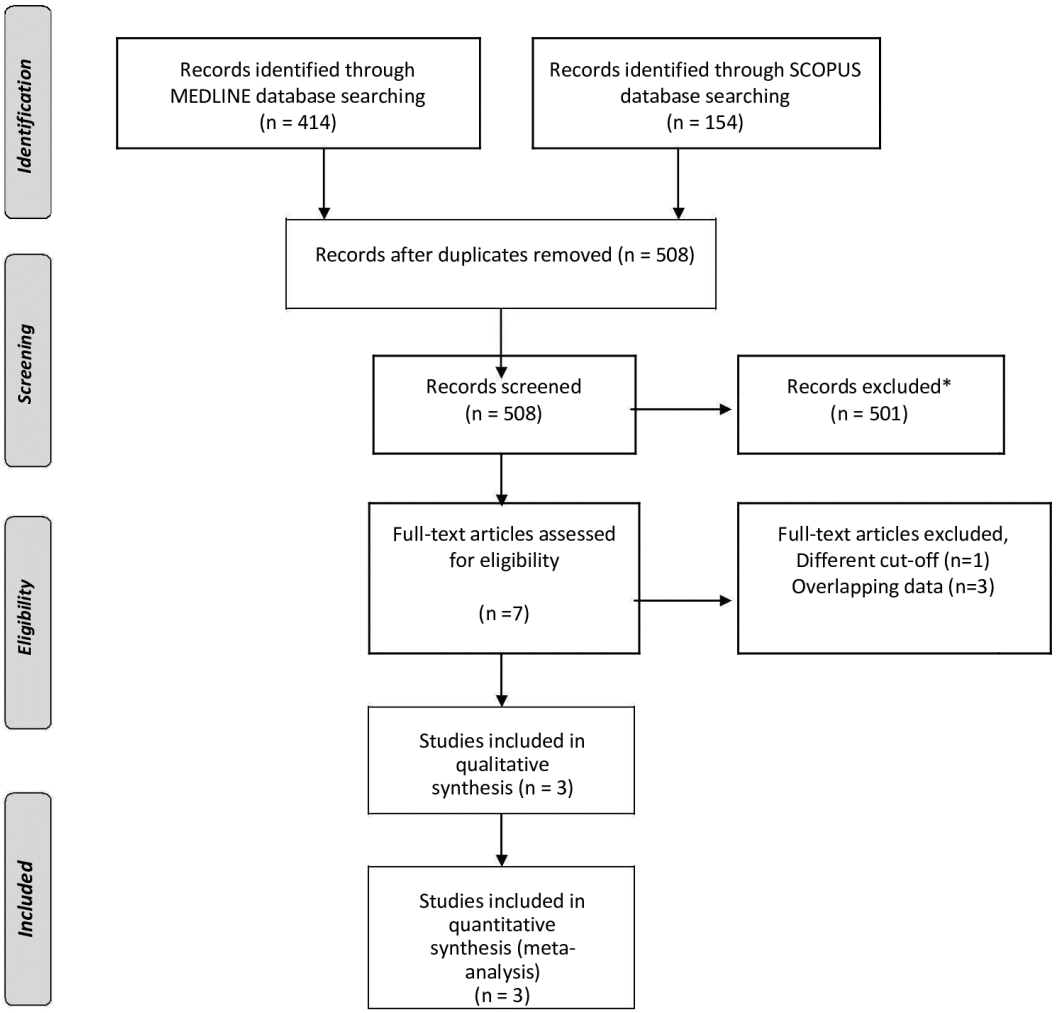
5. Nagel S, Bouslama M, Krause LU, et al. Mechanical Thrombectomy in Patients With Milder Strokes and Large Vessel Occlusions. Stroke. 2018;49:2391-2397.

6. Sarraj A, Hassan A, Savitz SI, et al. Endovascular Thrombectomy for Mild Strokes: How Low Should We Go? Stroke. 2018 Oct;49(10):2398-2405

7. Urra X, San Román L, Gil F, Millán M, Cánovas D, Roquer J, et al; Catalan Stroke Code and Reperfusion Consortium (Cat-SCR). Medical and endovascular treatment of patients with large vessel occlusion presenting with mild symptoms: an observational multicenter study. Cerebrovasc Dis. 2014;38:418–424.

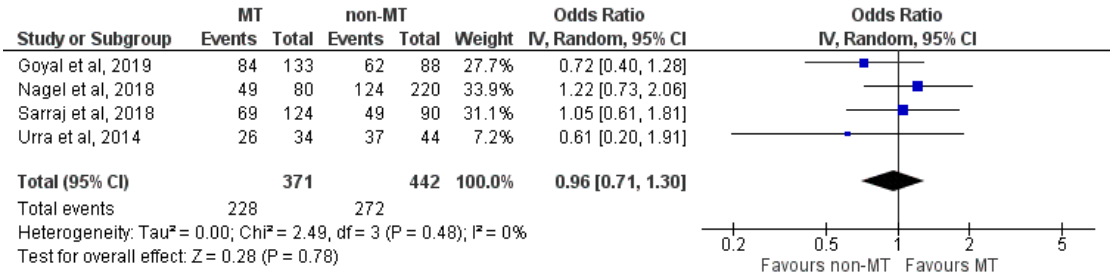
Supplementary Figures

eFigure 1. Flow chart presenting the selection of eligible studies

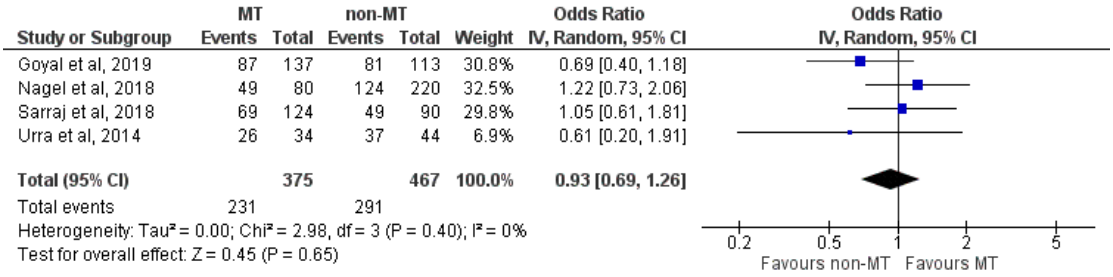


eFigure 2. Forest plots on the unadjusted probability of 3-month favorable functional outcome (mRS-scores 0-1) in patients with large vessel occlusion and mild neurological severity treated with mechanical thrombectomy compared to patients receiving best medical management.

(A) Without last-observation carried forward

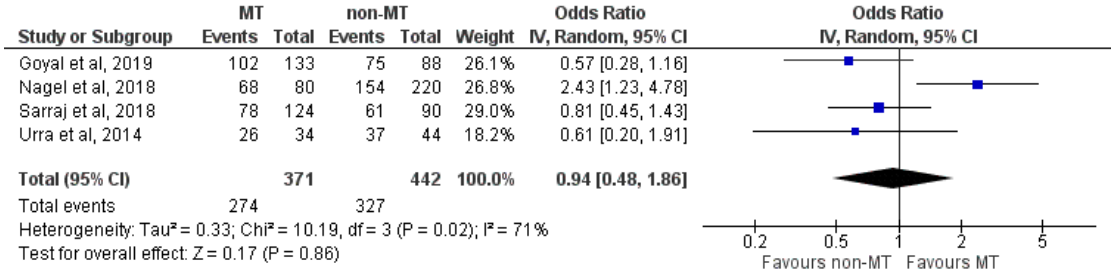


(B) With last-observation carried forward

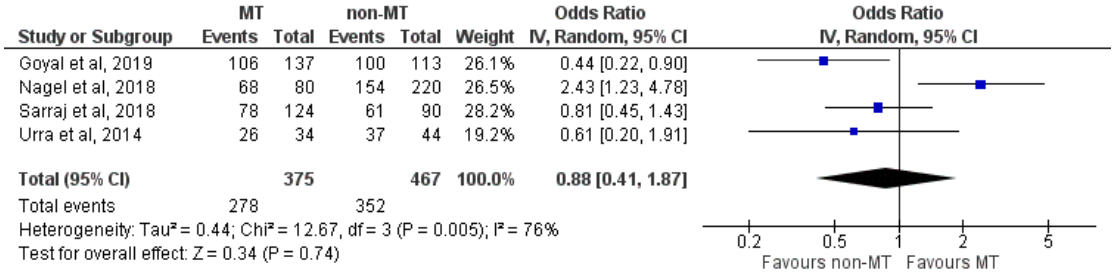


eFigure 3. Forest plots on the unadjusted probability of 3-month functional independence (mRS-scores 0-2) in patients with large vessel occlusion and mild neurological severity treated with mechanical thrombectomy compared to patients receiving best medical management.

(A) Without last-observation carried forward

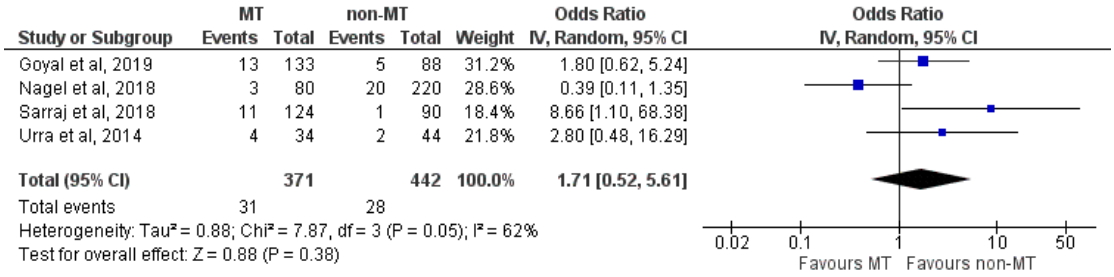


(B) With last-observation carried forward

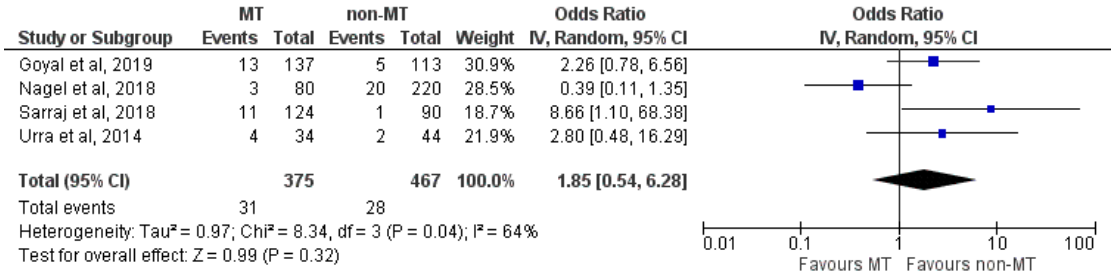


eFigure 4. Forest plots on the unadjusted probability of all-cause 3-month mortality in patients with large vessel occlusion and mild neurological severity treated with mechanical thrombectomy compared to patients receiving best medical management.

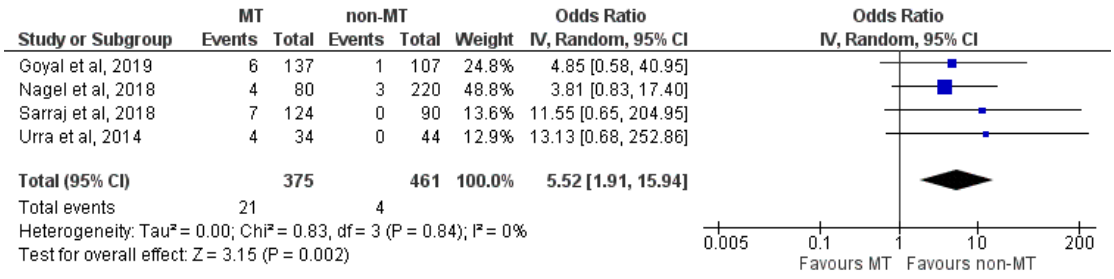
(A) Without last-observation carried forward



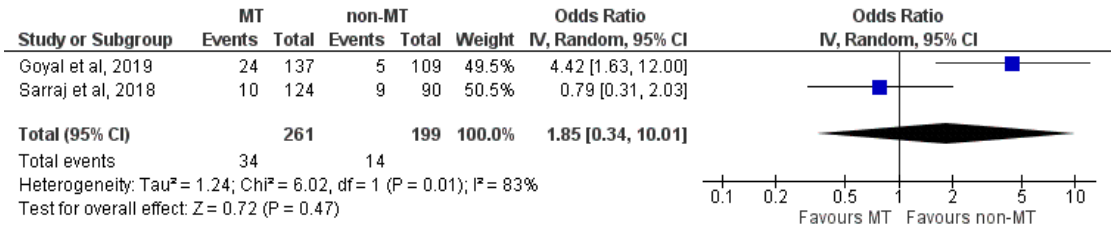
(B) With last-observation carried forward



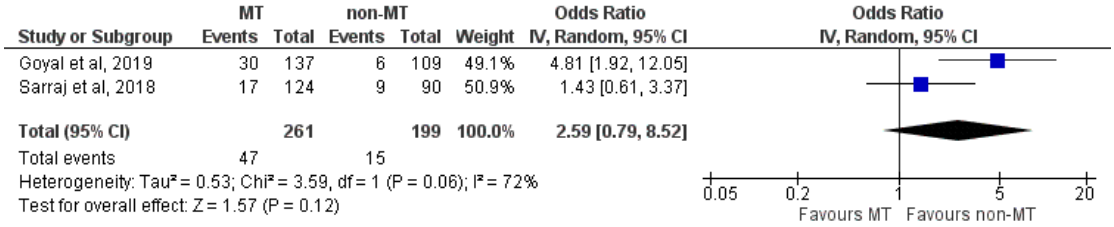
e**Figure 5.** Forest plot on the unadjusted probability of symptomatic intracranial hemorrhage in patients with large vessel occlusion and mild neurological severity treated with mechanical thrombectomy compared to patients receiving best medical management.



eFigure 6. Forest plot on the unadjusted probability of asymptomatic intracranial hemorrhage in patients with large vessel occlusion and mild neurological severity treated with mechanical thrombectomy compared to patients receiving best medical management.

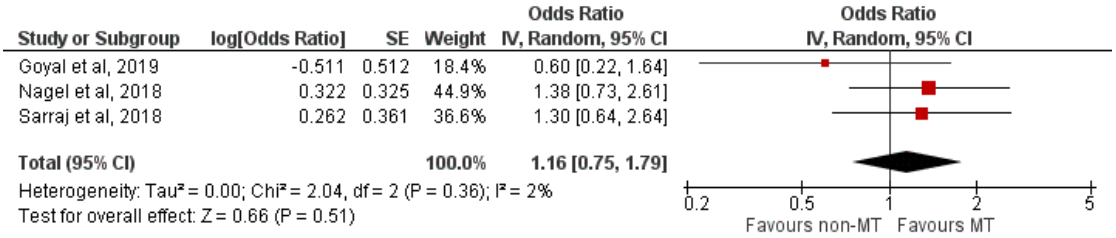


eFigure 7. Forest plot on the unadjusted probability of any intracranial hemorrhage in patients with large vessel occlusion and mild neurological severity treated with mechanical thrombectomy compared to patients receiving best medical management.

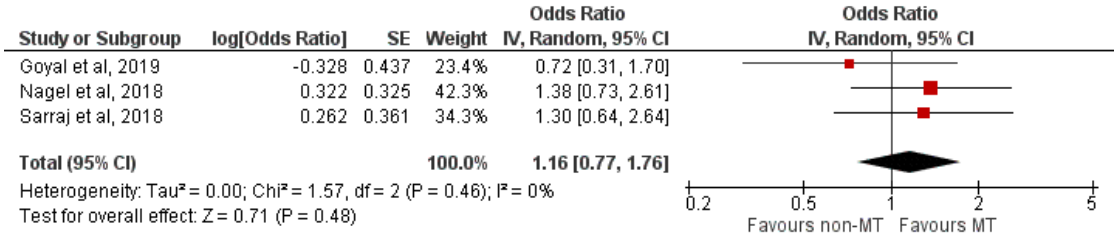


eFigure 8. Forest plots on the adjusted probability of 3-month favorable functional outcome (mRS-scores 0-1) in patients with large vessel occlusion and mild neurological severity treated with mechanical thrombectomy compared to patients receiving best medical management.

(A) Without last-observation carried forward

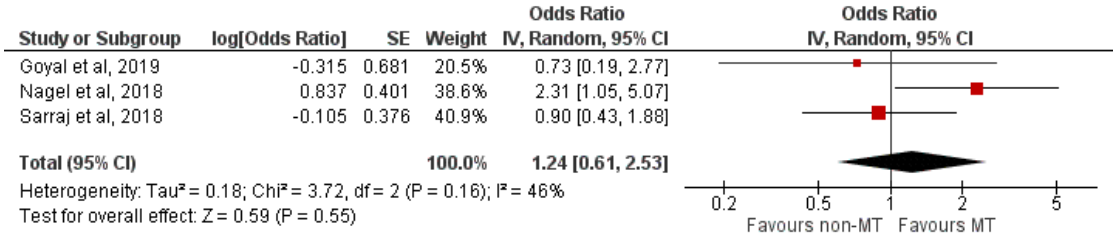


(B) With last-observation carried forward

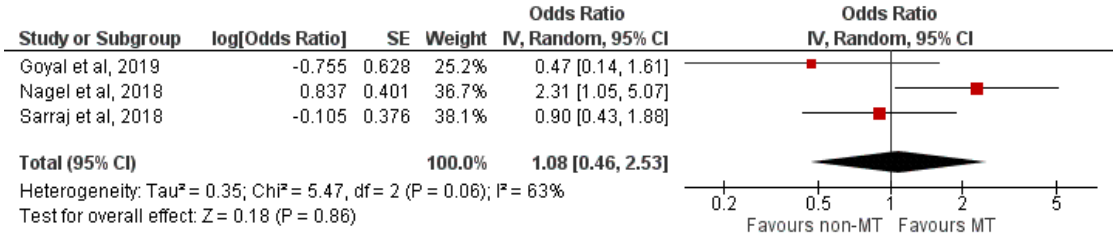


eFigure 9. Forest plots on the adjusted probability of 3-month functional independence (mRS-scores 0-2) in patients with large vessel occlusion and mild neurological severity treated with mechanical thrombectomy compared to patients receiving best medical management.

(A) Without last-observation carried forward

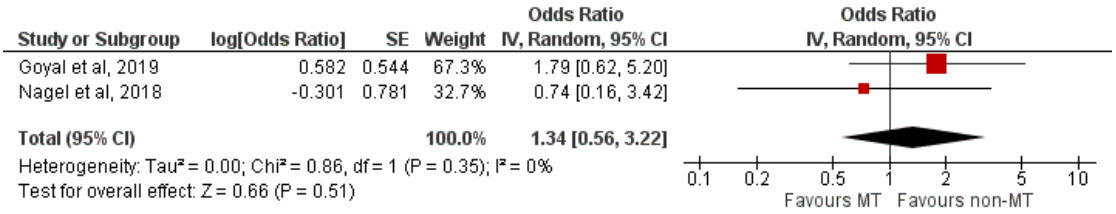


(B) With last-observation carried forward

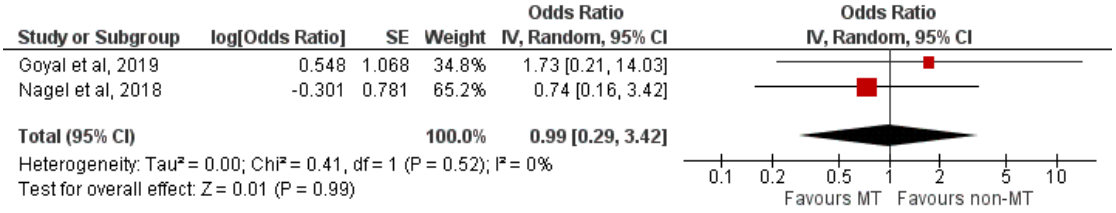


eFigure 10. Forest plots on the adjusted probability of all-cause 3-month mortality in patients with large vessel occlusion and mild neurological severity treated with mechanical thrombectomy compared to patients receiving best medical management.

(A) Without last-observation carried forward



(B) With last-observation carried forward



eFigure 11. Forest plot on the adjusted probability of symptomatic intracranial hemorrhage in patients with large vessel occlusion and mild neurological severity treated with mechanical thrombectomy compared to patients receiving best medical management.