Supplementary material for the paper:

Direct to angiography suite approaches for the triage of suspected acute stroke patients – a systematic review and meta-analysis

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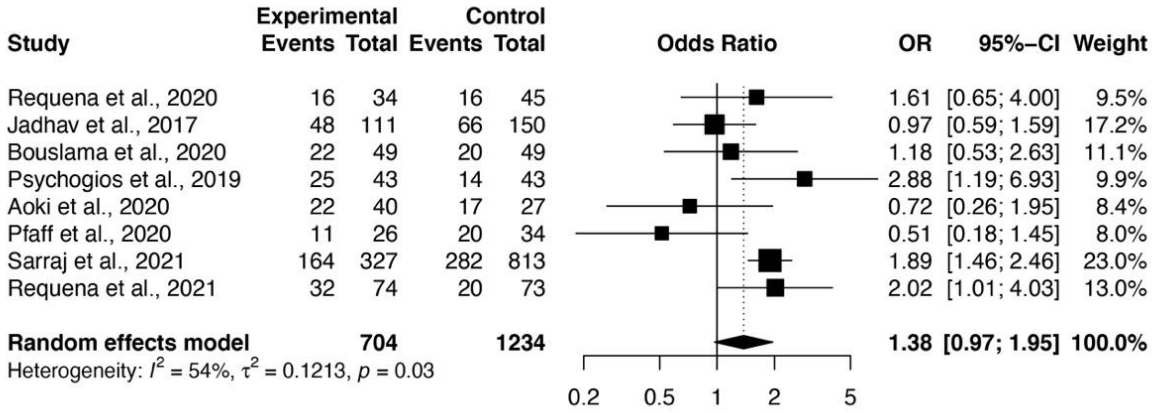
Section/topic	#	Checklist item	Reported on page #
TITLE			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	1
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	2
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	3
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	3
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	4
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	4
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	4
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	supplement
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	4-5
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	5
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	5
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	supplement
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	5
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis.	5

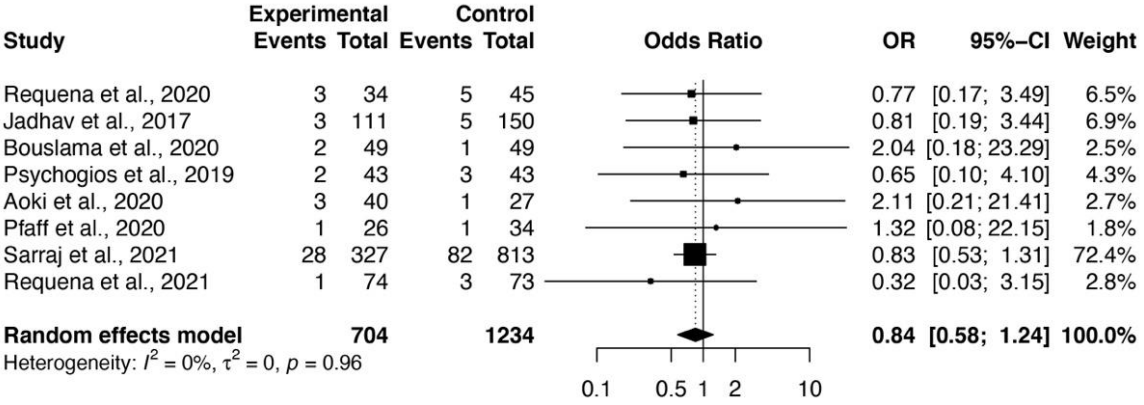
Section/topic	#	Checklist item	Reported on page #
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	9
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	5
RESULTS			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.	6, figure1
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	6, table 1
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).	Supplement
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.	Figure 2 and figure 3
Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	Table 2 and 3
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see Item 15).	Supplement
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	7
DISCUSSION			
Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers).	7 – 10
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias).	9
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	10
FUNDING			
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.	11

Part 1 – Additional Forest Plots

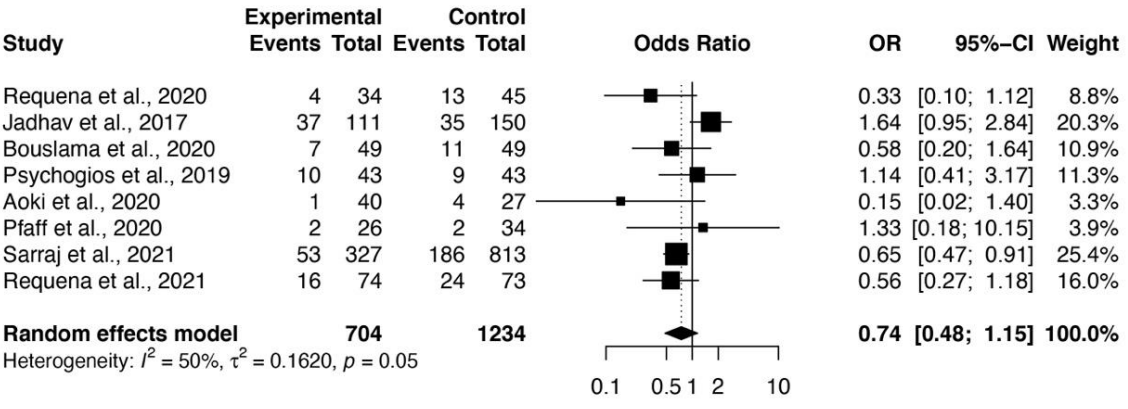
eFigure 1: Forest plot of meta-analysis on good clinical outcome (modified Rankin Scale ≤ 2)



eFigure 2: Forest plot of meta-analysis on symptomatic intracranial hemorrhage



eFigure3: Forest plot of meta-analysis on mortality within 90 days



Part 2: Risk of Bias Assessment

2.1 Overall Risk of Bias of all Studies

Study	Risk of Bias Assessment	Assessment Tool
Aoki et al. 2020	Serios	Robins I
Bouslama et al. 2020	Moderate	Robins I
Jadhav et al. 2017	Serios	Robins I
Pfaff et al. 2020	Some Concerns	Rob 2 CRT
Psychogios et al. 2019	Serious	Robins I
Requena et al. 2020	Moderate	Robins I
Requena et al. 2021	Low	Rob 2
Sarray et al. 2021	Moderate	Robins I

2.2 Detailed overview of risk domains for the randomized studies

Domain of Bias	Pfaff et al. 2020	Requena et al. 2020
Domain 1a: Risk of bias arising from the randomization process	Some concerns	Low
Domain 1b: Risk of bias arising from the timing of identification or recruitment of participants in a cluster-randomized trial	Low	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Low	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to	Low	Low

intervention)		
Domain 3: Risk of bias due to missing outcome data	Low	Low
Domain 4: Risk of bias in measurement of the outcome	Low	Low
Domain 5: Risk of bias in selection of the reported result	Some concerns	Low

2.3 Detailed overview of risk domains for the observational studies

Domain of Bias	Aoki et al. 2020	Bouslama et al. 2020	Jadhav et al. 2017	Psychogios et al. 2019	Requena et al. 2020	Sarray et al. 2021
Confounding	Serious	Moderate	Serious	Serious	Moderate	Moderate
Selection of participants into the study	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Classification of intervention	Low	Low	Low	Low	Low	Low
Deviations from intended interventions	Low	Low	Low	Low	Low	Low
Missing Data	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Measurement of Outcomes	Low	Low	Low	Low	Low	Low
Selection of reported results	Low	Low	Low	Low	Low	Low

Part 3: Search Strategy for the different databases

Embase.com

('cerebrovascular accident'/de OR 'cardioembolic stroke'/de OR 'occlusive cerebrovascular disease'/de OR 'middle cerebral artery occlusion'/de OR 'brain embolism'/de OR 'brain ischemia'/de OR 'brain infarction'/de OR 'brain embolism'/de OR ('brain'/de AND ('thromboembolism'/de OR
'embolism'/de OR 'thrombosis'/de)) OR (stroke* OR ictus OR ((cerebrovascular OR 'cerebro vascular' OR 'cerebrum vascular' OR cerebral OR cerebri OR brain OR intracranial OR intra-cranial OR intracerebral OR intra-cerebral OR carotid OR neural OR hemispher* OR 'circle of willis') NEAR/3
(accident* OR lesion* OR insult* OR attack* OR insufficienc* OR arrest* OR failure* OR injur* OR vasculopath* OR occlu* OR obstruct* OR thrombosis OR phlebothrombosis OR thromboembolism OR thrombus OR thrombi OR blockage OR clot OR interruption OR obliterat* OR embol* OR ischemi* OR ischaemi* OR infarct* OR 'blood flow disturbance' OR 'blood flow disorder' OR 'circulation disorder' OR 'circulatory disorder')) OR apoplexia OR apoplexy OR apoplectic OR 'ischaemic seizure*' OR 'ischemic seizure*' OR 'ischaemic encephalopath*' OR 'ischemic encephalopath*' OR CVA OR AIS OR ((Heubner* OR MCA OR ACA OR PCA) NEAR/3 (infarct* OR syndrome*))):ab,ti)
AND
('thrombectomy'/exp OR 'endovascular surgery'/exp OR 'embolectomy'/exp OR 'thrombectomy device'/exp OR 'endovascular therapy'/de OR (thrombectom* OR embolectom* OR 'mechanical thrombolysis' OR 'mechanical clot disruption' OR ((endovascular OR intravascular OR intraarterial OR endo-vascular OR intra-vascular OR intra-arterial OR neuroendovascular) NEXT/3 (procedure* OR surgery OR treatment* OR management OR therapy OR recanalization* OR recanalization* OR revascularization* OR revascularization* OR 're-canalization*' OR 're-canalization*' OR 're-vascularization*' OR 're-vascularisation*' OR technolog* OR 'clot retrieval' OR 'clot removal')) OR
'stent retriever*' OR stentriever* OR merci OR solitaire OR trevo OR mindframe OR soehendra OR AngioJet OR APERIO OR ASPIRE OR BONnet OR FlowTriever OR pREset OR 'Revive device' OR Rotarex OR 3MAX OR 4MAX OR 5MAX OR 'ACE 64' OR 'ACE 68' OR Amplatz OR Angiojet OR ASPIREX OR CAT8 OR 'Diver CE' OR EPAR OR 'Fast Funnel' OR Hydrolyser OR Indigo OR ThromCat OR X-Sizer OR Xpeedior):ab,ti)
AND

('time to treatment'/de OR 'workflow'/de OR 'time factor'/de OR 'flat detector computed tomography'/de OR (((time* OR timing OR delay*) NEAR/3 (treatment* OR therap* OR intervention* OR recanalization OR recanalisation OR re-canalization OR re-canalisation OR reperfusion OR re- perfusion OR groin OR angiosuite OR angio-suite OR angiography OR neuroangiosuite OR neuroangio-suite OR neuroangiography OR door-to-needle OR puncture)) OR 'procedural time*' OR workflow OR 'work flow' OR 'time factor*' OR triage* OR (flat NEAR/3 (CT OR 'computed tomography')) OR (direct* NEAR/3 (angiosuite OR angio-suite OR angiography OR neuroangiosuite OR neuroangio-suite OR neuroangiography)) OR ((bypass* OR circumvent* OR avoid* OR omit* OR skip*) NEAR/3 (multidetector OR multi-detector OR emergency OR 'CT suite' OR 'Computed Tomography suite' OR 'CT room' OR 'Computed Tomography room')) OR 'one stop'):ab,ti)
NOT
(('animal'/de OR 'animal experiment'/exp OR 'nonhuman'/de) NOT ('human'/exp OR 'human experiment'/de))
NOT
[conference abstract]/lim

Medline (Ovid)

(exp stroke/ OR exp "intracranial embolism and thrombosis"/ OR brain ischemia/ OR (brain/ AND
("embolism and thrombosis"/ OR thromboembolism/ OR embolism/ OR thrombosis/)) OR (stroke* OR ictus OR ((cerebrovascular OR cerebro vascular OR cerebrum vascular OR cerebral OR cerebri OR brain OR intracranial OR intra-cranial OR intracerebral OR intra-cerebral OR carotid OR neural OR hemispher* OR circle of willis) ADJ3 (accident* OR lesion* OR insult* OR attack* OR insufficienc* OR arrest* OR failure* OR injur* OR vasculopath* OR occlu* OR obstruct* OR thrombosis OR phlebothrombosis OR thromboembolism OR thrombus OR thrombi OR blockage OR clot OR interruption OR obliterat* OR embol* OR ischemi* OR ischaemi* OR infarct* OR blood flow disturbance OR blood flow disorder OR circulation disorder OR circulatory disorder)) OR apoplexia OR apoplexy OR apoplectic OR ischaemic seizure* OR ischemic seizure* OR ischaemic encephalopath* OR ischemic encephalopath* OR CVA OR AIS OR ((Heubner* OR MCA OR ACA OR PCA) ADJ3 (infarct* OR syndrome*))).ab,ti.)
AND

(exp thrombectomy/ OR endovascular procedures/ OR exp embolectomy/ OR (thrombectom* OR embolectom* OR mechanical thrombolysis OR mechanical clot disruption OR ((endovascular OR intravascular OR intraarterial OR endo-vascular OR intra-vascular OR intra-arterial OR neuroendovascular) ADJ3 (procedure* OR surgery OR treatment* OR management OR therapy OR recanalization* OR recanalization* OR revascularization* OR revascularization* OR re-canalization* OR re-canalization* OR re-vascularization* OR re-vascularisation* OR technolog* OR clot retrieval OR clot removal)) OR stent retriever* OR stentriever* OR merci OR solitaire OR trevo OR mindframe OR soehendra OR AngioJet OR APERIO OR ASPIRE OR BONnet OR FlowTriever OR pREset OR Revive device OR Rotarex OR 3MAX OR 4MAX OR 5MAX OR ACE 64 OR ACE 68 OR Amplatz OR Angiojet OR ASPIREX OR CAT8 OR Diver CE OR EPAR OR Fast Funnel OR Hydrolyser OR Indigo OR ThromCat OR X-Sizer OR Xpeedior).ab,ti.)
AND
(time-to-treatment/ OR workflow/ OR time factors/ OR triage/ OR (((time* OR timing OR delay*) ADJ3 (treatment* OR therap* OR intervention* OR recanalization OR recanalisation OR re- canalization OR re-canalisation OR reperfusion OR re-perfusion OR groin OR angiosuite OR angio-suite OR angiography OR neuroangiosuite OR neuroangio-suite OR neuroangiography OR door-to-needle OR puncture)) OR procedural time* OR workflow OR work flow OR time factor* OR triage* OR (flat ADJ3 (CT OR computed tomography)) OR (direct* ADJ3 (angiosuite OR angio-suite OR angiography OR neuroangiosuite OR neuroangio-suite OR neuroangiography)) OR ((bypass* OR circumvent* OR avoid* OR omit* OR skip*) ADJ3 (multidetector OR multi-detector OR emergency OR CT suite OR Computed Tomography suite OR CT room OR Computed Tomography room)) OR one stop).ab,ti.)
NOT (exp animals/ NOT humans/)

Scopus

TITLE-ABS((stroke* OR ictus OR ((cerebrovascular OR "cerebro vascular" OR "cerebrum vascular" OR cerebral OR cerebri OR brain OR intracranial OR intra-cranial OR intracerebral OR intra-cerebral OR carotid OR neural OR hemispher* OR "circle of willis") W/5 (accident* OR lesion* OR insult* OR attack* OR insufficienc* OR arrest* OR failure* OR injur* OR vasculopath* OR occlu* OR obstruct* OR thrombosis OR phlebothrombosis OR thromboembolism OR thrombus OR thrombi OR blockage OR clot OR interruption OR obliterat* OR embol* OR ischemi* OR ischaemi* OR infarct* OR "blood flow disturbance"

OR "blood flow disorder" OR "circulation disorder" OR "circulatory disorder")) OR apoplexia OR apoplexy OR apoplectic OR "ischaemic seizure" OR "ischemic seizure" OR "ischaemic encephalopathy" OR "ischemic encephalopathy" OR CVA OR AIS OR ((Heubner* OR MCA OR ACA OR PCA) W/5 (infarct* OR syndrome*))))
AND
TITLE-ABS((thrombectom* OR embolectom* OR "mechanical thrombolysis" OR "mechanical clot disruption" OR ((endovascular OR intravascular OR intraarterial OR endo-vascular OR intra-vascular OR intra-arterial OR neuroendovascular) W/5 (procedure* OR surgery OR treatment* OR management OR therapy OR recanalization* OR recanalization* OR revascularization* OR revascularization* OR "re-canalization" OR "re-canalization" OR "re-vascularization" OR "re-vascularisation" OR technolog* OR "clot retrieval" OR "clot removal")) OR "stent retriever" OR stentriever* OR merci OR solitaire OR trevo OR mindframe OR soehendra OR AngioJet OR APERIO OR ASPIRE OR BONnet OR FlowTriever OR pREset OR "Revive device" OR Rotarex OR 3MAX OR 4MAX OR 5MAX OR "ACE 64" OR "ACE 68" OR Amplatz OR Angiojet OR ASPIREX OR CAT8 OR "Diver CE" OR EPAR OR "Fast Funnel" OR Hydrolyser OR Indigo OR ThromCat OR X-Sizer OR Xpeedior))
AND
TITLE-ABS((((time* OR timing OR delay*) W/5 (treatment* OR therap* OR intervention* OR recanalization OR recanalisation OR re-canalization OR re-canalisation OR reperfusion OR re-perfusion OR groin OR angiosuite OR angio-suite OR angiography OR neuroangiosuite OR neuroangio-suite OR neuroangiography OR door-to-needle OR puncture)) OR "procedural time" OR workflow OR "work flow" OR "time factor" OR triage* OR (flat W/5 (CT OR "computed tomography")) OR (direct* W/5 (angiosuite OR angio-suite OR angiography OR neuroangiosuite OR neuroangio-suite OR neuroangiography)) OR ((bypass* OR circumvent* OR avoid* OR omit* OR skip*) W/5 (multidetector OR multi-detector OR emergency OR "CT suite" OR "Computed Tomography suite" OR "CT room" OR"Computed Tomography room")) OR "one stop"))

Clinical Trials.gov

(stroke* OR ictus OR "cerebrovascular accident" OR apoplexia OR CVA OR AIS)
AND
(thrombectom* OR embolectom* OR "mechanical thrombolysis" OR "endovascular treatment" OR "stent retriever")

Part 4: Data extraction forms

Abbreviations:

1st first quartile, 3rd third quartile, c, control, dTG, door to groin, dTR, door to reperfusion, GO good outcome, i, intervention, M Mothership, Me, median, Mor, mortality, sICH symptomatic intracranial hemorrhage, T Transfer

This data extraction form was used for the primary analysis except for door to reperfusion times

study	n_c	n_i	dTG_c_Me	dTG_c_1st	dTG_c_3rd	dTg_i_Me	dTG_i_1st	dTG_i_3rd	GO_c	GO_i	sICH_c	sICH_i	Mor_c	Mor_i
Psychogios_2019	43	43	60	48	68	25	19	30	14	25	3	2	9	10
Aoki_2020	27	40	31	27	40	22	16	31	17	22	1	3	4	1
Bouslama_2020	49	49	55	44.5	66	33	26.5	47	20	22	1	2	11	7
Jadhav_2017	150	111	81	46	91	22	12	25	66	48	5	3	35	37
Requena_2020	45	34	78	57	100	19	16	23	16	16	5	3	13	4
Pfaff_2020	34	26	40	31	48	41	30	48	20	11	1	1	2	2
Requena_2021	73	74	42	35	51	18	15	24	20	32	3	1	24	16
Sarraj_2021	813	327	60	37	95	34	20	62	282	164	82	28	186	53

study	T_n_c	T_n_i	T_dTG_c_Me	T_dTG_c_1st	T_dTG_c_3rd	T_dTG_i_Me	T_dTG_i_1st	T_dTG_i_3rd
Psychogios_2019	13	25	40	30	69	21	19	26
Aoki_2020	27	40	31	27	40	22	16	31
Bouslama_2020	49	49	55	44.5	66	33	26.5	47
Jadhav_2017	150	111	81	46	91	22	12	25
Requena_2020	NA	NA	NA	NA	NA	NA	NA	NA
Pfaff_2020	23	19	33	30	43	37	25	45

Requena_2021	52	55	42	34	51	17	15	25
Sarraj_2021	813	327	60	37	95	34	20	62

study	M_n_c	M_n_i	M_dTG_c_Me	M_dTG_c_1st	M_dTG_c_3rd	M_dTG_i_Me	M_dTG_i_1st	M_dTG_i_3rd
Psychogios_2019	30	18	61	54	67	26	25	38
Aoki_2020	NA	NA	NA	NA	NA	NA	NA	NA
Bouslama_2020	NA	NA	NA	NA	NA	NA	NA	NA
Jadhav_2017	NA	NA	NA	NA	NA	NA	NA	NA
Requena_2020	45	34	78	57	100	19	16	23
Pfaff_2020	11	7	46	40	85	47	44	54
Requena_2021	21	19	43	39	51	20	17	23
Sarraj_2021	NA	NA	NA	NA	NA	NA	NA	NA

Data extraction form for the primary analysis and secondary analysis of door to reperfusion times

study	n_c	n_i	dTR_c_Me	dTR_c_1st	dTR_c_3rd	dTR_i_Me	dTR_i_1st	dTR_i_3rd
Psychogios_2019	43	43	102	85	117	68	53	89
Aoki_2020	27	40	67	56	122	56	43	80
Bouslama_2020	49	49	110	80	153	85	57.5	115.5
Jadhav_2017	150	111	125	81	146	66	39	84
Requena_2020	175	174	114	90	142	55	40	80
Pfaff_2020	34	26	78	58	92	80	66	118
Requena_2021	73	74	84	63	117	57	43	77
Sarraj_2021	813	327	NA	NA	NA	NA	NA	NA

study	T_n_c	T_n_i	T_dTR_c_Me	T_dTRR_c_1st	T_dTR_c_3rd	T_dTR_i_Me	T_dTR_i_1st	T_dTR_i_3rd
Psychogios_2019	13	25	102	68	109	64	51	88
Aoki_2020	27	40	67	56	122	56	43	80
Bouslama_2020	49	49	110	80	153	85	57.5	115.5
Jadhav_2017	150	111	125	81	146	66	39	84

Requena_2020	130	140	110	79	137	53	39	73
Pfaff_2020	23	19	73	57	91	74	64	122
Requena_2021	52	55	90	69	121	56	43	76
Sarraj_2021	813	327	NA	NA	NA	NA	NA	NA

study	M_n_c	M_n_i	M_dTR_c_Me	M_dTR_c_1st	M_dTR_c_3rd	M_dTR_i_Me	M_dTR_i_1st	M_dTR_i_3rd
Psychogios_2019	30	18	103	85	121	72	58	87
Aoki_2020	NA	NA	NA	NA	NA	NA	NA	NA
Bouslama_2020	NA	NA	NA	NA	NA	NA	NA	NA
Jadhav_2017	NA	NA	NA	NA	NA	NA	NA	NA
Requena_2020	45	34	127	104	154	73	47	97
Pfaff_2020	11	7	87	73	95	89	74	107
Requena_2021	21	19	80	55	90	60	51	85
Sarraj_2021	NA	NA	NA	NA	NA	NA	NA	NA

Part 5: Detailed list of excluded studies

No	Reference	Reason for exclusion
1	Janssen PM, Venema E, Dippel DWJ. Effect of workflow improvements in endovascular stroke treatment: A systematic review and meta-analysis. Stroke 2019;50:665-674.	Mixture of interventions (Anesthesia, direct to angiography, organization of angioroom etc.)
2	Kansagra AP, Wallace AN, Curfman DR, et al. Streamlined triage and transfer protocols improve door-to-puncture time for endovascular thrombectomy in acute ischemic stroke. Clinical Neurology and Neurosurgery 2018;166:71-75.	Wrong comparator (Comparison over time (quarters) with change in pre-transfer imaging; for example, pre-transfer CT-A rate increased significantly)
3	Menéndez ES, Espot PG, Macho LC, Rodríguez-Samaniego MT, Santana Román KE, Fueyo MRD. Implementation of a protocol for direct stroke patient transfer and mobilization of a stroke team to reduce times to reperfusion. Emergencias 2019;31:385-390.	Double reporting of data (at least partly included in Requena et al. 2020)
4	Qureshi AI, Egila H, Adil MM, et al. "No turn back approach" to reduce treatment time for endovascular treatment of acute ischemic stroke. Journal of Stroke and Cerebrovascular Diseases 2014;23:e317-e323.	No direct to angiography suite approach evaluated
5	Aghaebrahim A, Streib C, Rangaraju S, et al. Streamlining door to recanalization processes in endovascular stroke therapy. Journal of NeuroInterventional Surgery 2017;9:340-345.	No direct to angiography suite approach evaluated
6	Sablot D, Farouil G, Laverdure A, Arquizan C, Bonafe A. Shortening time to reperfusion after transfer from a primary to a comprehensive stroke center. Neurology: Clinical Practice 2019;9:417-423.	No direct to angiography suite approach evaluated

7	Bohmann FO, Kurka N, du Mesnil de Rochemont R, et al. Simulation-Based Training of the Rapid Evaluation and Management of Acute Stroke (STREAM)—A Prospective Single-Arm Multicenter Trial. Frontiers in Neurology 2019;10.	No direct to angiography suite approach evaluated
8	Hung SC, Lin CJ, Guo WY, et al. Toward the era of a one-stop imaging service using an angiography suite for neurovascular disorders. BioMed Research International 2013;2013.	Review; no data included
9	Clarençon F, Rosso C, Degos V, et al. Triage in the Angiography Suite for Mechanical Thrombectomy in Acute Ischemic Stroke: Not Such a Good Idea. AJNR American journal of neuroradiology 2018;39:E59-E60.	Comment, no data given
10	Mashni SK, O'Neal CR, Abner E, Lee J, Fraser JF. Time Intervals for Direct Versus Transfer Cases of Thrombectomy for Stroke in a Primarily Rural System of Care. Journal of Stroke and Cerebrovascular Diseases 2020;29.	No direct to angiography suite approach evaluated
11	Psychogios MN, Behme D, Schregel K, et al. One-stop management of acute stroke patients minimizing door-to-reperfusion times. Stroke 2017;48:3152-3155.	Double reporting (included in Psychogios et al. 2020)
12	Mendez B, Requena M, Aires A, et al. Direct transfer to Angio-suite to reduce workflow times and increase favorable clinical outcome a case-control study. Stroke 2018;49:2723-2727.	Double reporting (included in Requena et al. 2020)
13	Ribo M, Boned S, Rubiera M, et al. Direct transfer to angiosuite to reduce door-to-puncture time in thrombectomy for acute stroke. Journal of	Double reporting (included in Requena et al. 2020)

	NeuroInterventional Surgery 2018;10:221-224.	
14	Brehm A, Tsogkas I, Maier IL, et al. One-stop management with perfusion for transfer patients with stroke due to a large-vessel occlusion: Feasibility and effects on in-hospital times. American Journal of Neuroradiology	Double reporting (included in Psychogios et al. 2020)
15	Psychogios MN, Bähr M, Liman J, Knauth M. One Stop Management in Acute Stroke: First Mothership Patient Transported Directly to the Angiography Suite. Clinical Neuroradiology 2017;27:389-391.	Case report
16	Tong E, Komlosi P, Wintermark M. One-stop-shop stroke imaging with functional CT. European Journal of Radiology 2015;84:2425-2431.	No data included on endpoint
17	Ragoschke-Schumm A, Yilmaz U, Kostopoulos P, et al. Stroke Room': Diagnosis and Treatment at a Single Location for Rapid Intraarterial Stroke Treatment. Cerebrovascular Diseases 2015;40:251-257.	Hybrid concept: MDCT and angiography suite in the same room
18	Pfaff J, Herweh C, Pham M, et al. Mechanical thrombectomy using a combined CT/C-arm X-ray system. Journal of NeuroInterventional Surgery 2016;8:621-625.	Hybrid concept: MDCT and angiography suite in the same room
19	Pfaff J, Schönenberger S, Herweh C, et al. Influence of a combined CT/C-arm system on periprocedural workflow and procedure times in mechanical thrombectomy. European Radiology 2017;27:3966-3972.	Hybrid concept: MDCT and angiography suite in the same room
20	Jeon SB, Ryoo SM, Lee DH, et al. Multidisciplinary Approach to Decrease In-Hospital Delay for Stroke Thrombolysis. J Stroke 2017;19:196-204.	No direct to angiography suite approach evaluated
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