

Table S1. Search strategies

Database	Step	Search algorithm	Items found
Pubmed	#1	"Stroke"[Mesh]	157,982
	#2	(((((((((((Strokes[Title/Abstract]) OR (Cerebrovascular Accident[Title/Abstract])) OR (Cerebrovascular Accidents[Title/Abstract])) OR (CVA (Cerebrovascular Accident[Title/Abstract]))) OR (CVAs (Cerebrovascular Accident[Title/Abstract]))) OR (Cerebrovascular Apoplexy[Title/Abstract])) OR (Apoplexy, Cerebrovascular[Title/Abstract])) OR (Vascular Accident, Brain[Title/Abstract])) OR (Brain Vascular Accident[Title/Abstract])) OR (Brain Vascular Accidents[Title/Abstract])) OR (Vascular Accidents, Brain[Title/Abstract])) OR (Cerebrovascular Stroke[Title/Abstract])) OR (Cerebrovascular Strokes[Title/Abstract])) OR (Stroke, Cerebrovascular[Title/Abstract])) OR (Strokes, Cerebrovascular[Title/Abstract])) OR (Apoplexy[Title/Abstract])) OR (Cerebral Stroke[Title/Abstract])) OR (Cerebral Strokes[Title/Abstract])) OR (Stroke, Cerebral[Title/Abstract])) OR (Strokes, Cerebral[Title/Abstract])) OR (Stroke, Acute[Title/Abstract])) OR (Acute Stroke[Title/Abstract])) OR (Acute Strokes[Title/Abstract])) OR (Strokes, Acute[Title/Abstract])) OR (Cerebrovascular Accident, Acute[Title/Abstract])) OR (Acute Cerebrovascular Accident[Title/Abstract])) OR (Acute Cerebrovascular Accidents[Title/Abstract])) OR (Cerebrovascular Accidents, Acute[Title/Abstract]))	53,803
	#3	#1 OR 2#	185,511
	#4	"Thrombectomy"[Mesh]	9,987

	#5	(((((((((((Thrombectomies[Title/Abstract] OR (Percutaneous Aspiration Thrombectomy[Title/Abstract])) OR (Aspiration Thrombectomies, Percutaneous[Title/Abstract])) OR (Aspiration Thrombectomy, Percutaneous[Title/Abstract])) OR (Percutaneous Aspiration Thrombectomies[Title/Abstract])) OR (Thrombectomies, Percutaneous Aspiration[Title/Abstract])) OR (Thrombectomy, Percutaneous Aspiration[Title/Abstract])) OR (Aspiration Thrombectomy[Title/Abstract])) OR (Aspiration Thrombectomies[Title/Abstract])) OR (Thrombectomies, Aspiration[Title/Abstract])) OR (EVT[Title/Abstract])) OR (Endovascular therapy[Title/Abstract])) OR (Mechanical Thrombectomy[Title/Abstract])) OR (Endovascular Treatment[Title/Abstract])	26,401
	#6	#4 OR #5	31,047
	#7	((((((((imaging selection [Title/Abstract]) OR (imaging paradigm [Title/Abstract])) OR (imaging triage [Title/Abstract])) OR (imaging protocol [Title/Abstract])) OR (Imaging criteria [Title/Abstract])) OR (imaging [Title/Abstract])) OR (selection paradigm [Title/Abstract])) OR (selection criteria [Title/Abstract])) OR (NCCT[Title/Abstract])) OR (CTA[Title/Abstract])) OR (Collaterals [Title/Abstract])	1,011,336
	#8	#3 AND #6 AND #7	1,911
Web of Sciences	#1	TS=(Stroke OR Strokes OR Cerebrovascular Accident OR Cerebrovascular Accidents OR CVA (Cerebrovascular Accident) OR CVAs (Cerebrovascular Accident) OR Cerebrovascular Apoplexy OR Apoplexy, Cerebrovascular OR Vascular Accident, Brain OR Brain Vascular Accident OR Brain Vascular Accidents OR Vascular Accidents, Brain OR Cerebrovascular Stroke OR Cerebrovascular Strokes OR Stroke, Cerebrovascular OR Strokes, Cerebrovascular OR Apoplexy OR Cerebral Stroke OR Cerebral Strokes OR Stroke, Cerebral OR Strokes, Cerebral OR Stroke, Acute OR Acute Stroke OR Acute Strokes OR Strokes, Acute OR Cerebrovascular Accident, Acute OR Acute Cerebrovascular Accident OR Acute Cerebrovascular Accidents OR Cerebrovascular Accidents, Acute)	410,118

	#2	TS= (Thrombectomy OR Thrombectomies OR Percutaneous Aspiration Thrombectomy OR Aspiration Thrombectomies, Percutaneous OR Aspiration Thrombectomy, Percutaneous OR Percutaneous Aspiration Thrombectomies OR Thrombectomies, Percutaneous Aspiration OR Thrombectomy, Percutaneous Aspiration OR Aspiration Thrombectomy OR Aspiration Thrombectomies OR Thrombectomies, Aspiration OR EVT OR Endovascular therapy OR Mechanical Thrombectomy OR Endovascular Treatment)	57,753
	#3	TS= (imaging selection OR imaging paradigm OR imaging triage OR imaging protocol OR Imaging criteria OR imaging OR selection paradigm OR selection criteria OR NCCT OR CTA OR Collaterals)	2,941,714
	#4	#1 AND #2 AND #3	4,124
Embase	#1	'stroke'/exp OR stroke	618,563
	#2	'strokes':ab,ti OR 'cerebrovascular accident':ab,ti OR 'cerebrovascular accidents':ab,ti OR 'cva (cerebrovascular accident)':ab,ti OR 'cvas (cerebrovascular accident)':ab,ti OR 'cerebrovascular apoplexy':ab,ti OR 'apoplexy, cerebrovascular':ab,ti OR 'vascular accident, brain':ab,ti OR 'brain vascular accident':ab,ti OR 'brain vascular accidents':ab,ti OR 'vascular accidents, brain':ab,ti OR 'cerebrovascular stroke':ab,ti OR 'cerebrovascular strokes':ab,ti OR 'stroke, cerebrovascular':ab,ti OR 'strokes, cerebrovascular':ab,ti OR 'apoplexy':ab,ti OR 'cerebral stroke':ab,ti OR 'cerebral strokes':ab,ti OR 'stroke, cerebral':ab,ti OR 'strokes, cerebral':ab,ti OR 'stroke, acute':ab,ti OR 'acute stroke':ab,ti OR 'acute strokes':ab,ti OR 'strokes, acute':ab,ti OR 'cerebrovascular accident, acute':ab,ti OR 'acute cerebrovascular accident':ab,ti OR 'acute cerebrovascular accidents':ab,ti OR 'cerebrovascular accidents, acute':ab,ti	88,659
	#3	#1 OR #2	629,807
	#4	'thrombectomy'/exp OR thrombectomy	37,266

	#5	'thrombectomies':ab,ti OR 'percutaneous aspiration thrombectomy':ab,ti OR 'aspiration thrombectomies, percutaneous':ab,ti OR 'aspiration thrombectomy, percutaneous':ab,ti OR 'percutaneous aspiration thrombectomies':ab,ti OR 'thrombectomies, percutaneous aspiration':ab,ti OR 'thrombectomy, percutaneous aspiration':ab,ti OR 'aspiration thrombectomy':ab,ti OR 'aspiration thrombectomies':ab,ti OR 'thrombectomies, aspiration':ab,ti OR 'evt':ab,ti OR 'endovascular therapy':ab,ti OR 'mechanical thrombectomy':ab,ti OR 'endovascular treatment':ab,ti	38,375
	#6	#4 OR #5	63,158
	#7	'imaging selection':ab,ti OR 'imaging paradigm':ab,ti OR 'imaging triage':ab,ti OR 'imaging protocol':ab,ti OR 'imaging criteria':ab,ti OR 'imaging':ab,ti OR 'selection paradigm':ab,ti OR 'selection criteria':ab,ti OR 'ncct':ab,ti OR 'cta':ab,ti OR 'collaterals':ab,ti	1,355,097
	#8	#3 AND #6 AND #7	5,731
Cochrane	#1	Stroke	75,630
	#2	(Strokes):ab,ti,kw OR (Cerebrovascular Accident):ab,ti,kw OR (Cerebrovascular Accidents):ab,ti,kw OR (CVA (Cerebrovascular Accident)):ab,ti,kw OR (CVAs (Cerebrovascular Accident)):ab,ti,kw OR (Cerebrovascular Apoplexy):ab,ti,kw OR (Apoplexy, Cerebrovascular):ab,ti,kw OR (Vascular Accident, Brain):ab,ti,kw OR (Brain Vascular Accident):ab,ti,kw OR (Brain Vascular Accidents):ab,ti,kw OR (Vascular Accidents, Brain):ab,ti,kw OR (Cerebrovascular Stroke):ab,ti,kw OR (Cerebrovascular Strokes):ab,ti,kw OR (Stroke, Cerebrovascular):ab,ti,kw OR (Strokes, Cerebrovascular):ab,ti,kw OR (Apoplexy):ab,ti,kw OR (Cerebral Stroke):ab,ti,kw OR (Cerebral Strokes):ab,ti,kw OR (Stroke, Cerebral):ab,ti,kw OR (Strokes, Cerebral):ab,ti,kw OR (Stroke, Acute):ab,ti,kw OR (Acute Stroke):ab,ti,kw OR (Acute Strokes):ab,ti,kw OR (Strokes, Acute):ab,ti,kw OR (Cerebrovascular Accident, Acute):ab,ti,kw OR (Acute Cerebrovascular Accident):ab,ti,kw OR (Acute Cerebrovascular Accidents):ab,ti,kw OR (Cerebrovascular Accidents, Acute):ab,ti,kw	33,761
	#3	#1 OR #2	78,926

	#4 #5 #6 #7 #8 #9	Thrombectomy (Thrombectomies):ab,ti,kw OR (Percutaneous Aspiration Thrombectomy):ab,ti,kw OR (Aspiration Thrombectomies, Percutaneous):ab,ti,kw OR (Aspiration Thrombectomy, Percutaneous):ab,ti,kw OR (Percutaneous Aspiration Thrombectomies):ab,ti,kw OR (Thrombectomies, Percutaneous Aspiration):ab,ti,kw OR (Thrombectomy, Percutaneous Aspiration):ab,ti,kw OR (Aspiration Thrombectomy):ab,ti,kw OR (Aspiration Thrombectomies):ab,ti,kw OR (Thrombectomies, Aspiration):ab,ti,kw OR (EVT):ab,ti,kw OR (Endovascular therapy):ab,ti,kw OR (Mechanical Thrombectomy):ab,ti,kw OR (Endovascular Treatment):ab,ti,kw #4 OR #5 (imaging selection):ab,ti,kw OR (imaging paradigm):ab,ti,kw OR (imaging triage):ab,ti,kw OR (imaging protocol):ab,ti,kw OR (Imaging criteria):ab,ti,kw OR (imaging): ab,ti,kw OR (selection paradigm):ab,ti,kw OR (selection criteria):ab,ti,kw OR (NCCT):ab,ti,kw OR (CTA):ab,ti,kw OR (Collaterals):ab,ti,kw (ischemic stroke):ab,ti,kw OR (ischaemic stroke):ab,ti,kw #3 AND #6 AND #7 Trials matching "#8 - #3 AND #6 AND #7"	1,828 4,153 4,704 94,130 870 795
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Table S2. Risk of bias for observational studies

Study/year of publication	Selection	Comparability	Outcome	Total quality score	Assessment
Dekker 2021	LOW (4 pts)	HIGH (1 pts)	LOW (3 pts)	8	Good
Almekhlafi 2022	LOW (4 pts)	HIGH (1 pts)	LOW (3 pts)	8	Good
Herzberg 2021	LOW (4 pts)	LOW (2 pts)	LOW (3 pts)	9	Good
Dhillon 2022	LOW (4 pts)	HIGH (1 pts)	HIGH (2 pts)	7	Fair
Nogueira 2021	LOW (4 pts)	LOW (2 pts)	LOW (3 pts)	9	Good
Nguyen 2021	LOW (4 pts)	LOW (2 pts)	LOW (3 pts)	9	Good