

Supplementary material table S1

Table S1: Search strategy

Ovid MEDLINE(R) ALL <1946 to February 07, 2022>		EBSCO CINAHL Tuesday, February 08, 2022 3:33:09 PM		
1	(prehospital\$ or pre-hospital\$ or pre hospital\$ or ambulance\$ or paramedic\$ or EMS).tw. 106247	#	Query prehospital* or pre-hospital* or pre hospital* or ambulance* or paramedic* or EMS	Results Display
2	Emergency Medical Services/ 148969	S1	(MH "Emergency Medical Services")	Display
		S2	PHEM	Display
		S3	""out of hospital""	Display
		S4	(MH "Emergency Medical Technicians")	Display
3	PHEM.mp. 90	S5	(MH "Prehospital Care")	Display
		S6	S1 OR S2 OR S3 OR S4 OR S5 OR S6	Display
4	Emergency Responders/ 9522	S7	MH CEREBROVASCULAR DISORDERS OR MH BASAL GANGLIA CEREBROVASCULAR DISEASE OR MH BRAIN ISCHEMIA OR MH CAROTID ARTERY DISEASES OR MH NTRACRANIAL ARTERIAL DISEASES OR MH ("INTRACRANIAL EMBOLISM AND THROMBOSIS") OR MH INTRACRANIAL HEMORRHAGES	Display
5	"out of hospital".mp. 36924		(((stroke OR poststroke OR post-stroke OR cerebrovasc* OR brain) AND (vasc* OR cerebral)) AND (vasc* OR cva* OR apoplex* OR SAH))	Display
6	or/1-5252394	S8	((brain* OR cerebr* OR cerebell* OR intracran* OR intracerebral) N5 (isch?emi*	Display
7	CEREBROVASCULAR DISORDERS/ or exp BASAL GANGLIA CEREBROVASCULAR DISEASE/ or exp BRAIN ISCHEMIA/ or exp CAROTID ARTERY DISEASES/ or exp	S9		
		S10		

<p>INTRACRANIAL ARTERIAL DISEASES/ or exp INTRACRANIAL ARTERIOVENOUS MALFORMATIONS/ or exp "INTRACRANIAL EMBOLISM AND THROMBOSIS"/ or exp INTRACRANIAL HEMORRHAGES/ or STROKE/ or exp BRAIN INFARCTION/ or STROKE, LACUNAR/ or VASOSPASM, INTRACRANIAL/ or VERTEBRAL ARTERY DISSECTION/ or BRAIN INJURIES/ or BRAIN INJURY, CHRONIC/ 1585800</p> <p>8 (stroke or poststroke or post-stroke or cerebrovasc* or brain vasc* or cerebral vasc* or cva* or apoplex* or SAH).ti,ab. 871396</p> <p>9 ((brain* or cerebr* or cerebell* or intracran* or intracerebral) adj5 (isch?emi* or infarct* or thrombo* or emboli* or occlus*)).ti,ab.282389</p> <p>10 ((brain* or cerebr* or cerebell* or intracerebral or intracranial or subarachnoid) adj5 (haemorrhage* or hemorrhage* or haematoma* or</p>		OR infarct* OR thrombo* OR emboli* OR occlus*))	
		((brain* OR cerebr* OR cerebell* OR intracerebral OR intracranial OR subarachnoid) N5 (haemorrhage* OR hemorrhage* OR haematoma* OR	
	S11	hematoma* OR bleed*))	Display
	S12	S8 OR S9 OR S10 OR S11	Display
		(MH "Hemodynamics") OR	
	S13	"h?emodynamic"	Display
		(MH "Blood Pressure") OR "blood	
	S14	pressure"	Display
	S15	(MH "Heart Rate") OR "heart rate"	Display
		(MH "Carbon Dioxide") OR "carbon	
	S16	dioxide"	Display
	S17	(MH "Vital Signs") OR "vital sign"	Display
	S18	(MH "Cerebrovascular Circulation")	Display
	S19	cerebral n2 autoregulat*	Display
	S20	(MH "Capnography") OR "capnograph"	Display
	S21	(MH "Hypocapnia") OR "hypocapni"	Display
	S22	(MH "Hypercapnia") OR "hypercapni"	Display
		((diastolic or systolic or pulse) n2	
	S23	pressure)	Display
	S24	(MH "Hypertension") OR "hypertension"	Display
	S25	(MH "Hypotension") OR "Hypotension"	Display
	S26	cardiac rate	Display
	S27	(MH "Tachycardia") OR "tachycardia"	Display
	S28	(MH "Bradycardia") OR "bradycardia"	Display
	S29	(MH "Oxygenation") OR "Oxygenation"	Display
	S30	""End tidal CO2""	Display
	S31	"capnometr"	Display
	S32	(MH "Oximetry") OR "Oximetr"	Display

hematoma* or bleed*).ti,ab. 180998	S33	(MH "Oxygen Saturation") OR "Oxygen Saturation"	Display
11 7 or 8 or 9 or 10 2039098		S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32 OR S33	Display
12 h?emodynamic*.mp. or Hemodynamic Monitoring/ or Hemodynamics/ 608178	S34 S35 S36	S7 AND S12 AND S34 S13 OR S18 OR S19 S14 OR S15 OR S16 OR S17 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32 OR S33	Display 31,465
13 blood pressure.mp. or Blood Pressure/ 1125369	S37 S38	S7 AND S12 AND S36 AND S37	294,009 21
14 heart rate.mp. or Heart Rate/ 580820			
15 carbon dioxide.mp. or Carbon Dioxide/ 288641			
16 vital sign*.mp. or Vital Signs/ 58941			
17 (cerebral adj2 autoregulat*).mp. or Cerebrovascular Circulation/ [mp=ti, ab, hw, tn, ot, dm, mf, dv, kf, fx, dq, nm, ox, px, rx, ui, sy] 78400			

18	Capnography/ or capnograph*.mp. [mp=ti, ab, hw, tn, ot, dm, mf, dv, kf, fx, dq, nm, ox, px, rx, ui, sy] 9229	
19	Hypocapnia/ or hypocapni*.mp. 8114	
20	Hypercapnia/ or hypercapni*.mp. 42457	
21	((diastolic or systolic or pulse) adj2 pressure).mp. [mp=ti, ab, hw, tn, ot, dm, mf, dv, kf, fx, dq, nm, ox, px, rx, ui, sy] 385008	
22	Hypertension/ or hypertension.mp. 1509563	
23	hypotension.mp. or Hypotension/ 247186	
24	cardiac rate.mp. 1554	
25	tachycardia.mp. or exp Tachycardia/265759	

26	bradycardia.mp. or Bradycardia/ 94556	
27	Oxygenation.mp. 185368	
28	"End tidal CO2".mp. 7217	
29	capnometr*.mp. [mp=tj, ab, hw, tn, ot, dm, mf, dv, kf, fx, dq, nm, ox, px, rx, ui, sy] 4103	
30	Oximetry/ 24615	
31	Oximetr*.mp. 51416	
32	Oxygen Saturation.mp. 117013	
33	or/12-32 3789242	
34	6 and 11 and 33 4367	
35	12 or 17 673323	
36	or/13-16,18-32 3424650	
37	6 and 11 and 35 and 36 447	

38	(prehospital\$ or pre-hospital\$ or pre hospital\$ or ambulance\$ or paramedic\$ or EMS).tw.	106247
39	emergency health service/	154496
40	rescue personnel/ or ambulance/	28863
41	PHEM.mp.	90
42	"out of hospital".mp.	36924
43	or/38-42	259271
44	exp "CEREBROVASCULAR ACCIDENT"/	409597
45	(stroke or poststroke or post-stroke or cerebrovasc* or brain vasc* or cerebral vasc* or cva* or apoplex* or SAH).ti,ab.	871396
46	((brain* or cerebr* or cerebell* or intracran* or intracerebral) adj5	

(isch?emi* or infarct* or thrombo* or emboli* or occlus*)).ti,ab.282389

47 ((brain* or cerebr* or cerebell* or intracerebral or intracranial or subarachnoid) adj5 (haemorrhage* or hemorrhage* or haematoma* or hematoma* or bleed*)).ti,ab.
180998

48 CEREBROVASCULAR
DISORDERS/ or exp BASAL GANGLIA
CEREBROVASCULAR DISEASE/ or exp
BRAIN ISCHEMIA/ or exp CAROTID
ARTERY DISEASES/ or exp
INTRACRANIAL ARTERIAL DISEASES/ or
exp "INTRACRANIAL EMBOLISM AND
THROMBOSIS"/ or exp INTRACRANIAL
HEMORRHAGES/ or STROKE/ or exp
BRAIN INFARCTION/ or exp
VERTEBRAL ARTERY DISSECTION/
1469442

49 or/44-48 1959782

50 hemodynamics/ or
h?emodynamic*.mp. 608178

51	hemodynamic monitoring/ 16709	
52	blood pressure.mp. or blood pressure/ 1125369	
53	heart rate.mp. or heart rate/ 580820	
54	carbon dioxide.mp. or carbon dioxide/ 288641	
55	vital sign/ or vital sign*.mp. 58941	
56	brain blood flow/ or autoregulation/ 195646	
57	(cerebral adj2 autoregulat*).mp. [mp=ti, ab, hw, tn, ot, dm, mf, dv, kf, fx, dq, nm, ox, px, rx, ui, sy] 7085	
58	capnograph*.mp. or capnography/ 9229	

59	hypocapnia/ or hypocapni*.mp. 8114	
60	hypercapnia/ or hypercapni*.mp. 42457	
61	((diastolic or systolic or pulse) adj2 pressure).mp. 385008	
62	diastolic blood pressure/ 105556	
63	systolic blood pressure/ 175833	
64	hypertension.mp. or hypertension/ 1509563	
65	hypotension/ or Hypotension.mp. 247186	
66	cardiac rate.mp. 1554	
67	tachycardia/ or tachycardia.mp. 260033	

68	bradycardia.mp. or bradycardia/ 94556	
69	Oxygenation.mp. or blood oxygenation/ 185368	
70	end tidal carbon dioxide tension/ 9249	
71	"End tidal CO2".mp. 7217	
72	capnometry/ or capnometr*.mp. 6493	
73	oximetry/ or Oximetr*.mp. 51416	
74	oxygen saturation.mp. or oxygen saturation/ 117013	
75	pulse oximetry/ 31959	
76	or/50-75 3880549	
77	43 and 49 and 76 4189	

78	50 or 51 or 56 or 57 784516	
79	or/52-55,58-75 3420610	
80	43 and 49 and 78 and 79 445	
81	37 or 80 509	
82	remove duplicates from 81 448	