

CQ 6-3

成人敗血症患者に対して初期蘇生輸液と同時または早期(3時間以内)に血管収縮薬を使用するか？

検索データベース

- MEDLINE (PubMed/Ovid)
- CENTRAL
- 医学中央雑誌
- その他 ()

検索式とヒット数

PubMed search strategy (検索日 2019年5月6日)

#1	"systemic inflammatory response syndrome"[MeSH] OR SIRS[tiab] or (Sepsis[MeSH] OR "Shock, Septic"[MesH] OR sepsis[tiab] OR septic[tiab] OR "multiple organ failure"[MeSH] OR "organ failure"[tiab] OR MOF[tiab] OR "organ dysfunction" OR MODS[tiab]	224122
#2	(((((("vasoconstrictor agents"[MeSH Terms]) OR "vasoconstrictor agents"[Title/Abstract]) OR Vasoconstrictor[Title/Abstract]) OR Vasopressor[Title/Abstract]) OR Vasoconstrictors[Title/Abstract] OR ("Adrenergic alpha-Agonists"[Mesh] OR Adrenergic alpha-Agonists"[tiab])))	51969
#3	(epinephrine[MeSH Terms]) OR epinephrine[Title/Abstract]) OR adrenaline[Title/Abstract]) OR Norepinephrine[MeSH Terms]) OR Norepinephrine[Title/Abstract]) OR Noradrenaline[Title/Abstract]) OR Dopamine[MeSH Terms]) OR Dopamine[Title/Abstract]) OR Dobutamine[MeSH Terms]) OR Dobutamine[Title/Abstract]) OR isoproterenol[MeSH Terms]) OR isoproterenol[Title/Abstract]) OR Catecholamines[MeSH Terms]) OR Catecholamines[Title/Abstract]) OR Vasopressin[MeSH Terms]) OR Vasopressin[Title/Abstract]) OR pitressin[Title/Abstract]) OR terlipressin[MeSH Terms]) OR terlipressin[MeSH Terms]) OR Phenylephrine[MeSH Terms]) OR fenilefrina[Title/Abstract]) OR neosynephrine[Title/Abstract]	412305
#4	#2 or #3	443720
#5	(early[Title/Abstract]) OR first[Title/Abstract]) OR hours[Title/Abstract]) OR hour[Title/Abstract]) OR minites[Title/Abstract] OR restrict[tiab] OR "restricting	3912264

	volumes"[tiab] OR "fluid restriction"[tiab]	
#6	(together[Title/Abstract]) OR same time[Title/Abstract]) OR (immediately[Title/Abstract]) OR immediate[Title/Abstract]) OR rapidly[Title/Abstract]) OR rapid[Title/Abstract]))	1894334
#7	(infusion[Title/Abstract]) OR transfusion[Title/Abstract]	302189
#8	#5 or #6 or #7	5543433
#9	#4 AND #8	113197
#10	randomized controlled trial[pt] OR controlled clinical trial[pt] OR randomized[tiab] OR placebo[tiab] OR "clinical trials as topic"[MeSH Terms:noexp] OR randomly[tiab] OR trial[ti] NOT ("animals"[MeSH Terms] NOT "humans"[MeSH Terms])	1124328
#11	#1 AND #9 AND #10	449

CENTRAL search strategy(検索日 2019年5月6日)

#1	MeSH descriptor: [Sepsis] explode all trees	3998
#2	(sepsis):ti,ab,kw	10248
#3	MeSH descriptor: [Shock, Septic] explode all trees	771
#4	(septic):ti,ab,kw	4108
#5	MeSH descriptor: [Systemic Inflammatory Response Syndrome] explode all trees	4328
#6	(Systemic Inflammatory Response Syndrome):ti,ab,kw	1194
#7	(SIRS):ti,ab,kw	676
#8	MeSH descriptor: [Multiple Organ Failure] explode all trees	384
#9	("multiple organ failure"):ti,ab,kw	1326
#10	(Organ Failure):ti,ab,kw	5601
#11	(Organ dysfunction):ti,ab,kw	2529
#12	(MOF):ti,ab,kw	141
#13	(MODS):ti,ab,kw	247
#14	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13	19963
#15	MeSH descriptor: [Vasoconstrictor Agents] explode all trees	171
#16	(vasoconstrictor):ti,ab,kw	2351
#17	(vasoconstrictors):ti,ab,kw	232
#18	(vasopressor):ti,ab,kw	1226
#19	(vasoconstrictor agents):ti,ab,kw	1611
#20	MeSH descriptor: [Adrenergic alpha-Agonists] explode all trees	1079
#21	(Adrenergic alpha-Agonists):ti,ab,kw	852

#22	#15 or #16 or #17 or #18 or #19 or #20 or #21	4813
#23	MeSH descriptor: [Epinephrine] explode all trees	3460
#24	(epinephrine):ti,ab,kw	7141
#25	(adrenaline):ti,ab,kw	2526
#26	MeSH descriptor: [Norepinephrine] explode all trees	2682
#27	("norepinephrine"):ti,ab,kw	5720
#28	(noradrenaline):ti,ab,kw	2164
#29	MeSH descriptor: [Dopamine] explode all trees	1228
#30	(dopamine):ti,ab,kw	746
#31	MeSH descriptor: [Dobutamine] explode all trees	512
#32	(dobutamine):ti,ab,kw	1306
#33	MeSH descriptor: [Isoproterenol] explode all trees	589
#34	(isoproterenol):ti,ab,kw	862
#35	MeSH descriptor: [Catecholamines] explode all trees	9960
#36	(Catecholamines):ti,ab,kw	2395
#37	MeSH descriptor: [Vasopressins] explode all trees	1297
#38	(Vasopressin):ti,ab,kw	2294
#39	(pitressin):ti,ab,kw	16
#40	MeSH descriptor: [Terlipressin] explode all trees	120
#41	(terlipressin):ti,ab,kw	391
#42	MeSH descriptor: [Phenylephrine] explode all trees	737
#43	(Phenylephrine):ti,ab,kw	1838
#44	(fenilefrina):ti,ab,kw	6
#45	(neosynephrine):ti,ab,kw	15
#46	#21 or #22 or #23 or #24 or #25 or #26 or #27 or #28 or #29 or #30 or #31 or #32 or #33 or #34 or #35 or #36 or #37 or #38 or #39 or #40 or #41 or #42 or #43	28149
#47	#22 OR #46	31113
#48	(early):ti,ab,kw	105037
#49	(first):ti,ab,kw	210426
#50	(hours):ti,ab,kw	93413
#51	(hour):ti,ab,kw	46926
#52	(minites):ti,ab,kw	16
#53	(restrict):ti,ab,kw	743
#54	(restricting volumes):ti,ab,kw	15
#55	(restriction):ti,ab,kw	14487

#56	(together):ti,ab,kw	18276
#57	(same time):ti,ab,kw	34045
#58	(immediately):ti,ab,kw	33568
#59	(immediate):ti,ab,kw	22425
#60	(rapid):ti,ab,kw	28963
#61	(rapidly):ti,ab,kw	11660
#62	(infusion):ti,ab,kw	53530
#63	(transfusion):ti,ab,kw	13842
#64	#47 or #48 or #49 or #50 or #51 or #52 OR #53 OR #54 OR #55 OR #56 OR #57 OR #58 OR #59 OR #60 or #61 or #62 or #63	496949
#65	#22 or #46	14804
#66	#14 AND #65	909
#67	#14 AND #47 AND #56	714

医学中央雑誌 search strategy(検索日 2019年5月6日)

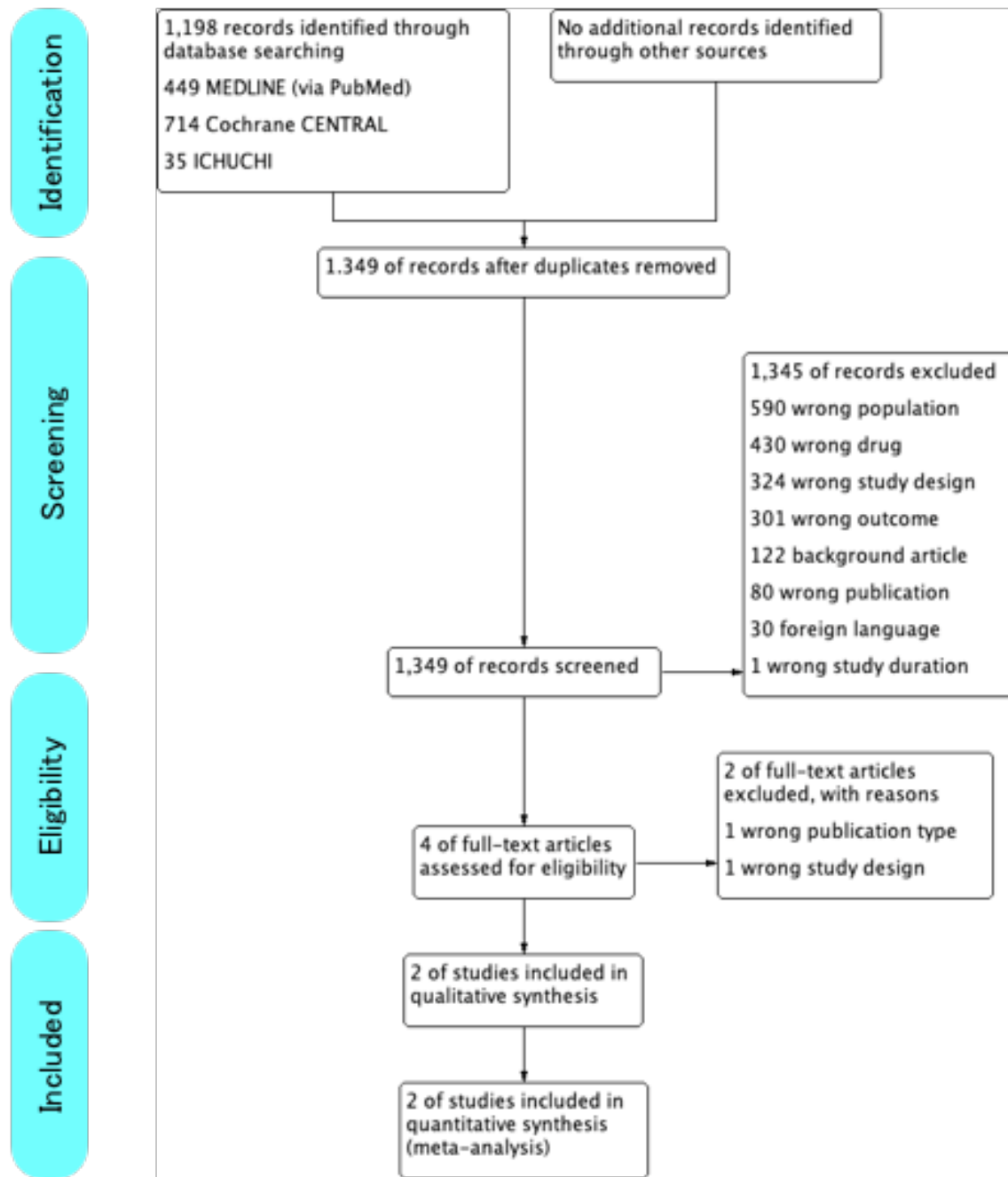
#1	(敗血症/TH or 敗血症/TA) and (PT=会議録除く)	22465
#2	(ショック-敗血症性/TH or 敗血症性ショック/TA) and (PT=会議録除く)	6161
#3	((敗血症/TH or sepsis/TA)) and (PT=会議録除く)	15943
#4	(septic/AL and (ショック/TH or shock/TA)) and (PT=会議録除く)	511
#5	((全身性炎症反応症候群/TH or 全身性炎症反応症候群/TA)) and (PT=会議録除く)	17767
#6	((全身性炎症反応症候群/TH or 全身性炎症性反応症候群/TA)) and (PT=会議録除く)	17593
#7	(全身炎症反応症候群/TA) and (PT=会議録除く)	21
#8	(septic/TA) and (PT=会議録除く)	1336
#9	((全身性炎症反応症候群/TH or sirs/TA)) and (PT=会議録除く)	17885
#10	((“全身性炎症反応症候群”/TH or “systemic inflammatory response syndrome”/TA)) and (PT=会議録除く)	17631
#11	((多臓器不全/TH or 多臓器不全/TA)) and (PT=会議録除く)	6294
#12	((“多臓器不全”/TH or “Multiple Organ Failure”/TA)) and (PT=会 議録除く)	3721
#13	((“organ failure”/TA) and (PT=会議録除く)	236
#14	((“organ dysfunction”/TA) and (PT=会議録除く)	52
#15	((多臓器不全/TH or mof/TA)) and (PT=会議録除く)	4905
#16	((多臓器不全/TH or mods/TA)) and (PT=会議録除く)	3768
#17	((多臓器不全/TH or 多臓器障害/TA)) and (PT=会議録除く)	4147

#18	(臓器不全/TA) and (PT=会議録除く)	5052
#19	(臓器機能障害/TA) and (PT=会議録除く)	143
#20	#1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18 or #19	31763
#21	(“血管収縮剤”/TH or 血管収縮剤/TA) and (PT=会議録除く)	21066
#22	(“Adrenergic Alpha-Agonists”/TH or “Adrenergic alpha-Agonists”/TA) and (PT=会議録除く)	11878
#23	((Epinephrine/TH or Epinephrine/TA)) and (PT=会議録除く)	6221
#24	(Norepinephrine/TH or Norepinephrine/TA) and (PT=会議録除く)	4715
#25	(Dopamine/TH or Dopamine/TA) and (PT=会議録除く)	6998
#26	(Dobutamine/TH or Dobutamine/TA) and (PT=会議録除く)	1479
#27	(Isoprenaline/TH or isoproterenol/TA) and (PT=会議録除く)	2002
#28	(Catecholamines/TH or Catecholamines/TA) and (PT=会議録除く)	21259
#29	(Vasopressins/TH or Vasopressins/TA) and (PT=会議録除く)	3871
#30	(Vasopressins/TH or pitressin/TA) and (PT=会議録除く)	3885
#31	(Terlipressin/TH or Terlipressin/TA) and (PT=会議録除く)	20
#32	(Phenylephrine/TH or Phenylephrine/TA) and (PT=会議録除く)	837
#33	(fenilefrina/AL) and (PT=会議録除く)	0
#34	(Terlipressin/TH or Terlipressin/TA) and (PT=会議録除く)	20
#35	(Epinephrine/TH or エピネフリン/TA) and (PT=会議録除く)	8098
#36	(Epinephrine/TH or アドレナリン/TA) and (PT=会議録除く)	11397
#37	(Norepinephrine/TH or ノルエピネフリン/TA) and (PT=会議録除く)	5561
#38	(Norepinephrine/TH or ノルアドレナリン/TA) and (PT=会議録除く)	6250
#39	(Dopamine/TH or ドパミン/TA) and (PT=会議録除く)	8355
#40	(Dobutamine/TH or ドブタミン/TA) and (PT=会議録除く)	1740
#41	(Catecholamines/TH or カテコールアミン/TA) and (PT=会議録除く)	22968
#42	(Catecholamines/TH or カテコラミン/TA) and (PT=会議録除く)	23255
#43	(Vasopressins/TH or バソプレッシン/TA) and (PT=会議録除く)	3966
#44	(Vasopressins/TH or バソプレシン/TA) and (PT=会議録除く)	4184
#45	(Vasopressins/TH or ピトレシン/TA) and (PT=会議録除く)	3884
#46	(テリプレシン/AL) and (PT=会議録除く)	0
#47	(テリプレッシン/AL) and (PT=会議録除く)	0
#48	(Phenylephrine/TH or フェニレフリン/TA) and (PT=会議録除く)	996
#49	(Phenylephrine/TH or ネオシネジン/TA) and (PT=会議録除く)	598
#50	(フェニレフリナ/AL) and (PT=会議録除く)	0
#51	#21 or #22 or #23 or #24 or #25 or #26 or #27 or #28 or #29 or #30	53453















	or #31 or #32 or #33 or #34 or #35 or #36 or #37 or #38 or #39 or #40 or #41 or #42 or #43 or #44 or #45 or #46 or #47 or #48 or #49 or #50	
#52	(early/TA) and (PT=会議録除く)	5717
#53	(早期/TA) and (PT=会議録除く)	132677
#54	(first/TA) and (PT=会議録除く)	3410
#55	(初期/TA) and (PT=会議録除く)	58455
#56	(hours/TA) and (PT=会議録除く)	156
#57	(hour/TA) and (PT=会議録除く)	452
#58	(minite/AL) and (PT=会議録除く)	13
#59	(同時/TA) and (PT=会議録除く)	69025
#60	(together/TA) and (PT=会議録除く)	61
#61	("same time"/TA) and (PT=会議録除く)	2
#62	(順次/TA) and (PT=会議録除く)	1866
#63	(即時/TA) and (PT=会議録除く)	4710
#64	(immediately/TA) and (PT=会議録除く)	139
#65	(immediate/TA) and (PT=会議録除く)	603
#66	(rapidly/TA) and (PT=会議録除く)	352
#67	(rapid/TA) and (PT=会議録除く)	3168
#68	(制限/TA) and (PT=会議録除く)	27392
#69	(輸液制限/TA) and (PT=会議録除く)	34
#70	(輸液療法/TH or 輸液/TA) and (PT=会議録除く)	26766
#71	(補液療法/TH or 補液/TA) and (PT=会議録除く)	19583
#72	(infusion/TA) and (PT=会議録除く)	1589
#73	(transfusion/TA) and (PT=会議録除く)	482
#74	#52 or #53 or #54 or #55 or #56 or #57 or #58 or #59 or #60 or #61 or #62 or #63 or #64 or #65 or #66 or #67 or #68 or #69 or #70 or #71 or #72 or #73	315378
#75	(ランダム化比較試験/TH or ランダム化比較試験/TA) and (PT=会議録除く)	32387
#76	(準ランダム化比較試験/TH or 準ランダム化比較試験/TA) and (PT=会議録除く)	2740
#77	((ランダム割付け/TH or ランダム化/TA)) and (PT=会議録除く)	3261
#78	(ランダム化比較試験/TH or 無作為化比較試験/TA) and (PT=会議録除く)	32169
#79	(比較試験/AL) and (PT=会議録除く)	43755

#80	(臨床試験/TH or 臨床試験/TA) and (PT=会議録除く)	91374
#81	((プラセボ/TH or プラセボ/TA)) and (PT=会議録除く)	6130
#82	(対照/AL) and (PT=会議録除く)	69723
#83	(コントロール/AL) and (PT=会議録除く)	54954
#84	#75 or #76 or #77 or #78 or #79 or #80 or #81 or #82 or #83	208060
#85	#20 and #51 and #74 and #84	35

PRISMA フロー図

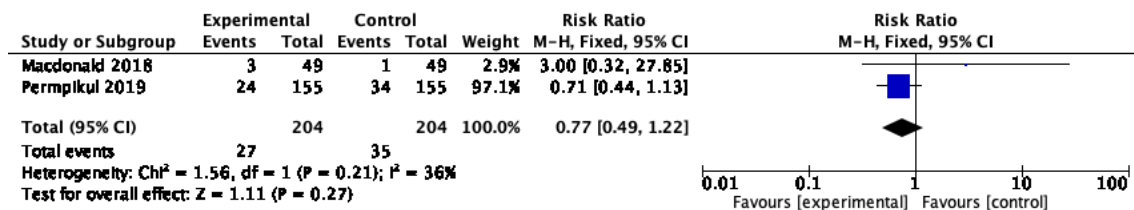


Risk of Bias サマリー

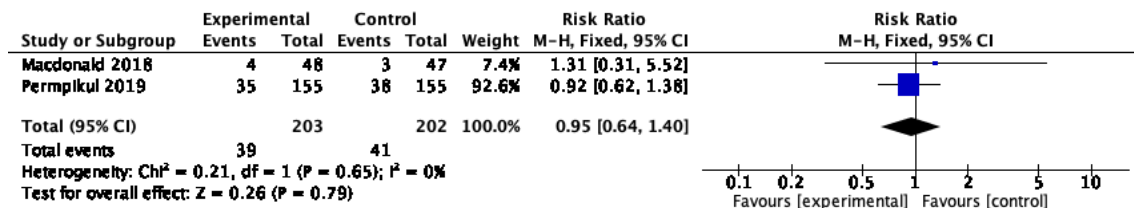
	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Macdonald 2018							
Permpikul 2019							

Forest/Funnel Plots

アウトカム① 短期死亡(28日死亡)



アウトカム② 長期死亡(90日死亡もしくは最長期間死亡)



アウトカム③ 重篤な副作用(肺水腫)



アウトカム④ 重篤な副作用(心筋虚血に関連する合併症)

