

CQ 12-1 敗血症患者への栄養投与は経腸栄養と経静脈栄養どちらを行うか？

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 4 月 28 日)

#1	"Intensive Care Units"[Mesh] OR "intensive care unit*"[tiab]	129584
#2	"Critical Illness"[Mesh] OR "Critical Care"[Mesh] OR "Critical*ill*"[tiab] OR "critical care"[tiab] OR "intensive care"[tiab] OR "Surgical intensive care" [tiab]	185588
#3	Sepsis[Mesh] OR "Shock, Septic"[Mesh] OR Bacteremia[Mesh] OR Sepsis[tiab] OR "Septic shock"[tiab] OR Bacteremia[tiab]	182749
#4	"Systemic Inflammatory Response Syndrome"[Mesh] OR "Systemic Inflammatory Response Syndrome"[tiab] OR SIRS[tiab]	123788
#5	"Multiple Organ Failure"[Mesh] OR "organ failure*"[tiab] OR "organ dysfunction"[tiab] OR MOF[tiab]	37297
#6	#1 OR #2 OR #3 OR #4 OR #5	396577
#7	"Enteral Nutrition"[Mesh] OR "enteral nutrition"[tiab] OR "enteral feeding"[tiab] OR "feeding tube*"[tiab] OR "force feeding*"[tiab] OR "tube feeding*"[tiab] OR "gastric tube*" [tiab]	28577
#8	"Parenteral Nutrition"[Mesh] OR "parenteral nutrition"[tiab] OR "parenteral feeding*"[tiab] OR "intravenous feeding*"[tiab] OR "intravenous nutrition*"[tiab]	30807
#9	randomized controlled trial[pt] OR controlled clinical trial[pt] OR randomized[tiab] OR placebo[tiab] OR drug therapy[sh] OR randomly[tiab] OR trial[tiab] OR groups[tiab] NOT (animals [mh] NOT humans [mh])	3888206
#10	#6 AND #7 AND #8 AND #9	520

CENTRAL search strategy (検索日 2019 年 4 月 28 日)

#1	MeSH descriptor: [Intensive Care Units] explode all trees	3260
#2	("intensive care unit*"):ti,ab,kw	13671

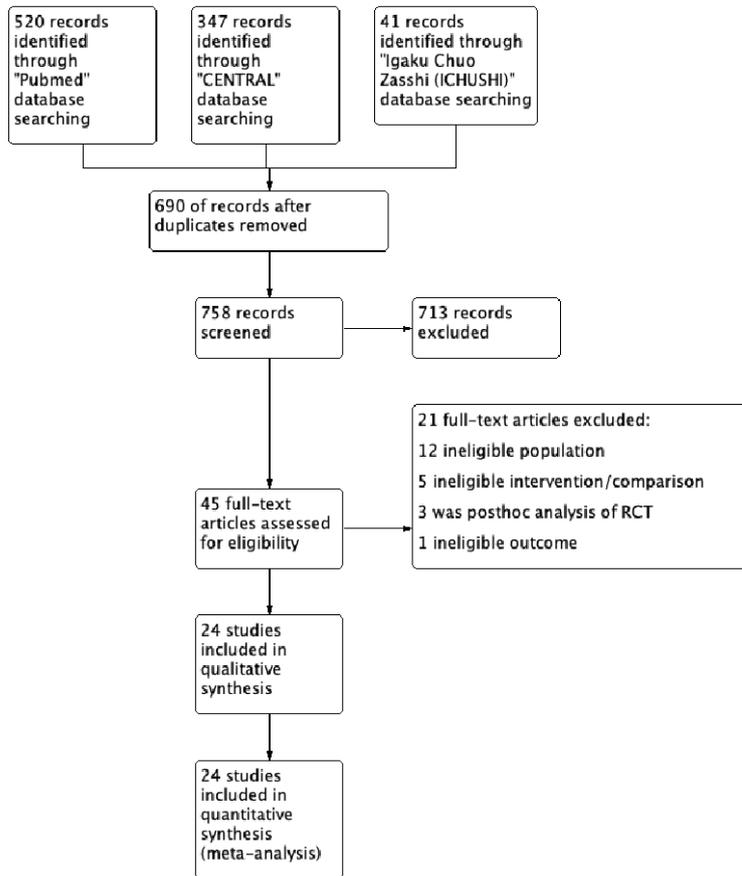
#3	MeSH descriptor: [Critical Illness] explode all trees	1845
#4	("Critical* ill*"):ti,ab,kw	73
#5	MeSH descriptor: [Critical Care] explode all trees	1918
#6	("critical care"):ti,ab,kw	3515
#7	("intensive care"):ti,ab,kw	20325
#8	("Surgical intensive care"):ti,ab,kw	716
#9	MeSH descriptor: [Sepsis] explode all trees	3998
#10	(Sepsis):ti,ab,kw	10248
#11	("Septic shock"):ti,ab,kw	2576
#12	MeSH descriptor: [Bacteremia] explode all trees	886
#13	(Bacteremia):ti,ab,kw	2383
#14	MeSH descriptor: [Systemic Inflammatory Response Syndrome] explode all trees	4328
#15	("Systemic Inflammatory Response Syndrome"):ti,ab,kw	1020
#16	(SIRS):ti,ab,kw	676
#17	MeSH descriptor: [Multiple Organ Failure] explode all trees	384
#18	("organ failure*"):ti,ab,kw	2807
#19	("organ dysfunction"):ti,ab,kw	1416
#20	(MOF):ti,ab,kw	141
#21	#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 OR #20	35862
#22	MeSH descriptor: [Enteral Nutrition] explode all trees	1713
#23	("enteral nutrition"):ti,ab,kw	3911
#24	("feeding tube*"):ti,ab,kw	525
#25	("enteral feeding"):ti,ab,kw	1244
#26	("force feeding*"):ti,ab,kw	1
#27	("tube feeding*"):ti,ab,kw	624
#28	("gastric tube*"):ti,ab,kw	548
#29	#22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28	5605
#30	MeSH descriptor: [Parenteral Nutrition] explode all trees	1599
#31	("parenteral nutrition"):ti,ab,kw	3900
#32	("pnarenteral feeding*"):ti,ab,kw	0
#33	("intravenous feeding*"):ti,ab,kw	111
#34	("intravenous nutrition*"):ti,ab,kw	153

#35	#30 OR #31 OR #32 OR #33 OR #34	4003
#36	#21 AND #29 AND #35	357
#37	Trials	347

医学中央雑誌 search strategy (検索日 2019 年 4 月 28 日)

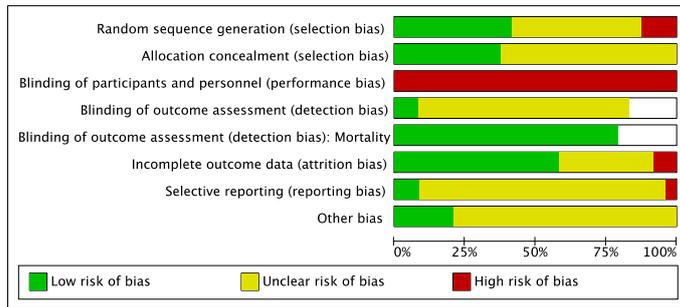
#1	(ICU/TH or ICU/AL) and (PT=会議録除く)	67724
#2	((ショック-敗血症性/TH or ショック-敗血症性/TA) and (PT=会議録除く)) or ((敗血症/TH or 敗血症/TA) and (PT=会議録除く))	22405
#3	(全身性炎症反応症候群/TH or 全身性炎症反応症候群/TA) and (PT=会議録除く)	17730
#4	(多臓器不全/TH or 多臓器不全/TA) and (PT=会議録除く)	6286
#5	(クリティカルケア/TH or クリティカルケア/AL) and (PT=会議録除く)	8161
#6	#1 or #2 or #3 or #4 or #5	98605
#7	((経腸栄養/TH or 経腸栄養/TA) and (PT=会議録除く)) or ((経腸栄養剤/TH or 経腸栄養剤/TA) and (PT=会議録除く))	13037
#8	((静脈栄養/TH or 静脈栄養/TA) and (PT=会議録除く)) or ((中心静脈栄養/TH or 中心静脈栄養/TA) and (PT=会議録除く)) or ((静脈栄養剤/TH or 静脈栄養剤/TA) and (PT=会議録除く))	11931
#9	ランダム化比較試験/TH or 準ランダム化比較試験/TH or ランダム化/AL or 無作為化/AL or 比較試験/AL or 臨床試験/AL or プラセボ/AL or 対照/AL or コントロール/AL or 臨床研究/AL	301704
#10	#6 and #7 and #8 and #9	41

PRISMA フロー図



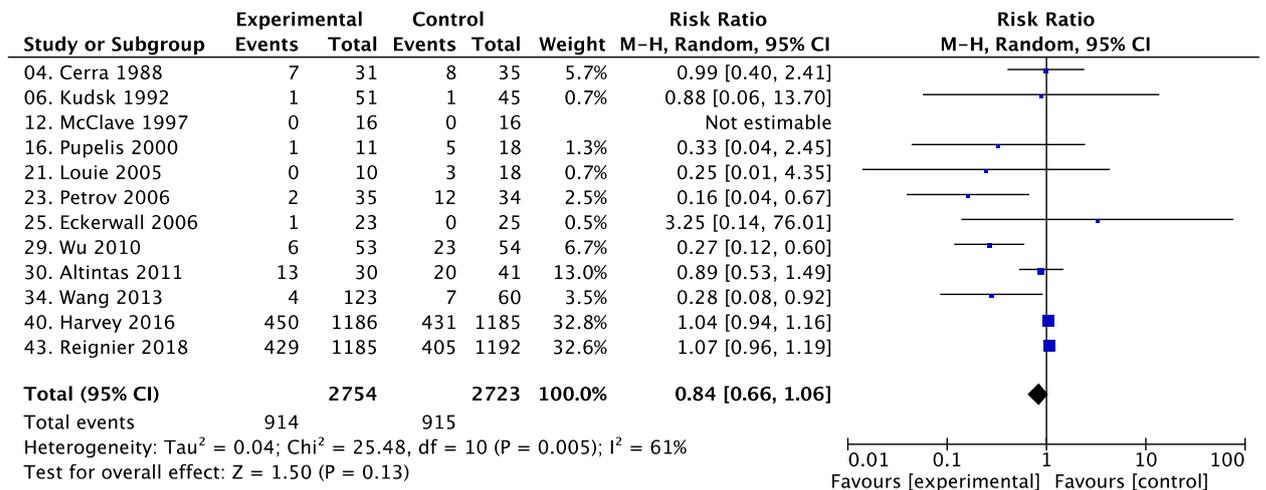
Risk of Bias サマリー

	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Blinding of outcome assessment (detection bias): Mortality	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
01. Rapp 1983	?	?	-		+	+	-	+
02. Moore 1986	+	?	-	?		+	?	?
03. Young 1987	?	?	-	?	+	?	?	?
04. Cerra 1988	?	?	-		+	+	?	+
06. Kudsk 1992	+	+	-	?	+	+	?	?
10. Hadfield 1995	?	?	-		+	+	?	?
12. McClave 1997	?	?	-	?	+	?	?	?
13. Windsor 1998	-	?	-	?	+	?	?	?
16. Pupelis 2000	?	?	-	?	+	?	?	?
18. Bertolini 2003	+	+	-		+	+	?	?
19. Gupta 2003	+	+	-	?		+	?	?
21. Louie 2005	+	+	-	?	+	?	?	?
23. Petrov 2006	+	?	-	?	+	?	?	?
24. Radrizzani 2006	+	+	-	?	+	+	?	?
25. Eckerwall 2006	+	+	-	?	+	-	?	?
29. Wu 2010	?	?	-	?	+	?	?	?
30. Altintas 2011	-	+	-	?	+	+	?	+
31. Justo Meirelles 2011	?	?	-	?	+	+	?	?
32. Aydogmus 2012	-	?	-	?		+	?	?
34. Wang 2013	?	?	-	?	+	+	?	?
35. Wan 2014	?	?	-	?		-	?	?
40. Harvey 2016	+	+	-	+	+	+	+	+
43. Reignier 2018	+	+	-	+	+	+	+	+
44. Liu 2018	?	?	-	?		?	?	?

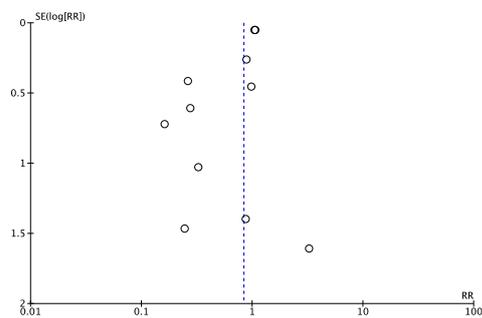


フォレストプロット+ファンネルプロット

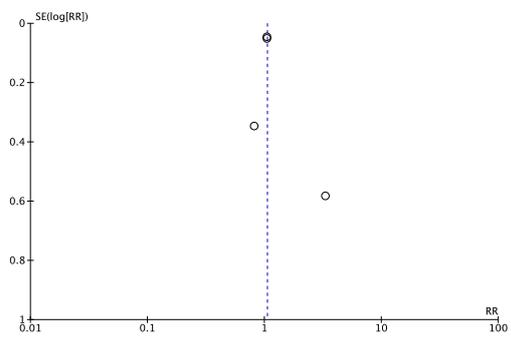
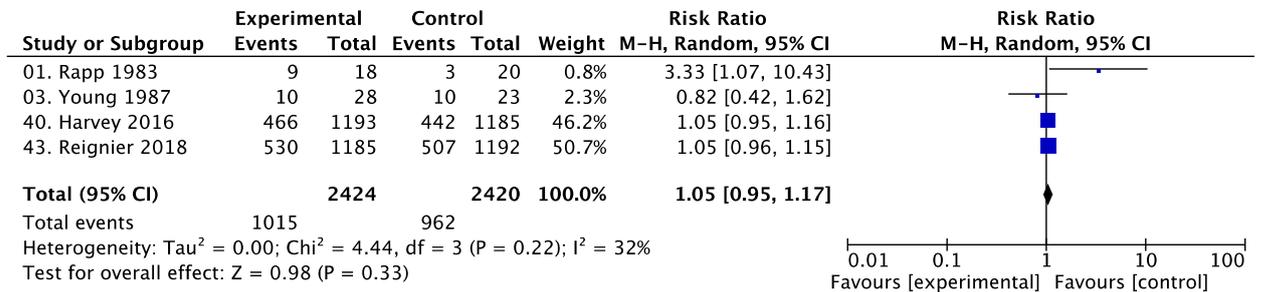
In-hospital mortality



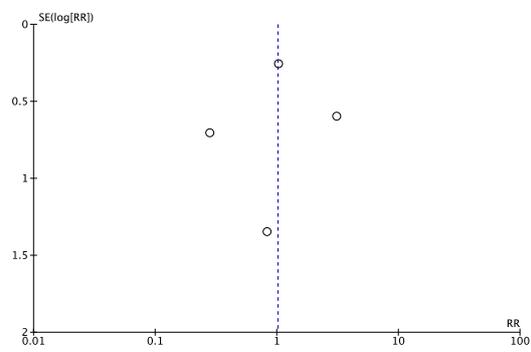
Plot of SE(log(RR))



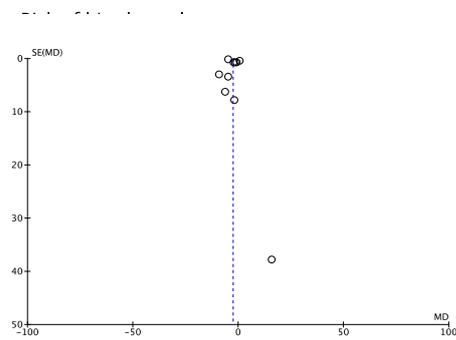
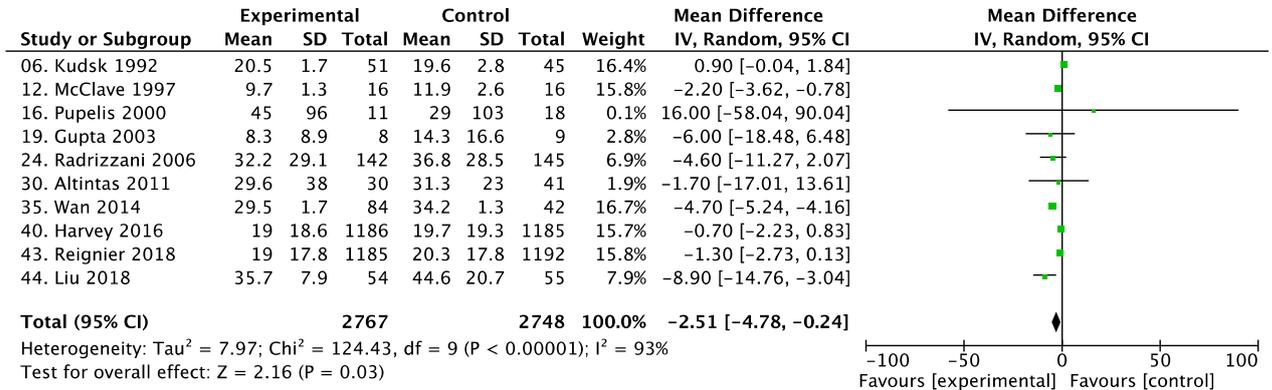
90-day mortality



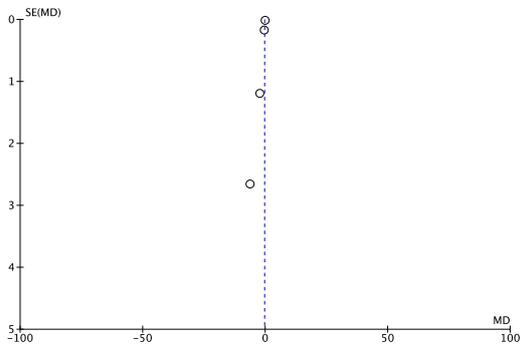
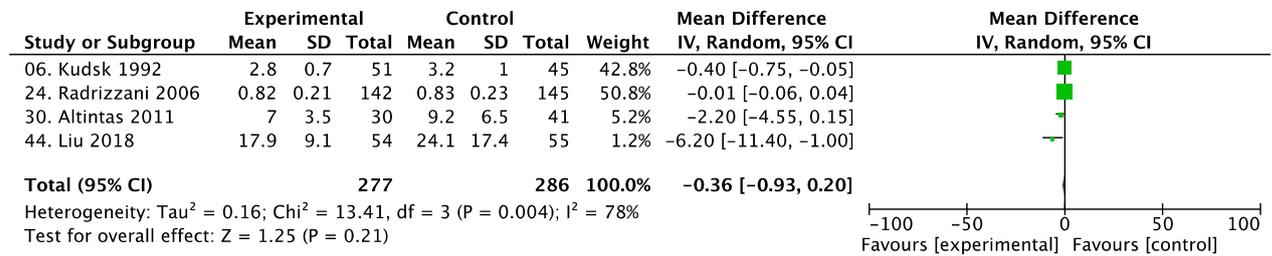
28 or 30-day mortality



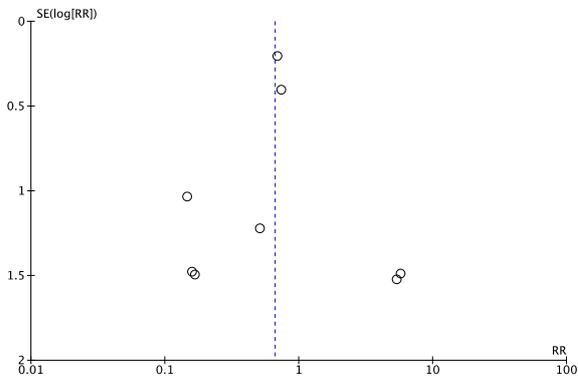
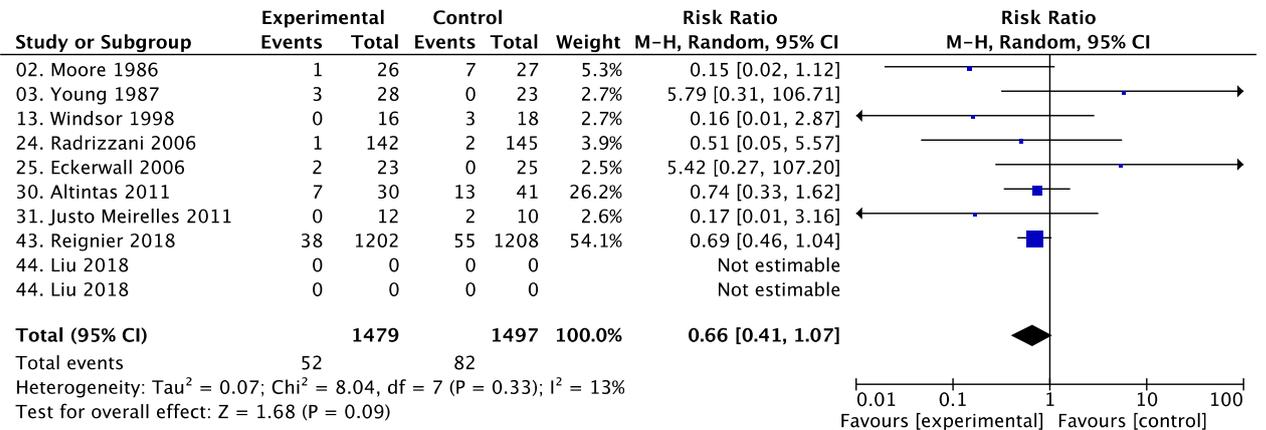
Length of stay



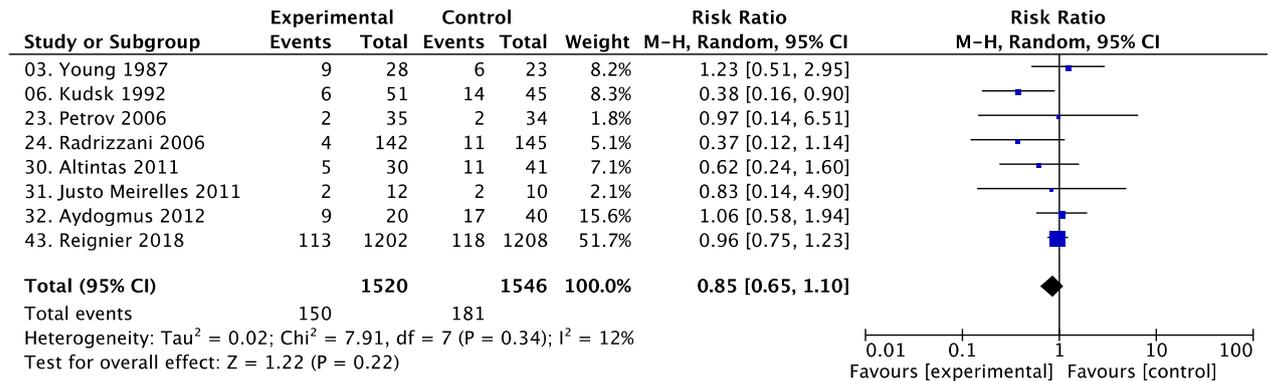
Length of mechanical ventilation

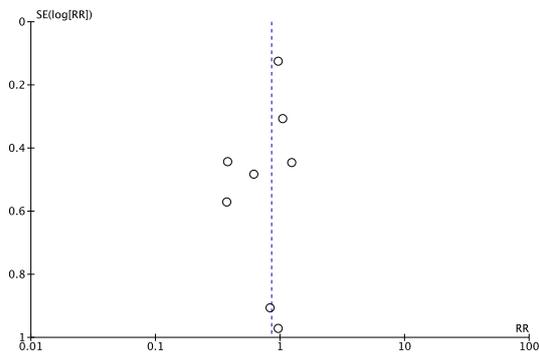


Sepsis (bacteremia) complication

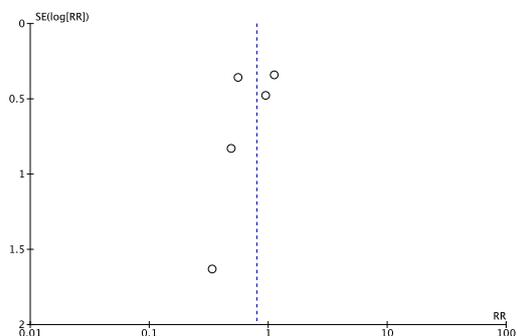
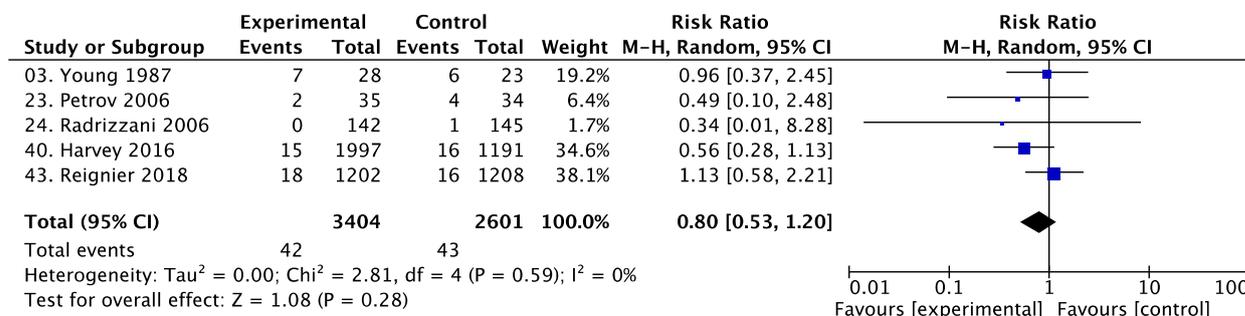


Pneumonia (+ VAP) complication

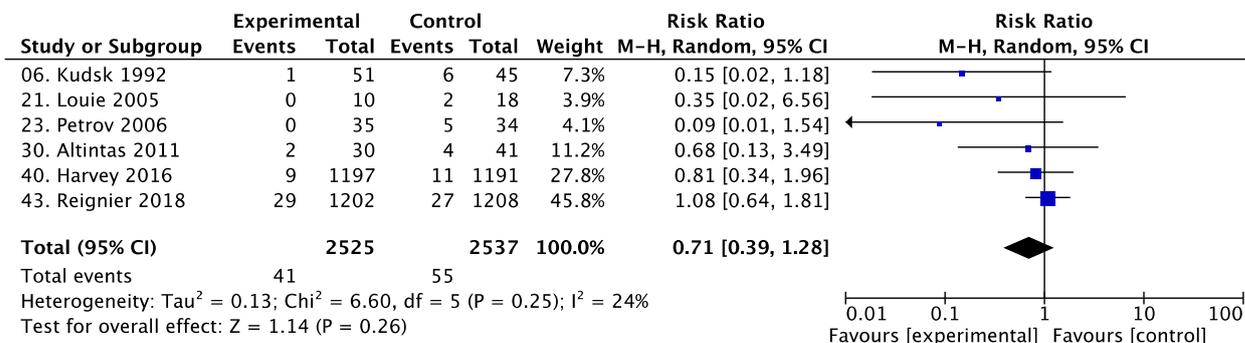


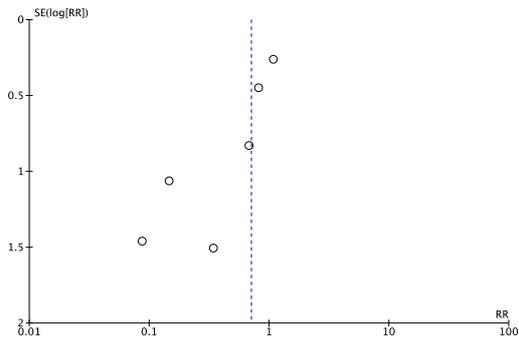


Urinary tract infection complication



CV Catheter associated infection (Line sepsis) Complication





Abdominal infection (+ intra-abdominal abscess, pancreatic necrosis, infectious

Study or Subgroup	Experimental		Control		Weight	Risk Ratio M-H, Random, 95% CI	Risk Ratio M-H, Random, 95% CI
	Events	Total	Events	Total			
06. Kudsk 1992	1	51	6	45	2.1%	0.15 [0.02, 1.18]	
16. Pupelis 2000	2	11	5	18	4.3%	0.65 [0.15, 2.81]	
23. Petrov 2006	7	35	16	34	16.0%	0.42 [0.20, 0.90]	
24. Radrizzani 2006	1	142	2	145	1.6%	0.51 [0.05, 5.57]	
29. Wu 2010	12	53	39	54	33.0%	0.31 [0.19, 0.53]	
34. Wang 2013	21	123	24	60	36.7%	0.43 [0.26, 0.70]	
40. Harvey 2016	4	1197	8	1191	6.3%	0.50 [0.15, 1.65]	
Total (95% CI)		1612		1547	100.0%	0.39 [0.29, 0.53]	
Total events	48		100				
Heterogeneity: Tau ² = 0.00; Chi ² = 2.39, df = 6 (P = 0.88); I ² = 0%							
Test for overall effect: Z = 6.15 (P < 0.00001)							

