

CQ 12-7-1 敗血症患者に対して急性期に積極的なビタミン C 投与を行うか？

CQ 12-7-2 敗血症患者に対して急性期に積極的なビタミン D 投与を行うか？

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 25 日)

#1	Sepsis[mesh] OR Sepsis[tiab]	169246
#2	"Systemic inflammatory response syndrome"[mesh] OR "Systemic inflammatory response syndrome"[tiab] OR SIRS[tiab]	123755
#3	"Critical Illness"[mesh] OR "Critical Illness"[tiab] OR "Critical care"[mesh] OR "Critical care"[tiab] OR "Critically ill"[tiab]	109050
#4	"respiratory distress syndrome, Adult"[mesh] OR "respiratory distress syndrome, Adult"[tiab] OR ARDS[tiab] OR "acute respiratory distress syndrome"[tiab] OR "adult respiratory distress syndrome"[tiab]	26325
#5	Trauma[tiab]	215219
#6	Burns[mesh] OR Burn[tiab]	66493
#7	"Multiple organ failure"[mesh] OR "Multiple organ failure"[tiab] OR MOF[tiab]	20591
#8	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7	565409
#9	"Vitamin D"[mesh] OR "Vitamin D"[tiab] OR "Vit D"[tiab]	79037
#10	Ergocalciferol[mesh] OR Ergocalciferol[tiab] OR "Vitamin D2"[tiab]	4891
#11	"Vitamin D3"[tiab] OR Cholecalciferol[tiab] OR Cholecalciferol[mesh]	29862
#12	Vitamin[mesh] OR Vitamin[tiab]	205931
#13	"Ascorbic Acid"[mesh] OR "Ascorbic Acid"[tiab] OR "Vitamin C"[tiab] OR "Vit C"[tiab] OR "Dehydroascorbic acid"[mesh] OR "Dehydroascorbic acid"[mesh]	61810
#14	antioxidants[tiab] OR antioxidant[tiab]	180650
#15	#9 OR #10 OR #11 OR #12 OR #13 OR #14	413281

#16	((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]))	3886739
#17	#8 AND #15 AND #16	1591

CENTRAL search strategy(検索日 2019年 4月 23日)

ID	Search	Hits
#1	MeSH descriptor: [Sepsis] explode all trees	3998
#2	(sepsis):ti,ab,kw	10248
#3	MeSH descriptor: [Systemic Inflammatory Response Syndrome] explode all trees	4328
#4	(Systemic inflammatory response syndrome):ti,ab,kw	1194
#5	(SIRS):ti,ab,kw	676
#6	MeSH descriptor: [Critical Illness] explode all trees	1845
#7	(Critical Illness):ti,ab,kw	3785
#8	MeSH descriptor: [Critical Care] explode all trees	1918
#9	(Critical care):ti,ab,kw	8789
#10	(Critically ill):ti,ab,kw	5980
#11	MeSH descriptor: [Respiratory Distress Syndrome, Adult] explode all trees	1033

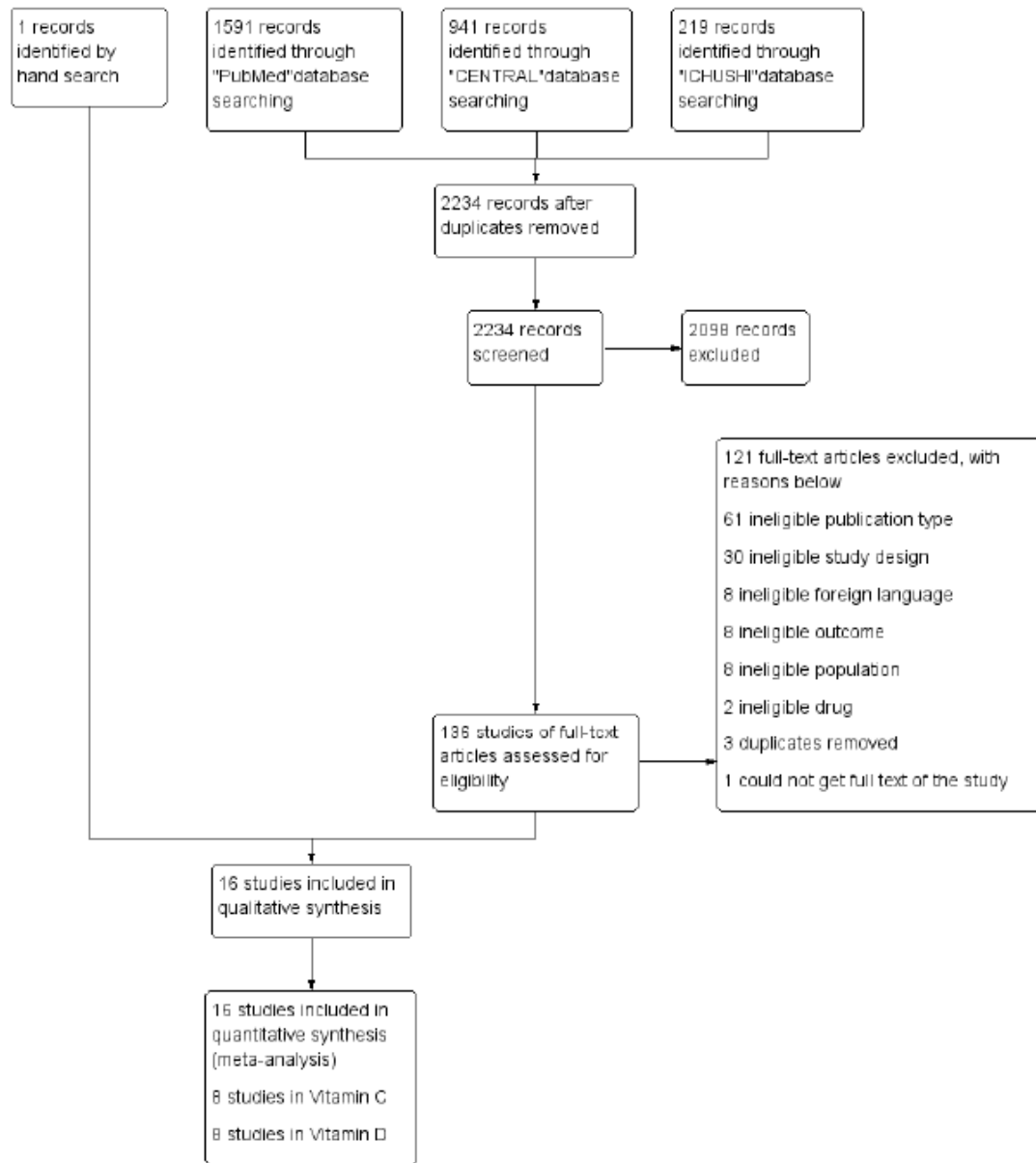
#12	(respiratory distress syndrome, Adult):ti,ab,kw	2386
#13	(ARDS):ti,ab,kw	1427
#14	(adult respiratory distress syndrome):ti,ab,kw	2386
#15	("acute respiratory distress syndrome"):ti,ab,kw	1294
#16	(trauma):ti,ab,kw	13168
#17	MeSH descriptor: [Burns] explode all trees	1556
#18	(Burn):ti,ab,kw	3351
#19	MeSH descriptor: [Multiple Organ Failure] explode all trees	384
#20	(Multiple organ failure):ti,ab,kw	1667
#21	(MOF):ti,ab,kw	141
#22	#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 OR #21	43289
#23	MeSH descriptor: [Vitamin D] explode all trees	4484
#24	(Vitamin D):ti,ab,kw	11982
#25	("vit D"):ti,ab,kw	409
#26	MeSH descriptor: [Ergocalciferols] explode all trees	1134
#27	("ergocalciferol"):ti,ab,kw	299

#28	("vitamin D2"):ti,ab,kw	220
#29	MeSH descriptor: [Cholecalciferol] explode all trees	2606
#30	("cholecalciferol"):ti,ab,kw	2239
#31	("vitamin D3"):ti,ab,kw	2562
#32	MeSH descriptor: [Vitamins] explode all trees	2356
#33	(Vitamin):ti,ab,kw	25546
#34		
#35	MeSH descriptor: [Ascorbic Acid] explode all trees	2033
#36	(Ascorbic acid):ti,ab,kw	3517
#37	(Vitamin C):ti,ab,kw	5970
#38	MeSH descriptor: [Dehydroascorbic Acid] explode all trees	9
#39	("dehydroascorbic acid"):ti,ab,kw	23
#40	MeSH descriptor: [Antioxidants] explode all trees	4543
	(Antioxidant):ti,ab,kw	9183
#41	#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	35857
#42	#22 AND #41	961
#43	(trials)	941

医学中央雑誌 219 件

ID	Search	Hits
#1	((敗血症/TH or 敗血症/TA or Sepsis/TA)) and (PT=会議録除く)	22,616
#2	((全身性炎症反応症候群/TH or 全身性炎症反応症候群/TA or SIRS/TA)) and (PT=会議録除く)	17,956
#3	((危篤/TH or 重症/TA or 集中治療/TA or ICU/TA)) and (PT=会議録除く)	123,742
#4	(呼吸窮迫症候群-急性/TH or 呼吸窮迫症候群-急性/TA or ARDS/TA or 急性呼吸窮迫症候群/TA or 呼吸窮迫症候群-急性/TH or 成人呼吸窮迫症候群/AL or "Acute Respiratory Distress Syndrome"/TA) and (PT=会議録除く)	7,530
#5	((外傷/TA)) and (PT=会議録除く)	54,229
#6	((熱傷/TH or 熱傷/TA)) and (PT=会議録除く)	10,444
#7	((多臓器不全/TH or 多臓器不全/TA or MOF/TA)) and (PT=会議録除く)	7,425
#8	#1 or #2 or #3 or #4 or #5 or #6 or #7	210,239
#9	(("Vitamin D"/TH or ビタミン D/TA or "Vitamin D"/TA)) and (PT=会議録除く)	12,722
#10	(("Ergocalciferols"/TH or ビタミン D2/TA or "Vitamin D2"/TA or エルゴカルシフェロール/TA or Ergocalciferol/TA)) and (PT=会議録除く)	253
#11	(("Cholecalciferol"/TH or ビタミン D3/TA or "Vitamin D3"/TA or コレカルシフェロール/TA or Cholecalciferol/TA)) and (PT=会議録除く)	7,268
#12	((Vitamins/TH or ビタミン/TA)) and (PT=会議録除く)	47,618
#13	(("Ascorbic Acid"/TH or ビタミン C/TA or アスコルビン酸/TA or ("Ascorbic Acid"/TH or "Vitamin C"/AL) or "Accorbic Acid"/TA)) and (PT=会議録除く)	5,004
#14	(("Dehydroascorbic Acid"/TH or デヒドロアスコルビン酸/TA or "Dehydroascorbic Acid"/TA)) and (PT=会議録除く)	79
#15	((抗酸化剤/TH or 抗酸化/TA and Antioxidant/TA)) and (PT=会議録除く)	740
#16	#9 or #10 or #11 or #12 or #13 or #14 or #15	49710
#17	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	301,704
#18	#8 and #16 and #17	219

PRISMA フロー図



Risk of Bias サマリー

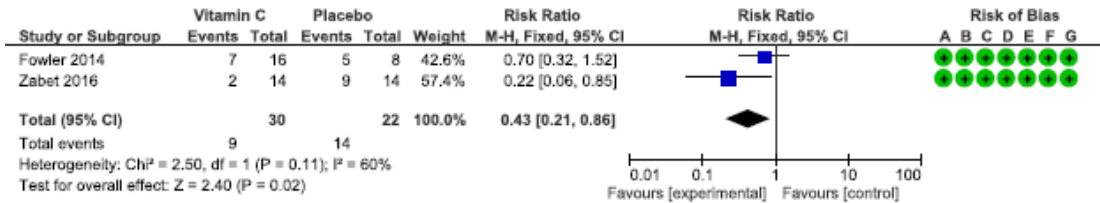
	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Crimi 2004	+	+	+	+	+	+	+
Ferron-Celma 2009	+	+	?	?	+	-	+
Fowler 2014	+	+	+	+	+	+	+
Howe 2015	+	+	+	+	+	-	+
Nogueira 2013	?	?	+	+	-	-	+
Porter 1999	+	+	+	+	+	-	+
Tanaka 2000	-	-	+	+	+	-	?
Zabet 2016	+	+	+	+	+	+	+

	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
Aminmansour 2012	-	-	+	+	+	-	+
Amrein 2011	+	+	+	+	-	+	+
Amrein 2014	+	+	+	+	+	+	+
Han 2016	+	+	+	+	+	+	+
Jokar 2018	-	-	?	?	+	-	+
Leaf 2014	+	+	+	+	+	+	+
Parekh 2018	+	+	+	+	+	+	+
Quraishi 2015	+	+	+	+	+	+	+

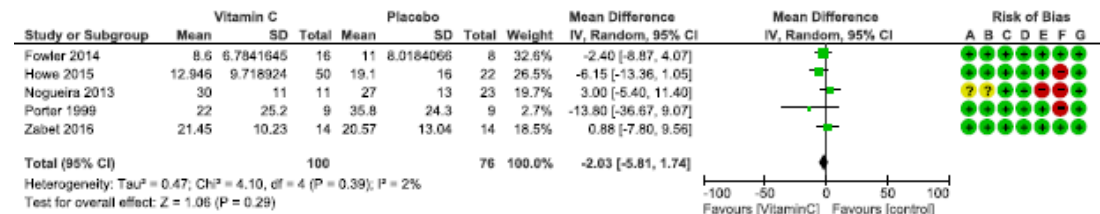
フォレストプロット

ビタミンC

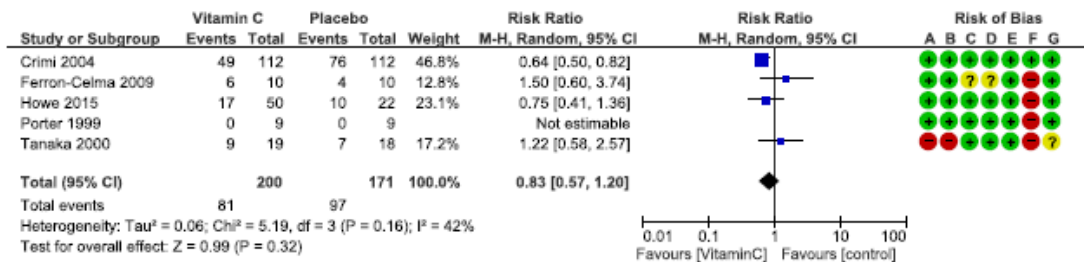
アウトカム① 28日死亡



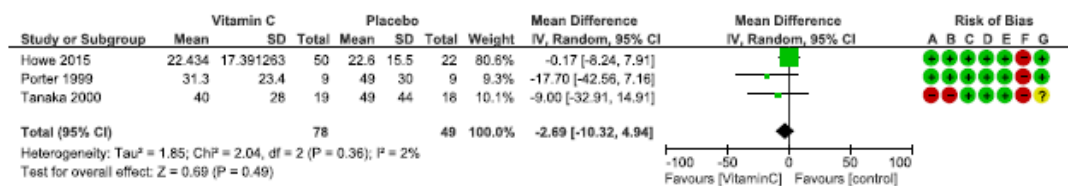
アウトカム② 院内死亡



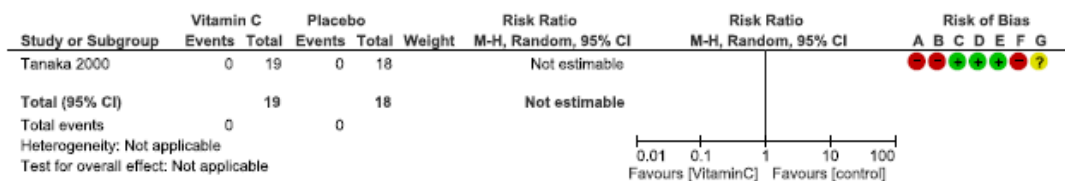
アウトカム③ ICU 滞在期間



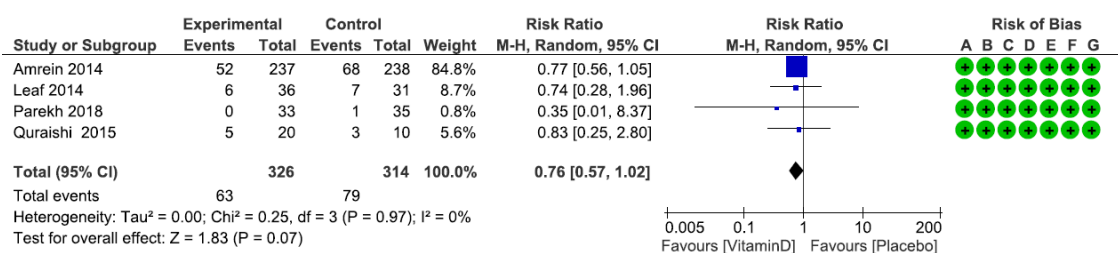
アウトカム④ 入院期間



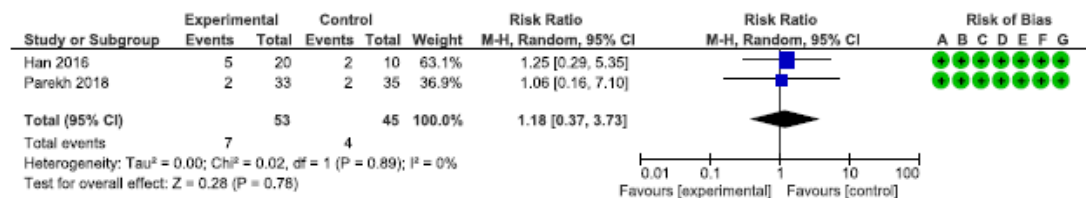
アウトカム⑤ AKI



ビタミンD

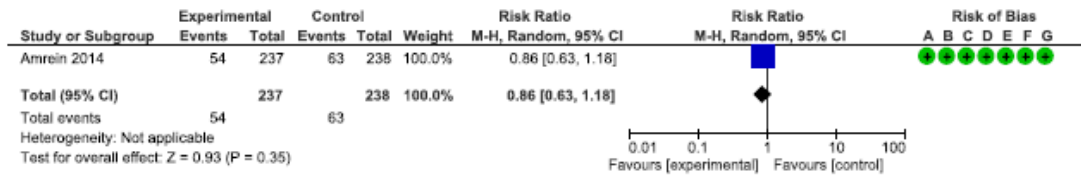


アウトカム① 28 or 30 日死亡

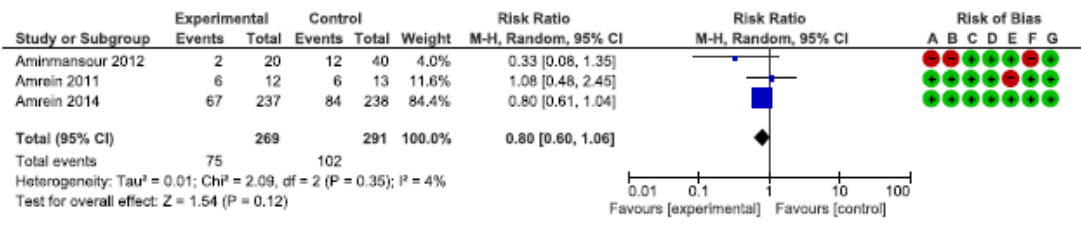


アウトカム② 90 日死亡

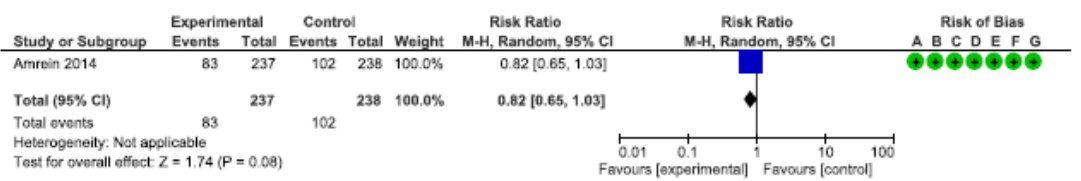
アウトカム③ ICU 死亡



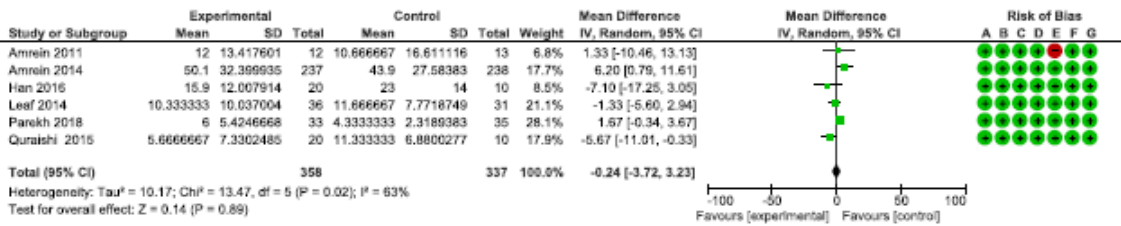
アウトカム④ 院内死亡



アウトカム⑤ 180日死亡



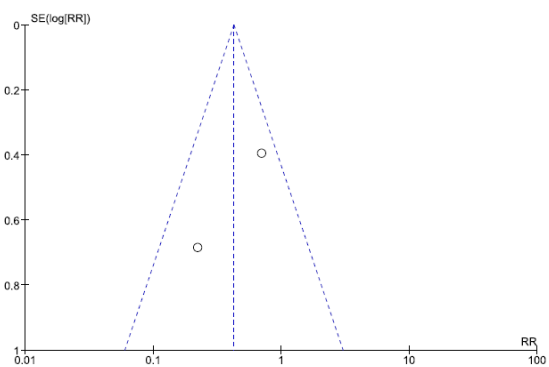
アウトカム⑥ ICU 滞在日数



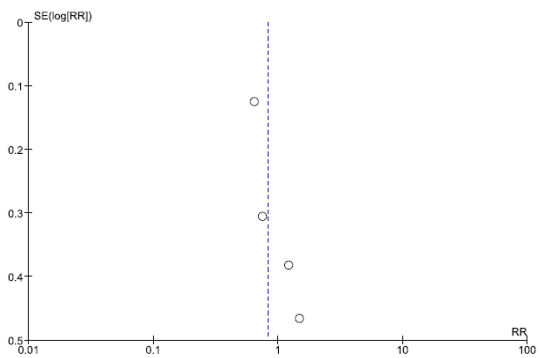
ファンネルプロット

ビタミン C

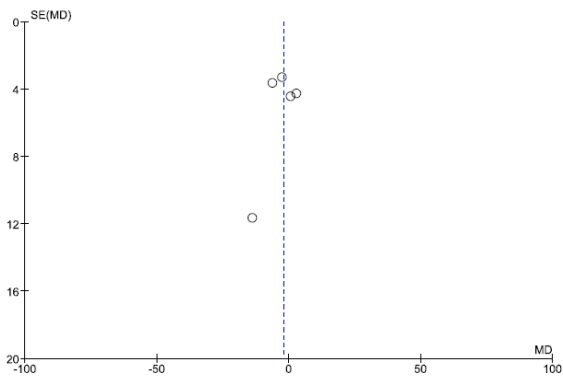
アウトカム① 28日死亡



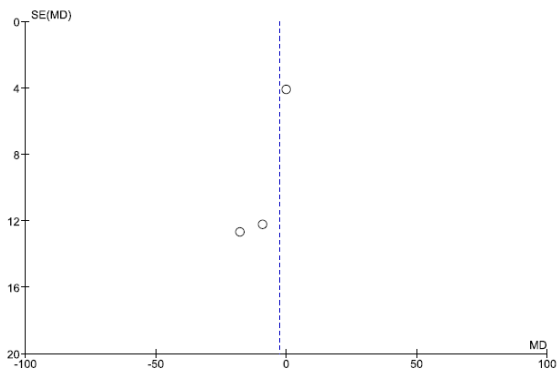
アウトカム② 院内死亡



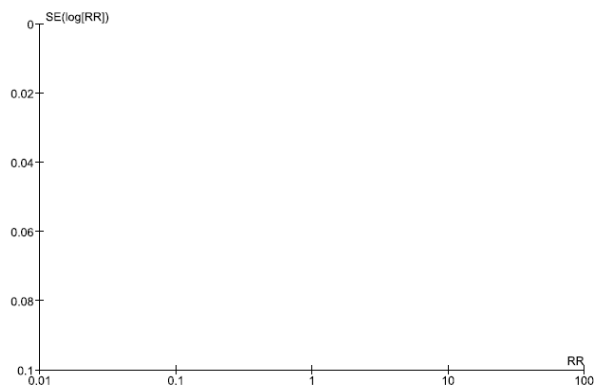
アウトカム③ ICU 滞在期間



アウトカム④ 入院期間

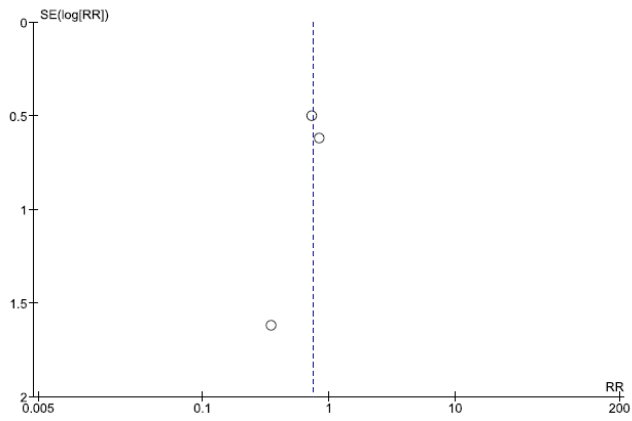


アウトカム⑤ AKI

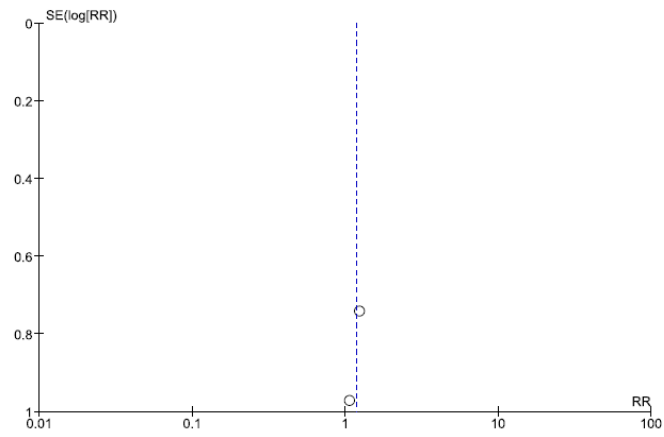


ビタミン D

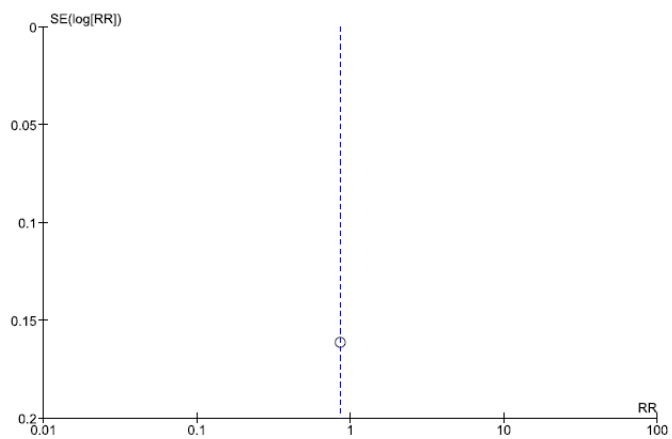
アウトカム① 28 or 30 日死亡



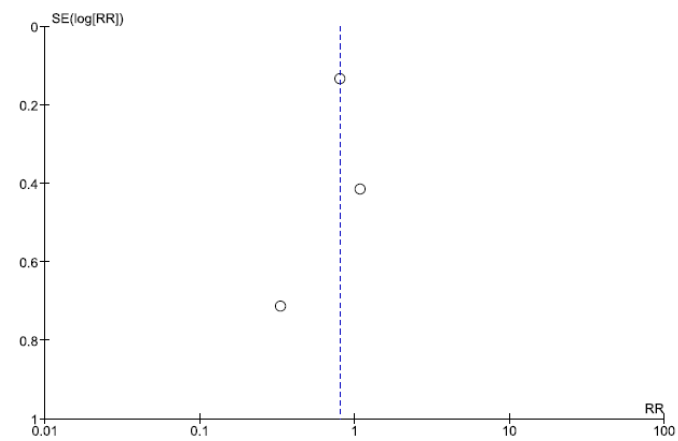
アウトカム② 90 日死亡



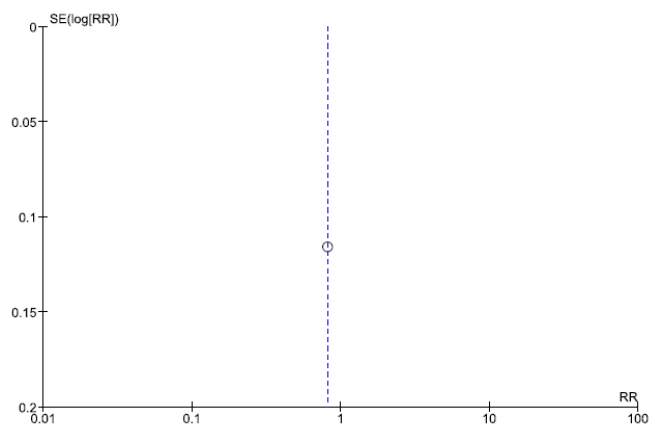
アウトカム③ ICU 日死亡



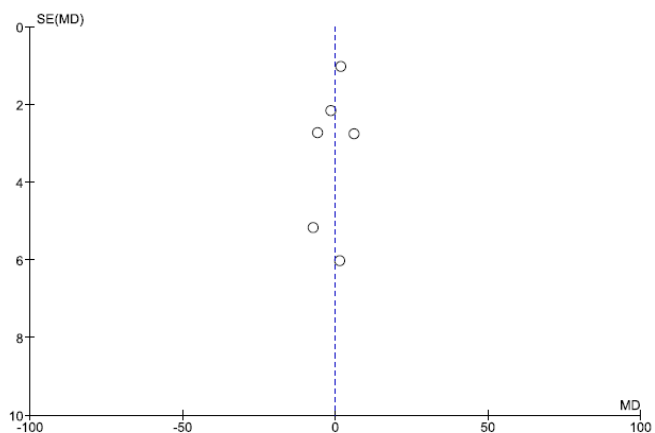
アウトカム④ 院内死亡



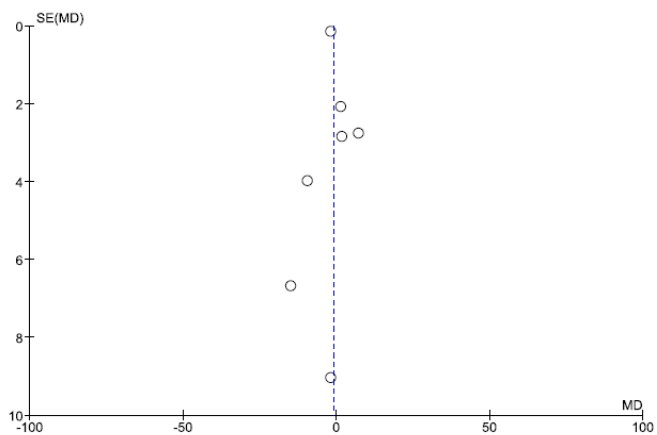
アウトカム⑤ 180日死亡



アウトカム⑥ ICU 滞在日数



アウトカム⑦ 入院期間



アウトカム⑧ 高Ca血症

