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Table S1: Observational studies (Benchmark groups) ^a

Study	Bacteremia definition ^b	Group size	VAP-IP (%)	B-IP (%)
Apostolopoulou et al 2003 ^{1 a}	NS	175	32	19
Berg et al 1995 ²	CDC	123	33	4.9
Berg et al 1995 ²	CDC	130	16.2	5.4
Bonten et al 1997 ³	NS	42	25	17
Cade et al 1993 ⁴	CDC	98	36	8.2
Craven et al 1988 ⁵	CDC	526	17	4.8
Craven et al 1988 ⁵	CDC	799	9	7.5
El-Masri et al 2004 ⁶	CDC	361	NA	15.2
Fagon et al 1989 ⁷	NS	52	9	27
Fagon et al 1996 ^{8 a}	CDC	1978	17	11
Fieselmann et al 1999 ⁹	CDC	224	21	4.9
Garrouste-Orgeas et al 2000 ¹⁰	CDC	291	NA	6.5
Garrouste-Orgeas et al 2006 ¹¹	CDC	3247	NA	7.1
George et al 1998 ¹²	CDC	223	13	14
Giard et al 2008 ¹³	NS	7236	13	5.2
Girou et al 2000 ¹⁴	CDC	50	22	10
Guimaraes et al 2006 ^{15 a}	NS	278	38	5
Hébert et al 1999 ¹⁶	NS	420	21	9.5
Hébert et al 1999 ¹⁶	NS	418	21	7.2
Hugonnet et al 2004 ¹⁷	CDC	432	24	15
Ibrahim et al 2000 ¹⁸	CDC	4913	NA	10
Jacobs et al 1990 ¹⁹	NS	24	54	17
Kollef et al 1997 ^{20 a}	CDC	353	12	3.7
Kollef et al 1997 ^{20 a}	CDC	327	7	3.4
Kunac et al 2013 ²¹	CDC	206	29	13
Laupland et al 2002 ²²	CDC	1017	NA	4.4
Laupland et al 2004 ²³	CDC	4473	NA	4.2
Magnason et al 2008 ²⁴	CDC	280	7.5	8.9
Nourdine et al 1999 ²⁵	CDC	607	13	2.3

Study	Bacteremia definition	Group size	VAP-IP (%)	B-IP (%)
Osmon et al 2008 ²⁶	CDC	893	NA	13
Potgieter et al 1987 ²⁷	NS	250	20	3.2
Rello et al 1994 ²⁸	NS	1650	NA	6.7
Reusser et al 1989 ²⁹	NS	40	38	13
Salata et al 1987 ³⁰	NS	51	41	14
Shorr et al 2004 ^{31,32}	NA	3502	20.5	3.3
Sofianou et al 2000 ^{33 a}	NS	198	34	5.6
Torres et al 1990 ^{34 a}	NS	78	24	13
Urli et al 2002 ³⁵	CDC	178	65	22
Violan et al 1998 ^{36 a}	NS	314	26	18

Table S1 footnotes

- a. The indicated studies were derived from the following systematic reviews;
- Melsen WG, Rovers MM, Bonten MJM. Ventilator-associated pneumonia and mortality: A systematic review of observational studies. *Crit Care Med* 2009;37:2709–18.
 - Safdar N, Dezfulian C, Collard HR, Saint S. Clinical and economic consequences of ventilator-associated pneumonia: a systematic review. *Crit Care Med* 2005;33:2184–93.
 - Agrafiotis M, Siempos II, Ntaidou TK, Falagas ME. Attributable mortality of ventilator-associated pneumonia: a meta-analysis. *Intern J Tub Lung Dis* 2011;15:1154-1163.
- b. Bacteremia defining criteria; NA, not applicable, NS, not specified; CDC, Center for disease control definitions.

Table S2: Studies of non-antibiotic-based methods of VAP prevention^a

	Bacteremia definition ^b	Control groups				Intervention groups			
		Exposure ^c	Group size	VAP-IP (%)	B-IP (%)	Exposure ^c	Group size	VAP-IP (%)	B-IP (%)
Gastric based interventions									
Acosta-escribano et al 2010 ^{37 a}	CDC	G feed	54	57	3.7	SB feed	50	32	12
Barraud et al 2010 ^{38 a}	NS	SC	80	19	14	Probiotic	87	26	3.4
Bonten et al 1995 ^{39 a}	NS	SC	74	22	4.1	sucrulfate	67	22	3
Doig et al 2013 ⁴⁰	NS	EN	682	18	4.8	TPN	681	15	5.7
Harvey et al 2014 ⁴¹	NS	EN	1197	12	2	TPN	1191	11	2
Hsu et al 2009 ^{42 a}	CDC	G feed	62	24	4.8	SB feed	59	9	5.1
Ibrahim et al 2002 ⁴³	NS	Early feed	75	49	12	Late feed	75	31	11
Kearns et al 2000 ^{44 a}	NS	G feed	23	13	22	SB feed	21	19	14
Laggner et al 1989 ^{45 a}	NS	ranitidine	16	13	19	sucrulfate	16	6	6.3
Montecalvo et al ⁴⁶	CDC	G feed	19	11	21	SB feed	19	0	32
Oudhuis et al ^{47 a,d}	CDC					Probiotic	130	8	12
Reignier et al ⁴⁸	NS	SC	222	16	4.1	RGV	227	17	7.5
Spindler-Vessel et al 2007 ^{49 a}	CDC	SC	87	38	3.4	Probiotic	26	15	0
Airway and oral-care-based interventions									
Camus et al 2005 ^{50 a,e}	CDC					Mup/Chlx	130	19	6.2
De Riso et al 1996 ^{51 a}	CDC		180	5	2.2	Chlx	173	1.7	1
Fourrier et al 2000 ^{52 a}	CDC	SC	30	50	10	Chlx	30	17	10
Fourrier et al 2005 ^{53 a}	CDC	Placebo	114	11	2.6	Chlx	114	11	6.1
Holzappel et al 1993 ⁵⁴	NS	NTI	149	11	15	OTI	151	6	8.6
Holzappel et al 1999 ^{55 a}	NS	SC	200	26	23	sinus CT	199	19	18
Segers et al 2006 ^{56 a}	CDC		469	16	3.6	Chlx	485	9.3	1.9
Seguin et al 2013 ^{57 a}	NS	Placebo	72	28	8.5	PVI	78	31	3.5
Valencia et al ^{58 a}	NS	SC	69	15	8.7	CPC	73	15	5.5

Table S2 footnotes;

- a. The indicated studies were derived from the following systematic reviews;
 - Messori A, Trippoli S, Vaiani M, Gorini M, Corrado A. Bleeding and pneumonia in intensive care patients given ranitidine and sucralfate for prevention of stress ulcer: meta-analysis of randomised controlled trials. *BMJ* 2000;321:1103–1106.
 - Huang J, Cao Y, Liao C, Wu L, Gao F. Effect of histamine-2-receptor antagonists versus sucralfate on stress ulcer prophylaxis in mechanically ventilated patients: a meta-analysis of 10 randomized controlled trials. *Crit Care* 2010;14:R194.
 - Alhazzani W, Almasoud A, Jaeschke R, Lo BW, Sindi A, Altayyar S, Fox-Robichaud A. Small bowel feeding and risk of pneumonia in adult critically ill patients: a systematic review and meta-analysis of randomized trials. *Crit Care* 2013;17:R127;
 - Chan EY, Ruest A, Meade MO, Cook DJ. Oral decontamination for prevention of pneumonia in mechanically ventilated adults: systematic review and meta-analysis. *BMJ* 2007;334:889–900;
 - Labeau SO, Van de Vyver K, Brusselaers N, Vogelaers D, Blot SI. Prevention of ventilator-associated pneumonia with oral antiseptics: a systematic review and meta-analysis. *Lancet Infect Dis* 2011;11:845-854.
 - Petrof EO, Dhaliwal R, Manzanares W, Johnstone J, Cook D, Heyland DK. Probiotics in the critically ill: a systematic review of the randomized trial evidence. *Crit Care Med* 2012;40:3290-3302.
 - Liu KX, Zhu YG, Zhang J, Tao LL, Lee JW, Wang XD, Qu JM. Probiotics' effects on the incidence of nosocomial pneumonia in critically ill patients: a systematic review and meta-analysis. *Crit Care* 2012;16:R109.
 - Melsen WG, Rovers MM, Bonten MJM. Ventilator-associated pneumonia and mortality: A systematic review of observational studies. *Crit Care Med* 2009;37:2709–18.
 - Safdar N, Dezfulian C, Collard HR, Saint S. Clinical and economic consequences of ventilator-associated pneumonia: a systematic review. *Crit Care Med* 2005;33:2184–93.
- b. Bacteremia defining criteria: NA, not applicable, NS, not specified; CDC, Center for disease control definitions.
- c. Treatment abbreviations; G feed, feeding by the gastric route; SB feed, feeding by the small bowel route; EN, Enteral nutrition; TPN Total parenteral nutrition; SC, standard care; RGV, residual gastric volume monitoring; Mup, mupirocin nasal ointment; Chlx, chlorhexidene oral care; NTI, naso-tracheal intubation; OTI, oro-tracheal intubation; CPC, cuff pressure monitoring by automation.
- d. Oudhuis et al ⁴⁷; Non-concurrent control group of this study received SDD and is classified as an intervention group in Table S3.
- e. Camus et al ⁵⁰; Concurrent control group of this four arm study is classified in Table S4.

Table S3: Studies of antibiotic based methods of VAP prevention (= SDD) – non-concurrent groups^a

	Bacteremia definition ^{b, c}	Control groups			Intervention groups			
		Group size	VAP-IP (%)	B-IP (%)	Antibiotic	Group size	VAP-IP (%)	B-IP (%)
Non-concurrent groups; intervention groups received TAP alone^d								
Brun-Buisson et al 1989 ^{59 a}	CDC	124	15	18				
de Smet et al (SOD) 2009 ^{60 a,c}	Composite	1990	NA	9.3	PTA	1904	NA	6.5
Godard et al 1990 ^{62 a}	CDC	84	16	12	PT	97	2	10
Nardi et al 2001 ⁶³	NS				PTA	104	19	13
Nardi et al 2001 ⁶³	NS				PTAM	119	8	15
Oostdijk et al (SOD) 2014 ^{63 c}	Composite				PTA	5442	NA	5.9
Non-concurrent groups; Intervention groups received both TAP and PPAP^d								
Cerda et al 2007 ^{64, c}	MRSA				PTA-Ctx	377		8.8
Cerda et al 2007 ^{64, c}	MRSA				PTAV-Ctx	165		1.1
de Smet et al (SDD) 2009 ^{60 a,c}	Composite				PTA-Ctx	2045	NA	4.3
Fox et al 1991 ^{65 a}	NS	12	66	8	PTA-Ctx	12	50	8
Hammond et al 1995 ⁶⁶	CDC	719	11	4.3	PTA-Ctx	403	16	6.2
Hammond et al 1995 ⁶⁶	CDC	406	14	5.4				
Ledingham et al 1988 ^{67 a}	NS	161	11	6.8	PTA-Ctx	163	2	4.9
McClelland et al 1990 ^{68 a}	NS	12	50	25	PTA-Ctx	15	7	20
Oostdijk et al (SDD) 2014 ^{63 c}	Composite				PTA-Ctx	5549	NA	4.6
Oudhuis et al 2011 ^{47 a,e}	CDC				PGA-Ctx	124	7	13
Silvestri et al 1999 ^{69, c}	CDC (PE)				PTA-Ctx	117	4.3	19.7
Silvestri et al 2004 ⁷⁰	CDC				PTA-Ctx	42	45	10
Silvestri et al 2004 ⁷⁰	CDC				PTAV-Ctx	42	52	7
Stoutenbeek et al 1984 ^{71 a}	CDC	59	59	42	PTA-Ctx	63	8	3.2
Sydow et al 1990 ^{72 a}	NS	48	75	8.3	PTA-Ctx	45	7	6.7
Tissot vanPatot et al 1996 ⁷³	CDC	142	63	14.8	PTA-Cef	142	20	6.5
Viviani et al 2005 ^{74, c}	MRSA				PTAV-Ctx	55	NA	7.3
Viviani et al 2005 ^{74, c}	MRSA				PTAV-Ctx	50	NA	8

Table S3 footnotes;

- a. The indicated studies were derived from the following systematic reviews;
 - Hurley JC. Prophylaxis with enteral antibiotics in ventilated patients: selective decontamination or selective cross-infection? *Antimicrob Agents Chemother* 1995;39:941-7.
 - Pileggi C, Bianco A, Flotta D, Nobile CG, Pavia M. Prevention of ventilator-associated pneumonia, mortality and all intensive care unit acquired infections by topically applied antimicrobial or antiseptic agents: a meta-analysis of randomized controlled trials in intensive care units. *Crit Care* 2011;15:R155.
 - Silvestri L, Van Saene HKF, Milanese M, Gregori D, Gullo A. Selective decontamination of the digestive tract reduces bacterial bloodstream infection and mortality in critically ill patients. Systematic review of randomized, controlled trials. *J Hosp Infect* 2007;65:187-203.
 - Vandenbroucke-Grauls CM, Vandenbroucke JP. Effect of selective decontamination of the digestive tract on respiratory tract infections and mortality in the intensive care unit. *Lancet* 1991;338:859-862.
- b. Bacteremia defining criteria: NA, not applicable; NS, not specified; CDC, Center for disease control definitions; MRSA, methicillin resistant *Staphylococcus aureus*.
- c. The following studies were not evaluable for bacteremia incidence because of non-standard definitions of bacteremia;
 - Cerda et al ⁶⁴ and Viviani et al ⁷⁴ reported only MRSA bacteremias
 - de Smet et al ⁶⁰ and Oostdijk et al ⁶³ reported a composite of five bacteremia sub-types not including coagulase negative *Staphylococcus*.
 - Silvestri et al ⁷⁰ reported number of bacteremia episodes.
- d. Abbreviations; TAP, topical antibiotic prophylaxis; PPAP, protocolized parenteral antibiotic prophylaxis
- e. Oudhuis et al ⁴⁷; Non-concurrent intervention group of this study received probiotic and is classified as an intervention group in Table S2.

Table S4: Studies of antibiotic based methods of VAP prevention (= SDD) – RCCT's^a

	Bacteremia definition ^b	Control groups			Intervention groups			
		Group size	VAP-IP (%)	B-IP (%)	Antibiotic ^c	Group size	VAP-IP (%)	B-IP (%)
RCCT's: intervention groups received TAP alone^d								
Brun-Buisson et al 1989 ^{59 a}	CDC	50	12	10	PNeNa	36	8	19
Barret et al 2001 ^{75 a}	NS	12	NA	17	PTA	11	NA	36
Camus et al 2005 ^{50 a}	CDC	126	24	11	PT	130	12	10
Garbino et al 2002 ⁷⁶	CDC				PNVfluc	101	11	40
Garbino et al 2002 ⁷⁶	CDC				PNV	103	9	44
Gaussorgues et al 1991 ^{77 a}	NS	59	NA	24	PGVA	59	NA	8.5
Korinek et al 1993 ^{78 a}	CDC	60	42	10	PTAV	63	24	3.2
Langlois-Karaga et al 1995 ⁷⁹	NS	50	56	46	PGA	47	30	23
Quinio et al 1996 ^{80 a}	NS	72	51	18	PGA	76	25	17
Rodriguez_Roldan et al 1990 ^{81 a}	NS	17	65	12	PTNeA	14	29	0
Ruza et al 1998 ^{82 a}	CDC	110	NA	14	PTNy	116	NA	15
Wiener et al 1995 ^{83 a}	CDC	31	26	23	PGNy	30	27	23

Table S4: RCCT's (Continued)

	Bacteremia definition ^b	Control groups			Intervention groups			
		Group size	VAP-IP (%)	B-IP (%)	Antibiotic ^c	Group size	VAP-IP (%)	B-IP (%)
RCCT's intervention groups received TAP and PPAP								
Aerdt et al 1991 ^{84 a}	CDC	39	69	33	PNoA-Ctx	17	6	5.9
Blair et al 1991 ^{85 a}	NS	170	22	12	PTA-Ctx	161	7	3.7
Cerra et al 1995 ^{86 a, e}	CDC (pe)	21	71	57	Ny-No	25	48	20
Cockerill et al 1992 ^{87 a}	NS	75	5	15	PGNy-Ctx	75	4	5.3
de le Cal et al 2005 ^{88 a}	CDC	54	48	31	PTA-Ctx	53	34	36
Finch et al 1991 ^{89 a}	NS	25	29	24	PTA-Ctx	24	20	8.3
Flaherty et al 1990 ^{90 a}	NS	56	8.9	5.4	PGNy-Cef	51	2	2
Jacobs et al 1992 ⁹¹	NS	46	9	16	PTA-Ctx	49	12	14
Kerver et al 1988 ^{92 a}	NS	47	85	57	PTA-Ctx	49	12	31
Krueger et al 2002 ^{93 a}	CDC	262	11	13	PG-Cip	265	3	5.1
Palomar et al 1997 ^{94 a}	CDC	42	50	2.4	PTA-Ctx	41	17	4.9
Rocha et al 1992 ^{95 a}	CDC	54	46	19	PTA-Ctx	47	15	6.4
Rolando et al 1993 ^{96 a}	CDC	31	36	23	PTA-Ctx	28	29	3.6
Sanchez-Garcia et al 1998 ^{97 a}	NS	140	41	16	PTA-Ctx	131	29	11.5
Stoutenbeek et al 2007 ^{98 a}	NS	200	23	16	PTA-Ctx	201	10	15.4
Ulrich et al 1989 ^{99 a}	NS	52	50	35	PNoA-Tr	48	15	23
Verwaest et al 1997 ^{100 a}	CDC	185	22	16	OA-O	193	11	11
Verwaest et al 1997 ^{100 a}	CDC				PTA-Ctx	200	16	19
Zobel et al 1991 ¹⁰¹	NS	25	NA	12	PGA-Ctx	25	NA	4

Table S4 footnotes;

a. The indicated studies were derived from the following systematic reviews;

- Liberati A, D'Amico R, Pifferi S, Torri V, Brazzi L, Parmelli E. Antibiotic prophylaxis to reduce respiratory tract infections and mortality in adults receiving intensive care (Review). *Cochrane Database Syst Rev* 2009; CD000022.
- Pileggi C, Bianco A, Flotta D, Nobile CG, Pavia M. Prevention of ventilator-associated pneumonia, mortality and all intensive care unit acquired infections by topically applied

antimicrobial or antiseptic agents: a meta-analysis of randomized controlled trials in intensive care units. *Crit Care* 2011;15:R155.

- Silvestri L, Van Saene HKF, Milanese M, Gregori D, Gullo A. Selective decontamination of the digestive tract reduces bacterial bloodstream infection and mortality in critically ill patients. Systematic review of randomized, controlled trials. *J Hosp Infect* 2007; 65:187-203.
- b. Bacteremia defining criteria: NA, not applicable, NS, not specified; CDC, Center for disease control definitions; pe per episode.
- c. Treatment abbreviations
- letters before the hyphen referring to topical components; Pl, topical placebo; P, topical polymyxin; T, topical tobramycin; A, topical amphotericin; No, topical norfloxacin; G, topical gentamicin; Cip, topical ciprofloxacin, V, topical vancomycin; Ny, topical nystatin; Ne, topical neomycin; Na, topical nalidixic acid; No, topical norfloxacin; O, topical oflaxcin;
 - letters after the hyphen refer to parenteral components; -Cef, Cefazolin; -Ctx, systemic cefotaxime; -Cip, systemic ciprofloxacin; -V, systemic vancomycin; -No, systemic norfloxacin; -Tr, systemic trimethoprim; -O, systemic oflaxcin; -Cz, systemic ceftazidime.
- d. Abbreviations; TAP, topical antibiotic prophylaxis; PPAP, protocolized parenteral antibiotic prophylaxis
- e. The following study was not evaluable because the bacteremia incidence was reported as number of bacteremia episodes; Cerra et al 1995⁸⁶

Table S5: Studies of antibiotic based methods of VAP prevention (= SDD) RCCT's - Duplex groups ^a

	Bacteremia definition ^b	Control groups				Intervention groups			
		Antibiotic ^c	Group size	VAP-IP (%)	B-IP (%)	Antibiotic ^c	Group size	VAP-IP (%)	B-IP (%)
RCCT's: control groups received PPAP alone; intervention groups received TAP and PPAP ^d									
Arnou et al ^{102 a}	CDC	Ctx	38	NA	12	PTNy-Ctx	48	NA	3
Bion et al 1991 ^{103 a}	NS	Ctx&Amp	31	26	3.2	PTA-Ctx	21	0	9.5
Ferrer et al 1994 ^{104 a}	NS	Ctx	50	24	4	PTA-Ctx	51	18	3.9
Georges et al 1994 ^{105 a}	NS	Amx-Clav	33	46	24	PNA-AmxClav	31	10	19
Hammond et al 1992 ^{106 a}	NS	Ctx	160	6	5.6	PTA-Ctx	162	7	4.9
Hartenaeur et al 1991 ^{107 a}	CDC	Ctx	61	46	6.6	PTA-Ctx	50	10	6
Hartenaeur et al 1991 ^{107 a}	CDC	Ctx	40	45	7.5	PTA-Ctx	49	10	16
Hellinger et al 2002 ^{108 a}	NS	Ctz	43	NA	2.3	PGNy-Ctx	37	NA	5.4
Laggner et al 1994 ^{109 a}	NS	Amx-Clav	34	12	2.9	GA-AmxClav	33	3	9.1
Palomar et al 1997 ^{94 a}	CDC	Ctx	46	30	0	PTA-Ctx	41	17	4.9
Rolando et al 1996 ^{110 a}	CDC	CtzFlx	61	NA	13	PTA-CtzFlx	47	NA	4.3
Stoutenbeek et al 1996 ^{111 a}	NS	Ctx	42	19	26	PTA-Ctx	49	4	18
Tetteroo et al 1990 ^{112 a}	NS	Ctx	58	14	1.7	PTA-Ctx	56	2	1.8

Table S5 footnotes;

a. The indicated studies were derived from the following systematic reviews;

- Liberati A, D'Amico R, Pifferi S, Torri V, Brazzi L, Parmelli E. Antibiotic prophylaxis to reduce respiratory tract infections and mortality in adults receiving intensive care (Review). *Cochrane Database Syst. Rev.* 2009; CD000022;
- Chan EY, Ruest A, Meade MO, Cook DJ. Oral decontamination for prevention of pneumonia in mechanically ventilated adults: systematic review and meta-analysis. *BMJ.* 2007;334:889–900.
- Pileggi C, Bianco A, Flotta D, Nobile CG, Pavia M. Prevention of ventilator-associated pneumonia, mortality and all intensive care unit acquired infections by topically applied antimicrobial or antiseptic agents: a meta-analysis of randomized controlled trials in intensive care units. *Crit Care* 2011;15, R155.

- Melsen WG, Rovers MM, Bonten MJM. Ventilator-associated pneumonia and mortality: A systematic review of observational studies. *Crit Care Med.* 2009;37:2709–18.
 - Safdar N, Dezfulian C, Collard HR, Saint S. Clinical and economic consequences of ventilator-associated pneumonia: a systematic review. *Crit Care Med.* 2005;33:2184–93
 - Silvestri L, Van Saene HKF, Milanese M, Gregori D, Gullo A. Selective decontamination of the digestive tract reduces bacterial bloodstream infection and mortality in critically ill patients. Systematic review of randomized, controlled trials. *J Hosp Infect* 2007; 65:187-203.
- b. Bacteremia defining criteria: NA, not applicable, NS, not specified; CDC, Center for disease control definitions.
- c. Treatment abbreviations
- letters before the hyphen referring to topical components; Pl, topical placebo; P, topical polymyxin; T, topical tobramycin; A, topical amphotericin; No, topical norfloxacin; G, topical gentamicin; Cip, topical ciprofloxacin, V, topical vancomycin; Ny, topical nystatin; Ne, topical neomycin; Na, topical nalidixic acid; No, topical norfloxacin; O, topical ofloxacin;
 - letters after the hyphen refer to parenteral components; - Amx-Clav, amoxicillin-clavulinate; -Ctx, systemic cefotaxime; -Cip, systemic ciprofloxacin; -V, systemic vancomycin; -Cip, systemic ciprofloxacin; -Tr, systemic trimethoprim; -O, systemic ofloxacin; -Cz, systemic ceftazidime.
- d. Abbreviations; TAP, topical antibiotic prophylaxis; PPAP, protocolized parenteral antibiotic prophylaxis.

Table S6: Numbers of Coagulase negative Staphylococcus (CNS) bacteremia isolates ^a

Study	Group type ^b	Total number of bacteremia isolates	CNS isolates		Pseudomonas isolates	
			Number	Percent	Number	Percent
From Table S1						
Cade et al 1993 ⁴	B	8	1	12.5	2	25
Craven et al 1988 ⁵	B	25	0	0	1	4
Craven et al 1988 ⁵	B	66	11	16.7	6	9
El-Masri et al 2004 ⁶	B	40	6	15	1	3
Garrouste-Orgeas et al 2000 ¹⁰	B	33	12	36.4	12	36
Garrouste-Orgeas et al 2006 ¹¹	B	232	50	21.6	19	8
Ibrahim et al 2000 ¹⁸	B	339	96	28.3	22	6
Kollef et al 1997 ²⁰	B	14	0	0	2	14
Kollef et al 1997 ²⁰	B	9	0	0	1	11
Kunac et al 2013 ²¹	B	26	0	0	2	8
Laupland et al 2002 ²²	B	66	9	14	2	3
Laupland et al 2004 ²³	B	244	28	11.4	11	5
Magnason et al 2008 ²⁴	B	28	9	32.1	0	0
Osmon et al 2008 ²⁶	B	131	17	13	9	7
Urli et al 2002 ³⁵	B	46	11	23.9	3	7
From Table S2						
Fourrier et al 2000 ⁵²	C & I	6	2	33.3	0	0
Fourrier et al 2005 ⁵³	C & I	10	5	50	1	10
From Table S3						
Silvestri et al 1999 ⁶⁹	I	23	9	39.1	0	0
Stoutenbeek et al 1984 ⁷¹	C	13	0	0	1	8
From Table S4						
Quinio et al 1996 ⁸⁰	C	13	3	23	0	0
Cerra et al 1995 ⁸⁶	C	12	6	50	1	8
de le Cal et al 2005 ⁸⁸	C	23	2	8.6	23	100
Rocha et al 1992 ⁹⁵	C	10	2	20	1	10
Rolando et al 1993 ⁹⁶	C	7	2	29	0	0
Stoutenbeek et al 2007 ⁹⁸	C	29	12	41	2	7
Verwaest et al 1997 ¹¹³	C	32	7	21	1	3
Garbino et al 2003 ⁷⁶	I	108	52	48	NA	NA
Quinio et al 1996 ⁸⁰	I	13	2	15	0	0
Cerra et al 1995 ⁸⁶	I	6	1	17	1	17
de le Cal et al 2005 ⁸⁸	I	36	7	19.4	36	100
Rocha et al 1992 ⁹⁵	I	3	1	33	0	0
Rolando et al 1993 ⁹⁶	I	2	1	50	1	100
Stoutenbeek et al 2007 ⁹⁸	I	26	9	35	3	12
Verwaest et al 1997 ¹¹³	I	17	3	18	2	12
Verwaest et al 1997 ¹¹³	I	50	13	26	6	12

Table S6: Numbers of Coagulase negative Staphylococcus (CNS) bacteremia isolates (continued) ^a

Study	Group type ^b	Total number of bacteremia isolates	CNS isolates		Pseudomonas isolates	
			Number	Percent	Number	Percent
From Table S5						
Hartenaeur et al 1991 ¹⁰⁷	C	11	3	27	1	9
Hartenaeur et al 1991 ¹⁰⁷	I	7	1	14	1	14
Rolando et al 1996 ¹¹⁰	C	8	2	25	0	0
Rolando et al 1996 ¹¹⁰	I	2	2	100	0	0

Table S6 footnotes;

- a. All studies used CDC defining criteria for bacteremia
- b. Group type abbreviations; B benchmark; C control; I intervention; C & I control and intervention groups combined

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