Supplemental Figure 1: Forest Plot – Vasopressor need

Forest plot of improvement in hemodynamics (standard mean difference) in RCTs using hemofiltration, endotoxin removal devices, non-specific adsorption, CytoSorb, and CPFA. Improvement in hemodynamics represent either norepinephrine dose, SOFA cardiovascular score, or a vasopressor index. Size of squares for risk ratio reflects weight of trial in pooled analysis. Horizontal bars represent 95% confidence intervals

Supplemental Figure 2: Forest Plot – SOFA score

Forest plot of change in SOFA score (mean difference) in RCTs using hemofiltration, endotoxin removal devices, CytoSorb, and non-specific adsorption. Size of squares for risk ratio reflects weight of trial in pooled analysis. Horizontal bars represent 95% confidence intervals

Supplemental Figure 3: Forest Plot – Mortality by geographical area - North America/ Europe

Forest plot of mortality of RCTs by geographic area - North America and Europe. Size of squares for risk ratio reflects weight of trial in pooled analysis. Horizontal bars represent 95% confidence intervals

Supplemental Figure 4: Forest Plot – Mortality by geographical area - Asia

Forest plot of mortality of RCTs by geographic area - Asia. Size of squares for risk ratio reflects weight of trial in pooled analysis. Horizontal bars represent 95% confidence intervals

Supplemental Figure 5: Forest Plot – Mortality for endotoxin removal devices by source of sepsis and endotoxin levels

Forest plot of mortality in RCTs using endotoxin removal devices. Studies include patients enrolled by site of infection, Gram-negative sepsis, or elevated endotoxin levels. Size of squares for risk ratio reflects weight of trial in pooled analysis. Horizontal bars represent 95% confidence intervals

Supplemental Figure 6: Forest Plot – Mortality stratified by control group mortality risk - Low

Forest plot of mortality in RCTs divided by control group mortality into low (mortality <25%), medium (mortality of 25-50%), and high (mortality >50%) risk respectively. Size of squares for risk ratio reflects weight of trial in pooled analysis. Horizontal bars represent 95% confidence intervals

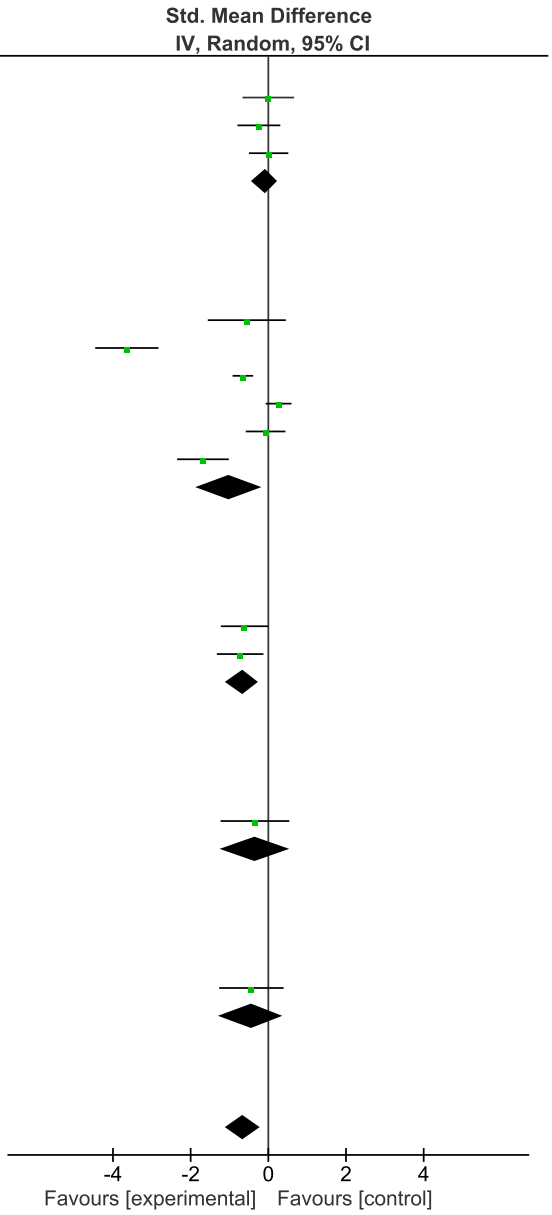
Supplemental Figure 7: Forest Plot – Mortality stratified by control group mortality risk - Medium

Forest plot of mortality in RCTs divided by control group mortality into low (mortality <25%), medium (mortality of 25-50%), and high (mortality >50%) risk respectively. Size of squares for risk ratio reflects weight of trial in pooled analysis. Horizontal bars represent 95% confidence intervals

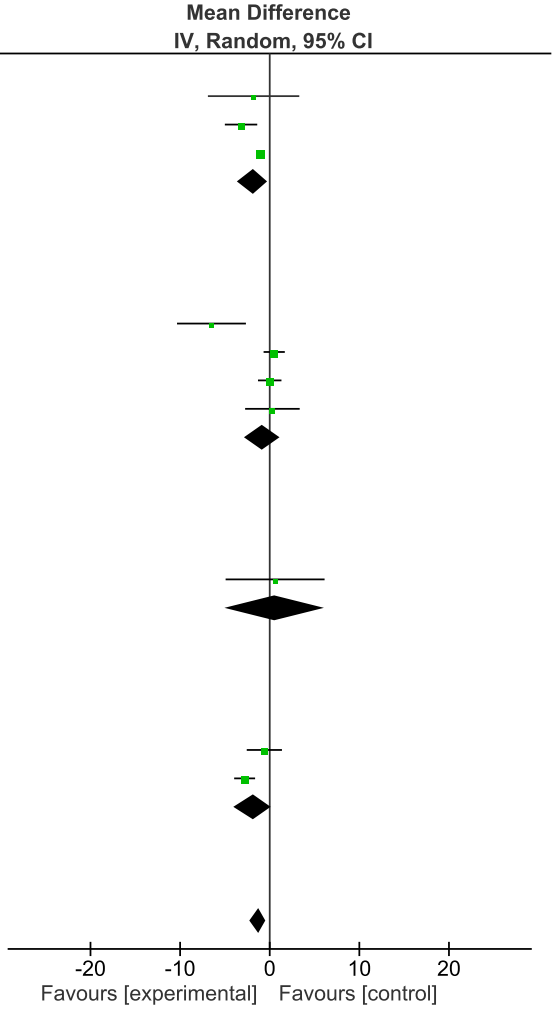
Supplemental Figure 8: Forest Plot – Mortality stratified by control group mortality risk - High

Forest plot of mortality in RCTs divided by control group mortality into low (mortality <25%), medium (mortality of 25-50%), and high (mortality >50%) risk respectively. Size of squares for risk ratio reflects weight of trial in pooled analysis. Horizontal bars represent 95% confidence intervals

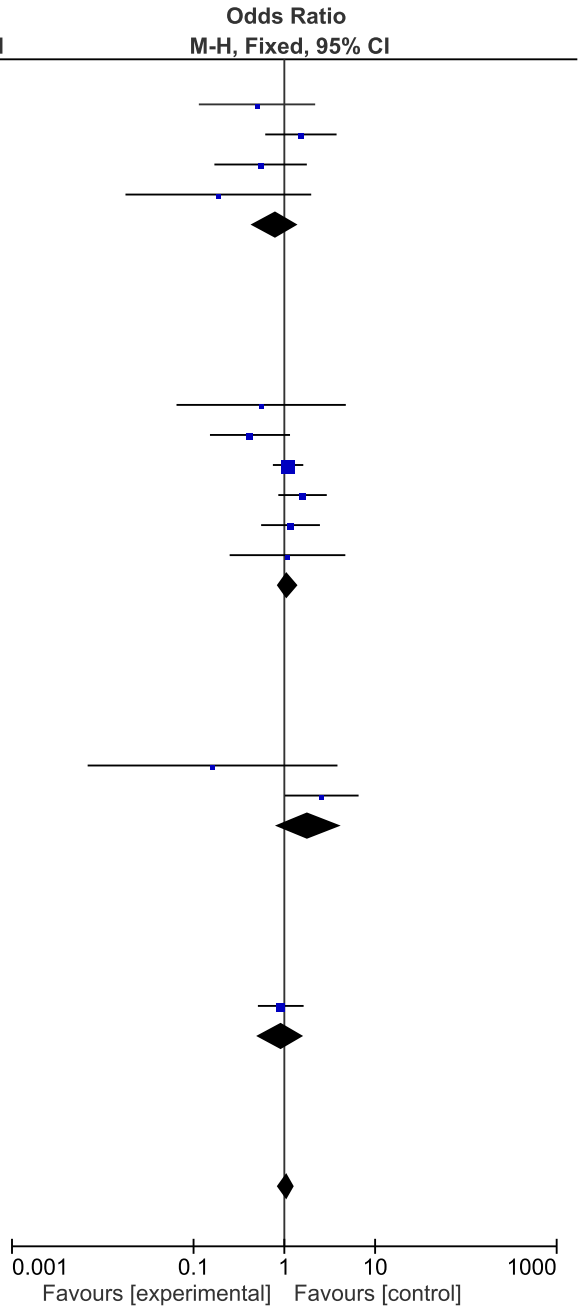
Study or Subgroup	Experimental Mean	Experimental SD	Experimental Total	Control Mean	Control SD	Control Total	Weight	Std. Mean Difference IV, Random, 95% CI
4.1.1 CVVH								
Chung 2017	0	0.2	23	0	0.2	14	7.6%	0.00 [-0.66, 0.66]
Meng 2016	0.06	0.03	24	0.15	0.5	27	8.1%	-0.24 [-0.79, 0.31]
Quenot 2015	1.6	63	29	1.2	23	31	8.2%	0.01 [-0.50, 0.51]
Subtotal (95% CI)			**76**			**72**	**23.9%**	**-0.08 [-0.41, 0.24]**
Heterogeneity: Tau² = 0.00; Chi² = 0.51, df = 2 (P = 0.78); I² = 0%								
Test for overall effect: Z = 0.49 (P = 0.63)								
4.1.2 Endotoxin removal								
Cantalupi 2008	0.1	0.23	8	0.26	0.31	8	6.2%	-0.55 [-1.56, 0.45]
Cruz 2009	0.16	0.4	34	3.3	1.17	30	7.0%	-3.64 [-4.46, -2.83]
Payen 2015	3	1.14	119	3.75	1.14	113	8.9%	-0.66 [-0.92, -0.39]
Reinhart 2004	2.4	1.4	66	2	1.6	74	8.8%	0.26 [-0.07, 0.60]
Srisawat 2018	0.23	0.29	29	0.25	0.27	30	8.2%	-0.07 [-0.58, 0.44]
Suzuki 2002	7.8	2.2	24	12.6	3.3	24	7.6%	-1.68 [-2.35, -1.02]
Subtotal (95% CI)			**280**			**279**	**46.7%**	**-1.02 [-1.87, -0.16]**
Heterogeneity: Tau² = 1.03; Chi² = 93.20, df = 5 (P < 0.00001); I² = 95%								
Test for overall effect: Z = 2.33 (P = 0.02)								
4.1.3 Non-specific adsorption								
Huang 2010	0.29	0.11	24	0.43	0.31	20	7.8%	-0.61 [-1.22, -0.01]
Huang 2013	0.26	0.13	25	0.43	0.31	21	7.9%	-0.73 [-1.33, -0.13]
Subtotal (95% CI)			**49**			**41**	**15.7%**	**-0.67 [-1.10, -0.24]**
Heterogeneity: Tau² = 0.00; Chi² = 0.07, df = 1 (P = 0.80); I² = 0%								
Test for overall effect: Z = 3.08 (P = 0.002)								
4.1.4 CytoSorb								
Hawchar 2019	0.22	0.24	10	0.31	0.26	10	6.7%	-0.34 [-1.23, 0.54]
Subtotal (95% CI)			**10**			**10**	**6.7%**	**-0.34 [-1.23, 0.54]**
Heterogeneity: Not applicable								
Test for overall effect: Z = 0.76 (P = 0.45)								
4.1.5 CPFA								
Hassan 2013	0.69	0.67	11	1.13	1.18	12	6.9%	-0.44 [-1.27, 0.39]
Subtotal (95% CI)			**11**			**12**	**6.9%**	**-0.44 [-1.27, 0.39]**
Heterogeneity: Not applicable								
Test for overall effect: Z = 1.03 (P = 0.30)								
Total (95% CI)			**426**			**414**	**100.0%**	**-0.64 [-1.08, -0.20]**
Heterogeneity: Tau² = 0.55; Chi² = 100.70, df = 12 (P < 0.00001); I² = 88%								
Test for overall effect: Z = 2.84 (P = 0.005)								
Test for subgroup differences: Chi² = 7.16, df = 4 (P = 0.13), I² = 44.1%								



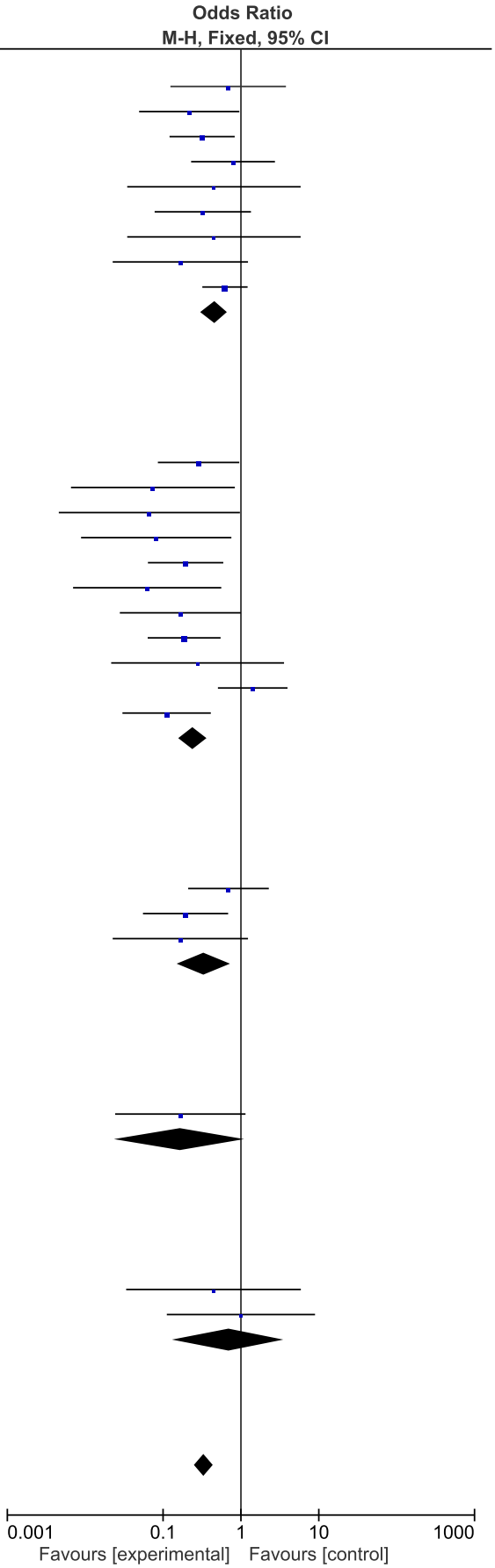
Study or Subgroup	Experimental Mean	Experimental SD	Experimental Total	Control Mean	Control SD	Control Total	Weight	Mean Difference IV, Random, 95% CI
5.1.1 CVVH								
Guo 2017	10.4	6.1	11	12.2	6.1	11	2.9%	-1.80 [-6.90, 3.30]
Wang 2009	12.6	3.4	48	15.8	5	41	11.2%	-3.20 [-5.01, -1.39]
Zu 2015	6.1	1	98	7.1	1.3	97	18.5%	-1.00 [-1.33, -0.67]
Subtotal (95% CI)			**157**			**149**	**32.7%**	**-1.85 [-3.59, -0.11]**
Heterogeneity: Tau² = 1.40; Chi² = 5.59, df = 2 (P = 0.06); I² = 64%								
Test for overall effect: Z = 2.08 (P = 0.04)								
5.1.2 Endotoxin removal								
Cantalupi 2008	6	2.6	8	12.5	4.9	8	4.6%	-6.50 [-10.34, -2.66]
Payen 2015	8	4.6	119	7.5	4.6	113	14.6%	0.50 [-0.68, 1.68]
Reinhart 2004	10.3	3.8	66	10.3	4.1	74	13.9%	0.00 [-1.31, 1.31]
Shum 2014	13.3	1.7	7	13	4	8	6.4%	0.30 [-2.74, 3.34]
Subtotal (95% CI)			**200**			**203**	**39.6%**	**-0.76 [-2.69, 1.17]**
Heterogeneity: Tau² = 2.56; Chi² = 11.70, df = 3 (P = 0.008); I² = 74%								
Test for overall effect: Z = 0.77 (P = 0.44)								
5.1.3 CytoSorb								
Hawchar 2019	11.6	6.3	10	11	6.3	10	2.6%	0.60 [-4.92, 6.12]
Subtotal (95% CI)			**10**			**10**	**2.6%**	**0.60 [-4.92, 6.12]**
Heterogeneity: Not applicable								
Test for overall effect: Z = 0.21 (P = 0.83)								
5.1.4 Non-specific adsorption								
Huang 2010	7.5	3.2	24	8.1	3.4	20	10.5%	-0.60 [-2.56, 1.36]
Huang 2013	6.1	1.2	25	8.9	2.5	21	14.7%	-2.80 [-3.97, -1.63]
Subtotal (95% CI)			**49**			**41**	**25.2%**	**-1.85 [-3.98, 0.29]**
Heterogeneity: Tau² = 1.74; Chi² = 3.56, df = 1 (P = 0.06); I² = 72%								
Test for overall effect: Z = 1.69 (P = 0.09)								
Total (95% CI)			**416**			**403**	**100.0%**	**-1.26 [-2.21, -0.31]**
Heterogeneity: Tau² = 1.24; Chi² = 32.30, df = 9 (P = 0.0002); I² = 72%								
Test for overall effect: Z = 2.61 (P = 0.009)								
Test for subgroup differences: Chi² = 1.35, df = 3 (P = 0.72), I² = 0%								



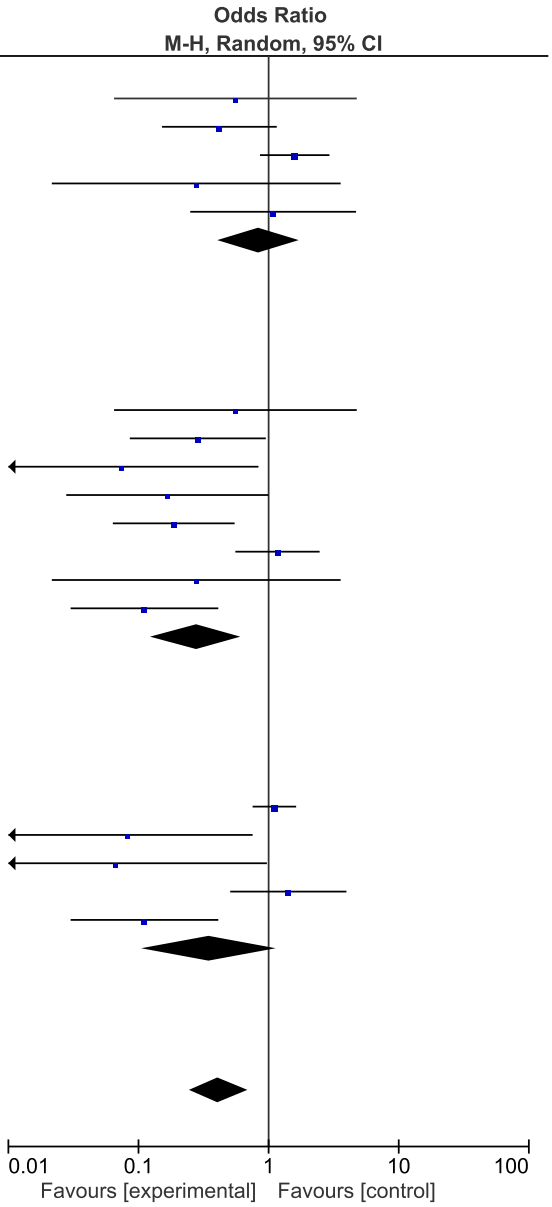
Study or Subgroup	Experimental Events	Experimental Total	Control Events	Control Total	Weight	Odds Ratio M-H, Fixed, 95% CI
6.2.1 Filtration						
Chung 2017	5	23	5	14	3.2%	0.50 [0.11, 2.19]
Payen 2009	20	37	17	39	5.0%	1.52 [0.62, 3.76]
Quenot 2015	6	29	10	31	5.1%	0.55 [0.17, 1.77]
Sander 1997	9	13	12	13	2.4%	0.19 [0.02, 1.98]
Subtotal (95% CI)		**102**		**97**	**15.8%**	**0.79 [0.43, 1.45]**
Total events	40		44			
Heterogeneity: Chi² = 4.19, df = 3 (P = 0.24); I² = 28%						
Test for overall effect: Z = 0.75 (P = 0.45)						
6.2.2 Endotoxin removal						
Cantalupi 2008	2	8	3	8	1.5%	0.56 [0.06, 4.76]
Cruz 2009	11	34	16	30	7.6%	0.42 [0.15, 1.16]
Dellinger 2018	84	226	78	223	32.6%	1.10 [0.75, 1.62]
Payen 2015	33	119	22	113	10.8%	1.59 [0.86, 2.94]
Reinhart 2004	19	66	19	74	8.4%	1.17 [0.56, 2.47]
Vincent 2005	5	17	5	18	2.3%	1.08 [0.25, 4.70]
Subtotal (95% CI)		**470**		**466**	**63.2%**	**1.10 [0.83, 1.45]**
Total events	154		143			
Heterogeneity: Chi² = 5.26, df = 5 (P = 0.38); I² = 5%						
Test for overall effect: Z = 0.65 (P = 0.51)						
6.2.4 CytoSorb						
Hawchar 2019	0	10	2	10	1.6%	0.16 [0.01, 3.85]
Schadler 2017	17	47	9	50	3.7%	2.58 [1.01, 6.58]
Subtotal (95% CI)		**57**		**60**	**5.3%**	**1.86 [0.80, 4.32]**
Total events	17		11			
Heterogeneity: Chi² = 2.76, df = 1 (P = 0.10); I² = 64%						
Test for overall effect: Z = 1.43 (P = 0.15)						
6.2.5 CPFA						
Livigni 2013	41	91	44	93	15.8%	0.91 [0.51, 1.63]
Subtotal (95% CI)		**91**		**93**	**15.8%**	**0.91 [0.51, 1.63]**
Total events	41		44			
Heterogeneity: Not applicable						
Test for overall effect: Z = 0.31 (P = 0.76)						
Total (95% CI)		**720**		**716**	**100.0%**	**1.06 [0.85, 1.32]**
Total events	252		242			
Heterogeneity: Chi² = 15.32, df = 12 (P = 0.22); I² = 22%						
Test for overall effect: Z = 0.51 (P = 0.61)						
Test for subgroup differences: Chi² = 2.89, df = 3 (P = 0.41), I² = 0%						



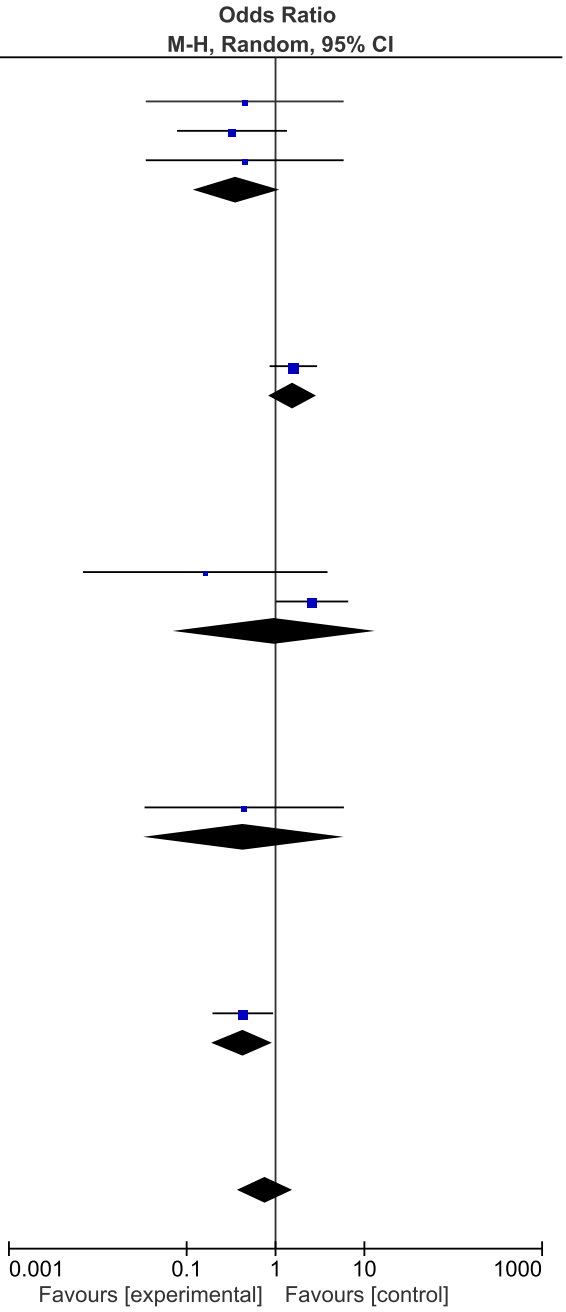
Study or Subgroup	Experimental Events	Experimental Total	Control Events	Control Total	Weight	Odds Ratio M-H, Fixed, 95% CI
6.3.1 Filtration						
Guo 2017	4	11	5	11	1.7%	0.69 [0.12, 3.78]
Han 2011	3	23	9	22	4.2%	0.22 [0.05, 0.95]
Jing 2015	8	51	17	46	7.9%	0.32 [0.12, 0.83]
Meng 2016	6	24	8	27	3.0%	0.79 [0.23, 2.73]
Peng IJAO 2010	1	11	2	11	1.0%	0.45 [0.03, 5.84]
Wang 2009	3	48	7	41	3.7%	0.32 [0.08, 1.34]
Xu 2014	1	11	2	11	1.0%	0.45 [0.03, 5.84]
Zheng 2017	4	10	8	10	2.5%	0.17 [0.02, 1.23]
Zu 2015	19	98	27	97	11.5%	0.62 [0.32, 1.22]
Subtotal (95% CI)		**287**		**276**	**36.3%**	**0.46 [0.30, 0.69]**
Total events	49		85			
Heterogeneity: Chi² = 4.53, df = 8 (P = 0.81); I² = 0%						
Test for overall effect: Z = 3.77 (P = 0.0002)						
6.3.2 Endotoxin removal						
Nakamura 1999	12	30	14	20	5.3%	0.29 [0.09, 0.95]
Nakamura 2001	4	10	9	10	2.8%	0.07 [0.01, 0.84]
Nakamura 2002 ASAIO 2	2	7	6	7	2.2%	0.07 [0.00, 0.97]
Nakamura 2002 ASAIO1	2	9	7	9	2.9%	0.08 [0.01, 0.75]
Nakamura 2003 J Hosp Inf	9	35	16	25	7.3%	0.19 [0.06, 0.59]
Nakamura 2003 Neph Clin	2	10	8	10	3.4%	0.06 [0.01, 0.56]
Nakamura 2004	3	15	6	10	3.0%	0.17 [0.03, 1.00]
Nemoto 2001	32	54	39	44	9.2%	0.19 [0.06, 0.55]
Shum 2014	1	7	3	8	1.3%	0.28 [0.02, 3.58]
Srisawat 2018	17	29	15	30	3.2%	1.42 [0.51, 3.96]
Suzuki 2002	6	24	18	24	7.1%	0.11 [0.03, 0.41]
Subtotal (95% CI)		**230**		**197**	**47.5%**	**0.24 [0.16, 0.37]**
Total events	90		141			
Heterogeneity: Chi² = 17.52, df = 10 (P = 0.06); I² = 43%						
Test for overall effect: Z = 6.53 (P < 0.00001)						
6.3.3 Non-specific adsorption						
Huang 2010	11	24	11	20	3.4%	0.69 [0.21, 2.28]
Huang 2013	7	25	14	21	5.7%	0.19 [0.06, 0.68]
Zheng 2017	4	10	8	10	2.5%	0.17 [0.02, 1.23]
Subtotal (95% CI)		**59**		**51**	**11.7%**	**0.33 [0.15, 0.72]**
Total events	22		33			
Heterogeneity: Chi² = 2.61, df = 2 (P = 0.27); I² = 23%						
Test for overall effect: Z = 2.77 (P = 0.006)						
6.3.4 CPFA						
Hassan 2013	5	11	10	12	2.7%	0.17 [0.02, 1.14]
Subtotal (95% CI)		**11**		**12**	**2.7%**	**0.17 [0.02, 1.14]**
Total events	5		10			
Heterogeneity: Not applicable						
Test for overall effect: Z = 1.82 (P = 0.07)						
6.3.5 Combined CVVH and adsorption						
Peng 2005	1	10	2	10	0.9%	0.44 [0.03, 5.88]
Zheng 2017	8	10	8	10	0.8%	1.00 [0.11, 8.95]
Subtotal (95% CI)		**20**		**20**	**1.8%**	**0.71 [0.14, 3.66]**
Total events	9		10			
Heterogeneity: Chi² = 0.22, df = 1 (P = 0.64); I² = 0%						
Test for overall effect: Z = 0.41 (P = 0.68)						
Total (95% CI)		**607**		**556**	**100.0%**	**0.34 [0.26, 0.44]**
Total events	175		279			
Heterogeneity: Chi² = 30.56, df = 25 (P = 0.20); I² = 18%						
Test for overall effect: Z = 7.99 (P < 0.00001)						
Test for subgroup differences: Chi² = 5.59, df = 4 (P = 0.23), I² = 28.5%						



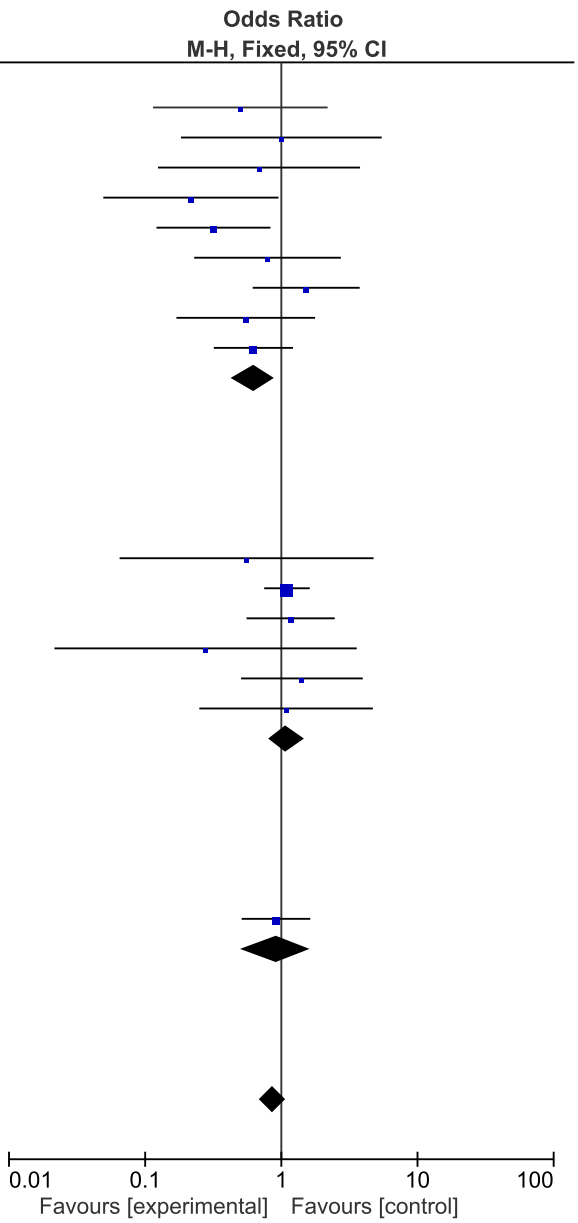
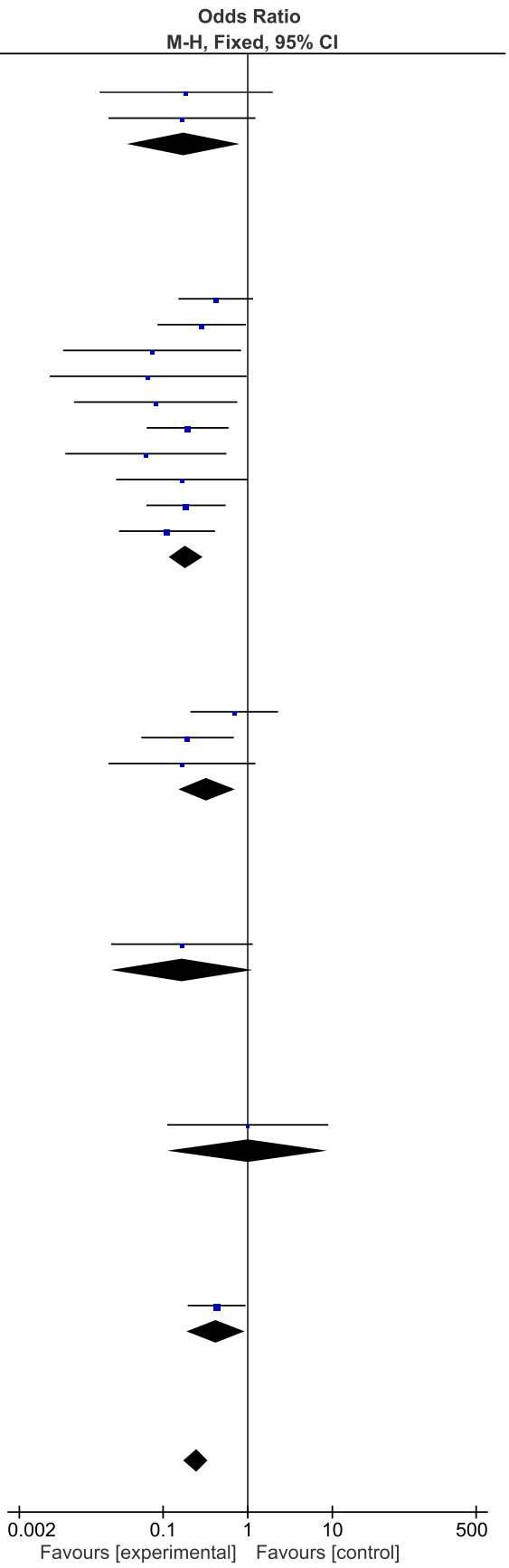
Study or Subgroup	Experimental Events	Experimental Total	Control Events	Control Total	Weight	Odds Ratio M-H, Random, 95% CI
1.4.1 Intra-abdominal infection						
Cantalupi 2008	2	8	3	8	3.7%	0.56 [0.06, 4.76]
Cruz 2009	11	34	16	30	7.3%	0.42 [0.15, 1.16]
Payen 2015	33	119	22	113	8.9%	1.59 [0.86, 2.94]
Shum 2014	1	7	3	8	2.9%	0.28 [0.02, 3.58]
Vincent 2005	5	17	5	18	5.6%	1.08 [0.25, 4.70]
Subtotal (95% CI)		**185**		**177**	**28.4%**	**0.84 [0.41, 1.71]**
Total events	52		49			
Heterogeneity: Tau² = 0.23; Chi² = 6.26, df = 4 (P = 0.18); I² = 36%						
Test for overall effect: Z = 0.48 (P = 0.63)						
1.4.2 Gram-negative Sepsis						
Cantalupi 2008	2	8	3	8	3.7%	0.56 [0.06, 4.76]
Nakamura 1999	12	30	14	20	6.5%	0.29 [0.09, 0.95]
Nakamura 2001	4	10	9	10	3.1%	0.07 [0.01, 0.84]
Nakamura 2004	3	15	6	10	4.5%	0.17 [0.03, 1.00]
Nemoto 2001	32	54	39	44	7.1%	0.19 [0.06, 0.55]
Reinhart 2004	19	66	19	74	8.4%	1.17 [0.56, 2.47]
Shum 2014	1	7	3	8	2.9%	0.28 [0.02, 3.58]
Suzuki 2002	6	24	18	24	6.1%	0.11 [0.03, 0.41]
Subtotal (95% CI)		**214**		**198**	**42.4%**	**0.28 [0.13, 0.61]**
Total events	79		111			
Heterogeneity: Tau² = 0.68; Chi² = 16.79, df = 7 (P = 0.02); I² = 58%						
Test for overall effect: Z = 3.18 (P = 0.001)						
1.4.4 Elevated endotoxin level						
Dellinger 2018	84	226	78	224	9.7%	1.11 [0.75, 1.63]
Nakamura 2002 ASAIO 2	2	9	7	9	3.5%	0.08 [0.01, 0.75]
Nakamura 2002 ASAIO1	2	7	6	7	2.7%	0.07 [0.00, 0.97]
Srisawat 2018	17	29	15	30	7.3%	1.42 [0.51, 3.96]
Suzuki 2002	6	24	18	24	6.1%	0.11 [0.03, 0.41]
Subtotal (95% CI)		**295**		**294**	**29.3%**	**0.35 [0.11, 1.17]**
Total events	111		124			
Heterogeneity: Tau² = 1.30; Chi² = 19.87, df = 4 (P = 0.0005); I² = 80%						
Test for overall effect: Z = 1.71 (P = 0.09)						
Total (95% CI)		**694**		**669**	**100.0%**	**0.42 [0.25, 0.69]**
Total events	242		284			
Heterogeneity: Tau² = 0.66; Chi² = 53.85, df = 17 (P < 0.0001); I² = 68%						
Test for overall effect: Z = 3.37 (P = 0.0007)						
Test for subgroup differences: Chi² = 4.51, df = 2 (P = 0.10), I² = 55.7%						



Study or Subgroup	Experimental Events	Experimental Total	Control Events	Control Total	Weight	Odds Ratio M-H, Random, 95% CI
2.2.1 Filtration						
Peng IJAO 2010	1	11	2	11	6.1%	0.45 [0.03, 5.84]
Wang 2009	3	48	7	41	13.4%	0.32 [0.08, 1.34]
Xu 2014	1	11	2	11	6.1%	0.45 [0.03, 5.84]
Subtotal (95% CI)		**70**		**63**	**25.6%**	**0.37 [0.12, 1.12]**
Total events	5		11			
Heterogeneity: Tau² = 0.00; Chi² = 0.08, df = 2 (P = 0.96); I² = 0%						
Test for overall effect: Z = 1.75 (P = 0.08)						
2.2.2 Endotoxin removal						
Payen 2015	33	119	22	113	23.6%	1.59 [0.86, 2.94]
Subtotal (95% CI)		**119**		**113**	**23.6%**	**1.59 [0.86, 2.94]**
Total events	33		22			
Heterogeneity: Not applicable						
Test for overall effect: Z = 1.47 (P = 0.14)						
2.2.3 CytoSorb						
Hawchar 2019	0	10	2	10	4.3%	0.16 [0.01, 3.85]
Schadler 2017	17	47	9	50	19.2%	2.58 [1.01, 6.58]
Subtotal (95% CI)		**57**		**60**	**23.5%**	**0.99 [0.07, 13.42]**
Total events	17		11			
Heterogeneity: Tau² = 2.49; Chi² = 2.76, df = 1 (P = 0.10); I² = 64%						
Test for overall effect: Z = 0.01 (P = 0.99)						
2.2.5 Combined CVVH and adsorption						
Peng 2005	1	10	2	10	6.0%	0.44 [0.03, 5.88]
Subtotal (95% CI)		**10**		**10**	**6.0%**	**0.44 [0.03, 5.88]**
Total events	1		2			
Heterogeneity: Not applicable						
Test for overall effect: Z = 0.62 (P = 0.54)						
2.2.6 Plasma exchange						
Busund 2002	18	54	28	52	21.3%	0.43 [0.20, 0.94]
Subtotal (95% CI)		**54**		**52**	**21.3%**	**0.43 [0.20, 0.94]**
Total events	18		28			
Heterogeneity: Not applicable						
Test for overall effect: Z = 2.11 (P = 0.03)						
Total (95% CI)		**310**		**298**	**100.0%**	**0.77 [0.38, 1.57]**
Total events	74		74			
Heterogeneity: Tau² = 0.46; Chi² = 15.38, df = 7 (P = 0.03); I² = 54%						
Test for overall effect: Z = 0.73 (P = 0.47)						
Test for subgroup differences: Chi² = 9.27, df = 4 (P = 0.05), I² = 56.8%						



Study or Subgroup	Experimental Events	Experimental Total	Control Events	Control Total	Weight	Odds Ratio M-H, Fixed, 95% CI
2.3.1 Filtration						
Chung 2017	5	23	5	14	2.8%	0.50 [0.11, 2.19]
Cole 2002	4	12	4	12	1.5%	1.00 [0.18, 5.46]
Guo 2017	4	11	5	11	1.8%	0.69 [0.12, 3.78]
Han 2011	3	23	9	22	4.5%	0.22 [0.05, 0.95]
Jing 2015	8	51	17	46	8.5%	0.32 [0.12, 0.83]
Meng 2016	6	24	8	27	3.2%	0.79 [0.23, 2.73]
Payen 2009	20	37	17	39	4.3%	1.52 [0.62, 3.76]
Quenot 2015	6	29	10	31	4.3%	0.55 [0.17, 1.77]
Zu 2015	19	98	27	97	12.4%	0.62 [0.32, 1.22]
Subtotal (95% CI)		**308**		**299**	**43.3%**	**0.62 [0.44, 0.89]**
Total events	75		102			
Heterogeneity: Chi² = 8.17, df = 8 (P = 0.42); I² = 2%						
Test for overall effect: Z = 2.60 (P = 0.009)						
2.3.2 Endotoxin removal						
Cantalupi 2008	2	8	3	8	1.3%	0.56 [0.06, 4.76]
Dellinger 2018	84	226	78	223	27.9%	1.10 [0.75, 1.62]
Reinhart 2004	19	66	19	74	7.2%	1.17 [0.56, 2.47]
Shum 2014	1	7	3	8	1.4%	0.28 [0.02, 3.58]
Srisawat 2018	17	29	15	30	3.5%	1.42 [0.51, 3.96]
Vincent 2005	5	17	5	18	1.9%	1.08 [0.25, 4.70]
Subtotal (95% CI)		**353**		**361**	**43.1%**	**1.09 [0.80, 1.49]**
Total events	128		123			
Heterogeneity: Chi² = 1.76, df = 5 (P = 0.88); I² = 0%						
Test for overall effect: Z = 0.57 (P = 0.57)						
2.3.5 CPFA						
Livigni 2013	41	91	44	93	13.5%	0.91 [0.51, 1.63]
Subtotal (95% CI)		**91**		**93**	**13.5%**	**0.91 [0.51, 1.63]**
Total events	41		44			
Heterogeneity: Not applicable						
Test for overall effect: Z = 0.31 (P = 0.76)						
Total (95% CI)		**752**		**753**	**100.0%**	**0.87 [0.70, 1.07]**
Total events	244		269			
Heterogeneity: Chi² = 15.22, df = 15 (P = 0.44); I² = 1%						
Test for overall effect: Z = 1.31 (P = 0.19)						
Test for subgroup differences: Chi² = 5.48, df = 2 (P = 0.06), I² = 63.5%						



Study or Subgroup	Experimental Events	Experimental Total	Control Events	Control Total	Weight	Odds Ratio M-H, Fixed, 95% CI
2.4.1 Filtration						
Sander 1997	9	13	12	13	2.5%	0.19 [0.02, 1.98]
Zheng 2017	4	10	8	10	3.2%	0.17 [0.02, 1.23]
Subtotal (95% CI)		**23**		**23**	**5.6%**	**0.18 [0.04, 0.81]**
Total events	13		20			
Heterogeneity: Chi² = 0.01, df = 1 (P = 0.94); I² = 0%						
Test for overall effect: Z = 2.23 (P = 0.03)						
2.4.2 Endotoxin removal						
Cruz 2009	11	34	16	30	7.6%	0.42 [0.15, 1.16]
Nakamura 1999	12	30	14	20	6.7%	0.29 [0.09, 0.95]
Nakamura 2001	4	10	9	10	3.6%	0.07 [0.01, 0.84]
Nakamura 2002 ASAIO 2	2	7	6	7	2.9%	0.07 [0.00, 0.97]
Nakamura 2002 ASAIO1	2	9	7	9	3.6%	0.08 [0.01, 0.75]
Nakamura 2003 J Hosp Inf	9	35	16	25	9.2%	0.19 [0.06, 0.59]
Nakamura 2003 Neph Clin	2	10	8	10	4.3%	0.06 [0.01, 0.56]
Nakamura 2004	3	15	6	10	3.8%	0.17 [0.03, 1.00]
Nemoto 2001	32	54	39	44	11.6%	0.19 [0.06, 0.55]
Suzuki 2002	6	24	18	24	9.0%	0.11 [0.03, 0.41]
Subtotal (95% CI)		**228**		**189**	**62.4%**	**0.19 [0.12, 0.29]**
Total events	83		139			
Heterogeneity: Chi² = 6.15, df = 9 (P = 0.72); I² = 0%						
Test for overall effect: Z = 7.40 (P < 0.00001)						
2.4.3 Non-specific adsorption						
Huang 2010	11	24	11	20	4.3%	0.69 [0.21, 2.28]
Huang 2013	7	25	14	21	7.3%	0.19 [0.06, 0.68]
Zheng 2017	4	10	8	10	3.2%	0.17 [0.02, 1.23]
Subtotal (95% CI)		**59**		**51**	**14.8%**	**0.33 [0.15, 0.72]**
Total events	22		33			
Heterogeneity: Chi² = 2.61, df = 2 (P = 0.27); I² = 23%						
Test for overall effect: Z = 2.77 (P = 0.006)						
2.4.4 CPFA						
Hassan 2013	5	11	10	12	3.5%	0.17 [0.02, 1.14]
Subtotal (95% CI)		**11**		**12**	**3.5%**	**0.17 [0.02, 1.14]**
Total events	5		10			
Heterogeneity: Not applicable						
Test for overall effect: Z = 1.82 (P = 0.07)						
2.4.5 Combined CVVH and adsorption						
Zheng 2017	8	10	8	10	1.1%	1.00 [0.11, 8.95]
Subtotal (95% CI)		**10**		**10**	**1.1%**	**1.00 [0.11, 8.95]**
Total events	8		8			
Heterogeneity: Not applicable						
Test for overall effect: Z = 0.00 (P = 1.00)						
2.4.6 Plasma exchange						
Busund 2002	18	54	28	52	12.7%	0.43 [0.20, 0.94]
Subtotal (95% CI)		**54**		**52**	**12.7%**	**0.43 [0.20, 0.94]**
Total events	18		28			
Heterogeneity: Not applicable						
Test for overall effect: Z = 2.11 (P = 0.03)						
Total (95% CI)		**385**		**337**	**100.0%**	**0.25 [0.18, 0.34]**
Total events	149		238			
Heterogeneity: Chi² = 14.46, df = 17 (P = 0.63); I² = 0%						
Test for overall effect: Z = 8.44 (P < 0.00001)						
Test for subgroup differences: Chi² = 5.83, df = 5 (P = 0.32), I² = 14.3%