



Article

Effectiveness and Safety of Antibiotics for Preventing Pneumonia and Improving Outcome after Acute Stroke: Systematic Review and Meta-analysis

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Table 2. Rating the certainty of evidence by GRADE criteria

Quality assessment							Summary of findings				
No of participants (studies) Follow-up	Risk of bias	Inconsistency	Indirectness	Imprecision	Publication bias	Overall quality of evidence	Study event rates (%)		Relative effect (95% CI)	Anticipated absolute effects	
							With control	With Preventive antibiotics		Risk with control	Risk difference with Preventive antibiotics
Post-stroke pneumonia: primary analysis											
2757 (4 RCTs)	not serious	not serious	not serious	serious	none	⊕⊕⊕○ MODERATE	110/1382 (8.0%)	82/1375 (6.0%)	RR 0.75 (0.57 to 0.99)	80 per 1,000	20 fewer per 1,000 (34 fewer to 1 fewer)
Post-stroke pneumonia: sensitivity analysis											
3845 (6 RCTs)	not serious	not serious	not serious	serious	none	⊕⊕⊕○ MODERATE	162/1906 (8.5%)	153/1939 (7.9%)	RR 0.86 (0.59 to 1.24)	85 per 1,000	12 fewer per 1,000 (from 20 more to 35 fewer)
All infections: primary analysis											
2677 (3 RCTs)	not serious	not serious	not serious	not serious	none	⊕⊕⊕⊕ HIGH	258/1340 (19.3%)	151/1337 (11.3%)	RR 0.58 (0.48 to 0.69)	193 per 1,000	81 fewer per 1,000 (100 fewer to 60 fewer)
All infections: sensitivity analysis											
4030 (5 RCTs)	not serious	serious	not serious	not serious	none	⊕⊕⊕○ MODERATE	407/2011 (20.2%)	284/2019 (14.1%)	RR 0.67 (0.52 to 0.85)	202 per 1,000	67 fewer per 1,000 (97 fewer to 30 fewer)
Urinary tract infections: primary analysis											

Quality assessment							Summary of findings				
2677 (3 RCTs)	not serious	not serious	not serious	not serious	none	⊕⊕⊕ HIGH	148/1340 (11.0%)	59/1337 (4.4%)	RR 0.49 (0.26 to 0.85)	110 per 1,000	56 fewer per 1,000 (82 fewer to 17 fewer)
Urinary tract infections: sensitivity analysis											
3894 (4 RCTs)	not serious	not serious	not serious	not serious	none	⊕⊕⊕ HIGH	187/1939 (9.6%)	74/1955 (3.8%)	RR 0.42 (0.29 to 0.62)	96 per 1,000	56 fewer per 1,000 (68 fewer to 37 fewer)
Death: primary analysis											
2733 (4 RCTs)	not serious	not serious	not serious	serious	none	⊕⊕⊕○ MODERATE	153/1369 (11.2%)	147/1364 (10.8%)	RR 0.96 (0.78 to 1.19)	112 per 1,000	4 fewer per 1,000 (25 fewer to 21 more)
Death: sensitivity analysis											
4050 (6 RCTs)	not serious	not serious	not serious	serious	none	⊕⊕⊕○ MODERATE	320/2024 (15.8%)	347/2026 (17.1%)	RR 1.08 (0.90 to 1.29)	158 per 1,000	13 more per 1,000 (16 fewer to 46 more)
Dependency: sensitivity analysis											
3719 (2 RCTs)	not serious	not serious	not serious	serious	none	⊕⊕⊕○ MODERATE	971/1856 (52.3%)	972/1863 (52.2%)	RR 0.99 (0.88 to 1.11)	523 per 1,000	5 fewer per 1,000 (63 fewer to 58 more)