Table 29: Clinical evidence profile: Comparison 2. Continuous oral Cephalexin versus antibiotics 'as required'

Quality assessment							No of patients		Effect			
No of studies	**Design**	**Risk of bias**	**Inconsistency**	**Indirectness**	**Imprecision**	**Other considerations**	**Continuous oral Cephalexin, antibiotic prophylaxis**	**Antibiotics as required**	**Relative (95% CI)**	**Absolute**	**Quality**	**Importance**
Number of children from whom *S aureus* isolated at least once (follow-up mean 1 years; assessed with: Respiratory cultures)												
1 (Stutman 2002)	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	11/75 (14.7%)	36/77 (46.8%)	RR 0.31 (0.17 to 0.57)	323 fewer per 1000 (from 201 fewer	MODERATE	IMPORTANT

Quality assessment							No of patients		Effect			
No of studies	**Design**	**Risk of bias**	**Inconsistency**	**Indirectness**	**Imprecision**	**Other considerations**	**Continuous oral Cephalexin, antibiotic prophylaxis**	**Antibiotics as required**	**Relative (95% CI)**	**Absolute**	**Quality**	**Importance**
										to 388 fewer)		
Number of children from whom *S aureus* isolated at least once (follow-up mean 2 years; assessed with: Respiratory cultures)												
1 (Stutman 2002)	randomised trials	serious[2]	no serious inconsistency	no serious indirectness	no serious imprecision	none	19/87 (21.8%)	52/79 (65.8%)	RR 0.33 (0.22 to 0.51)	441 fewer per 1000 (from 323 fewer to 513 fewer)	MODERATE	IMPORTANT
Number of children from whom *S aureus* isolated at least once (follow-up mean 3 years; assessed with: Respiratory cultures)												
1 (Stutman 2002)	randomised trials	serious[3]	no serious inconsistency	no serious indirectness	no serious imprecision	none	25/77 (32.5%)	44/64 (68.8%)	RR 0.42 (0.29 to 0.59)	399 fewer per 1000 (from 282 fewer to 488 fewer)	MODERATE	IMPORTANT
Number of children from whom *S aureus* isolated at least once (follow-up mean 4 years; assessed with: Respiratory cultures)												
1 (Stutman	randomised trials	serious[4]	no serious inconsistency	no serious indirectness	no serious imprecision	none	25/71 (35.2%)	47/56 (83.9%)	RR 0.42 (0.3 to 0.59)	487 fewer per 1000 (from	MODERATE	IMPORTANT

Quality assessment							No of patients		Effect			
No of studies	**Design**	**Risk of bias**	**Inconsistency**	**Indirectness**	**Imprecision**	**Other considerations**	**Continuous oral Cephalexin, antibiotic prophylaxis**	**Antibiotics as required**	**Relative (95% CI)**	**Absolute**	**Quality**	**Importance**
2002)										344 fewer to 587 fewer)		
Number of children from whom *S aureus* isolated at least once (follow-up mean 5 years; assessed with: Respiratory cultures)												
1 (Stutman 2002)	randomised trials	very serious[5]	no serious inconsistency	no serious indirectness	no serious imprecision	none	20/58 (34.5%)	34/40 (85%)	RR 0.41 (0.28 to 0.59)	502 fewer per 1000 (from 349 fewer to 612 fewer)	LOW	IMPORTANT
Number of children from whom *S aureus* isolated at least once (follow-up mean 6 years; assessed with: Respiratory cultures)												
1 (Stutman 2002)	randomised trials	very serious[6]	no serious inconsistency	no serious indirectness	no serious imprecision	none	7/25 (28%)	14/18 (77.8 %)	RR 0.36 (0.18 to 0.71)	498 fewer per 1000 (from 226 fewer to 638 fewer)	LOW	IMPORTANT
Lung function: FEV_1 litres (follow-up mean 6 years; Better indicated by higher values)												

Quality assessment							No of patients		Effect			
No of studies	**Design**	**Risk of bias**	**Inconsistency**	**Indirectness**	**Imprecision**	**Other considerations**	**Continuous oral Cephalexin, antibiotic prophylaxis**	**Antibiotics as required**	**Relative (95% CI)**	**Absolute**	**Quality**	**Importance**
1 (Stutman 2002)	randomised trials	serious[7]	no serious inconsistency	no serious indirectness	very serious[8]	none	68	51	-	MD 2.3 lower (13.59 lower to 8.99 higher)	VERY LOW	IMPORTANT
Any pulmonary exacerbations (follow-up mean 6 years; measured with: %; Better indicated by lower values)												
1 (Stutman 2002)	randomised trials	serious[7]	no serious inconsistency	no serious indirectness	very serious[9]	none	68	51	-	MD 4.9 lower (22.24 lower to 12.44 higher)	VERY LOW	CRITICAL
Number of children requiring admission due to pulmonary exacerbations (annualised rates) (follow-up mean 6 years; assessed with: not reported)												
1 (Stutman 2002)	randomised trials	serious[7]	no serious inconsistency	no serious indirectness	very serious[9]	none	5/68 (7.4%)	4/51 (7.8%)	RR 0.94 (0.26 to 3.32)	5 fewer per 1000 (from 58 fewer to 182 more)	VERY LOW	CRITICAL
Adherence to treatment (follow-up mean 6 years; measured with: Parents self-report; Better indicated by higher values)												

Quality assessment							No of patients		Effect			
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Continuous oral Cephalexin, antibiotic prophylaxis	Antibiotics as required	Relative (95% CI)	Absolute	Quality	Importance
1 (Stutman 2002)	randomised trials	serious[7]	no serious inconsistency	no serious indirectness	Not calculable[10]	none	68	51	-	MD 5 higher (0 to 0 higher)	MODERATE	IMPORTANT
Minor adverse events - generalised rash (follow-up mean 6 years; measured with: Parents self-report; Better indicated by lower values)												
1 (Stutman 2002)	randomised trials	serious[7]	no serious inconsistency	no serious indirectness	no serious imprecision	none	68	51	-	MD 0.4 higher (0.07 lower to 0.87 higher)	MODERATE	IMPORTANT
Minor adverse events - nappy rash (follow-up mean 6 years; measured with: Parents self-report; Better indicated by lower values)												
1 (Stutman 2002)	randomised trials	serious[7]	no serious inconsistency	no serious indirectness	no serious imprecision	none	68	51	-	MD 0.9 higher (1.06 lower to 2.86 higher)	MODERATE	IMPORTANT
Minor adverse events - increased stool frequency (follow-up mean 6 years; measured with: Parents self-report; Better indicated by lower values)												
1 (Stutman 2002)	randomised trials	serious[7]	no serious inconsistency	no serious indirectness	no serious imprecision	none	68	51	-	MD 0.2 higher (2.18 lower	MODERATE	IMPORTANT

Quality assessment							No of patients		Effect			
No of studies	**Design**	**Risk of bias**	**Inconsistency**	**Indirectness**	**Imprecision**	**Other considerations**	**Continuous oral Cephalexin, antibiotic prophylaxis**	**Antibiotics as required**	**Relative (95% CI)**	**Absolute**	**Quality**	**Importance**
										to 2.58 higher)		
Number of children from whom *P aeruginosa* identified at least once (follow-up mean 1 years)												
1 (Stutman 2002)	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[9]	none	27/75 (36%)	24/77 (31.2%)	RR 1.15 (0.74 to 1.81)	47 more per 1000 (from 81 fewer to 252 more)	VERY LOW	CRITICAL
Number of children from whom *P aeruginosa* identified at least once (follow-up mean 2 years)												
1 (Stutman 2002)	randomised trials	serious[2]	no serious inconsistency	no serious indirectness	serious[11]	none	38/87 (43.7%)	40/79 (50.6%)	RR 0.86 (0.62 to 1.19)	71 fewer per 1000 (from 192 fewer to 96 more)	LOW	CRITICAL
Number of children from whom *P aeruginosa* identified at least once (follow-up mean 3 years)												
1 (Stutman	randomised trials	serious[3]	no serious inconsistency	no serious indirectness	very serious[9]	none	45/77 (58.4%)	38/64 (59.4%)	RR 0.98 (0.75 to 1.3)	12 fewer per 1000 (from	VERY LOW	CRITICAL

Quality assessment							No of patients		Effect			
No of studies	**Design**	**Risk of bias**	**Inconsistency**	**Indirectness**	**Imprecision**	**Other considerations**	**Continuous oral Cephalexin, antibiotic prophylaxis**	**Antibiotics as required**	**Relative (95% CI)**	**Absolute**	**Quality**	**Importance**
2002)										148 fewer to 178 more)		
Number of children from whom *P aeruginosa* identified at least once (follow-up mean 4 years)												
1 (Stutman 2002)	randomised trials	serious[4]	no serious inconsistency	no serious indirectness	serious[11]	none	46/71 (64.8%)	33/56 (58.9%)	RR 1.1 (0.83 to 1.45)	59 more per 1000 (from 100 fewer to 265 more)	LOW	CRITICAL
								58.9%		59 more per 1000 (from 100 fewer to 265 more)		
Number of children from whom *P aeruginosa* identified at least once (follow-up mean 5 years)												
1 (Stutman	randomised trials	very serious[5]	no serious inconsistency	no serious indirectness	serious[11]	none	41/58 (70.7%)	22/40 (55%)	RR 1.29 (0.93	159 more per 1000	VERY LOW	CRITICAL

Quality assessment							No of patients		Effect			
No of studies	**Design**	**Risk of bias**	**Inconsistency**	**Indirectness**	**Imprecision**	**Other considerations**	**Continuous oral Cephalexin, antibiotic prophylaxis**	**Antibiotics as required**	**Relative (95% CI)**	**Absolute**	**Quality**	**Importance**
2002)									to 1.78)	(from 38 fewer to 429 more)		
Number of children from whom *P aeruginosa* identified at least once (follow-up mean 6 years)												
1 (Stutman 2002)	randomised trials	very serious[6]	no serious inconsistency	no serious indirectness	serious[11]	none	22/25 (88%)	12/18 (66.7%)	RR 1.32 (0.92 to 1.89)	213 more per 1000 (from 53 fewer to 593 more)	VERY LOW	CRITICAL

Abbreviations: CI: confidence interval; FEV_1: forced expiratory volume in 1 second; MD: mean difference; RR: risk ratio
1 This study was assessed by the Cochrane review Smyth 2014 as low risk of bias. However, the quality of the evidence was downgraded by 1 for this outcome, as the losses to follow up are over 20% (n=152; N=209).
2 This study was assessed by the Cochrane review Smyth 2014 as low risk of bias. However, the quality of the evidence was downgraded by 1 for this outcome, as the losses to follow up are over 20% (n=166; N=209).
3 This study was assessed by the Cochrane review Smyth 2014 as low risk of bias. However, the quality of the evidence was downgraded by 1 for this outcome, as the losses to follow up are over 20% (n=141; N=209).
4 This study was assessed by the Cochrane review Smyth 2014 as low risk of bias. However, the quality of the evidence was downgraded by 1 for this outcome, as the losses to follow up are over 20% (n=127; N=209).
5 This study was assessed by the Cochrane review Smyth 2014 as low risk of bias. However, the quality of the evidence was downgraded by 2 for this outcome, as the losses to follow up are over 50% (n=98; N=209).
6 This study was assessed by the Cochrane review Smyth 2014 as low risk of bias. However, the quality of the evidence was downgraded by 2 for this outcome, as the losses to follow up are over 50% (n=43; N=209).
7 This study was assessed by the Cochrane review Smyth 2014 as low risk of bias. However, the quality of the evidence was downgraded by 1 for this outcome, as the losses to follow up are over 20% (n=119; N=209).

8 The quality of the evidence was downgraded by 2, as the 95% CI crossed 2 clinical MIDs
9 The quality of the evidence was downgraded by 2, as the 95% CI crossed 2 default MIDs
10 Imprecision is not calculable with the data reported
11 The quality of the evidence was downgraded by 1, as the 95% CI crossed 1 default MID for dichotomous outcomes