

Table 47: Clinical evidence profile: Comparison 6. Continuous alternating therapy versus intermittent treatment: aztreonam lysine + tobramycin or placebo + tobramycin

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Continuous alternating therapy: aztreonam lysine + tobramycin	Intermittent treatment: placebo + tobramycin	Relative (95% CI)	Absolute		
Lung function: % change in FEV₁% predicted (follow-up 20 weeks¹; range of scores: 0-100; Better indicated by higher values)												
1 (Flume 2016)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	no serious imprecision	none	42	46	-	MD 1.33 higher (1.05 to 1.61 higher)	MODERATE	CRITICAL
Time to next pulmonary exacerbation												
1 (Flume 2016)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	serious ³	none	42	46	HR 0.89 (0.49 to 1.6)	-	LOW	CRITICAL
Quality of life: change in CFQ-R (follow-up 20 weeks¹; range of scores: 0-100; Better indicated by higher values)												
1 (Flume 2016)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	serious ⁴	none	42	46	-	MD 3.06 higher (2.35 to 3.77 higher)	LOW	
Minor adverse events: cough (follow-up 3 months)												

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Continuous alternative therapy: aztreonam lysine + tobramycin	Intermittent treatment: placebo + tobramycin	Relative (95% CI)	Absolute		
1 (Flume 2016)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	serious ⁵	none	32/42 (76.2%)	20/46 (43.5%)	RR 1.75 (1.21 to 2.54)	326 more per 1000 (from 91 more to 670 more)	LOW	IMPORTANT
Serious adverse events: dyspnoea (follow-up 3 months)												
1 (Flume 2016)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	serious ⁵	none	13/42 (31%)	24/46 (52.2%)	RR 0.59 (0.35 to 1.01)	214 fewer per 1000 (from 339 fewer to 5 more)	LOW	IMPORTANT
Serious adverse events (not treatment related) (follow-up 3 months)												
1 (Flume 2016)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	very serious ⁶	none	21/42 (50%)	24/46 (52.2%)	RR 0.96 (0.64 to 1.44)	21 fewer per 1000 (from	VERY LOW	IMPORTANT

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Continuous alternative therapy: aztreonam lysine + tobramycin	Intermittent treatment: placebo + tobramycin	Relative (95% CI)	Absolute		
										188 fewer to 230 more)		

Abbreviations: CFQ-R: cystic fibrosis questionnaire reviewed; CI: confidence interval; FEV₁: forced expiratory volume in 1 second; MD: mean difference; mg: milligrams; RR: risk ratio

1 Values at 4, 12 and 20 weeks were averaged

2 The quality of the evidence was downgraded by 1 due to unclear allocation concealment, blinding, and data collection/ reporting

3 The quality of the evidence was downgraded by 1 as the 95% CI crossed the null effect line

4 The quality of the evidence was downgraded by 1 as the 95% CI crossed 1 clinical MID

5 The quality of the evidence was downgraded by 1 as the 95% CI crossed 1 default MID

6 The quality of the evidence was downgraded by 2 as the 95% CI crossed 2 default MIDs