

Table 48: Clinical evidence profile: Comparison 7. Itraconazole versus placebo

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Itraconazole	Placebo, 24-week treatment	Relative (95% CI)	Absolute		
Lung function (follow-up mean 24 weeks; measured with: percentage change in FEV₁ predicted from baseline ; range of scores: 0-100; Better indicated by higher values)												
1 (Aron 2012)	randomised trials	serious ¹	no serious inconsistency	serious ²	very serious ³	none	18	17	-	MD 4.94 lower (15.33 lower to 5.45 higher)	VERY LOW	CRITICAL
Lung function (follow-up mean 48 weeks; measured with: percentage change in FEV₁ predicted from baseline; range of scores: 0-100; Better indicated by higher values)												
1 (Aron 2012)	randomised trials	serious ¹	no serious inconsistency	serious ²	very serious ³	none	18	17	-	MD 3.71 lower (-13.26 to 20.28)	VERY LOW	CRITICAL
Time to next pulmonary exacerbation (follow-up mean 24 weeks; Better indicated by lower values)												
1 (Aron 2012)	randomised trials	serious ¹	no serious inconsistency	serious ²	very serious ⁴	none	0/18 (0%)	0/17 (0%)	adjHR 1.34 (0.57 to 3.14)	-	VERY LOW	CRITICAL
proxy: number of patients with an exacerbation requiring antibiotics (follow-up mean 24 weeks; Better indicated by lower values)												

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1 (Aaron 2012)	randomised trials	serious ¹	no serious inconsistency	serious ²	serious ⁵	none	12/18 (66.7%)	7/18 (38.9%)	RR 1.71 (0.88 to 3.33)	276 more per 1000 (from 47 fewer to 906 more)	VERY LOW	IMPORTANT
proxy: number of patients with an exacerbation requiring AB (follow-up mean 48 weeks; Better indicated by lower values)												
1 (Aaron 2012)	randomised trials	serious ¹	no serious inconsistency	serious ²	serious ⁵	none	15/18 (83.3%)	11/18 (61.1%)	RR 1.36 (0.89 to 2.08)	220 more per 1000 (from 67 fewer to 660 more)	VERY LOW	IMPORTANT
proxy: number of patients with an exacerbation admitted to hospital (follow-up mean 24 weeks; Better indicated by lower values)												
1 (Aaron 2012)	randomised trials	serious ¹	no serious inconsistency	serious ²	very serious ⁶	none	3/18 (16.7%)	3/17 (17.6%)	RR 0.94 (0.22 to 4.05)	11 fewer per 1000 (from 138 fewer to 538 more)	VERY LOW	IMPORTANT
proxy: number of patients with an exacerbation admitted to hospital (follow-up mean 48 weeks; Better indicated by lower values)												

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Itraconazole	Placebo, 24-week treatment	Relative (95% CI)	Absolute		
1 (Aaron 2012)	randomised trials	serious ¹	no serious inconsistency	serious ²	very serious ⁶	none	4/18 (22.2%)	3/17 (17.6%)	RR 1.26 (0.33 to 4.82)	46 more per 1000 (from 118 fewer to 674 more)	VERY LOW	IMPORTANT
Quality of life – CFQ-R all domains (follow-up mean 24 weeks; range of scores: 0-100; Better indicated by higher values)												
1 (Aaron 2012)	randomised trials	serious ¹	no serious inconsistency	serious ²	not calculable ⁷	none	18	17	-	No significant differences	VERY LOW	IMPORTANT
Quality of life - CFQ-R respiratory domain (follow-up mean 24 weeks; range of scores: 0-100; Better indicated by higher values)												
1 (Aaron 2012)	randomised trials	serious ¹	no serious inconsistency	serious ²	not calculable ⁷	none	18 (mean: 3.76)	17 (mean: 4.77)	MD 1.01	p-value= 0.87	VERY LOW	IMPORTANT
Minor adverse events: increased dyspnoea (follow-up mean 24 weeks; Better indicated by lower values)												
1 (Aaron 2012)	randomised trials	serious ¹	no serious inconsistency	serious ²	very serious ⁶	none	2/18 (11.1%)	2/16 (12.5%)	RR 0.89 (0.14 to 5.6)	14 fewer per 1000 (from 108 fewer)	VERY LOW	IMPORTANT

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No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Itraconazole	Placebo, 24-week treatment	Relative (95% CI)	Absolute		
										to 575 more)		
Minor adverse events: rash (follow-up mean 24 weeks; Better indicated by lower values)												
1 (Aaron 2012)	randomised trials	serious ¹	no serious inconsistency	serious ²	very serious ⁶	none	2/18 (11.1%)	1/16 (6.3%)	RR 1.78 (0.18 to 17.8)	49 more per 1000 (from 51 fewer to 1000 more)	VERY LOW	IMPORTANT
Minor adverse events: hyperglycaemia (follow-up mean 24 weeks; Better indicated by lower values)												
1 (Aaron 2012)	randomised trials	serious ¹	no serious inconsistency	serious ²	very serious ⁶	none	1/18 (5.6%)	0/16 (0%)	RR 2.68 (0.12 to 61.58)	-	VERY LOW	IMPORTANT
Minor adverse events: flu-like illness (follow-up mean 24 weeks; Better indicated by lower values)												
1 (Aaron 2012)	randomised trials	serious ¹	no serious inconsistency	serious ²	very serious ⁶	none	3/18 (16.7%)	0/16 (0%)	RR 6.26 (0.35 to 112.7)	-	VERY LOW	IMPORTANT
Minor adverse events: diarrhoea (follow-up mean 24 weeks; Better indicated by lower values)												
1 (Aaron)	randomised trials	serious ¹	no serious inconsistency	serious ²	very serious ⁶	none	0/18 (0%)	1/16 (6.3%)	RR 0.3 (0.01 to 6.84)	44 fewer per 1000	VERY LOW	IMPORTANT

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Itraconazole	Placebo, 24-week treatment	Relative (95% CI)	Absolute		
2012)										(from 62 fewer to 365 more)		
Minor adverse events: conjunctivitis (follow-up mean 24 weeks; Better indicated by lower values)												
1 (Aaron 2012)	randomised trials	serious ¹	no serious inconsistency	serious ²	very serious ⁶	none	0/18 (0%)	1/16 (6.3%)	RR 0.3 (0.01 to 6.84)	44 fewer per 1000 (from 62 fewer to 365 more)	VERY LOW	IMPORTANT
Major adverse events: haemoptysis (follow-up mean 24 weeks; Better indicated by lower values)												
1 (Aaron 2012)	randomised trials	serious ¹	no serious inconsistency	serious ²	very serious ⁶	none	2/18 (11.1%)	1/16 (6.3%)	RR 1.78 (0.18 to 17.8)	49 more per 1000 (from 51 fewer to 1000 more)	VERY LOW	IMPORTANT
Major adverse events: spontaneous pneumothorax (follow-up mean 24 weeks; Better indicated by lower values)												
1 (Aaron)	randomised trials	serious ¹	no serious inconsistency	serious ²	very serious ⁶	none	1/18 (5.6%)	0/17 (0%)	RR 2.84 (0.12 to 65.34)	-	VERY LOW	IMPORTANT

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Itraconazole	Placebo, 24-week treatment	Relative (95% CI)	Absolute		
2012)												

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

1 The quality of the evidence was downgraded by 1 due to unclear allocation, data reporting and sample size

2 The quality of the evidence was downgraded by 1 due to indirectness, as the therapeutic dosages were not achieved in 2/3 of the participants

3 The quality of the evidence was downgraded by 2 as the 95% CI crossed 2 clinical MIDs.

4 The quality of the evidence was downgraded by 2 as the 95% CI crossed the null effect and it is very wide. The study is underpowered to detect differences between groups.

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

7 Not calculable, as no data was provided in the study.