
Other Reviews - - Other Review

Cystic Fibrosis Microbiome-directed Antibiotic Therapy Trial in Exacerbations Results Stratified (CFMATTERS): Results of a multi-centre randomised controlled trial.

Code: PM40506211

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Study design (if review, criteria of inclusion for studies)

Systematic review

Participants

Randomised, controlled, intervention trials (1985-2015) testing the effects of probiotics on clinical endpoints in CF

Interventions

Probiotics supplementation

Outcome measures

Fecal calprotectin levels, pulmonary exacerbation risk, and quality of life indicators; gut microbiota composition.

Main results

From 191 articles identified in initial searches, six studies met the critical inclusion criteria, and were reviewed in detail. These studies varied in size (n = 22 to 61) but were generally small and showed substantial diversity in protocol, specific probiotic species used and range of clinical outcomes measured. Probiotic administration showed beneficial effects on fecal calprotectin levels, pulmonary exacerbation risk, and quality of life indicators. In one study, such changes were associated with variations in gut microbiota composition.

Authors' conclusions

Despite encouraging preliminary results, the limited number of small and highly varied studies to date do not justify the addition of probiotics as an adjunct to current CF treatment protocols. Importantly, very minimal adverse effects of probiotics have been reported.

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See also

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Keywords

Probiotics; Immunoregulatory; pharmacological_intervention;