Bronchiectasis management in adults: state of the art and future directions

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Abstract
Formerly regarded as a rare disease, bronchiectasis is increasingly recognised. A renewed interest in this disease has led to significant progress in bronchiectasis research. Randomised clinical trials (RCTs) have demonstrated the benefits of airway clearance techniques, inhaled antibiotics and long-term macrolide therapy in bronchiectasis patients. However, the heterogeneity of bronchiectasis remains one of the most challenging aspects of management. Phenotypes and endotypes of bronchiectasis have been identified to help find "treatable traits" and partially overcome disease complexity. The goals of therapy for bronchiectasis are to reduce the symptom burden, improve quality of life, reduce exacerbations and prevent disease progression. We review the pharmacological and non-pharmacological treatments that can improve mucociliary clearance, reduce airway inflammation and tackle airway infection, the key pathophysiological features of bronchiectasis. There are also promising treatments in development for the management of bronchiectasis, including novel anti-inflammatory therapies. This review provides a critical update on the management of bronchiectasis focusing on treatable traits and recent RCTs.