NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Health Technology Evaluation

Brensocatib for treating non-cystic fibrosis bronchiectasis in people 12 years and over

Final scope

Remit/evaluation objective

To appraise the clinical and cost effectiveness of brensocatib within its marketing authorisation for treating non-cystic fibrosis bronchiectasis in people 12 years and over.

Background

Bronchiectasis is a long-term debilitating condition where the airways of the lungs are permanently widened. It is associated with inflammation and a build-up of excess mucus that can make the lungs more vulnerable to infection.[1] The most common symptom of bronchiectasis is a persistent cough that brings up a large amount of mucus. Other symptoms may include breathlessness, feeling tired, chest pain or tightness and rounded fingertips (finger clubbing).[2] People with bronchiectasis also experience 'flare ups' known as exacerbations. Non-cystic fibrosis bronchiectasis refers specifically to cases that are not concomitant with a diagnosis of cystic fibrosis. The treatment and outlook are different for non-cystic fibrosis bronchiectasis and cystic fibrosis-related bronchiectasis.[2]

Non-cystic fibrosis bronchiectasis may be caused by childhood infection, immunodeficiency or another trigger that results in inflammation in the airways of the lungs. However, in around 50% of cases, no obvious cause can be found.[1] The prevalence of bronchiectasis is increasing worldwide and in the UK is estimated to be 566 per 100,000 in females and 486 per 100,000 in males.[3,4] Around 60% of people diagnosed with bronchiectasis are over 70 years old.[2]

Treatments for bronchiectasis aim to manage the symptoms, reduce the number of exacerbations and prevent further damage. There are currently no licensed treatments for bronchiectasis in the UK but existing off-label treatments are widely used in clinical practice. Treatment can be broadly classified as relief of airway obstruction (for example, physiotherapy and medicines to improve clearance of mucus such as mucolytics and hypertonic saline); widening the airways (for example, bronchodilators) and treatment of acute infections.[1,2] In a small number of cases, surgery may also be considered for people who have bronchiectasis in a specific area of the lungs and whose symptoms are not controlled by other treatment. For preventing acute exacerbations of bronchiectasis, NICE guideline NG117 recommends a trial of antibiotic prophylaxis (with oral or inhaled antibiotics) only in people with repeated acute exacerbations on the advice of a specialist.

The technology

Brensocatib (brand name unknown, Insmed inc.) does not currently have a marketing authorisation in the UK for treating bronchiectasis. It is being studied in a phase 3 clinical trial compared with placebo in people aged 12 to 85 years with a clinical history consistent with non-cystic fibrosis bronchiectasis that is confirmed by chest

computerised tomography scan, who have experienced at least two pulmonary exacerbations in the previous 12 months.

Intervention(s)	Brensocatib with established clinical management
Population(s)	People 12 years and over with non-cystic fibrosis bronchiectasis who have experienced at least two pulmonary exacerbations in the previous 12 months
Comparators	Established clinical management without brensocatib (such as but not limited to inhaled mucolytics, inhaled corticosteroids, nebulised hypertonic saline, bronchodilators, oral and intravenous antibiotics [acute], antibiotic prophylaxis)
Outcomes	The outcome measures to be considered include: • changes in lung function • pulmonary exacerbations • symptom control • need for hospitalisation and other treatments • mortality • adverse effects of treatment • health-related quality of life.
Economic analysis	The reference case stipulates that the cost effectiveness of treatments should be expressed in terms of incremental cost per quality-adjusted life year. The reference case stipulates that the time horizon for estimating clinical and cost effectiveness should be sufficiently long to reflect any differences in costs or outcomes between the technologies being compared. Costs will be considered from an NHS and Personal Social Services perspective. The availability of any commercial arrangements for the intervention, comparator and subsequent treatment technologies will be taken into account.
Other considerations	Guidance will only be issued in accordance with the marketing authorisation. Where the wording of the therapeutic indication does not include specific treatment combinations, guidance will be issued only in the context of the evidence that has underpinned the marketing authorisation granted by the regulator.
Related NICE recommendations	**Related NICE guidelines:** Bronchiectasis (non-cystic fibrosis), acute exacerbation: antimicrobial prescribing (2018; reviewed April 2019) NICE guideline 117. Review date not stated.

References

1. NHS (2021) Bronchiectasis. Accessed May 2025

2. Asthma & Lung UK (2024) Bronchiectasis. Accessed May 2025

3. Chalmers, JD et al. (2023) Bronchiectasis in Europe: data on disease characteristics from the European Bronchiectasis registry (EMBARC) Lancet Respiratory Medicine, Volume 11, Issue 7: 637-649

4. Quint, JK, et al. (2016) Changes in the incidence, prevalence and mortality of bronchiectasis in the UK from 2004 to 2013: A population-based cohort study. Eur Respir J.;47(1):186-93