Bronchiectasis

A neglected and overlooked
lung condition with unrealised
commercial opportunity

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Bronchiectasis:

A neglected and overlooked lung condition with unrealised commercial opportunity

Despite being the third most common chronic lung condition in the UK, affecting 1 in 200 adults bronchiectasis remains largely unheard of.

The relative scarcity of research into bronchiectasis is due to several factors; its lower prevalence and awareness compared to conditions like asthma and COPD, historical perspective of it being a "disease of the past" and its confusion with other conditions.

Bronchiectasis is a condition in which the bronchi become abnormally dilated. This results in mucus build up and creates an environment in which bacteria can thrive and airways are blocked resulting in infection, inflammation and further lung damage and scarring.

The cause of bronchiectasis is not well understood. Diagnostic challenges and symptoms overlap with other respiratory diseases further contribute to underdiagnosis and reduced research focus. Bronchiectasis historically lacks the strong patient advocacy that raises the profile of the disease and driving impetus for research in other areas. Despite these challenges there is growing recognition of its societal impact, with increased efforts to understand and treat the disease.

Prevalence and demographic

Prevalence in the UK:

1 in 200
adults (~200,000 people)

Global trend:
Rising in the UK and worldwide

Age factor
Risk increases with age but not exclusive to older adults

Childhood incidence:
Rising in some countries

Gender
Higher prevalence in women across all age groups

Future projections

Confirmed global cases expected to rise

19.9%
over the next 10 years

Annual growth rate:

2.49%

2023 cases:

3,782,252
across 8MM (US, France, Germany, Italy, Spain, UK, Japan and China)

2033 Projected cases:

4,722,757
- 1 million more people expected to be diagnosed within 10 years.

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Symptoms

Some people can be symptom-free in everyday life only becoming clinically noticeable during lung exacerbations.

These are episodes defined by a worsening of lung function and respiratory symptoms. Symptoms can take months or years to develop and gradually become worse. The primary symptoms are a daily cough and daily production of mucus.

Symptoms include shortness of breath, wheezing, excessive coughing, sputum production, recurrent chest infections, fatigue, chest pain and hemoptysis.
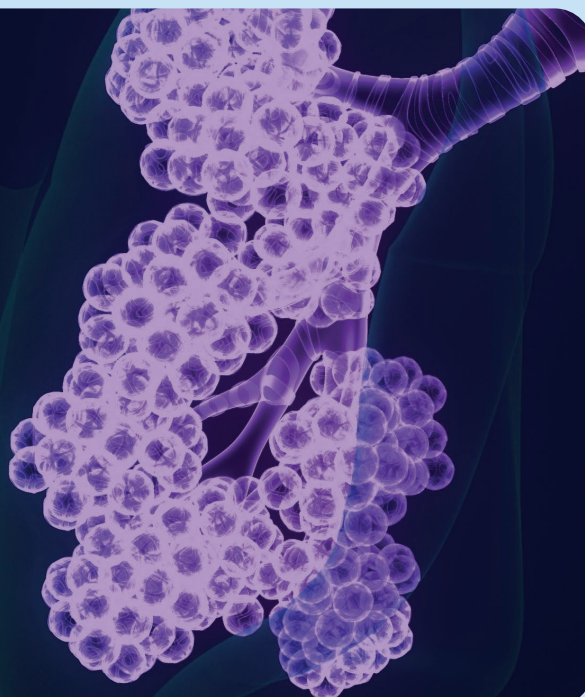
Current treatments and unmet needs

- **Treatment options:**
  No licensed treatments, current options use off-label medicines

- **Common drugs used today:**
  Antibiotics, bronchodilators, mucolytics

- **Unmet needs:**

  - More approved drugs, and drugs with greater efficacy

  - Targeted therapies

  - Better tests for managing infections and exacerbations, facilitating treatment decisions and improved outcomes

  - Improved diagnostic methods without over-reliance on CT scans

 - Increased awareness among primary care providers to improve diagnosis and referral

Diagnosis challenges

- **Complexity:**
  often under-diagnosed and misdiagnosed due to overlapping symptoms with other lung conditions (asthma, emphysema, COPD) and diversity of condition.

- **Diagnosis method to confirm bronchiectasis in a patient:**
  diagnosis relies on CT scan, and triaging patients for this is slow partly due to lack of awareness of the condition.

- **Need for Improvement:**
  development of new diagnostic tests and/or specific biomarkers is needed to improve triage for follow-up, to assist with diagnosis and for understanding of the condition.

Impact and perception

- **Misconception:**
  Bronchiectasis is a mild condition. Severe cases can result in hospitalisation several times a year. Ultimately lung transplants may be the only treatment option.

- **Economic impact:**
  Today there is a significant burden on NHS and on an individual's daily life.

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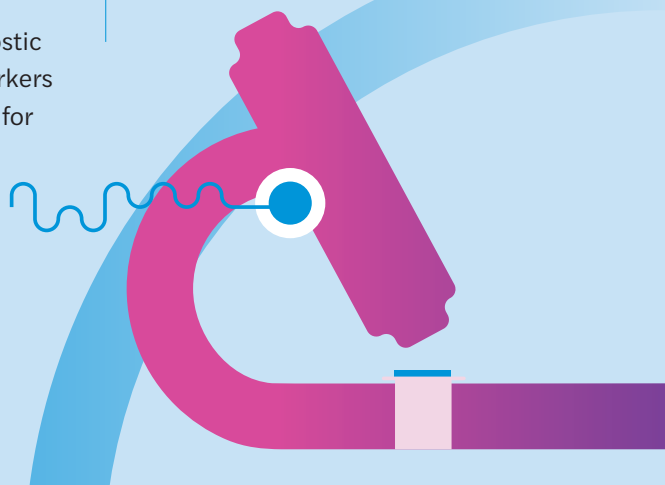
Bronchiectasis commercial potential :

the opportunity accessed via investing in BE research and development
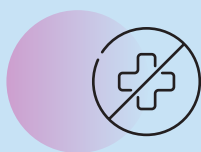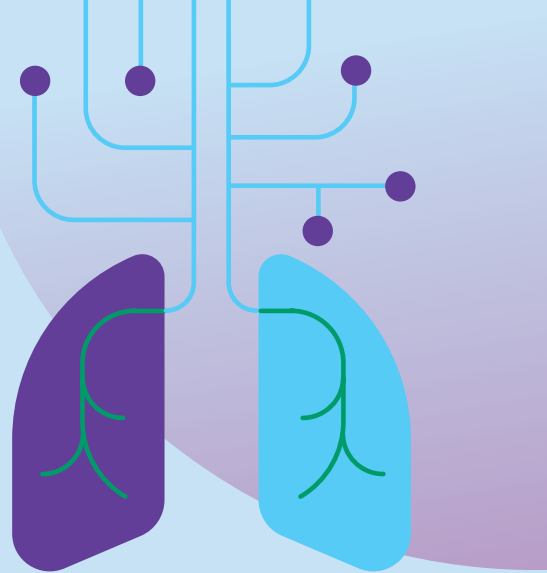
No treatments currently licensed: there is a significant unmet need that innovative therapies could address

People need a lifetime of treatment: Bronchiectasis is a chronic, long term condition that typically requires lifelong management and interventions

Increasing prevalence: the number of cases worldwide represents a substantial market opportunity, and this is growing due to demographics and increased confidence in diagnosis

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Market forecast:

Sales of bronchiectasis products forecast to reach $1.9 billion by 2033

- **2023 value of UK market:** $57.05 million
- **2033 project value of UK market:** $69.3 million
- **2023 value of combined 8MM:** $1.4 billion
- **2033 projected value:** $1.9 billion

Opportunities exist for companies with:

- **Anti-inflammatory knowledge** and expertise in drug discovery and development
- **Anti-infection treatments**
- **Historical experience in COPD**, asthma, cystic fibrosis or other chronic respiratory conditions
- **Diagnostic expertise** and capabilities that could be applied to finding better ways to diagnose the condition and monitor responses to treatment.

Partnership, Scientific and Collaboration opportunities

- **Collaborative research:** Collaborations and consortia connecting academic institutions, research organisations and charities providing an opportunity to share ideas and learning and work together to bridge the gap and translate research into clinical practice.
- **Pathophysiology insights:** Rich area for research, creating insight and driving potential breakthroughs

- **Biomarker development:** Potential for pioneering faster, cheaper and more accurate diagnostic tests and methods for stratification of patients for precision medicine approaches.
- **Therapeutic development:** Opportunity to develop targeted therapies for better patient outcomes, including the repositioning of existing products

Existing Bronchiectasis Resources / Useful links

- **Biobank access** - EMBARC
- **Established bronchiectasis** patient groups
- **Clinical trial set up** and recruitment support

- **De-risking projects** (eg, via "pump priming")
- **EMBARC** - European Bronchiectasis Registry
- **ELF European Lung Foundation**

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