ATS 2026: Bronchiectasis and NTM Pulmonary Disease Management

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> Managing bronchiectasis and nontuberculous mycobacterial (NTM) pulmonary disease presents a persistent clinical challenge due to their heterogeneous etiologies and often refractory nature. The ATS 2026 sessions provided a comprehensive review of current understanding, emphasizing the need for individualized treatment strategies informed by updated guidelines.

KEY TAKEAWAYS

- The Pivot: Updated guidelines for NTM pulmonary disease emphasize a multidisciplinary approach to diagnosis and treatment selection.
- The Data: Specific data points were not presented, but the focus was on integrating existing evidence into complex case management.
- The Action: Clinicians should integrate new guideline recommendations, particularly regarding diagnostic criteria and treatment duration for NTM, into their practice.

Bronchiectasis is a chronic respiratory condition characterized by permanent dilation of the bronchi and bronchioles, leading to recurrent respiratory infections and inflammation.1 Its etiology is diverse, encompassing post-infectious causes, primary ciliary dyskinesia, cystic fibrosis, immunodeficiencies, and connective tissue diseases.2 Nontuberculous mycobacteria (NTM) pulmonary disease is a significant and increasing cause of morbidity in patients with pre-existing lung conditions, including bronchiectasis.3 The ATS 2026 sessions addressed the intricate relationship between these conditions, focusing on diagnostic precision and therapeutic optimization.

Diagnosis of bronchiectasis relies on high-resolution computed tomography (HRCT) findings, demonstrating bronchial dilation and lack of tapering.1 Identification of underlying etiologies is critical for targeted management. For NTM pulmonary disease, diagnosis requires a combination of clinical symptoms, radiographic evidence, and microbiological isolation of NTM from respiratory samples, adhering to established criteria.3 The sessions underscored the importance of distinguishing NTM colonization from active disease, as treatment for NTM pulmonary disease involves prolonged, multi-drug regimens with potential for significant adverse effects.4

The epidemiology of bronchiectasis varies globally, with an increasing prevalence observed in many regions, particularly among older adults. Patients with bronchiectasis often present with chronic cough, sputum production, and recurrent exacerbations, which significantly impair their quality of life. The presence of NTM infection further complicates the clinical picture, as NTM can exacerbate existing lung damage and lead to a more rapid decline in lung function.

The ATS 2026 discussions highlighted the need for early and accurate diagnosis of NTM in bronchiectasis patients to prevent disease progression and optimize treatment outcomes. The sessions also explored the various patient populations

affected, noting that individuals with underlying structural lung diseases, such as bronchiectasis, are particularly susceptible to NTM infections due to impaired mucociliary clearance and chronic inflammation. Immunocompromised individuals also represent a high-risk group for developing NTM pulmonary disease.

Complex Case Management and Updated Guidelines

Management strategies for bronchiectasis aim to reduce exacerbations, improve lung function, and enhance quality of life. These include airway clearance techniques, bronchodilators, and long-term macrolide therapy in selected patients.5 The ATS 2026 discussions highlighted the challenges in managing patients with co-existing bronchiectasis and NTM pulmonary disease, where treatment decisions become particularly complex. For NTM pulmonary disease, updated guidelines from the American Thoracic Society (ATS) and Infectious Diseases Society of America (IDSA) provide refined recommendations for species-specific treatment regimens.4 For instance, Mycobacterium avium complex (MAC) pulmonary disease, the most common NTM species, typically requires a macrolide-based regimen (e.g., azithromycin or clarithromycin) combined with ethambutol and rifampin.4 Treatment duration for MAC pulmonary disease is generally 12 months after culture conversion.4

The sessions also reviewed emerging therapies and novel approaches to managing refractory cases. This included discussions on inhaled antibiotics for chronic bronchial infection in bronchiectasis, such as inhaled tobramycin or aztreonam, which have demonstrated efficacy in reducing bacterial load and exacerbation frequency in specific patient populations.6 The mechanism of action for these inhaled antibiotics involves direct delivery of high concentrations of the antimicrobial agent to the site of infection, minimizing systemic exposure and potential side effects. For NTM, the role of newer agents and combination therapies for drug-resistant strains was explored, though specific trial data were not detailed in the general session overview. The importance of a multidisciplinary team, including pulmonologists, infectious disease specialists, microbiologists, and physiotherapists, was emphasized for optimal patient outcomes, particularly in cases with complex microbiology or treatment intolerance.3

Limitations in current understanding include the precise mechanisms driving disease progression in a subset of patients and the identification of biomarkers predicting treatment response or disease exacerbation. The heterogeneity of bronchiectasis etiologies and NTM species presents a significant challenge in developing universally effective treatments. Furthermore, the long duration of NTM treatment regimens often leads to issues with patient adherence and the development of drug resistance. Further research is needed to develop more targeted and less toxic therapies for NTM pulmonary disease and to better understand the interplay between various etiologies of bronchiectasis. The sessions concluded with a call for continued collaborative research to address these gaps and improve patient care.

> **CLINICAL IMPLICATIONS**
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> The ATS 2026 focus on bronchiectasis and NTM pulmonary disease underscores a persistent clinical conundrum: managing chronic, progressive lung conditions with often limited therapeutic options. The emphasis on updated guidelines for NTM is a welcome development, providing a clearer framework for diagnosis and treatment. However, the sheer complexity of these cases, particularly the differentiation between NTM colonization and active disease requiring prolonged, toxic regimens, continues to place a significant burden on clinicians. The risk of overtreatment, with its attendant side effects and antimicrobial resistance implications, remains a tangible concern.

> From an industry perspective, the lack of truly novel, transformative therapies for NTM pulmonary disease is striking. While inhaled antibiotics for bronchiectasis offer incremental benefits, the core multi-drug regimens for NTM have seen little fundamental change. This suggests a significant unmet need for drug development, particularly for agents with improved tolerability profiles and shorter treatment durations. Pharmaceutical companies should view this as an opportunity for innovation, moving beyond minor modifications of existing drug classes.
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> Patients, meanwhile, continue to face a protracted and often debilitating treatment journey. The requirement for 12 months of multi-drug therapy for MAC, for example, demands exceptional adherence and resilience. The discussions at ATS 2026, while highlighting best practices, also implicitly reveal the ongoing challenges in improving patient quality of life and reducing treatment burden. It is imperative that future research and guideline updates not only focus on microbiological eradication but also on patient-reported outcomes and the practicalities of long-term disease management.

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REFERENCES

1. 1. Polverino E, et al. European Respiratory Society guidelines for the management of adult bronchiectasis. Eur Respir J. 2017;50(3):1700629.
2. 2. Pasteur MC, et al. British Thoracic Society guideline for non-CF bronchiectasis. Thorax. 2010;65 Suppl 1:i1-58. doi:10.1136/thx.2010.136119
3. 3. Daley CL, et al. An Official ATS/IDSA/ERS Clinical Practice Guideline: Treatment of Nontuberculous Mycobacterial Pulmonary Disease. Am J Respir Crit Care Med. 2020;201(5):e12-e52. doi:10.1093/cid/ciaa1062
4. 4. Griffith DE, et al. An Official ATS/IDSA Statement: Diagnosis, Treatment, and Prevention of Nontuberculous Mycobacterial Diseases. Am J Respir Crit Care Med. 2007;175(4):367-416. doi:10.1164/ajrccm.175.7.744b
5. 5. Chalmers JD, et al. Bronchiectasis. Nat Rev Dis Primers. 2018;4(1):18023.
6. 6. Bilton D, et al. Inhaled aztreonam lysine for chronic airway infection in bronchiectasis (AIR-BX1 and AIR-BX2): two phase 3, randomised, double-blind, placebo-controlled trials. Lancet Respir Med. 2018;6(10):749-761. doi:10.3410/f.718542954.793557654

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