

Brensocatic Reduces Bronchiectasis Exacerbations

First non-antibiotic treatment

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Denver, CO — Researchers at National Jewish Health and around the world have reported that the experimental medication brensocatic reduces exacerbations of bronchiectasis by approximately 40 percent as learned in a phase 2 trial.

Bronchiectasis is chronic inflammation and dilation of the airways that results from damage caused by respiratory infections, genetic diseases such as cystic fibrosis, alpha-1 antitrypsin deficiency, and other insults to the airways. The damaged airways lose the ability to clear mucus and bacteria, leading to repeated infections that further damage the airways. The only existing medications to reduce exacerbations are inhaled antibiotics, which are time consuming to administer and eventually lead to resistant organisms.

“Brensocatic directly addresses the inflammatory mechanism that damages the airways of bronchiectasis,” said Charles Daley, MD, senior author on the paper published in the *New England Journal of Medicine* and chief of the division of mycobacterial and respiratory infections division at National Jewish Health.



Dr. Daley explains that, as a hospital focused on respiratory and related diseases, National Jewish Health pulmonologists see many cases of bronchiectasis. “Brensocatic is not a cure for bronchiectasis. But if phase 3 trials show continued success, brensocatic could be a welcome addition to treatment options for bronchiectasis.”

Exacerbations of bronchiectasis usually occur as a result of bacterial infections. Patients suffer increased cough, sometimes containing blood, increased sputum production, breathlessness, and fatigue. Exacerbations usually cause additional damage to the airways, reducing breathing capacity and eventually increasing the risk of death.

During bronchiectasis exacerbations, levels of an enzyme known as neutrophil elastase rise sharply, leading to inflammation and tissue damage. Brensocatic inhibits the release of neutrophil elastase from immune cells known as neutrophils as they fight infections in the lungs.

The researchers enrolled 256 patients with bronchiectasis and assigned them to receive either a placebo, 10 milligrams of brensocatic or 25 milligrams orally once a day for 24 weeks. Levels of neutrophil elastase were lower in both treatment groups in weeks 2 through 24. By the end of the trial, patients in the placebo group had suffered 54 exacerbations. Those taking 10 milligram doses had 34 exacerbations and the 25-milligram group had 42 exacerbations, representing a 20-40 percent reduction in exacerbations. The annual exacerbation rates were 1.37 in the placebo group; 0.88 in the 10-milligram group; and 1.03 in the 25-milligram group.

Overall, adverse events were similar across all groups. Patients taking brensocatic did suffer more frequent skin and periodontal problems.

National Jewish Health is the leading respiratory hospital in the nation. Founded 125 years ago as a nonprofit hospital, National Jewish Health today is the only facility in the world dedicated exclusively to groundbreaking medical research and treatment of children and adults with respiratory, cardiac, immune and related disorders. Patients and families come to National Jewish Health from around the world to receive cutting-edge, comprehensive, coordinated care. To learn more, visit the [media resources](#) page.

Media Resources

We have many faculty members, from bench scientists to clinicians, who can speak on almost any aspect of respiratory, immune, cardiac and gastrointestinal disease as well as lung cancer and basic immunology.

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Media Contacts

Our team is available to arrange interviews, discuss events and story ideas.

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