



Altesa BioSciences Presents Novel Clinical Data Demonstrating Vapendavir Significantly Reduces Key Inflammatory Biomarkers in Rhinovirus-Challenged COPD Patients at the European Respiratory Society International Congress 2026

Results build on previously reported reductions in virus load, illness severity, improved quality of life from a Phase 2a placebo-controlled challenge study evaluating oral vapendavir

BARCELONA, Spain, Sept. 8, 2026 -- Altesa BioSciences, a clinical-stage pharmaceutical company focused on addressing the impact of chronic lung diseases including COPD and asthma, today announced new clinical data showing that vapendavir — the company's investigational antiviral therapy — significantly reduced critical inflammatory biomarkers in COPD patients experiencing a rhinovirus infection. The data were shared in an oral presentation at the European Respiratory Society (ERS) International Congress 2026 in Barcelona, Spain.

The presentation, titled, *"Inflammatory biomarkers are reduced by vapendavir treatment in rhinovirus-challenged COPD patients,"* was presented by Dr. Sebastian Johnston, MD, PhD, FMedSci, Professor of Respiratory Medicine and Allergy at the National Heart and Lung Institute, Imperial College London, in a session titled: *"Respiratory infections: host response, complications and interventions."*

The reductions observed in local airway inflammation are consistent with previously reported findings presented at the ERS International Congress 2025, in which vapendavir treatment significantly reduced viral load, illness duration and severity of lower respiratory symptoms, and improved quality of life, relative to placebo.

"These findings help explain why patients treated with vapendavir experienced less severe illness in this study — we're seeing a measurable reduction in the inflammatory response in the airway itself, not just an effect on viral load," **said Dr. Sebastian Johnston, MD, PhD, FMedSci, Professor of Respiratory Medicine and Allergy at the National Heart and Lung Institute, Imperial College London and Chief Medical Officer of VirTus Respiratory Research Ltd (the CRO that ran the study).** "Rhinovirus infections are underappreciated as a driver of COPD exacerbations, in part because they are so rarely tested for in clinical practice. A treatment that addresses both the virus and the resulting airway inflammation could meaningfully change how we manage these patients."

About the Phase 2a challenge study and novel results

COPD patients in the study were experimentally challenged with rhinovirus and treated with either vapendavir or placebo beginning after the onset of symptoms. Analysis of nasal lavage samples showed that vapendavir treatment was associated with significantly lower levels of two key inflammatory molecules — IP-10/CXCL10 and GM-CSF — over the course of infection compared to placebo. Nasal levels of two additional biomarkers, IFN- α 2a and IFN- λ 1/IL-29, trended lower with vapendavir treatment but did not reach statistical significance.

"The data collectively support a mechanistic link between vapendavir's antiviral activity and reduced airway inflammation in COPD patients infected with rhinovirus," **said Dr. Katharine Knobil, Altesa BioSciences' Chief Medical Officer.** "Acute COPD exacerbations are the main driver of hospitalization, lung function loss, and reduced quality of life," **she said.**

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"Deepening our understanding of the underlying disease biology is critical to developing therapies that bring much-needed relief to those living with a chronic and debilitating illness, and the data from this study has given us the ability to successfully progress into the Phase 2B CARDINAL study already underway and actively enrolling patients," **the Altesa CMO concluded.**

About Vapendavir

Vapendavir is an investigational oral medicine in development by Altesa BioSciences. Vapendavir demonstrated efficacy in patients with COPD by improving symptoms, reducing duration of illness and viral load, and maintaining small airway function after rhinovirus challenge. Vapendavir is now in late-stage clinical development and, if approved, has the potential to prevent the most common cause of COPD exacerbations, improve quality of life, and generate significant reductions in healthcare costs.

About the CARDINAL Study

The CARDINAL clinical trial is a Phase 2b multinational, randomized, placebo-controlled study in COPD patients experiencing rhinovirus infections that will enroll 900 people with COPD across the US and UK. Participants will be closely monitored over time and, upon confirmed rhinovirus infection, will be randomized to receive one of two doses of vapendavir or placebo. The trial's primary objective is to assess improvement in respiratory symptoms using established patient-reported outcomes, with additional endpoints evaluating time to symptom resolution, quality of life, healthcare resource utilization, and lung function.

About Altesa BioSciences, Inc.

Altesa BioSciences is a clinical-stage pharmaceutical company led by global experts in respiratory medicine and infectious diseases. Altesa is dedicated to improving the lives of people with chronic lung diseases, including COPD and asthma, by treating the principal cause of exacerbations and pathological inflammation — viral respiratory infections. www.altesa.com

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