



# National Asthma Study Points to Better Outcomes for Black and Latinx Patients

A collaborative national asthma study involving the University of Miami Miller School of Medicine points the way to achieving better outcomes for Black and Latinx patients.

“This is one of the few studies focusing on Black and Latinx, who face disproportionately high burden of complications from this disease,” said Rafael A. Calderon-Candelario, M.D., M.Sc., assistant professor of clinical medicine and principal investigator for the Miami study site. “The most significant finding was that these patients who took inhaled corticosteroids when they used reliever medications, in addition to usual care, had fewer severe asthma attacks, improved asthma control, and had fewer days lost from work or school.”



Rafael A.  
Calderon-  
Candelario,  
M.D., M.Sc.



Dr. Calderon-Candelario was a co-author of the nationwide study, “Reliever-Triggered Inhaled Steroid in Black and Latinx Adults with Asthma,” which was published recently in the New England Journal of Medicine. The study noted that Black and Latinx patients experience higher rates of asthma-related emergency department visits, higher rates of hospitalization, and approximately double the asthma mortality rate compared to whites. Interventions to try to reduce this disparity have been labor-intensive and have had varied results, according to the study.

Elliot Israel, M.D., the Gloria M. and Anthony C. Simboli Distinguished Chair in Asthma Research at the Brigham and Women’s Hospital in Boston, was the leader of the multicenter PREPARE (PeRson EmPowered Asthma RELief) trial, which involved about 1,200 patients in the continental U.S. and Puerto Rico with moderate to severe asthma. In the study, Black and Latinx patients received a one-time instruction to use inhaled corticosteroids (ICS) when they used an asthma reliever or nebulizer in addition to other medications they were taking for the disease.

“What’s unique about this study is that we’ve focused exclusively on patient populations that face significant disparities in asthma outcomes and included them in optimizing the study,” said Juan Carlos Cardet, M.D., of University of South Florida and a co-investigator of the study.

## **Decreased Risk of Severe Symptoms**

In data presented at the 2022 Annual Meeting of the American Academy of Allergy, Asthma & Immunology (AAAAI), the researchers demonstrated that this new intervention decreased the risk of severe asthma exacerbations by 15 percent, along



with reduced asthma symptoms and days of impairment. This was equivalent to the reductions seen in previous studies that led the NIH National Heart, Lung, and Blood Institute to update recommendations for patients with moderate to severe asthma.

“Results of the PREPARE trial show us that we can help reduce the impact of asthma through the simple, patient-centered intervention of having patients use ICS whenever they use their rescue inhaler or nebulizer to treat symptoms,” said Dr. Israel. “This intervention is effective – easy to implement, easy to use, and comes at a low cost.”

Content Type Article