

## **Inhaled Treprostinil Improves Cardiac Effort in Patients With Pulmonary Hypertension–Interstitial Lung Disease: ASCENT Trial**

**Glenview, IL** – In patients with pulmonary hypertension–interstitial lung disease (PH-ILD), treatment with LIQ861, a novel inhaled dry powder formulation of treprostinil, was associated with improvements in Cardiac Effort, suggesting improved physiology during exercise testing.

PH-ILD, including combined pulmonary fibrosis and emphysema (CPFE), is a progressive disorder with limited therapeutic options. The ASCENT trial (NCT06129240), Cohort A, is a prospective, multicenter, open-label study evaluating the safety, tolerability, and efficacy of LIQ861.

This analysis assessed changes in the number of heartbeats during the 6-minute walk test (6MWT) divided by the 6-minute walk distance (6MWD), which is known as a Cardiac Effort. This has been shown to correlate with stroke volume and track with physiologic changes.

The first 20 patients with PH-ILD who were enrolled in ASCENT Cohort A were analyzed. All participants underwent 6MWTs with continuous heart rate monitoring using the Fourth Frontier X2, a single-lead dry electrode electrocardiogram. Screening and baseline 6MWD and Cardiac Effort values were averaged to establish baseline measures. Follow-up assessments occurred at weeks 8 and 16.

Eighteen patients reached week 8, and the baseline mean Cardiac Effort was  $2.4 \pm 1.0$  beats/m, which improved to  $2.1 \pm 0.9$  beats/m at week 8. Thirteen patients reached week 16, and the baseline mean Cardiac Effort was  $2.0 \pm 0.527$  beats/m, which improved to  $1.8 \pm 0.5$  beats/m at week 16. The 6MWD was  $297 \pm 100$  meters at baseline. The median dose of LIQ861 at weeks 8 and 16 was 132.5 and 159 mcg four times a day, respectively.

“Continuous electrocardiogram-based monitoring integrated with the walk distance offers insight into physiologic stress needed to achieve a certain 6-minute walk distance,” said Daniel J. Lachant, DO, lead researcher and CHEST 2025 presenter. “The ASCENT trial highlights the Cardiac Effort changes and provides early insights into physiological improvements in patients with PH-ILD following treatment with LIQ861.”

Further results will be presented at the CHEST Annual Meeting 2025 as part of the *On the Hunt for New Approaches to Diagnose and Monitor PH rapid fire original investigation presentations* titled, *Changes in Cardiac Effort in Pulmonary Hypertension-Interstitial Lung Disease: Insights from the ASCENT Trial*. The [study abstract](#) can be viewed on the CHEST® journal website.