



Pliant Therapeutics Presents Clinical and Preclinical Data at the American Thoracic Society International Conference

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SOUTH SAN FRANCISCO, Calif., May 21, 2025 (GLOBE NEWSWIRE) -- Pliant Therapeutics, Inc. (Nasdaq: PLRX) today announced that the Company led oral and poster presentations of clinical and preclinical data this week as part of the American Thoracic Society (ATS) 2025 International Conference, held from May 16-21, 2025.

Characterizing the Antifibrotic Activity of Bexotegrast on Distinct Fibroblast Populations in PCLS from Multiple ILD Subtypes

In a featured oral presentation, Johanna Schaub, Ph.D., Director of Translational Sciences at Pliant Therapeutics, discussed an evaluation of the antifibrotic activity of bexotegrast in fibrotic human precision-cut lung slices (PCLS) generated from non-idiopathic pulmonary fibrosis (IPF) interstitial lung disease (ILD) patient lung explants. Results showed that bexotegrast, a dual inhibitor of α V β 6/ α V β 1 integrins, reduced expression of genes related to TGF- β signaling and fibrogenesis in alveolar type 1 (AT1) cells and multiple fibroblast subpopulations.

Plasma Proteome Analysis Reveals Shared and Unique Biomarkers of ILD Subtypes

In a poster presentation, Erine Budi, Ph.D., Senior Scientist II Translational Biology at Pliant Therapeutics, reviewed a comparative analysis assessing circulating plasma biomarkers of ILD in healthy subjects and patients with idiopathic pulmonary fibrosis (IPF), rheumatoid arthritis-ILD (RA-ILD), and scleroderma associated-ILD (SSc-ILD). Results identified biomarkers consistently dysregulated across multiple ILD subtypes that could assist in informing clinical decision making in ILD.

Single-Cell Profiling Demonstrates the Antifibrotic Effects of Bexotegrast on Pathologic Lung Cell Populations in the Presence and Absence of Background Therapy

In a poster presentation, Mahru An, Ph.D., Director of Translational Sciences at Pliant Therapeutics, reviewed a single-nuclei RNAseq analysis of fibrotic human precision-cut lung slices comparing the pharmacodynamic effects of bexotegrast, a dual inhibitor of α V β 6 and α V β 1 integrins, alone, or in combination with nintedanib. Results showed that treatment with bexotegrast or nintedanib displayed distinct cell-specific pharmacodynamic profiles. In addition, bexotegrast alone, or in the presence of nintedanib, significantly reduced the expression of type I collagen and other profibrotic genes in aberrant basaloid cells (α V β 6-expressing) and fibroblasts (α V β 1-expressing), while treatment with nintedanib alone did not.

The presentation and posters presented at the 2025 ATS Conference are available by accessing the links above or on Pliant's website under the Publications section at <https://pliantrx.com/publications>.

About Pliant Therapeutics, Inc.

Pliant Therapeutics is a clinical-stage biopharmaceutical company and leader in the discovery and development of novel therapeutics for the treatment of fibrotic diseases. Pliant's lead product candidate, bexotegrast (PLN-74809), is an oral, small molecule, dual selective inhibitor of α v β 6 and α v β 1 integrins that is undergoing evaluation for the treatment of idiopathic pulmonary fibrosis, or IPF. Bexotegrast has received Fast Track Designation and Orphan Drug Designation from the U.S. Food and Drug Administration (FDA) and Orphan Drug Designation from the European Medicines Agency in IPF. Pliant is conducting a Phase 1 study for PLN-101095, a small molecule, dual-selective inhibitor of α v β 8 and α v β 1 integrins, that is being developed for the treatment of solid tumors. In addition, Pliant has received regulatory clearance for the conduct of a Phase 1 study of PLN-101325, a monoclonal antibody agonist of integrin α 7 β 1 targeting muscular dystrophies.

For additional information, please visit: www.PliantRx.com. Follow us on social media [X](#), [LinkedIn](#), and [Facebook](#).

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