Pliant Therapeutics Announces Presentations at 2022 American Thoracic Society International Conference

May 18, 2022

SOUTH SAN FRANCISCO, Calif., May 18, 2022 (GLOBE NEWSWIRE) -- Pliant Therapeutics, Inc. (Nasdaq: PLRX), a clinical stage biotechnology company focused on discovering and developing novel therapeutics for the treatment of fibrosis, today announced that the Company presented five scientific posters as part of the 2022 American Thoracic Society (ATS) International Conference held May 13-18, 2022, in San Francisco, California.

Éric Lefebvre, M.D., Chief Medical Officer at Pliant Therapeutics commented: “We are very pleased with the breadth of our oral and poster presentations at this year's ATS meeting, which reflect some of the data aimed at derisking the development of PLN-74809 as the potential new treatments for IPF.”

Pliant presented the following posters as part of the 2022 ATS International Conference.

Poster 419: PLN-74809, A Dual-Selective Inhibitor of αvβ6 and αvβ1, Is Well Tolerated in Over 280 Healthy Participants

Results from an analysis of the seven completed Phase 1 studies with available safety data as of October 1, 2021, showed that PLN-74809 was generally well tolerated in 283 healthy participants receiving single doses up to 640 mg or multiple doses up to 320 mg once daily, administered for up to 14 days. The most frequently reported adverse events were headache and constipation, and no drug-related severe adverse events were reported. To date, PLN-74809 has been administered to over 450 subjects, including healthy participants as well as those with idiopathic pulmonary fibrosis (IPF), primary sclerosing cholangitis (PSC), or acute respiratory distress syndrome (ARDS) without any new safety concerns.

Poster 710 PLN-74809, a Dual-Selective Inhibitor of Integrins αvβ6 and αvβ1, Shows Dose-Dependent Target Engagement in the Lungs of Patients with Idiopathic Pulmonary Fibrosis (IPF)

Interim results from the ongoing Phase 2a αvβ6 positron emission tomography (PET) imaging trial in patients with IPF showed dose- and plasma concentration-dependent target engagement with all participants achieving >50% αvβ6 target engagement. In two participants, αvβ6 target engagement approached saturation (>90%) at the two highest doses of 240 mg and 320 mg. No severe or serious adverse events were reported.

Poster 707: PLN-74809, an Oral, Dual-Selective αvβ6/αvβ1 Inhibitor in Phase 2 Clinical Trials for Idiopathic Pulmonary Fibrosis (IPF), Sustainably Reduces Transforming Growth Factor Beta (TGF-β) Activity in the Lungs of Healthy Participants with Once-Daily Dosing

Results from this Phase 1b proof-of-mechanism trial in healthy subjects showed that PLN-74809 inhibited TGF-β activation, a key mediator of the fibrosis pathway, in a sustained, dose dependent manner in the lungs of healthy participants. At the two highest doses tested, on Day 7, PLN-74809 showed inhibition levels by up to 92% and 76% at 6- and 24-hours, respectively, following dosing. PLN-74809 was generally well tolerated, with few drug-related adverse events and no serious adverse events reported.

Poster P1012: Therapeutic Biomarker Discovery in Idiopathic Pulmonary Fibrosis (IPF) Through Proteomic Analysis of Precision-Cut Lung Slice (PCLS) Supernatants

Results from a proteomic profiling study of precision-cut lung slices from explanted IPF lung tissue assessing the impact of transforming growth factor-beta (TGF-β) pathway inhibition on secreted proteins validated this platform in IPF target-specific biomarker discovery.

Poster 816: Pharmacological Inhibitors of Integrin αvβ6 That Differentially Modulate Protein Conformation Are Similarly Effective at Inhibiting Transforming Growth Factor Beta (TGF-β) Signaling in the Fibrotic Lung

The impact and differential effects of αvβ6 antagonists on gene expression was studied in primary lung epithelial cells and lung tissue explants from patients with IPF. Results showed that pharmacological inhibitors that differentially modulate integrin αvβ6 conformation were all effective at blocking αvβ6-mediated regulation of TGF-β signaling in lung cell- and fibrotic lung tissue-based assays, with no clear conformation-related changes in gene expression observed.

Posters presented at the 2022 ATS Conference are available 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 focused on discovering and developing novel therapies for the treatment of fibrosis. Pliant's lead product candidate, PLN-74809, is an oral small molecule dual selective inhibitor of $\alpha_v\beta_6$ and $\alpha_v\beta_1$ integrins that is in development in the lead indications for the treatment of idiopathic pulmonary fibrosis, or IPF, and primary sclerosing cholangitis, or PSC. PLN-74809 has received Fast Track Designation and Orphan Drug Designation from the U.S. Food and Drug Administration (FDA) in IPF and Orphan Drug Designation from the FDA and European Medicines Agency in PSC. Pliant is currently conducting Phase 2a trials of PLN-74809 in the lead indications of IPF and PSC. Pliant has also developed PLN-1474, a small molecule selective inhibitor of $\alpha_v\beta_1$ for the treatment of nonalcoholic steatohepatitis, or NASH with liver fibrosis, which Pliant has transferred to Novartis pursuant to our development partnership. In addition to clinical stage programs, Pliant currently has two preclinical programs targeting oncology and muscular dystrophies. For additional information about Pliant Therapeutics, visit www.pliantrx.com and follow us on Twitter, LinkedIn, Facebook and YouTube.

Forward-Looking Statements

Statements contained in this press release regarding matters that are not historical facts are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "may," "will," "expect," "anticipate," "estimate," "intend," and similar expressions (as well as other words or expressions referencing future events, conditions, or circumstances) are intended to identify forward-looking statements. These statements include those regarding the de-risking of our development of PLN-74809 and the efficacy and safety profile of our product candidates. Because such statements deal with future events and are based on our current expectations, they are subject to various risks and uncertainties and actual results, performance or achievements of Pliant Therapeutics could differ materially from those described in or implied by the statements in this press release. These forward-looking statements are subject to risks and uncertainties, including those related to the development and commercialization of our product candidates, including any delays in our ongoing or planned preclinical or clinical trials, the impact of the ongoing COVID-19 pandemic on our business, operations, clinical supply and plans, our reliance on third parties for critical aspects of our development operations, the risks inherent in the drug development process, the risks regarding the accuracy of our estimates of expenses and timing of development, our capital requirements and the need for additional financing, and our ability to obtain and maintain intellectual property protection for our product candidates. These and additional risks are discussed in the sections titled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K filed for the year ended December 31, 2021 with the SEC on March 1, 2022, as updated by our Quarterly Report on Form 10-Q filed for the quarter ended March 31, 2022 with the SEC on May 9, 2022, each available on the SEC's website at www.sec.gov. Unless otherwise noted, Pliant is providing this information as of the date of this news release and does not undertake any obligation to update any forward-looking statements contained in this document as a result of new information, future events or otherwise.

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