



Pliant Therapeutics Reports Positive Results of Phase 1b Clinical Study Supporting Advancement of PLN-74809 for Treatment of Idiopathic Pulmonary Fibrosis

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SOUTH SAN FRANCISCO — June 27, 2019— Pliant Therapeutics, Inc., a clinical stage biopharmaceutical company focused on discovering and developing novel therapies for the treatment of fibrosis, today announced the successful completion of a Phase 1b clinical trial of its lead product candidate, PLN-74809, an oral small-molecule dual selective inhibitor of $\alpha_v\beta_6$ and $\alpha_v\beta_1$ integrins that is being developed for the treatment of idiopathic pulmonary fibrosis (IPF), and primary sclerosing cholangitis (PSC). PLN-74809 was shown to inhibit TGF- β activation by up to 70% in alveolar macrophages collected from healthy volunteers, in a dose- and exposure-dependent manner. Additionally, PLN-74809 was well tolerated with only mild adverse events, and no drug-related adverse events.

The randomized, double-blind, placebo-controlled trial of PLN-74809 evaluated 20 mg and 40 mg doses of PLN-74809 against placebo administered over seven days in 18 healthy volunteers and demonstrated clear evidence of on-target biological activity in humans. In addition to safety and pharmacokinetics, the trial was designed to examine PLN-74809's ability to reduce TGF- β activation in the lungs of healthy volunteers as measured through relative pSMAD2 levels in alveolar macrophages collected through bronchioalveolar lavage. The trial identified target plasma concentrations for inhibition of TGF- β activation in lungs, which will guide once-daily dose selection and trial design as the company moves into Phase 2a trials in patients with IPF. All study participants who exceeded the target plasma exposure levels after seven days of dosing experienced $\geq 50\%$ reductions in TGF- β activation relative to pre-treatment.

"We're pleased to report that PLN-74809 has shown human proof-of-mechanism by inhibiting TGF- β activation in the lungs of healthy volunteers. By inhibiting this critical molecular driver of fibrosis, we believe PLN-74809 may disrupt the fibrosis pathway and affect disease progression in patients with IPF. The compound continues to display a favorable safety, tolerability and pharmacokinetic profile," said Éric Lefebvre, M.D., chief medical officer of Pliant Therapeutics. "We plan to initiate our Phase 2a program in IPF patients in the second half of 2019."

About PLN-74809

Pliant's therapeutic approach focuses on fibrotic tissue-specific inhibition of integrins and the TGF- β pathway. Our proprietary small molecule PLN-74809 is designed to be an oral dual selective inhibitor of the tissue-specific $\alpha_v\beta_6$ and $\alpha_v\beta_1$ integrins. In preclinical studies, PLN-74809 was observed to selectively block the $\alpha_v\beta_1$ and $\alpha_v\beta_6$ integrin mediated activation of TGF- β , preventing the growth of fibrotic tissue within the lung. In Phase 1a trials, PLN-74809 was shown to be well tolerated, with a half-life potentially supporting once-daily dosing. In addition to IPF, we also expect to evaluate PLN-74809 in other fibrotic diseases with unmet clinical needs, including PSC, a chronic progressive disorder characterized by inflammation and fibrosis of the bile ducts in the liver.

About Pliant Therapeutics

Pliant Therapeutics is a clinical stage biopharmaceutical company focused on discovering and developing novel therapies for the treatment of fibrosis. Pliant seeks to slow or halt the progression of multiple life-threatening fibrotic diseases by developing targeted treatments. The company's lead product candidate, PLN-74809, is designed to be a selective inhibitor of $\alpha_v\beta_1$ and $\alpha_v\beta_6$ integrins that play a key role in multiple fibrotic pathways. PLN-74809 has received Orphan Drug Designation from the U.S. Food and Drug Administration in both idiopathic pulmonary fibrosis (IPF) and primary sclerosing cholangitis (PSC), and has completed Phase 1b testing. Pliant's second product candidate, PLN-1474, is designed to be a selective inhibitor of $\alpha_v\beta_1$, targeting late-stage liver fibrosis and is currently in IND-enabling studies. For more information, please visit www.plianttx.com.

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