



Terns Announces Initiation of Dosing in Phase 1 Clinical Trial of TERN-501, its THR-Beta Agonist in Development for the Treatment of NASH

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-TERN-501 is designed to have high metabolic stability, enhanced liver distribution and high selectivity for THR-β-

-Top-line data expected in the second half of 2021-

FOSTER CITY, Calif., March 22, 2021 (GLOBE NEWSWIRE) -- Terns Pharmaceuticals, Inc. ("Terns" or the "Company") (Nasdaq: TERN), a clinical-stage biopharmaceutical company developing a portfolio of small-molecule single-agent and combination therapy candidates for the treatment of non-alcoholic steatohepatitis (NASH) and other chronic liver diseases, today announced the initiation of dosing in a Phase 1 clinical trial evaluating TERN-501, a selective thyroid hormone receptor beta (THR-β) agonist with high metabolic stability, enhanced liver distribution and greater selectivity for THR-β when compared with other THR-β agonists in development. Terns expects to report initial top-line data from the trial in the second half of 2021.

"We are excited to initiate the first-in-human study of TERN-501 and are proud of the hard work our team has done to advance three NASH programs of different therapeutic classes into clinical development. We believe each of our single-agent programs has improved upon a validated mechanism of action for the treatment of NASH," said Erin Quirk, M.D., President and Chief Medical Officer of Terns. "It has always been our goal to rapidly advance monotherapy candidates with high potential to be used in combination regimens. Furthermore, initiating first-in-human dosing of TERN-501 advances Terns closer to our goal of starting a Phase 2a clinical proof-of-concept trial evaluating a combination of TERN-101, our liver-distributed farnesoid X receptor agonist currently in Phase 2a development, and TERN-501 in the first half of 2022."

This Phase 1 clinical trial is being conducted in the United States and is expected to enroll approximately 90 healthy participants. The trial is designed to incorporate both single ascending dose and multiple ascending dose cohorts in which the safety, tolerability and pharmacokinetics of TERN-501 will be assessed, as well as pharmacodynamic biomarkers such as sex hormone binding globulin and serum lipid levels that could serve as an early marker of THR-β target engagement.

About TERN-501

TERN-501 is a thyroid hormone receptor beta (THR-β) agonist with high metabolic stability, enhanced liver distribution and greater selectivity for THR-β compared to other THR-β agonists in development. Agonism of THR-β increases fatty acid metabolism via mitochondrial oxidation and affects cholesterol synthesis and metabolism. As a result, THR-β stimulation has the ability to reduce hepatic steatosis and improve serum lipid parameters including LDL cholesterol and triglycerides. *In vivo* NASH studies in a rodent model have demonstrated that low-doses of TERN-501 achieved complete resolution of steatosis and reductions in serum lipids, hepatic inflammation and fibrosis. TERN-501 has high liver distribution and is 23-fold more selective for THR-β than for THR-α activation in a cell free assay, thereby minimizing the risk of cardiotoxicity and other off-target effects associated with non-selective THR stimulation. Finally, TERN-501 has been designed to be metabolically stable and is therefore expected to have little pharmacokinetic variability and a low clinical dose, making it an attractive candidate for use in fixed-dose combinations for NASH treatment.

About TERN-101

TERN-101 is a liver-distributed, non-bile acid FXR agonist that has demonstrated a differentiated tolerability profile and improved target engagement, likely due to its sustained FXR activation in the liver but only transient FXR activation in the intestine. FXR is a nuclear receptor primarily expressed in the liver, intestine and kidneys. FXR regulates hepatic expression of various genes involved in lipid metabolism, inflammation and fibrosis. Studies have demonstrated that there is minimal overlap between liver and intestine FXR binding sites, indicating potentially a high degree of tissue-specific FXR function. Clinical studies of other FXR agonists have demonstrated significant histological NASH improvements but have also resulted in pruritus and adverse lipid changes. These tolerability issues have generally been observed in Phase 1 clinical trials of other FXR agonists in development and have been regarded as dose-limiting toxicities, which are suboptimal for patients and can lead to treatment discontinuation. However, in all four Phase 1 clinical trials of TERN-101, none of the 119 subjects who received TERN-101 reported pruritus, and the serum lipid profiles among TERN-101 recipients were similar to placebo recipients even at high doses.

About Terns Pharmaceuticals

Terns Pharmaceuticals, Inc. is a clinical-stage biopharmaceutical company developing a portfolio of small-molecule single-agent and combination therapy candidates for the treatment of non-alcoholic steatohepatitis, or NASH, and other chronic liver diseases. Terns' [programs](#) are based on clinically validated and complementary mechanisms of action to address the multiple hepatic disease processes of NASH in order to drive meaningful clinical benefits for patients. For more information, please visit www.ternspharma.com.

Cautionary Note Regarding Forward-Looking Statements

This press release contains forward-looking statements about Terns Pharmaceuticals, Inc. (the "Company," "we," "us," or "our") within the meaning of the federal securities laws, including those related to the Company's expectations of timing and potential results of the Company's clinical trials and other development activities and the potential utility and progress of the Company's product candidates in NASH. All statements other than statements of historical facts contained in this press release, including statements regarding the Company's strategy, future financial condition, future operations, projected costs, prospects, plans, objectives of management and expected market growth, are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "aim," "anticipate," "assume," "believe," "contemplate," "continue," "could," "design," "due," "estimate," "expect," "goal," "intend," "may," "objective," "plan," "positioned," "potential," "predict," "seek," "should," "target," "will," "would" and other similar expressions that are predictions of or indicate future events and future trends, or the negative of these terms or other comparable terminology. The Company has based these forward-looking statements largely on its current expectations, estimates, forecasts and projections about future

events and financial trends that it believes may affect its financial condition, results of operations, business strategy and financial needs. In light of the significant uncertainties in these forward-looking statements, you should not rely upon forward-looking statements as predictions of future events. These statements are subject to risks and uncertainties that could cause the actual results and the implementation of the Company's plans to vary materially, including the risks associated with the initiation, cost, timing, progress and results of the Company's current and future research and development activities and preclinical studies and clinical trials. In particular, the impact of the COVID-19 pandemic on the Company's ability to progress with its research, development, manufacturing and regulatory efforts, including the Company's clinical trials for its product candidates, will depend on future developments that are highly uncertain and cannot be predicted with confidence at this time, such as the ultimate duration of the pandemic, travel restrictions, quarantines, social distancing and business closure requirements in the United States and in other countries, and the effectiveness of actions taken globally to contain and treat the disease. These risks are not exhaustive. For a detailed discussion of the risk factors that could affect the Company's actual results, please refer to the risk factors identified in the Company's SEC reports, including but not limited to its prospectus dated February 4, 2021. Except as required by law, the Company undertakes no obligation to update publicly any forward-looking statements for any reason.

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