Forma Therapeutics Presents Clinical Proof-of-Concept Data at the 62nd Annual ASH Meeting Supporting the Potential of its Novel Investigational PKR Activator, FT-4202, to Treat Sickle Cell Disease (SCD)

December 7, 2020

6 of 7 (86%) patients on 300 mg of FT-4202 for 14 days achieved a hemoglobin increase > 1 g/dL from baseline

Hemolytic markers support the hypothesis that FT-4202 improves red blood cell survival and reduces turnover

A favorable tolerability profile was observed after once-daily dosing of FT-4202 for 14 days and a 7-day follow up period in patients with SCD

Initiated 600 mg MAD2 cohort and 12-week open label extension study

WATERTOWN, Mass.--(BUSINESS WIRE)--Dec. 7, 2020-- Forma Therapeutics Holdings, Inc. (Nasdaq: FMTX), a clinical-stage biopharmaceutical company focused on rare hematologic diseases and cancers, today announced that clinical proof-of-concept in patients with sickle cell disease (SCD) has been observed in the ongoing randomized, placebo-controlled, multi-center Phase 1 trial of FT-4202. FT-4202 is a novel, investigational, selective red blood cell (RBC) pyruvate kinase-R (PKR) activator in development as a potential disease-modifying therapy for SCD. In a cohort of nine patients, six of seven patients (86%) who received FT-4202 achieved a hemoglobin increase of greater than 1 g/dL from baseline with once-daily dosing at 300 mg for 14 days. The data, being presented today at the 62nd American Society of Hematology (ASH) Annual Meeting, also demonstrate improvements in hemolytic parameters showing that activation of PKR by FT-4202 decreases reticulocyte counts and sickle RBC hemolysis in patients with SCD.

“These results are remarkable for a Phase 1 study, and they’re encouraging for sickle cell patients,” said Marilyn J. Telen, M.D., director of the Duke Comprehensive Sickle Cell Center, Professor of Medicine, Duke University School of Medicine, and one of the study investigators. “The absence of serious treatment-related adverse events, together with increased hemoglobin and reduced markers of hemolysis among the group receiving FT-4202, indicate a potential impact on overall red blood cell health and support further studies.”

“We are pleased to present our clinical proof-of-concept data and continue to see potential for FT-4202 to improve the lives of people living with sickle cell disease,” said Patrick Kelly, M.D., chief medical officer of Forma. “As we prepare to initiate Forma’s pivotal Phase 2/3 trial, we plan to evaluate whether the combined ability of FT-4202 to increase hemoglobin levels in red blood cells and bring about improved red blood cell health will meaningfully reduce the frequent painful vaso-occlusive crises these patients endure.”

Presentation Overview

FT-4202, an Allosteric Activator of Pyruvate Kinase-R, Demonstrates Proof of Mechanism and Proof of Concept after a Single Dose and after Multiple Daily Doses in a Phase 1 Study of Patients with Sickle Cell Disease

The data will be presented in an oral presentation by R. Clark Brown, M.D., Ph.D., Pediatric Hematologist/Oncologist, Medical Director of Sickle Cell at Scottish Rite, Aflac Cancer and Blood Disorders Center of Children’s Healthcare of Atlanta, and Associate Professor of Pediatrics, Emory University School of Medicine.

The results announced today are based on nine patients with SCD (FT-4202 n=7; placebo n=2) randomly assigned to receive a single oral dose of 300 mg daily of FT-4202 or placebo for 14 days. The data show that, from baseline, in patients receiving FT-4202:

- 6 of 7 achieved a > 1 g/dL increase in hemoglobin (Hb); median 1.2 g/dL increase (range 0, 2.3 g/dL);
- 2,3-DPG levels were reduced, thus increasing oxygen affinity and decreasing sickle hemoglobin polymerization;
- Adenosine triphosphate (ATP) levels were increased resulting in improved RBC function and reduced hemolysis;
- 7 of 7 achieved a reduction in reticulocytes; median 60% decrease (range -39%, -81%);
- 6 of 7 achieved a reduction in lactate dehydrogenase (LDH); median 36% decrease (range +18%, -57%); and
- 7 of 7 achieved a reduction in bilirubin; median 35% decrease (range -7%, -63%).

The tolerability data presented today are based on nine patients enrolled at the time of submission of the presentation to ASH. Since then, findings from these nine patients have been unblinded. Among the seven patients receiving FT-4202, the tolerability analysis indicates:

- Eighteen adverse events (AEs) were reported;
- Two Grade 1 AEs considered possibly related to study treatment were reported by one patient each and included headache and nausea;
- No treatment-related serious AEs were reported.

Non-treatment-related AEs were consistent with sickle cell disease-related events commonly experienced in this patient population.

The ongoing Phase 1 study is evaluating the safety, tolerability, pharmacokinetics (PK) and pharmacodynamics (PD) of a single ascending dose and multiple ascending doses of FT-4202, first in healthy volunteers and now in patients with sickle cell disease. Based on the safety results and tolerability

profile observed in the initial multiple dose cohort of patients, a second multiple dose cohort is being enrolled in which patients are randomly assigned to receive a single daily 600 mg oral dose of FT-4202 or placebo for 14 days. Patients who complete this second 14-day dose cohort can then enroll into a 12-week, open label cohort receiving a single daily 400 mg oral dose of FT-4202. For more information, please visit clinicaltrials.gov/NCT03815695.

The data presented today, along with the results from the single 700 mg dose arm of the study presented in June 2020 at the European Hematology Association (EHA) Annual Congress, support initiation of a randomized, placebo-controlled, double-blind, global multicenter Phase 2/3 registrational study to evaluate the safety and efficacy of FT-4202 in adults and adolescents with SCD in the first quarter of 2021.

Investor Event

Forma Therapeutics will conduct a webcast today, Dec. 7, at 6 p.m. Eastern Standard Time (EST) to further discuss the results from the ongoing study and to provide additional details of the company's development plans for FT-4202. A live webcast will be available in the "News & Investors" section of Forma's website: https://ir.formatherapeutics.com/.

About Sickle Cell Disease

Sickle cell disease (SCD) is one of the most common single-gene disorders and is estimated to affect approximately 100,000 people in the United States, as well as approximately 30,000 in France, Germany, Italy, Spain and the United Kingdom. The National Institutes of Health (NIH) reports that prevalence is estimated at more than 20 million individuals globally. From 2010 to 2050, the annual number of newborns with SCD is expected to rise globally by approximately one-third.[1] Despite recent advances in treatment, most patients with SCD still suffer from pain crises, lifelong disability, significant morbidity and reduced quality of life.

About FT-4202

FT-4202 is a novel investigational selective red blood cell (RBC) pyruvate kinase-R (PKR) activator designed to be a disease-modifying therapy for the treatment of sickle cell disease (SCD). Employing a multimodal approach, FT-4202 is designed to work upstream by activating the RBCs' natural PKR activity to decrease 2,3-DPG levels, which leads hemoglobin to hold on to oxygen molecules longer to reduce RBC sickling. The downstream activity of FT-4202 is designed to increase ATP levels, the fuel that provides energy to cells, to improve RBC health and survival. Together, these effects are anticipated to increase hemoglobin levels and decrease painful vaso-occlusive crises. In preclinical safety studies, FT-4202 did not inhibit aromatase activity or affect steroidogenesis, important biological processes responsible for sexual development. FT-4202 has been granted Fast Track, Rare Pediatric Disease and Orphan Drug designations from the U.S. Food and Drug Administration (FDA), and Orphan Drug Designation from the European Commission based on a positive opinion from the Committee for Orphan Medicinal Products of the European Medicines Agency for the treatment of patients with SCD.

About Forma Therapeutics

Forma Therapeutics is a clinical-stage biopharmaceutical company focused on the research, development and commercialization of novel therapeutics to transform the lives of patients with rare hematologic diseases and cancers. Our R&D engine combines deep biology insight, chemistry expertise and clinical development capabilities to create drug candidates with differentiated mechanisms of action focused on indications with high unmet need. Our work has generated a broad proprietary portfolio of programs with the potential to provide profound patient benefit. For more information, please visit www.FormaTherapeutics.com or follow us on Twitter @FORMAInc and LinkedIn.

Forward-looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including, without limitation, express or implied statements regarding our beliefs and expectations regarding: our ability to complete our ongoing Phase 1 clinical trial for FT-4202, including its timing and success, our expectations of the therapeutic benefits related to FT-4202, , whether positive interim results from a clinical study are predictive of the results of ongoing or future clinical studies, our expectations around our future regulatory filings and our growth as a company. The words "may," "will," "could," "would," "should," "expect," "plan," "anticipate," "intend," "believe," "estimate," "predict," "project," "potential," "continue," "target" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

Any forward-looking statements in this press release are based on management's current expectations and beliefs and are subject to a number of risks, uncertainties and important factors that may cause actual events or results to differ materially from those expressed or implied by any forward-looking statements contained in this press release, including, without limitation, those risks and uncertainties related to the advancement of our clinical programs and other risks identified in our SEC filings, including those risks discussed under the heading "Risk Factors" in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2020, as well as other risks detailed in our subsequent filings with the SEC. We caution you not to place undue reliance on any forward-looking statements, which speak only as of the date they are made. We disclaim any obligation to publicly update or revise any such statements to reflect any change in expectations or in events, conditions or circumstances on which any such statements may be based, or that may affect the likelihood that actual results will differ from those set forth in the forward-looking statements. Any forward-looking statements contained in this press release represent our views only as of the date hereof and should not be relied upon as representing its views as of any subsequent date. We explicitly disclaim any obligation to update any forward-looking statements.

---

[1] Piel, F. B., Hay, S. I., Gupta, S., Weatherall, D. J., & Williams, T. N. (2013). Global burden of sickle cell anaemia in children under five, 2010-2015: Modelling based on demographics, excess mortality, and interventions. PLOS Medicine, 10(7). Retrieved from link.

View source version on businesswire.com: https://www.businesswire.com/news/home/20201207005857/en/

Media Contact:
Megan McGrath, +1 781-591-3488
MacDougall

mmcgrath@macbiocom.com

Investor Contacts:
Mario Corso, +1 781-366-5726
Forma Therapeutics
mcorso@formatherapeutics.com

Stephanie Ascher, +1 212-362-1200
Stern Investor Relations
stephanie.ascher@sternir.com

Source: Forma Therapeutics Holdings, Inc.