Synlogic Announces SYNB8802 Will Advance to Phase 1B Proof of Concept Study After Proof of Mechanism Demonstrated in Dietary Hyperoxaluria

March 24, 2021

- 28.6% Urinary Oxalate lowering demonstrated in Dietary Hyperoxaluria in healthy volunteers -

- Part B in Enteric Hyperoxaluria patients initiated -

CAMBRIDGE, Mass., March 24, 2021 /PRNewswire/ -- Synlogic, Inc. (Nasdaq: SYBX), a clinical stage company bringing the transformative potential of synthetic biology to medicine, today announced that SYNB8802 has achieved proof of mechanism in a Dietary Hyperoxaluria study in which healthy volunteers on a high oxalate and low calcium diet were treated with multiple ascending doses of SYNB8802.

In the study's efficacy analysis, the percent change from baseline urinary oxalate levels were -28.6% (90% CI: -42.4 to -11.6), compared to placebo, at the 3e11 live cell dose. This dose was well tolerated and will be used in Part B of the study.

Synlogic has initiated Part B of the study and will assess the urinary oxalate lowering potential of SYNB8802 in patients with Enteric Hyperoxaluria following Roux-en-Y gastric bypass surgery. Data is expected in the second half of 2021.

"Enteric Hyperoxaluria is a debilitating condition with no approved treatment options," said Richard Riese, M.D., Synlogic's Chief Medical Officer. "Lowering dangerously high levels of urinary oxalate is the only way to reduce the risk of disease progression and irreversible kidney damage. We are pleased that SYNB8802 has demonstrated meaningful lowering of urinary oxalate levels in healthy volunteers with induced Dietary Hyperoxaluria. We are advancing the program rapidly into patients and will provide additional data this year."

"At Synlogic, we are building a portfolio of Synthetic Biotic medicines that consume toxic metabolites to provide new treatment approaches for patients struggling to manage their disease," said Aoife Brennan, M.B. Ch.B., Synlogic's President and Chief Executive Officer. "Only 15 months after we nominated SYNB8802 as a program, we are moving into a proof-of-concept patient study, demonstrating the speed and power of the Synthetic Biotic platform. We look forward to advancing additional metabolic product candidates to provide new treatment options for patients."

SYNB8802 Phase 1A Study: Design and Results
The primary outcome of Part A of the Phase 1 study was safety and tolerability, with results used to select a dose for further study in patients with Enteric Hyperoxaluria in Part B of the trial. Synlogic has completed dosing of five cohorts in part A, 45 total subjects. Findings include:

- SYNB8802 was generally well tolerated in healthy volunteers. There were no serious or systemic adverse events. The most frequent adverse events were mild or moderate, transient, and GI-related. Dietary Hyperoxaluria was successfully induced in Healthy Volunteers.
    - Subjects placed on 600 mg of daily dietary oxalate had urinary oxalate levels of 44.8 mg/24h at baseline.
- Dose responsive changes in urinary oxalate levels were observed with a significant reduction in urinary oxalate relative to placebo across three dose levels.
- A dose of 3e11 live cells administered three times daily with meals was selected as the dose for part B of the study.
- This dose was well-tolerated and resulted in a change from baseline urinary oxalate reduction of 28.6% (90% CI: -42.4 to -11.6), compared to placebo.
- At the end of dosing, the mean 24-hour urinary oxalate level was 40.1 mg for subjects treated with SYNB8802 3e11 live cells, compared to 58.1 mg for placebo subjects.
    - Upper limit of normal urinary oxalate levels are 45 mg per 24 hours.

Full results of the study will be presented at a future medical meeting.

About SYNB8802
SYNB8802 is an investigational oral drug for the treatment of Enteric Hyperoxaluria composed of an engineered Synthetic Biotic designed to lower urinary oxalate levels by consuming oxalate in the GI tract, potentially reducing kidney damage due to Enteric Hyperoxaluria. Synlogic is conducting a Phase 1 clinical study to evaluate the safety, tolerability, and potential for urinary oxalate lowering of SYNB8802 in healthy volunteers and patients. The study has two parts: Part A is a multiple ascending dose study in healthy volunteers; Part B is a placebo controlled, cross-over design study in patients with Enteric Hyperoxaluria following Roux-en-Y gastric bypass surgery which provides an opportunity to demonstrate proof of concept.

About Enteric Hyperoxaluria
Enteric Hyperoxaluria is an acquired metabolic disorder caused by increased absorption of dietary oxalate, which is present in many healthy foods, making it almost impossible to control with diet alone. Enteric Hyperoxaluria often occurs as a result of a primary insult to the bowel, such as inflammatory bowel disease, short bowel syndrome, or as a result of surgical procedures such as Roux-en-Y bariatric weight-loss surgery. Enteric Hyperoxaluria results in dangerously high levels of urinary oxalate, which causes progressive kidney damage, kidney stone formation, and nephrocalcinosis. There are no approved treatment options.

About Synlogic
Synlogic™ is bringing the transformative potential of synthetic biology to medicine. With a premiere synthetic biology platform that leverages a

reproducible, modular approach to microbial engineering, Synlogic designs Synthetic Biotic medicines that target validated underlying biology to treat disease in new ways. Synlogic's proprietary pipeline includes Synthetic Biotics for the treatment of metabolic disorders including Phenylketonuria (PKU) and Enteric Hyperoxaluria. The company is also building a portfolio of partner-able assets in immunology and oncology.

Forward-Looking Statements
This press release contains "forward-looking statements" that involve substantial risks and uncertainties for purposes of the safe harbor provided by the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical facts, included in this press release regarding strategy, future operations, clinical development plans, future financial position, future revenue, projected expenses, prospects, plans and objectives of management are forward-looking statements. In addition, when or if used in this press release, the words "may," "could," "should," "anticipate," "believe," "estimate," "expect," "intend," "plan," "predict" and similar expressions and their variants, as they relate to Synlogic may identify forward-looking statements. Examples of forward-looking statements, include, but are not limited to, statements regarding the potential of Synlogic's platform to develop therapeutics to address a wide range of diseases including: cancer, inborn errors of metabolism, and inflammatory and immune disorders; our expectations about sufficiency of our existing cash balance; the future clinical development of Synthetic Biotic medicines; the approach Synlogic is taking to discover and develop novel therapeutics using synthetic biology; and the expected timing of Synlogic's clinical trials of SYNB8802 and availability of clinical trial data including Phase 1 Part B data of SYNB8802 for the treatment of enteric hyperoxaluria. Actual results could differ materially from those contained in any forward-looking statement as a result of various factors, including: the uncertainties inherent in the clinical and preclinical development process; the ability of Synlogic to protect its intellectual property rights; and legislative, regulatory, political and economic developments, as well as those risks identified under the heading "Risk Factors" in Synlogic's filings with the SEC. The forward-looking statements contained in this press release reflect Synlogic's current views with respect to future events. Synlogic anticipates that subsequent events and developments will cause its views to change. However, while Synlogic may elect to update these forward-looking statements in the future, Synlogic specifically disclaims any obligation to do so. These forward-looking statements should not be relied upon as representing Synlogic's view as of any date subsequent to the date hereof.

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