

Synlogic Presents Data from SYNB1891 Phase 1 Trial at American Association for Cancer Research (AACR) Annual Meeting

April 10, 2021

- Data demonstrates activation of STING pathway in patients -
- Combination arm of Phase 1 study of SYNB1891 ongoing -

CAMBRIDGE, Mass., April 10, 2021 /PRNewswire/ -- Synlogic, Inc. (Nasdaq: SYBX), a clinical stage company bringing the transformative potential of synthetic biology to medicine, today presented data on SYNB1891 for the treatment of solid tumors and lymphoma during the American Association for Cancer Research (AACR) annual meeting, April 10-15, 2021.

The presentation, "Intratumoral injection of SYNB1891, a Synthetic Biotic designed to activate the innate immune system, demonstrates target engagement in humans including intratumoral STING activation," was delivered by Dr. Filip Janku, Associate Professor, Department of Investigational Cancer Therapeutics, Division of Cancer Medicine at The University of Texas MD Anderson Cancer Center. The presentation recording will be available throughout the duration of the conference.

SYNB1891 is an investigational drug being evaluated in an ongoing Phase 1 clinical trial for the treatment of solid tumors and lymphoma. SYNB1891 is composed of an engineered Synthetic Biotic strain of E. coli Nissle that produces cyclic di-AMP (CDA), a stimulator of the STING (STimulator of INterferon Genes) pathway. This mechanism can play a critical role in the initiation of an anti-tumor immune response via activation of APCs and presentation of tumor antigens. Findings from the monotherapy cohorts include:

- SYNB1891 is safe and well-tolerated as an intratumoral injection in a heterogenous population.
 - No dose limiting toxicities or SYNB1891-related infections
- Dose levels through 1e7 live cells demonstrate target engagement as assessed by dose-dependent increases in serum cytokines, upregulation of ISGs and presence of tumor infiltrating lymphocytes.
- Evidence of durable stable disease was seen in 2 patients and was associated with upregulation genes tied to immune activation and increased intratumoral lymphocytes.

These data support continued dose escalation in the monotherapy and combination arms. The combination arm of the study combines escalating dose levels of SYNB1891 with a fixed dose of a PD-L1 checkpoint inhibitor antibody to establish a recommended Phase 2 dose for the combination regimen.

Data from both arms will continue to be reported over the course of 2021, with mature combination therapy data expected by the end of the year.

Learn more about Synlogic's programs and pipeline by visiting https://www.synlogictx.com/.

About SYNB1891

SYNB1891 is an investigational drug for the intra-tumoral treatment of solid tumors and lymphoma, composed of an engineered Synthetic Biotic strain of E. coli Nissle that produces cyclic di-AMP (CDA), a stimulator of the STING (STimulator of INterferon Genes) pathway. This mechanism can play a critical role in the initiation of an anti-tumor immune response via activation of APCs and presentation of tumor antigens. The bacterial chassis of SYNB1891 also stimulates the innate immune system by several other mechanisms, including via Toll-like receptors (TLRs), potentially adding to the magnitude of the overall immune response. While SYNB1891 has been engineered with safety features that are designed to prevent its replication unless supplemented with specific nutrients, the bacteria remain active for several days within the injected tumor to stimulate a local immune response. SYNB1891 is being evaluated in a Phase 1 clinical trial (NCT04167137).

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 SYNB1891 and availability of clinical trial data. 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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