LogicBio Therapeutics Announces Upcoming Presentations on GeneRide Development Candidate and Multiple Advancements in AAV Manufacturing Processes at ASGCT Annual Meeting

May 11, 2022

-GeneRide® LB-401 preclinical data in HT1 demonstrated substantial and durable reduction of disease-related biomarkers

-Proprietary AAV transfection process, harnessing mAAVRx ™ system showed 15- to 30-fold yield increase over standard processes

-Improved downstream process resulted in increased purity and potency, and substantially reduced manufacturing timeline, of LK03 capsid vector

LEXINGTON, Mass., May 11, 2022 /PRNewswire/ -- LogicBio® Therapeutics, Inc. (Nasdaq: LOGC), a clinical-stage genetic medicine company, today announced that it will present four abstracts highlighting the company's GeneRide technology in preclinical hereditary tyrosinemia type 1 (HT1) models and optimized adeno-associated virus (AAV) manufacturing processes during the American Society of Gene & Cell Therapy (ASGCT) 2022 Annual Meeting, held May 16-19, 2022, in Washington D.C. and virtually.

LogicBio will present preclinical data from LB-401, its development candidate for the treatment of HT1. Building upon previously presented data that demonstrated GeneRide-edited hepatocytes in an HT1 mouse model fully repopulated the liver within four weeks post-dose and corrected disease phenotypes, these new data highlight the potential durability of LB-401 for at least 10 months. Additionally, compared to the standard of care, these data demonstrated that HT1 mice treated with LB-401 showed succinylacetone reduction, better tyrosine management, and a rapid decrease of alfa-fetoprotein, suggesting a lower risk of hepatocellular carcinoma.

LogicBio will also present new data showcasing the company's AAV technology process advancements:

- An oral presentation will highlight that LogicBio's optimized transient transfection of suspension HEK293 cells showed a 15- to 30-fold increase of vector yields compared to standard upstream processes. The company believes that its optimized transfection process, which harnesses LogicBio's mAAVRx system, has the potential to significantly reduce per patient manufacturing costs.

- Another oral presentation will show that LogicBio's downstream process improvements reduced the manufacturing timeline of an LK03 capsid vector from two weeks to four days and resulted in increased purity and potency of the vector. LogicBio's downstream process improvements were made to accommodate the increased yield resulting from the company's optimized transfection process.

- A poster presentation will detail the analytical methods used to support a potency assay matrix for the *in vitro* evaluation of late-stage LB-001, the company's product candidate for the treatment of methylmalonic acidemia.

Details on the four abstracts LogicBio will present at ASGCT are below:

Oral Presentation Title: Modification and Optimization of an AAV Purification Process to Accommodate Increased Upstream Yield and Reduce Manufacturing Bottlenecks
Abstract Number: 116
Session: Vector Manufacturing and Engineering 2: Next Generation Methods
Location: Room 201
Date & Time: May 16, 2022, 4:30 – 4:45 PM ET
Presenter: Nick DiGioia

Oral Presentation Title: Combination of Advanced Plasmid Design, Transfection Reagent and Design of Experiment (DOE) Achieves High-yield, High-quality and Potent AAV Vectors in Scalable Suspension HEK293 Cells
Abstract Number: 867
Session: Vector Manufacturing and Engineering 3: Improving Vector Design and System Performance
Location: Room 201
Date & Time: May 18, 2022, 5:15 – 5:30 PM ET
Presenter: Jing Liao, PhD

Poster Presentation Title: An endonuclease-free genome editing technology provided long-term efficacy and benefits in a mouse model of Tyrosinemia Type 1
Abstract Number: 537
Poster Number: Tu-42
Session: AAV Vectors- Preclinical and Proof-of-concept Studies II
Location: Hall D
Date & Time: May 17, 2022, 5:30 – 6:30 PM ET

Presenter: Chih-Wei Ko

Poster Presentation Title: Assembling a Comprehensive Potency Assay Matrix for Late-Stage Manufacturing of AAV Viral Vectors
Poster Number: W-291
Abstract Number: 1165
Session: Vector Product Engineering, Development or Manufacturing III
Location: Hall D
Date & Time: May 18, 2022, 5:30 – 6:30 PM ET
Presenter: William Lee

Additional information on the meeting can be found on the ASGCT website.

Following the presentations, the posters will be made available on the Presentations section of the Company website at https://investor.logicbio.com/events-and-presentations/presentations.

About LogicBio Therapeutics

LogicBio® Therapeutics is a clinical-stage genetic medicine company pioneering genome editing and gene delivery platforms to address rare and serious diseases from infancy through adulthood. The company's genome editing platform, GeneRide®, is a new approach to precise gene insertion harnessing a cell's natural DNA repair process potentially leading to durable therapeutic protein expression levels. The company's gene delivery platform, sAAVy™, is an adeno-associated virus (AAV) capsid engineering platform designed to optimize gene delivery for treatments in a broad range of indications and tissues. The company's proprietary optimized transfection system, mAAVRx™, aims to overcome the current limitations of AVV manufacturing by achieving the highest yields.The company is based in Lexington, MA. For more information, visit www.logicbio.com, which does not form a part of this release.

Forward-Looking Statements

This press release includes forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995, as amended, including statements with respect to the potential of LogicBio's product candidates and manufacturing processes. These statements are not historical facts, but instead represent only LogicBio's beliefs regarding future events, many of which, by their nature, are inherently uncertain and outside of LogicBio's control. For a discussion of risks related to the forward-looking statements in this press release, including the risks related to our development of our product candidates, our manufacturing processes and our financial position, see the "Risk Factors" section of LogicBio's Annual Report on Form 10-K for the fiscal year ended December 31, 2021, filed with the U.S. Securities and Exchange Commission (SEC) on March 4, 2022, and other filings that LogicBio may make with the SEC in the future. These forward-looking statements (except as otherwise noted) speak only as of the date of this press release, and LogicBio does not undertake, and specifically disclaims, any obligation to update any forward-looking statements contained in this press release.

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