NEWS RELEASE

Lantern Pharma to Present AI-Driven Cancer Drug Development & Research Platforms at Inaugural AI for Biology and Medicine Symposium at UNT

2025-10-30

- Lantern showcases two commercially ready, machine learning platforms that have the potential to accelerate drug discovery from months to days and dramatically reduce costs.
- predictBBB.ai and LBx-AI, will both be available as open-access services for Lantern's partners and collaborators and are both being advanced as part of a broader multi-agentic initiative at Lantern Pharma.

DALLAS--(BUSINESS WIRE)-- Lantern Pharma Inc. (NASDAQ: LTRN)— Lantern today announced it will present two commercially deployed AI research platforms at the inaugural AI for Biology and Medicine (AI4BM) symposium at the University of North Texas. The symposium, hosted by Dr. Serdar Bozdag and the newly established Center for Computational Life Sciences, brings together leading researchers advancing the intersection of artificial intelligence and biomedicine.

The Lantern Pharma team will deliver two presentations demonstrating how machine learning is transforming drug development and precision oncology through specific AI modules that are already delivering value to Lantern’s drug development efforts and other pharmaceutical companies and researchers:

- "Machine Learning Ensemble Models for In Silico Screening and Prediction of Blood-Brain Barrier Permeability: A Comprehensive Approach Using Molecular Fingerprints and Descriptors". This presentation will showcase predictBBB.ai, Lantern's commercially deployed platform that achieves 94.1% accuracy in

predicting blood-brain barrier permeability—placing it at the top of the Therapeutic Data Commons leaderboard. The platform predicts BBB permeability in days rather than the months or years required by traditional methods, with the ability to screen 200,000 drug candidates in under a week. The ensemble model has been blindly validated on over 1,300 unseen molecules, demonstrating both accuracy and scalability for pharmaceutical companies developing CNS-targeted therapeutics and is available now as a commercial-ready resource.

- "Machine Learning Models for Liquid Biopsy-Based Treatment Response Prediction and Biomarker Discovery in Cancer" Lantern will demonstrate LBx-AI, a production-ready platform that transforms liquid biopsy data into actionable insights with 86% accuracy in predicting treatment response for non-small cell lung cancer patients. Using a novel pathway-level engineering approach, the platform identifies complex biomarkers and pathway analytics that would be missed by traditional single-mutation analysis—with 20 out of 21 significant predictive markers being engineered pathway features. Beyond treatment prediction, LBx-AI can infer solid tumor characteristics from circulating tumor DNA, including accurate prediction of PD-L1 expression levels (0.76 Pearson correlation). Lantern is actively collaborating with world-class research institutions to further validate and improve the models' performance across a number of tumor types, including GBM, and breast cancer.

Lantern believes that the platforms stand apart through three key differentiators: proven commercial deployment, dramatically compressed drug development timelines, and the generation of novel insights previously inaccessible through conventional methods. While traditional BBB permeability testing and biomarker discovery require months to years of laboratory work, Lantern's AI models deliver comprehensive insights for drug development, candidate optimization, and target identification within days—maintaining enterprise-level scalability throughout. This transformation from lengthy experimental cycles to rapid computational analysis represents a fundamental shift in how pharmaceutical companies can approach drug discovery and development.

These advanced AI models power Lantern's comprehensive cancer drug development ecosystem, which was initially developed as RADR®. LBx-AI serves as a core component of RADR®, Lantern's AI-driven platform that accelerates precision oncology drug development, while predictBBB.ai operates as a standalone service helping pharmaceutical companies and research teams reduce development costs and improve success rates for CNS-targeted therapeutics.

"Our team is excited to share our efforts and platforms with leading researchers at this inaugural AI symposium," said Panna Sharma, President and CEO at Lantern Pharma. "We're honored to present alongside distinguished researchers and look forward to engaging with the scientific community. Our vision extends beyond these current capabilities—we're committed to making these powerful AI tools available as open-access platforms, democratizing advanced computational methods for researchers worldwide."

The symposium will feature keynote speaker Dr. Iman Hajirasouliha, Associate Professor of Systems and Computational Biomedicine at Weill Cornell Medicine, member of the Englander Institute for Precision Medicine and the Meyer Cancer Center, and Co-Director of the Tri-I Computational Biology and Medicine Ph.D. program.

For more information about the AI4BM symposium, visit: **https://ccls.unt.edu/events/ai4biology.html**

About Lantern Pharma

Lantern Pharma (NASDAQ: LTRN) is an AI-driven biotechnology company focused on accelerating and optimizing the discovery, development, and commercialization of cancer therapies. Its proprietary RADR® platform leverages artificial intelligence and machine learning to uncover novel therapeutic opportunities, accelerate drug development timelines, and improve patient outcomes.

For more information, visit:

- Website: **www.lanternpharma.com**
- LinkedIn: **https://www.linkedin.com/company/lanternpharma/**
- X: @lanternpharma

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements include, among other things, statements relating to: future events or our future financial performance; the potential advantages of our RADR® platform in identifying drug candidates and patient populations that are likely to respond to a drug candidate; our strategic plans to advance the development of our drug candidates and antibody drug conjugate (ADC) development program; estimates regarding the development timing for our drug candidates and ADC development program; expectations and estimates regarding clinical trial timing and patient enrollment; our research and development efforts of our internal drug discovery programs and the utilization of our RADR® platform to streamline the drug development process; our intention to leverage artificial intelligence, machine learning and genomic data to streamline and transform the pace, risk and cost of oncology drug discovery and development and to identify patient populations that would likely respond to a drug candidate; estimates regarding patient populations, potential markets and potential market sizes; sales estimates for our drug candidates and our plans to discover and develop drug candidates and to maximize their commercial potential by advancing such drug candidates ourselves or in collaboration with others.

Any statements that are not statements of historical fact (including, without limitation, statements that use words

such as “anticipate,” “believe,” “contemplate,” “could,” “estimate,” “expect,” “intend,” “seek,” “may,” “might,” “plan,” “potential,” “predict,” “project,” “target,” “model,” “objective,” “aim,” “upcoming,” “should,” “will,” “would,” or the negative of these words or other similar expressions) should be considered forward-looking statements. There are a number of important factors that could cause our actual results to differ materially from those indicated by the forward-looking statements, such as (i) the risk that we may not be able to secure sufficient future funding when needed and as required to advance and support our existing and planned clinical trials and operations, (ii) the risk that observations in preclinical studies and early or preliminary observations in clinical studies do not ensure that later observations, studies and development will be consistent or successful, (iii) the risk that our research and the research of our collaborators may not be successful, (iv) the risk that we may not be successful in licensing potential candidates or in completing potential partnerships and collaborations, (v) the risk that none of our product candidates has received FDA marketing approval, and we may not be able to successfully initiate, conduct, or conclude clinical testing for or obtain marketing approval for our product candidates, (vi) the risk that no drug product based on our proprietary RADR® AI platform has received FDA marketing approval or otherwise been incorporated into a commercial product, and (vii) those other factors set forth in the Risk Factors section in our Annual Report on Form 10-K for the year ended December 31, 2024, filed with the Securities and Exchange Commission on March 27, 2025.

You may access our Annual Report on Form 10-K for the year ended December 31, 2024 under the investor SEC filings tab of our website at **http://www.lanternpharma.com/** or on the SEC’s website at **http://www.sec.gov/**. Given these risks and uncertainties, we can give no assurances that our forward-looking statements will prove to be accurate, or that any other results or events projected or contemplated by our forward-looking statements will in fact occur, and we caution investors not to place undue reliance on these statements. All forward-looking statements in this press release represent our judgment as of the date hereof, and, except as otherwise required by law, we disclaim any obligation to update any forward-looking statements to conform the statement to actual results or changes in our expectations.

Investor Contact
Investor Relations
ir@lanternpharma.com
+1-972-277-1136

Source: Lantern Pharma Inc.