NEWS RELEASE

Lantern Pharma to Present Positive Preclinical Data on the Efficacy of LP-184 for Pancreatic Cancer at the AACR Special Conference for Pancreatic Cancer

2022-09-14

DALLAS--(BUSINESS WIRE)-- Lantern Pharma Inc. (NASDAQ: LTRN), a clinical stage biopharmaceutical company using its proprietary RADR® artificial intelligence ("A.I.") and machine learning ("M.L.") platform to transform the cost, pace, and timeline of oncology drug discovery and development, today announced that it will present positive preclinical data on the in vivo efficacy of its drug candidate LP-184 for pancreatic cancer at the **American Association for Cancer Research (AACR) Special Conference for Pancreatic Cancer**, Sept 13-16th, 2022, in Boston, MA.

LP-184 is a small molecule drug candidate and next generation acylfulvene that preferentially damages DNA in cancer cells that harbor mutations in DNA damage repair (DDR) genes and that overexpress the enzyme PTGR1. Pancreatic cancer cells are expected to be sensitive to LP-184 treatment as around 25% of these cancers harbor both elevated levels of PTGR1 and mutations in DDR genes.

The AACR poster, which is being presented in collaboration with Igor Astsaturov, M.D., Ph.D. at **The Marvin and Concetta Greenberg Pancreatic Cancer Institute at Fox Chase Cancer Center**, shows that LP-184 treatment has potent anti-tumor effects in mouse models of pancreatic cancer that harbor mutations in the DDR genes ATR or BRCA1. After two rounds of LP-184 treatment, the ATR and BRCA1 pancreatic cancer mouse models had tumor growth inhibitions of 140% and 112%, respectively. In these mice, LP-184 treatment was generally well-tolerated

and minimal differences were observed in body weight and blood counts relative to treatment control groups.

The AACR presentation will show additional data demonstrating that LP-184 can act synergistically in vitro and in vivo with several standard of care or FDA approved agents, including spironolactone and radiation therapy. These results continue to demonstrate LP-184's potential as a therapeutic agent for pancreatic cancer as a monotherapy or in combination with other approved therapies.

LP-184 has been granted Orphan Drug Designation by the U.S. Food and Drug Administration for the treatment of pancreatic cancer, malignant gliomas, and ATRT, and was also granted a Rare Pediatric Disease Designation for ATRT. These designations and continued positive preclinical data will help to accelerate LP-184 towards a targeted IND submission in Q1 2023 and Phase 1 clinical trials anticipated to commence in Q2 2023.

Details of the poster presentation are listed below and can be found on the **AACR conference website**. A full version of the poster will be available on Lantern's website on September 19th, 2022.

Title: LP-184, a tumor site activated small molecule synthetic lethal therapeutic, is synthetically lethal in pancreatic cancers with DNA damage repair defects
Date and Time: September 14, 2022, 4:00pm ET
Poster Number: B033
Presenter: Aditya Kulkarni, Ph.D., Lantern Pharma

About Lantern Pharma

Lantern Pharma (NASDAQ: LTRN) is a clinical-stage oncology-focused biopharmaceutical company leveraging its proprietary RADR® A.I. and machine learning platform to discover biomarker signatures that identify patients most likely to respond to its pipeline of genomically-targeted therapeutics. Lantern is currently developing four drug candidates and an ADC program across nine disclosed tumor targets, including two phase 2 programs. By targeting drugs to patients whose genomic profile identifies them as having the highest probability of benefiting from the drug, Lantern's approach represents the potential to deliver best-in-class outcomes.

Please find more information at:
Website: **www.lanternpharma.com**
LinkedIn: **https://www.linkedin.com/company/lanternpharma/**
Twitter: **@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," "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 impact of the COVID-19 pandemic, (ii) the risk that our research and the research of our collaborators may not be successful, (iii) 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, (iv) the risk that no drug product based on our proprietary RADR® A.I. platform has received FDA marketing approval or otherwise been incorporated into a commercial product, and (v) those other factors set forth in the Risk Factors section in our Annual Report on Form 10-K for the year ended December 31, 2021, filed with the Securities and Exchange Commission on March 10, 2022. You may access our Annual Report on Form 10-K for the year ended December 31, 2021 under the investor SEC filings tab of our website at **www.lanternpharma.com** or on the SEC's website at **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.

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