NEWS RELEASE

Lantern Pharma to Present Positive Preclinical Data on the Efficacy of LP-284 for Mantle Cell Lymphoma at the Society of Hematologic Oncology Annual Meeting

2022-09-23

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 preclinical data on the potency of Lantern’s drug candidate LP-284 for mantle cell lymphoma (MCL) and several other non-Hodgkin’s lymphomas at the Society of Hematologic Oncology (SOHO) Tenth Annual Meeting, Sept. 28 – Oct. 1, 2022, in Houston, TX.

LP-284 is a next generation acylfulvene that has a synthetically lethal mechanism of action in cancers with impaired DNA damage repair (DDR) pathway genes. In Lantern’s preclinical testing, LP-284 has shown in vitro and in vivo anti-tumor potency across a range of non-Hodgkin’s B-cell lymphomas. Of the lymphomas tested to date, LP-284 had the greatest potency against numerous MCL cell lines, including those that are resistant to the standard-of-care (SOC) agents Ibrutinib and Bortezomib. In the US, MCL is estimated to be diagnosed in around 4,500 patients each year and represents an approximate $200 million in annual therapy sales.

Lantern’s LP-284 program has been accelerated and de-risked using A.I. insights and biological modeling powered by RADR®. Lantern has been able to advance LP-284 from initial RADR® insights regarding anti-cancer activity and

potential mechanisms of action in hematological cancers, to selection of specific subtypes of lymphomas with superior response, to late stage IND enabling studies and initial design of first in human clinical trials in less than 2 years. Lantern is planning on an IND submission for LP-284 in Q1 2023 and anticipates launching a Phase 1 clinical trial in Q2 2023.

Details of the poster presentation are listed below and can be found on the **SOHO website**. A full version of the poster will be available on Lantern's website on October 3, 2022.

Title: LP-284 - A Highly Potent Small Molecule Targeting Mantle Cell Lymphoma
Date and Time: September 28, 2022, 5:05pm CT
Poster Number: MCL-319
Presenter: Jianli Zhou, 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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