NEWS RELEASE

Lantern Pharma Announces Issuance of New Patent that Strengthens Patent Portfolio for Cancer Drug Candidate LP-300

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- U.S. Patent No. 11,471,431 relates to the use of LP-300 to increase the survival time of patients with cancers overexpressing thioredoxin or glutaredoxin.
- The patent issuance extends commercial protection for uses of LP-300 until late 2032, increasing the potential for future partnering opportunities and the development of additional programs in specific cancer indications.
- Lantern has multiple additional pending patent applications relating to LP-300 and is continuing to file patent applications in this area.

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 the United States Patent and Trademark Office (USPTO) has issued U.S. Patent No. 11,471,431, for Lantern's drug candidate LP-300, which is in a Phase 2 clinical trial, **Harmonic™**, for never-smokers with relapsed non-small cell lung cancer (NSCLC).

The patent is directed to increasing the survival time of cancer patients receiving LP-300 for cancers that are marked by overexpression of the regulatory proteins thioredoxin (TRX) or glutaredoxin (GRX) and/or exhibition of TRX- or GRX-mediated resistance to one or more chemotherapeutic interventions. TRX and GRX are commonly

overexpressed in adenocarcinomas, a cancer subtype of NSCLC, and can lead to increased tumor resistance to chemotherapy. LP-300 can inhibit activity of TRX and GRX, restoring the redox balance of cancer cells and improving their sensitivity to chemotherapy.

“Developing a strong and evolving patent estate around our drug candidates and technologies is an essential part of our business strategy. LP-300 has the potential to improve the lives of many cancer patient groups, including never-smokers with NSCLC,” said Panna Sharma, Lantern President and CEO. “The issuance of this patent demonstrates our ability to create unique cancer insights that we can then translate into clinical practice. This has the potential to add significant value for patients and investors alike,” continued Sharma.

U.S. Patent No. 11,471,431 is the latest U.S. patent added to LP-300’s patent portfolio. Lantern’s current patent estate for LP-300 includes 43 patents, covering 8 patent families. The strengthened patent estate relating to LP-300 will stimulate the opportunity for future partnering discussions with biopharma companies.

About LP-300:

LP-300 is a dithio-containing drug candidate that interferes with the activity of cancer promoting proteins by modifying cysteine residues and creating adducts. LP-300’s intended mechanism of action is to work together with chemotherapy to strongly interact with cancer-promoting proteins including TRX/GRX and tyrosine kinases. In a previous multi-center Phase 3 clinical trial, a subset of never smoker NSCLC patients who received LP-300 with chemotherapy showed increased overall and two-year survival of 91% and 125%, respectively, compared to patients who received chemotherapy alone. In addition, LP-300 has been administered in multiple clinical trials to more than 1,000 people and has been generally well tolerated.

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," "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 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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Nicole Leber
Investor Relations Associate
ir@lanternpharma.com

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