NEWS RELEASE

Lantern Pharma's Proprietary A.I. Platform for Precision Oncology Drug Development, RADR®, Surpasses 10 Billion Datapoints - Significantly Enhancing Precision Medicine Capabilities & Expanding Potential for Biopharma Collaborations and Partnerships

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- Represents a 10-fold increase in the number of datapoints from one year ago, November 2020, and a 37-fold increase since the June 2020 IPO

- Accelerates the discovery of new indications for Lantern's existing drug candidates, as well as the identification of new drug candidates and combination therapies

- Data growth was largest in bladder, pancreatic, brain and blood cancers

DALLAS, Nov. 1, 2021 /PRNewswire/ -- Lantern Pharma (NASDAQ: LTRN), a clinical stage biopharmaceutical company using its proprietary RADR® artificial intelligence ("A.I.") platform to transform the cost, pace, and timeline of oncology drug discovery and development, today announced that its proprietary A.I. platform RADR® has exceeded 10.4 billion datapoints. RADR® is Lantern's proprietary integrated A.I. platform for large-scale biomarker and drug-tumor interaction data analytics that leverages machine-learning. RADR® is used to provide mechanistic insights about drug-tumor interactions, predict the potential response of cancer types and subtypes to existing drugs and drug candidates, and uncover patient groups that may respond to potential therapies being developed by Lantern and its collaborators.

RADR® is also being used to: (1) help define and develop combination strategies involving drugs in development by Lantern and existing drugs that are approved for a range of oncology indications; (2) guide the prioritization of potential indications for development; and (3) identify potential new drug candidates to in-license and develop.

The increase to 10.4 billion datapoints was also accompanied by other significant improvements in the functionality, feature set and further automation of RADR®, which are intended to help scale the A.I. platform's drug development capabilities. The significant increase in the number of drug-tumor interaction data sets and cancers sub-types covered by RADR® includes new data from collaborations in glioblastoma multiforme (GBM) and pancreatic cancer and data from transcriptome, genome and methylome data-sets in blood, bladder and other rare cancers being considered for future development or have limited therapeutic options.

Panna Sharma, CEO and President of Lantern Pharma, stated, "Our team has been well ahead of schedule in the growth of our platform, and RADR® has now surpassed 10.4 billion data points covering more cancer sub-types, which further advances our goal of building the most complete and powerful A.I. platform for precision oncology drug development. Additionally, the new data will drive insights and potential drug-candidate innovations faster and into areas of cancer that have remained untouched or intractable."

Corresponding with this growth in datapoints, the Company has also focused resources and technology development on the growth and improvements to the library of algorithms designed specifically to help solve challenging data and correlation problems for cancer drug development. By using an ensemble-based approach in applying the library of algorithms to statistical, correlative and inferential problems related to drug-tumor interaction, RADR® can rapidly analyze large amounts of complex data and predict with high accuracy how both tumors and patients will respond to drugs and drug candidates. RADR's ability to rapidly sift through large amounts of curated and complex datasets is key in predicting the probability of a tumor or a patient group in responding to a cancer treatment. Additionally, the RADR® platform evolves as new datasets are added, which improves and sharpens the insights generated from the algorithms. Lantern plans on continuing further RADR® expansion by incorporating and curating additional datasets from proprietary studies and public data sources and further automating the evolution of its library of algorithms. Additionally, the Company will be augmenting the 10.4 billion datapoints with additional data from immuno-oncology related studies and clinical trials, including antigen, immune-response and protein data that it believes will enable a potentially more robust and more powerful multiomic analysis. "In the next phase of growth for RADR® our belief is that we can deepen our capabilities in novel ADC development and also predict combination therapy approaches using our drug candidates and existing approved immuno-oncology therapies," stated Mr. Sharma.

"Previously, the task of identifying new cancer therapies has been costly, risky, and inefficient. Specifically, studying how existing compounds and therapeutic combinations can affect different cancer subtypes often took years,

whereas our platform can reduce many key aspects of this process to months. As a result, we believe our platform changes the industry paradigm in a meaningful way. We have witnessed first-hand the growing industry interest in solutions that innovate the development of precision therapeutics and combination therapies, which we believe will pave the road to new partnerships. Accordingly, we believe our growing A.I. platform will be pivotal in uncovering potential new therapeutic opportunities and developing insights into the creation of combination-therapy programs, both internally and through third-party party collaborations to drive long-term shareholder value."

RADR's highly scalable machine-learning methods are designed to guide drug development and yield new biological insights, while also having the potential to increase response rates and improve outcomes in clinical trials. The robustness and growing number of datasets powering RADR® is anticipated to continue to improve machine-learning results, accelerate automation of other features and aid oncology drug development for Lantern and its partners with an ultimate focus on benefitting cancer patients.

About Lantern Pharma

Lantern Pharma (LTRN) is a clinical-stage oncology-focused biopharmaceutical company leveraging its proprietary RADR® A.I. platform and machine learning 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 eight 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. More information is available at: **www.lanternpharma.com** and 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; 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 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, 2020, filed with the Securities and Exchange Commission on March 10, 2021. You may access our Annual Report on Form 10-K for the year ended December 31, 2020 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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