



NEWS RELEASE

Lantern Pharma's Proprietary A.I. Platform for Precision Oncology Drug Development, RADR®, Surpasses 450 Million Data Points, Ahead of Schedule, and Accelerates the Company's Path to 1 Billion Data Points Curated Specifically for Oncology Drug Development and Drug Response Prediction

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- The machine learning-powered RADR® platform identifies genomically distinct cancer subtypes, and patient groups, that can respond to specific drugs that Lantern and its partners are developing
- The growing A.I. platform will be pivotal in uncovering combination therapies using Lantern's portfolio of compounds together with both already marketed and approved therapeutics and, late-stage compounds in development

DALLAS, June 29, 2020 (GLOBE NEWSWIRE) -- Lantern Pharma (**NASDAQ: LTRN**), a clinical stage biotechnology company focused on leveraging artificial intelligence ("A.I."), machine learning and genomic data to streamline the drug development process and to identify the patients that will benefit from its targeted oncology therapies, announced today that it surpassed the milestone of 450 million curated data points being utilized in its proprietary A.I. and machine learning-powered platform, **RADR® (Response Algorithm for Drug Positioning and Rescue)**.

RADR® leverages genomic, transcriptomic, clinical and drug sensitivity data points across more than 145 drug-



tumor interactions to predict the potential response cancer patients will have to potential drugs, therefore enabling a more personalized approach to therapy that is aimed at better outcomes. Lantern is establishing collaborations and partnerships to expand the functionality of RADR[®], including algorithms that can operate 200 to 300 percent faster than its existing algorithms, enabling the company to develop robust gene signatures that can be used to guide patient enrollment in trials and as a companion diagnostic (CDx). During the most recent data enrichment campaign, Lantern focused on significantly increasing the depth and amount of data for: non-small cell lung cancer, ovarian cancer, glioblastoma, and gliomas. Reaching this milestone of over 450 million curated data points for oncology drug development will bring greater precision and speed in helping Lantern with its objective of personalizing oncology therapy with reduced risk and cost.

“Our approach in leveraging machine learning to develop biologically relevant, multi-gene signatures in days or weeks allows our team to more efficiently review and test novel insights about the complex mechanisms that can drive patient response to a drug,” said Panna Sharma, CEO of Lantern Pharma.

As a pioneer in the application of machine learning to oncology-focused drug development and clinical trial design, Lantern has published gene signatures derived from RADR[®] as posters and presentations at both ASCO and AACR. **Lantern’s pipeline of compounds** includes one candidate in an active Phase 2 clinical trial for metastatic, hormone-refractory prostate cancer using a genomic signature for patient selection; another candidate in preparation for a Phase 2 clinical trial in non-small cell lung cancer in a targeted patient population; and a third candidate in two preclinical programs for biomarker-defined solid tumors and glioblastoma.

Mr. Sharma continued, “Because of the increasing availability of large-scale biomarker, genomic and patient data, and rapidly maturing technologies like artificial intelligence and machine learning, oncology is undergoing a monumental shift in the way cancer drugs are discovered, developed, studied, targeted, and commercialized. Lantern is at the forefront of this transformation. For Lantern, exceeding 450 million data points is a significant milestone in our work, and demonstrates our commitment to leveraging paradigm changing technologies that transform oncology drug development with the ultimate objective of cost-effectively personalizing treatment for patients.”

Lantern Pharma is ahead of the initial platform development schedule, reaching 400 million data points by the end of 2020, which puts Lantern on track to reach over 1 billion data points earlier than expected. The developmental focus on increasing the number of data points, and improving the performance of the algorithms is expected to yield additional targeted indications for Lantern’s current pipeline of drugs, and also help to uncover additional compounds and therapies that can be in-licensed or acquired and subsequently developed in a more efficient manner that leverages the insights from Lantern’s data-driven, A.I.-enabled approach.

The market opportunity for RADR[®] as a platform for the development of targeted oncology therapies is significant.

The highly scalable RADR[®] platform can be leveraged in multiple real-world applications, in addition to drug development, including: identifying potential drug combinations, predicting synergies with immune-oncology agents, developing companion diagnostics (CDx) and evaluating compounds for therapeutic efficacy and optimal positioning. Lantern is a pioneer in the adoption and implementation of data-driven and machine-learning enabled processes for drug development. The intersection of A.I., machine learning and genomics is considered a rapidly growing trend as researchers and investors turn to big data approaches to transform the cost, risk and timeline of oncology drug development.

“Lantern Pharma is using genomics, machine-learning and big data in an effort to develop potentially life-saving cancer drugs, and our ability to fulfill this mission with greater efficiency and speed will be enhanced by focusing on the overall strength and scale of our platform,” concluded Mr. Sharma.

About Lantern Pharma

Lantern Pharma is a clinical-stage biopharmaceutical company innovating the repurposing, revitalization and development of precision therapeutics in oncology. We leverage advances in machine learning, genomics, and artificial intelligence by using a proprietary A.I. platform to discover biomarker signatures that help identify patients more likely to respond to our pipeline of cancer therapeutics. Lantern’s focus is to improve the outcome for patients by leveraging our technology to uncover, rescue and develop abandoned or failed drugs. Our current pipeline of three drugs, two in clinical stages and one in preclinical, focuses on cancers that have unique and unmet clinical needs with a clearly defined patient population. We believe that the use of machine learning, genomics and computational methods can help accelerate the revitalization, refocusing and development of small molecule-based therapies. By targeting drugs to patients whose genomic profile identifies them as having the highest probability of benefiting from the drug, this approach represents the potential to deliver best-in-class outcomes. Our team seeks out experienced industry partners, world-class scientific advisors, and innovative clinical-regulatory approaches to assist in delivering cancer therapies to patients as quickly and efficiently as possible. For more information, please visit the company's website at www.lanternpharma.com or follow the company on Twitter [@lanternpharma](https://twitter.com/lanternpharma)

Contact: Kyle Evans, Public Relations

Phone: 646-699-1414

Email: lantern@fischtankpr.com

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. The forward-looking statements in this press release include, among other things, statements relating to: 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 any of our drug candidates; our strategic plans to expand the number of data points that our RADR[®] platform can access and analyze; 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 the drug development process and to identify patient populations that would likely respond to a drug candidate; 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. Additional information regarding the risk factors to which we are subject is provided in greater detail in our final prospectus for our initial public offering on June 10, 2020, on file with the Securities and Exchange Commission. You may access our June 10, 2020 final prospectus 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 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.

Source: Lantern Pharma

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