Lantern Pharma Establishes Manufacturing Network in Preparation for Its Phase 2 Clinical Trial for the Treatment of Non-Small Cell Lung Cancer and a Phase 1 Clinical Trial for Solid Tumors and Glioblastoma

- *Lantern has entered into agreements with leading contract manufacturing and process development groups to advance manufacturing and development activities on both LP-300 and LP-184.*
- *The manufacturing and process development activity is expected to start immediately and ensure that sufficient drug candidate material will be available for upcoming clinical trials and ongoing research studies.*

DALLAS, TX – JULY 20, 2020 – 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 entering into agreements with leading contract manufacturing companies for process development and manufacturing for two of Lantern's oncology drug candidates, LP-300 and LP-184. Lantern Pharma filed an 8-K on Thursday, July 16 describing a recent agreement for GMP manufacturing.

Lantern's LP-300 is a small molecule drug candidate currently in preparation to enter phase 2 clinical trials in a growing, but unaddressed, type of non-small cell lung cancer (NSCLC) among never-smokers. Lantern is focused on developing LP-300 as a potential first-in-class combination therapy for never smoking (or non-smoking) NSCLC patients with histologically defined adenocarcinoma. NSCLC among never and non-smokers has a distinct molecular profile and according to the American Cancer Society, as many as 20% of people who die from lung cancer in the United States every year have never smoked or used any other form of tobacco. Leading researchers have started to classify lung cancer in never and non-smokers as having unique and distinct clinical, biological and pathological characteristics that have the potential to be impacted by new therapeutic options. According to market research, and data analytics firm, GlobalData, approximately $10 billion USD will be spent annually on NSCLC therapies in 2020 in the leading eight markets (by annual drug sales), with approximately $4 billion in the US.

Lantern's LP-184 is a small molecule drug candidate currently in preclinical development for certain genomically defined solid tumors that overexpress certain RNA, as well as for glioblastoma multiforme (GBM). Lantern is currently planning to enter a Phase 1 clinical trial with this drug candidate in late 2021 or early 2022, after finalizing further biomarker studies with leading researchers, and after completing IND-enabling studies. Lantern estimates that, by 2025, potential annual sales for therapies in the genomically defined solid tumors targeted by LP-184 will be over $2.5 billion USD globally, and that potential annual sales for therapies to treat GBM will be nearly $1 billion globally.

Both molecules have been advanced using Lantern's proprietary RADR® A.I. platform. With nearly 500 million data points, the RADR® A.I. platform uses machine learning techniques, genomics, and computational biology methods to accelerate drug development by accelerating the discovery of potential mechanisms of action and developing genomic and biomarker signatures that correlate to drug

response in cancer patients. Both molecules, LP-300 and LP-184, are being developed with the vision of pairing them with companion diagnostics generated, in-part by RADR®, to enable precision medicine trials and selection of patients with the highest probability of benefiting from the drug and offering the potential for best-in-class outcomes.

Panna Sharma, CEO and President of Lantern Pharma, stated, "the launch of manufacturing activities with our partners represents key steps in establishing a specialized global manufacturing network that can provide Lantern with critical scalability, flexibility and innovation to help maximize the impact of our capital resources and efficiently prepare our drug supply for our clinical trials and studies." Sharma continued, "These key capabilities are especially important now as we advance LP-300 and LP-184 towards commencement of clinical trials that can likely shape the timing and terms of potential future partnering discussions."

About Lantern Pharma

Lantern Pharma (NASDAQ: LTRN) 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 our 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, with two programs in clinical stages and two 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

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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; 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. Additional information regarding the risk factors to which we are subject is provided in greater detail in our final prospectus, dated June 10, 2020, for our initial public offering, 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.