Leveraging A.I., machine learning & genomics to transform the cost, pace, and timeline of oncology drug discovery and development
Forward looking statements

This presentation 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," "may," "might," "plan," "potential," "predict," "project," "target," "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 we may not be able to successfully initiate, conduct, or conclude clinical testing for or obtain marketing approval for our product candidates; (iii) 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 (iv) 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.lantermpharma.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 presentation 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.
The Golden Age of A.I. in medicine

10 Mega-Trends Setting The Stage for A.I. Led Transformation in Drug Development & Medicine

1. Large-scale, relevant and readily available data-sets
2. Methods, technologies and algorithms that are massively scalable
3. Computing, storage and transmission continue exponential advances
4. Rapid rise of global talent and collaboration networks
5. Tremendous increase in quality of biological data and methods
6. Rise of sequencing as a highly available, on-demand, low-cost service
7. Consumers willing to share personal data
8. Industries that have an increasing impetus to transform
9. New generation of investors demanding novel value creation
10. Executives and entrepreneurs rewarded for rapid change

Lantern is at the forefront of this model of A.I. driven transformation in the area of personalized oncology drug development to drive value for cancer patients and our investors

NASDAQ:LTRN
Current oncology drug development is costly, risky, and inefficient ... A perfect problem for artificial intelligence & machine learning to solve

Challenges in drug development ...

<table>
<thead>
<tr>
<th>3.3%</th>
<th>$2.8B</th>
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</thead>
<tbody>
<tr>
<td>Avg. success rate of oncology drugs</td>
<td>R&amp;D investment to bring new cancer to market 2009-2018</td>
</tr>
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</table>

<table>
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<tr>
<th>17,000+</th>
<th>4-12X</th>
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</thead>
<tbody>
<tr>
<td>Oncology trials conducted from 2001-2015</td>
<td>Success rate of oncology trials using biomarker</td>
</tr>
</tbody>
</table>

...are being met by data-driven, and A.I.-enabled approaches & technology
There is a critical need to rescue drugs that failed or bring abandoned therapeutic assets to market in order to create ROI for biopharma.

1. “... low efficacies of cancer drugs might be attributed to the heterogeneity of the tested patient population, which essentially dilutes the strong therapeutic effect that a drug might have on a specific patient subgroup.”

   Thibault Geoux, Ph.D.
   Chemistry - Elsevier 11/9/2015

2. “The ever-increasing catalog of genetic changes involved in cancer development is fueling a new generation of targeted drugs that are designed to address specific weaknesses in tumor cells. But these drugs will only work in a subset of patients – creating a demand for genetic stratification.”

   Allison Halliday, Ph.D.
   Cancer Research, 01/31/2020
   Cancer Biomarkers: Powering Precision Medicine

Solves these two central problems in oncology drug development with unprecedented speed and cost

This allows us to increase the potential for success and improve trial design.
Lantern leverages A.I. to reduce oncology drug development costs and improve the likelihood of success

- Drugs that fell short of statistical significance or abandoned by pharma / biotech companies in late stage trials despite tens to hundreds of millions spent on development, PK analysis, safety and efficacy studies
- Development of new compounds in drug classes that leverage our AI platform
- Big data (genomic, clinical, response) assembled and analyzed
- Patient subgroups identified through machine learning and artificial intelligence
- Mechanisms of action clarified
- Potential combinations identified
- Potential for faster and more efficient path to relaunching in the clinical trial setting
- Patient stratification based on A.I. enabled genomic biomarker discovery
- New patient populations for failed or abandoned drugs based on validated biomarker signatures
- Aimed to shorten time to market
- Designed to reduce risk in development
- Potential for orphan or fast track status
- New Chemical Entities designed and filed

Potential to **shorten clinical development** by years, save tens to hundreds of millions of dollars in cost and substantially **de-risk drug development** versus the traditional model

NASDAQ:LTRN
RADR® Surpassed 13 billion datapoints in January 2022

- accelerate drug development timelines
- uncover new therapeutic opportunities
- develop insights into the creation of combination-therapy programs
- expand our ability to collaborate with additional partners

NASDAQ:LTRN
What is RADR®

Response Algorithm for Drug Positioning & Rescue

A proprietary integrated data analytics, experimental biology, oncology-focused, machine-learning-based platform focused on drug development.

Leverages cutting edge machine-learning approaches and techniques to generate powerful data-driven insights.

Enables rapid informatics based hypothesis generation which can be validated in wet-lab.

Uses biology driven machine-learning algorithms to achieve higher prediction accuracy in real world settings.

A scalable, robust, expanding and replicable platform to support a range of drug development needs.
How RADR® is used by Lantern & our collaborators

**Find Mechanism of Action**

Use RADR to find potential Mechanism of Action (MoA) of the Compound / Drug

**Derive ML-based signatures**

RADR can derive Machine Learning based **gene signatures** which can guide biomarker strategies & CDx (Companion Diagnostics)

**Identify Drug Combinations**

Use different algorithms and methods from RADR to find **potential Drug combinations**

**Identify new indications**

Identify and prioritize type/subtype of cancer for your compound with use of RADR
Expanding RADR® drives growth in our portfolio of therapies and potential collaborations with other biopharma companies.

Future Goals For A.I. Platform

• Expand to 20 Billion datapoints during 2022
• Increase library of oncology trained algorithms
• Increase focus on immuno-oncology related datasets (including antigen and immunomic data)
• Increase focus on rare cancers
• Enter into additional value-based biopharma collaborations

"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 collaborations."
Equity-Based collaboration with Actuate Therapeutics that leverages RADR®

Actuate Therapeutics, Inc. is a private clinical stage biopharmaceutical company focused on the development of compounds for use in the treatment of cancer, and inflammatory diseases leading to fibrosis.

- Develop predictive model of sensitivity and a potential signature of biomarkers to identify response patients for 9-ING-41.
- 9-ING-41 is a widely researched GSK-3β inhibitor. There are multiple active oncology clinical trials in Phase I - II as monotherapy and in drug combinations.
- Lantern will be receiving equity in Actuate as part of the collaboration.
Lantern’s unique & rapidly developing pipeline

<table>
<thead>
<tr>
<th>Indication</th>
<th>Program</th>
<th>R&amp;D</th>
<th>Preclinical</th>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
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<tbody>
<tr>
<td>Prostate Cancer</td>
<td>LP-100</td>
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<tr>
<td>(Metastatic Castration-Resistant</td>
<td>Irofulven</td>
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<td>Initial 9 patients showed median overall survival (mOS) of 12.5 months</td>
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<td>Prostate Cancer)</td>
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<tr>
<td>Non-Small Cell Lung Cancer</td>
<td>LP-300</td>
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<td>(Focused on Never-Smokers)</td>
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<tr>
<td>Pancreatic Cancer</td>
<td>LP-184</td>
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<td>(Identified by RADR® defined genomic signature)</td>
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<td>Development Collaboration with Fox Chase Cancer Center</td>
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<td>CNS Cancers - Glioblastoma</td>
<td>LP-184</td>
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<td>(Predicted by RADR® and confirmed in in-vivo studies)</td>
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<td>CNS Cancers - ATRT</td>
<td>LP-184</td>
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<tr>
<td>Hematologic Cancers</td>
<td>LP-284</td>
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<td>(Predicted by RADR® confirmed with in-vitro studies)</td>
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<tr>
<td>Bladder Cancer</td>
<td>LP-184</td>
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<td>Select Solid Tumors</td>
<td>LP-A18</td>
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<td>Leveraging novel linker library &amp; with unique DNA-damaging agents with proven antibodies</td>
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Accelerated Development by Leveraging the RADR® A.I. platform
Over 90+ issued patents and pending applications across 14 patent families

NASDAQ:LTRN
Over 500K patients annually worldwide with several billion $USD in potential future oncology therapy sales

Drug Candidates in Development in Targeted Patient Segments With Clinical Need

<table>
<thead>
<tr>
<th>Cancer Type</th>
<th>Incidence</th>
<th>Notes</th>
</tr>
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<tbody>
<tr>
<td>Prostate Cancer</td>
<td>1.4 million</td>
<td>2020 Estimated Global Incidence</td>
</tr>
<tr>
<td></td>
<td>282,000</td>
<td>2020 Estimated Global metastatic hormone-resistant prostate cancer subpopulation</td>
</tr>
<tr>
<td>Pancreatic &amp; Bladder Cancer</td>
<td>1.1 million</td>
<td>2020 Estimated Combined Global Incidence</td>
</tr>
<tr>
<td></td>
<td>200,000</td>
<td>2020 Estimated Global cancer subpopulation with potential biomarker signature for response</td>
</tr>
<tr>
<td>Glioblastoma (GBM)</td>
<td>240,000+</td>
<td>2018 Estimate of new GBM cases globally</td>
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<tr>
<td></td>
<td>13,000+</td>
<td>2020 estimated GBM Cases in the USA</td>
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<tr>
<td>Non-Small Cell Lung Cancer (NSCLC)</td>
<td>1.9 million</td>
<td>2020 Estimated Global Incidence</td>
</tr>
<tr>
<td></td>
<td>475,000</td>
<td>2020 Estimated Global never-smoker NSCLC adenocarcinoma subpopulation</td>
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</table>

Sources: American Cancer Society, Globocan, AANS, NCI, Lantern Pharma meta-analysis
LP-100 (Irofulven): Historical* Phase II trial results & current status

Median 1 yr. survival was 86% greater in Irofulven in combination treated metastatic prostate cancer patients v. control

Precision Phase II Trial & Current Status

- Irofulven (LP-100) is in an existing phase 2 clinical trial for patients with metastatic, castration resistant prostate cancer (mCRPC) being conducted in Denmark
  - 9 patients [out of a targeted enrollment of 27] have been treated based on meeting criteria established by Allarity’s DRP® (Drug Response Predictor) companion diagnostic technology.
  - Median overall survival (OS) for the initial group of 9 patients has been 12.5 months, which is an improvement over other similar fourth-line treatment regimens for mCRPC
- Annually over $200 million is spent in the US, and nearly $700 million globally, for treatment for late-stage metastatic prostate cancer
- Click to see the clinical trial details at U.S. National Library of Medicine

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*Historical data from Hart et al., Randomized phase II trial of irofulven/prednisone, irofulven/capecitabine/prednisone, or mitoxantrone/prednisone in hormone refractory prostate cancer (HRPC) patients failing first-line docetaxel. European Journal of Cancer Supplements (2006)
LP-300 in development for never-smokers with NSCLC adenocarcinoma based on strong historical data & biomarker studies

**Mechanism of action**
- Disulfide bond disrupting agent
- Disrupts by covalently modifying cysteine
- Inhibits and modulates activity of proteins in NSCLC pathways (ALK, EGFR, MET, ROS1)

**Prior Clinical Experience**
- Prior history in 5 Phase 1 and 5 Phase 2 and 3 clinical trials in lung and breast cancers as a combination agent
- LP-300 has been administered to over 1,000 patients and has been generally well tolerated
- Prior studies did not stratify or select patients based on biomarker or smoking status
- Overall survival increased by 91% - 101% in never-smoker subgroups in prior global Phase 3 trial
- 2 year survival benefit increases of 125% were observed in never-smoker subgroups in a global Phase 3 trial

**Current status**
- Targeting never-smoker sub-population, as a potential targeted rare disease market
- Planned Phase II clinical trial (N=90) for use in never-smokers with NSCLC adenocarcinoma who are chemo-naive and relapsed from TKI therapy
- Expect to enroll 20-25 clinical sites in the U.S. starting in Q1/Q2 2022
- Leveraging AI platform of patient recruitment partner, DeepLens, to accelerate enrollment and decrease clinical trial costs
- Additionally, exploring preclinical in vivo studies to characterize efficacy as a combination with approved targeted TKI therapies
- Leveraging RADR® to develop biomarker signature that can be used to predict patients most likely to respond to combination therapy with LP-300

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**NASDAQ:LTRN**
Lantern’s precision oncology approach in the LP-300 Phase II trial builds on a prior Phase III trial that did not meet clinical efficacy endpoints but demonstrated survival benefit in a patient subgroup.

Source: Phase 3 clinical trial, study ID DMS32212R, conducted by BioNumerik Pharmaceuticals - subpopulations receiving paclitaxel/cisplatin.
LP-184 for multiple solid tumors and certain PTGR1 expressing cancers - Key payload template for ADC program

**Unique Features**

- Hydroxyurea Methylacylfulvene
- Nanomolar potency across multiple solid tumors (pancreas, prostate, liver) and CNS cancers
- Broad anti-tumor agent that counteracts multi-drug resistance and is independent of other mutations (p53, KEAP1)
- Favorable *in vitro* and *in vivo* efficacy supporting RADR-driven hypothesis
- Promising blood-brain-barrier (BBB) profile that can be leveraged in other CNS cancers including brain metastases

**Current status**

- 6 new patent filings: 2 new applications on synthetic manufacturing of new molecular entities
- Wet lab validated 16 gene signature leveraging NCI Cell Miner platform from our collaboration
- Published results at AACR virtual pancreatic forum 2021
- Validated BBB permeability in both neurospheres and animals
- Collaboration with Georgetown in prostate cancer
- Q3 '21 expanded collaborations with Johns Hopkins and Fox Chase Cancer Center
- Advanced GMP manufacturing for phase 1 clinical trials in GBM and solid tumors
As predicted by RADR®, LP-184 cytotoxic activity is driven by PTGR1.

**RADR® Insight (in-silico)**

LP-184 activity positively correlates with PTGR1 transcript levels in the NCI60 cancer cell line panel.

**In-vitro Gene Editing Studies (CRISPR)**

CRISPR-mediated depletion of PTGR1 expression in a pancreatic cancer cell line (Panc03.27) is sufficient to fully diminish LP-184 activity. This confirms the strict dependency of LP-184 cytotoxicity on PTGR1 expression.
Positive preclinical data in Glioblastoma (GBM)

FDA Orphan Drug Designation for the treatment of GBM and other malignant gliomas

Highlights

- Complete IND enabling studies demonstrating the ability of LP-184 to inhibit tumor growth and improve survival in animal studies of glioblastoma (GBM)
- Based on the encouraging results of the study, Lantern extended and expanded its collaborative agreement with Kennedy Krieger Institute and Johns Hopkins
- LP-184 treatment drove tumor regression by greater than 106%, reduced subcutaneous xenograft tumor volume in mice by greater than 85% within the treatment group
- LP-184 resulted in a statistically significant (p < 0.0001) extension of median overall survival compared to the control group
- Share detailed scientific results from LP-184 collaborative research program in GBM after presentation at Society of Neuro Oncology conference November 18-21 in Boston, MA

Upcoming Milestones

- Finalize IND enabling studies
- Launch Phase 1/2 clinical trial for LP-184 in GBM
LP-184 shows complete tumor regression in mice implanted with Glioblastoma in multiple models

- Complete Regression!
- No measurable tumors 12 days post final dosing (33 days after implantation)

**U87-MG GBM Model**

**M1123 GBM Model**

- Complete regression during dosing!
- 3 out of 4 mice showed no tumor growth after final dosing
Positive preclinical data in pancreatic cancer

Highlights

- Granted Orphan Drug Designation by FDA
- Positive preclinical data in pancreatic cancers that have high levels of PTGR1 expression or deficiencies/mutations in DNA damage repair genes
- Presented at the AACR Virtual Special Conference: Pancreatic Cancer
- Hosted Key Opinion Leader (KOL) Webinar on LP-184 for the treatment of pancreatic cancer on World Pancreatic Cancer Day

Upcoming Milestones

- Initiate Investigational New drug Application (IND) and Phase 1 human trial
- Launching Phase 2 of the collaboration with Fox Chase Cancer Center
- Planning to launch Phase 1 clinical trial in humans in mid 2022
Preclinical data demonstrated that LP-184 demonstrated significant & rapid pancreatic tumor shrinkage, by over 90%, in in-vivo mouse models in 8 weeks.

In August 2021, the U.S. FDA granted LP-184 Orphan Drug Designation (ODD) for the treatment of Pancreatic Cancer.

Tumor growth inhibition of 109% was observed with LP-184 treatment relative to control with dosing occurring weekly over an 8 week period.

Tumors from Vehicle Control Mice at the End of Study Period
Average tumor volume = 587 mm$^3$

Tumors from LP-184 (3mg/kg) Treated Mice at the End of Study Period
Average tumor volume = 4 mm$^3$
LP-184 shows nanomolar in vitro potency in pancreatic cancer cell lines

<table>
<thead>
<tr>
<th>Drug / Compounds</th>
<th>Range of IC50 [nM] across 6 cancer cell lines</th>
<th>Median IC50 [nM]</th>
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</thead>
<tbody>
<tr>
<td>LP-184</td>
<td>100 - 200</td>
<td>154</td>
</tr>
<tr>
<td>Gemcitabine</td>
<td>30 - 1,000</td>
<td>149</td>
</tr>
<tr>
<td>Irinotecan</td>
<td>3,000 - 70,000</td>
<td>12,052</td>
</tr>
<tr>
<td>5-Fluorouracil</td>
<td>30,000 - 300,000</td>
<td>72,747</td>
</tr>
</tbody>
</table>

LP-184 IC50 in the **normal**(non-cancerous) pancreatic epithelial cell HPNE line: 670 nM
LP-184 is effective in a xenograft model of Atypical Teratoid/Rhabdoid Tumor (ATRT)

CHLA06 subcutaneous cell line derived xenograft model (SMARCB1 deletion, MYC elevation)

**Tumor Volumes for CHLA-06**

**Representative terminal tumors**

Orphan Drug Designation (ODD) and Rare Pediatric Disease Designation (RPDD) applications submitted for the use of LP-184 in ATRT treatment

NASDAQ:LTRN
Mutant cell lines deficient in the Nucleotide Excision Repair (NER) pathway were more sensitive to LP-184 than the parent cell line.
LP-284 demonstrated distinct anti-tumor activity in hematologic cancer cells

- LP-284 is a fully synthetic molecule belonging to the new generation of acylfulvenes, a family of naturally derived anti-cancer drug candidates.
- LP-284 is the stereoisomer (enantiomer) of LP-184.
- Presented in the 63rd ASH annual meeting on its effectiveness in Hematologic Cancer

LP-284 exhibited **nanomolar potency** in mantle cell lymphoma, double-hit lymphoma, Burkitt's lymphoma, multiple myeloma, chronic myeloid leukemia, and acute lymphocytic leukemia.
What are Antibody-drug Conjugates (ADC) - an area of increasing future focus of Lantern Pharma

Antibody-Drug Conjugates (ADCs) novel class of highly potent biological drugs conjugate a cytotoxic drug with a monoclonal antibody (mAb) through an applicable linker

High specificity

- ADCs take advantage of the high potency of cytotoxic payloads and the superior specificity of antibodies. The drug antibody conjugate thus maximizes efficacy and minimizes systemic toxicity

“ADC's ability to harness mAb specificity and target the delivery of a cytotoxic agent to the tumor may significantly enhance both mAb and drug activities.”


Growing

- 2 of the 4 largest oncology licensing deals in 2020 were for ADC assets
  AstraZeneca licensed a Ph 1 ADC from Daiichi Sankō for $6.0 billion
  Merck licensed a Ph2 ADC from Seagen for $3.2 billion

“With so many ADCs in clinical development and the unprecedented approvals of the past year, it's clear that ADCs will continue to be a critical part of the therapeutic armamentarium against cancer”

Dr. Amita Patnaik FRCPC, of START Center for Cancer Care

Commercially available antibodies

Linker

Lantern small molecule drugs LP-184, LP-284

NASDAQ:LTRN
Converted an antibody with no intrinsic biological activity to an ADC based on data submitted to FDA.

LP-A18* v. other ADCs

- LP-A18 has an LD50 of 7 nM versus IC50 2-7 nM for Adcetris® or Kadcyla®

Initial data supporting Lantern’s ADC program

Toxin: Antibody ratio of 5:1; 4 hours exposure

One can treat even MDR refractory leukemias (whether T-cell, B-cell, myeloid or myeloma leukemias)

NASDAQ:LTRN
**Intellectual property portfolio**

**90+ Issued patents & Pending applications**

<table>
<thead>
<tr>
<th>5 families</th>
<th>Drug Sensitivity &amp; Response Signatures using Biomarkers</th>
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<tbody>
<tr>
<td>7 families</td>
<td>Methods of Use</td>
</tr>
<tr>
<td>2 families</td>
<td>Composition of Matter</td>
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</tbody>
</table>

**LP-300**
- In-licensed
- Internally developed

**LP-184**
- In-licensed
- Internally developed

**LP-100**
- In-licensed

**Extensive and continually growing position of** over 90 issued patents & patent applications **across 14 patent families**

**Filed an additional** 12 patent applications **during 2021**
Studies & collaborations with top tier academic & research partners drives scientific validation, data access and patient insights
Recent highlights and milestones

• Achieved over **13 billion data points** on our A.I. platform, RADR®
• LP-184 granted Orphan Drug Designation for the treatment of pancreatic cancer, glioblastoma multiforme (GBM) and other malignant gliomas by the U.S. Food and Drug Administration (FDA)
• Announced positive preclinical data in GBM with LP-184 and expanded GBM research collaboration with Johns Hopkins
• Presented at the AACR Virtual Special Conference on the effectiveness of LP-184 in pancreatic cancers that have either high levels of PTGR1 expression or deficiencies/mutations in DNA damage repair genes
• Confirmed LP-184 efficacy in the nanomolar range in the ultra-rare brain cancer, Atypical Teratoid Rhabdoid Tumor (ATRT)
• Advanced two new undisclosed programs on rare cancers which are expected to advance into preclinical indications during 2022
• Entered strategic collaboration with Deep Lens and Code Ocean
• Presented abstract on effectiveness of LP-284 in Hematologic Cancers at the 63rd American Society of Hematology (ASH) Annual meeting

NASDAQ:LTRN
## Key milestones

### Foundational Year
- Advance Platform
- Prepare Trial Launches
- Prioritize Additional Compounds

#### 2021
- Update on LP-100 Ph. 2 EU trial in mCRPC
- Grow RADR® A.I. platform to 12+ billion datapoints
- Identify antibody target for ADC program
- Results from preclinical work w/ LP-184 in pancreatic, prostate, GBM, ATRT and other tumors
- Obtain LP-184 Orphan Drug Designations for GBM and pancreatic
- Share detailed results from LP-184 research program in GBM after presentation at Society of Neuro Oncology conference
- Share detailed results from LP-284 in Hematologic Cancers after presentation at American Society of Hematology (ASH) annual meeting

### 2022
- Launch of Ph. 2 clinical trial for LP-300 in NSCLC (never-smokers that are chemo naïve and failed TKI therapy) – two arm 90+ person trial
- Launch Ph. 1 clinical trial for LP-184 in solid tumors
- Launch Ph. 1/2 clinical trial for LP-184 in GBM
- Progress LP-184 in ATRT towards Ph. 1/2 clinical trial
- Advance ADC preclinical studies to support future Phase 1 launch
- Explore potential combinations for LP-184 & LP-300 with other existing approved drugs (inc. I-O agents)
- Strategically grow RADR® A.I. platform to 20 billion datapoints
- Licensing and partnership opportunities
Financial highlights and cap table

- **Approx. $73.8M of cash, cash equivalents and marketable securities** as of September 30, 2021
- Management and Directors own over 30% of fully diluted shares outstanding
- Committed to creating enduring growth and value for LTRN shareholders

### LANTERN PHARMA INC. (LTRN)

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange</td>
<td>Nasdaq</td>
</tr>
<tr>
<td>Stock Price (1/3/22)</td>
<td>$7.56</td>
</tr>
<tr>
<td>Common Shares Outstanding (9/30/21)</td>
<td>11.2M</td>
</tr>
<tr>
<td>Market Cap (1/3/22)*</td>
<td>$84.57M</td>
</tr>
<tr>
<td>Warrants (9/30/21)</td>
<td>298K</td>
</tr>
<tr>
<td>Options (Employees, Management and Directors) (9/30/21)</td>
<td>802K</td>
</tr>
<tr>
<td>Fully Diluted Shares Outstanding (9/30/21)</td>
<td>12.3M</td>
</tr>
</tbody>
</table>

Investment highlights

Active drug rescue process and in the clinic with 2 compounds and accelerating additional compounds and combinations to clinical trials...potentially saving tens of millions and years of development

Growing A.I. based platform with clear roadmap to 20+ Bn. datapoints focused exquisitely on cancer therapeutic development and companion Dx in a high growth, high demand $4 Bn market

Focused on cancer drug market segments with clear clinical need, understood mechanisms, targeted patient populations that exceed 1 Million, and multi-billion USD in annual sales potential

A novel ADC platform with the potential to develop and out-license or partner ADC assets in early phases

Multiple compounds in place with the potential for Orphan Disease Designation for LP-184 in multiple targeted indications (pancreatic and GBM granted) which can help accelerate development

Proven and growing library of A.I. & machine-learning methodologies published at ASCO, AACR and used to generate novel IP & patents and accelerate discovery by potentially years

Experienced and innovative management team w/ 70+ years experience in cancer and a passion to change the cost and outcome for cancer patients by using A.I. and genomics – paradigm changing technologies

Industry leading collaborations with National Cancer Institute, Georgetown, Johns Hopkins & Fox Chase Cancer Center