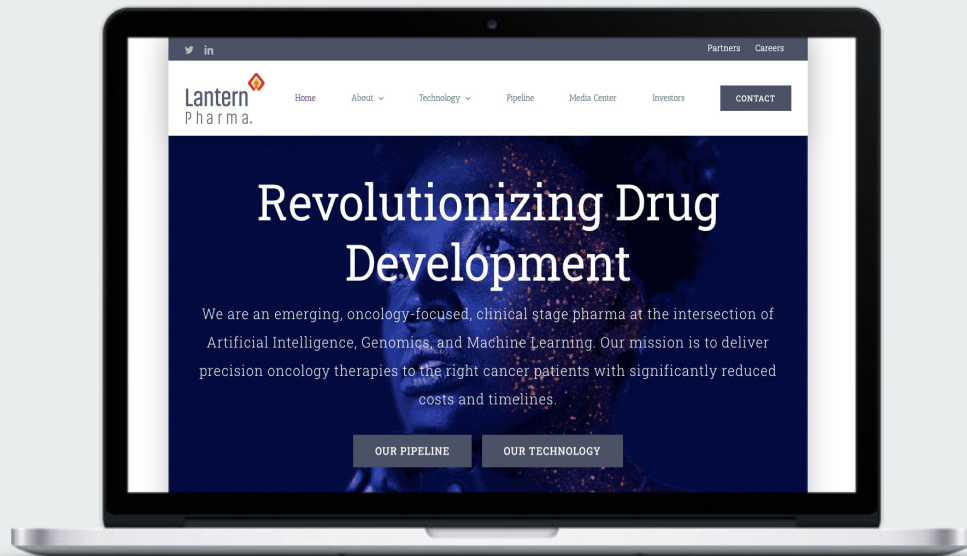




Second Quarter 2020

Operating & Financial  
Results Conference Call



<https://ir.lanternpharma.com/>



## 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<sup>®</sup> 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; estimates regarding the development timing for our drug candidates; our strategic plans to expand the number of data points that our RADR<sup>®</sup> platform can access and analyze; our research and development efforts of our internal drug discovery programs and the utilization of our RADR<sup>®</sup> 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. Any statements that are not statements of historical fact (including, without limitation, statements to the effect that Lantern Pharma Inc. or our management "believes", "expects", "anticipates", "estimates", "plans", and words such as "targets," "objectives" (and 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 the impact of the COVID-19 pandemic, the results of our clinical trials, and the impact of competition. Additional factors can be found in the Risk Factors section 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](http://www.lanternpharma.com) or on the SEC's website at [www.sec.gov](http://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.

## Second Quarter 2020

Operating and Financial Results  
Conference Call

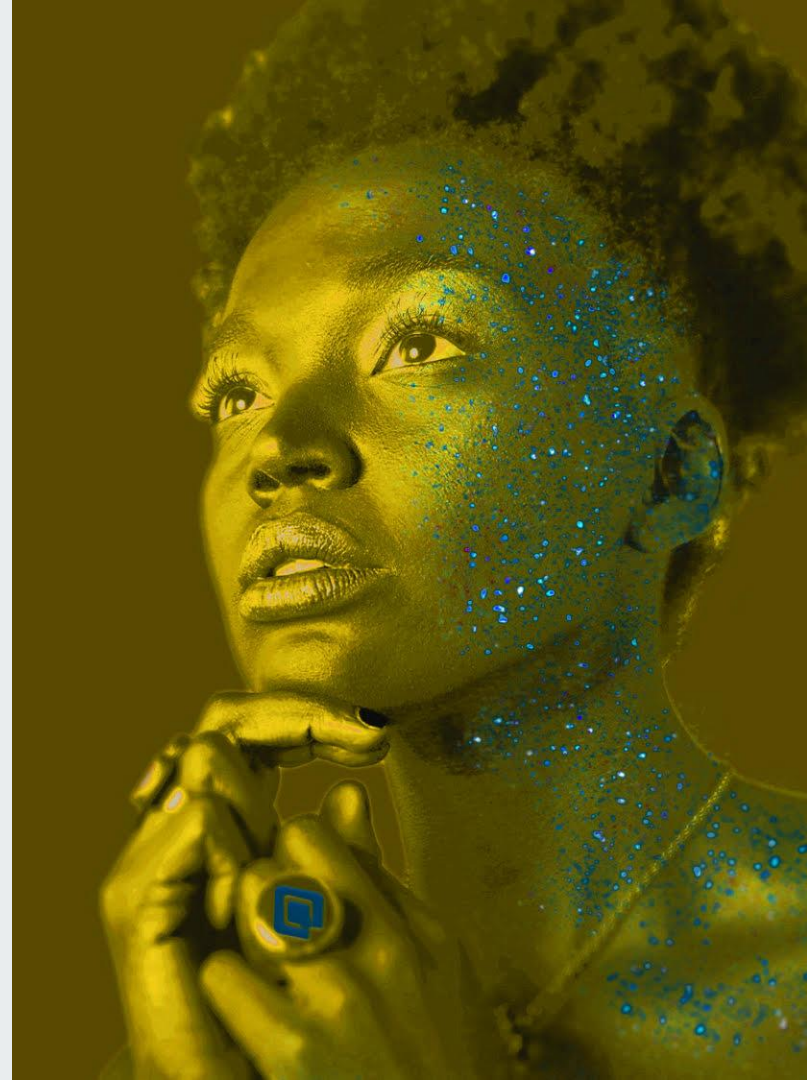
1. **Business Overview & Background**  
Panna Sharma, CEO
2. **Financial Results & IPO Summary**  
David Margrave, CFO
3. **Future Outlook & Milestones**  
Panna Sharma, CEO
4. **Q&A Session**

# Entering “The Golden Age of A.I.”

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

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

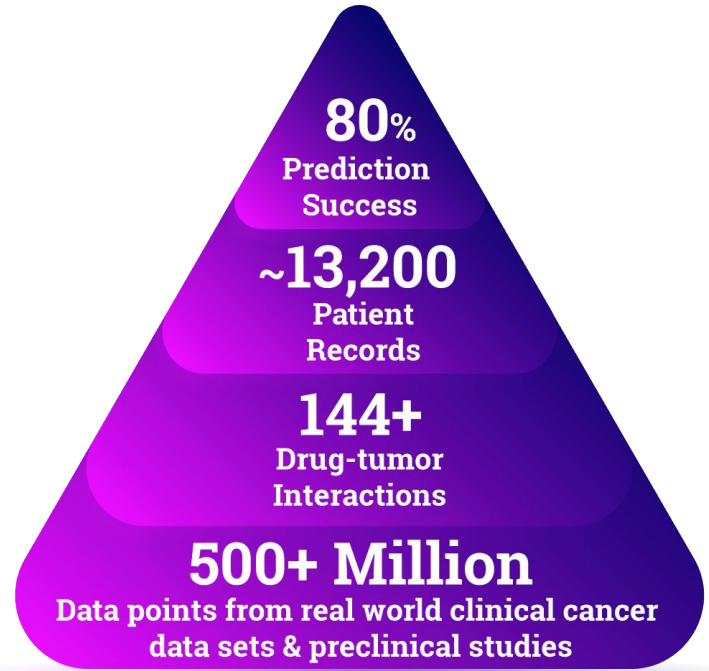
**Lantern is at the forefront of this model of A.I. driven transformation in the area of personalized oncology drug development to drive value for cancer patients and our investors.**



RADR<sup>®</sup> rapidly identifies genetic & biomarker signatures for precision oncology drug development, clinical response prediction and CDx (companion diagnostic) enablement.

We continue to invest in the platform's functionality, scale, and volume of data.

## RADR<sup>®</sup> Platform Key Features & Architecture

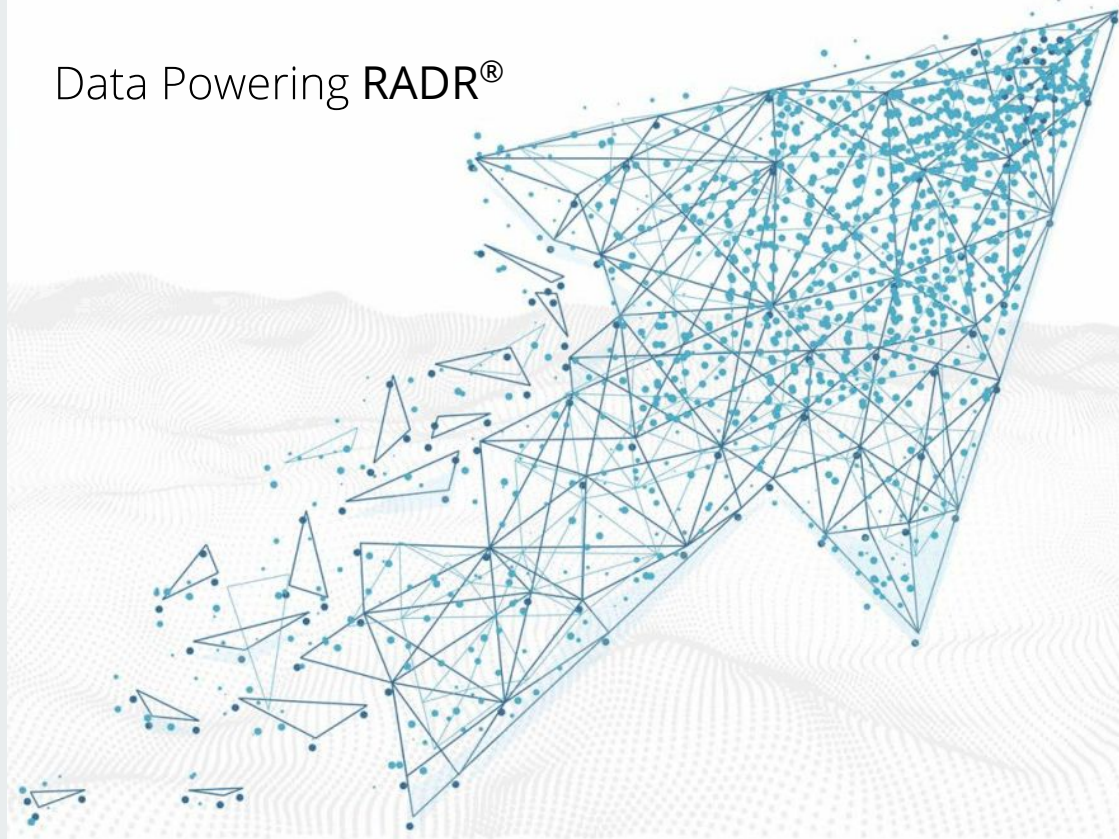


RADR<sup>®</sup> Platform Continues to Grow in  
Volume and Functionality

Lantern's powerful A.I. platform is being developed with a pure focus on predicting drug outcome and drug response using a depth of interrelated biomarker and clinical data, including:

- Complete transcriptome data
- RNA gene expression data
- Drug sensitivity data
- DNA copy number and mutation data
- Clinical stage of tumor/cancer
- Histology of tumor
- Patient age and sex
- Patient race or ethnicity
- Prior treatment history and response

## Data Powering RADR®



**10 Million >**  
2018

**125 Million >**  
2019

**400 Million >**  
2020

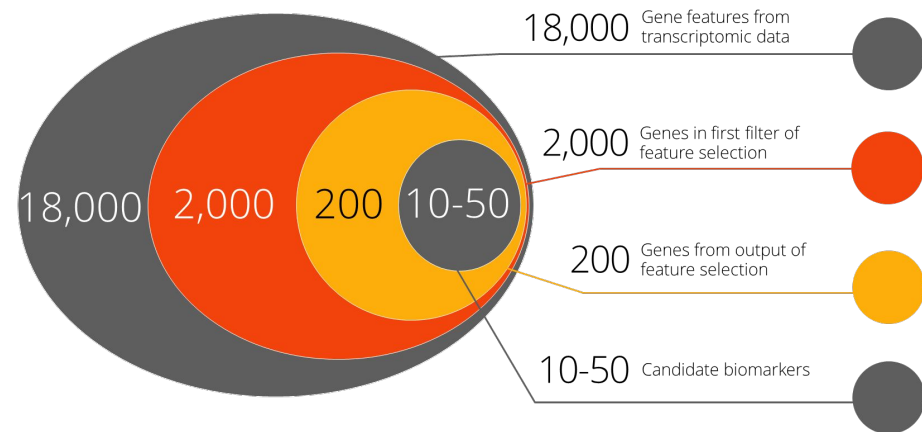
**1 Billion >**  
2021

**3-5 Billion >**  
2022

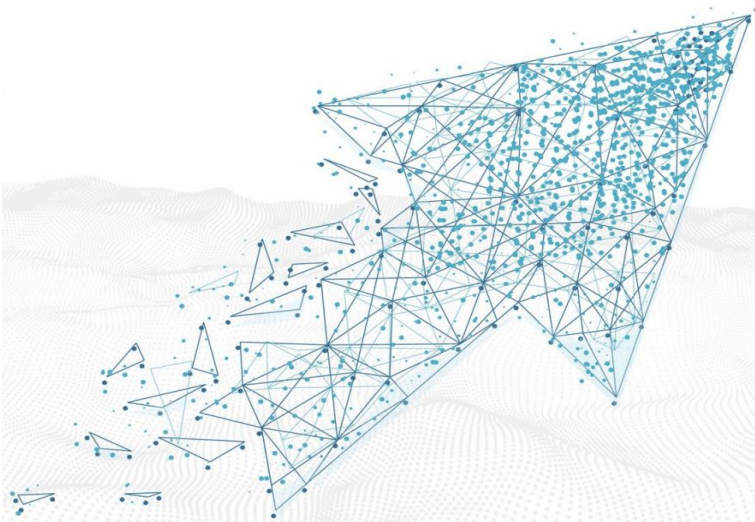
**RADR®** automates machine-learning approaches in generating a biomarker based response signature that can be used throughout the lifecycle of therapy development:

1. Preclinical modeling and studies
2. Clarifying mechanisms of action
3. Launching a robust companion diagnostic (CDx).
4. Identifying additional potential combination drugs or therapies

## Biomarker Signature is Based on Statistical Significance and Biological Relevance



Output & Signature Development Process



10 Million > 125 Million > 400 Million > 1 Billion > 3-5 Billion >  
2018 2019 2020 2021 2022

**Curated Data Sources Include:**

- Historical Trials
- Proprietary Internal Studies
- Studies & Collaborations w/ Partners
- Active Clinical Trials
- Trials in adjacent drug classes and tumors
- Proprietary Sequencing Campaigns
- Proprietary Drug Sensitivity Studies
- Open Sources from Publications and Research
- Clinical Outcome & Lab Data From Select Groups

## The RADR® Platform Enables...

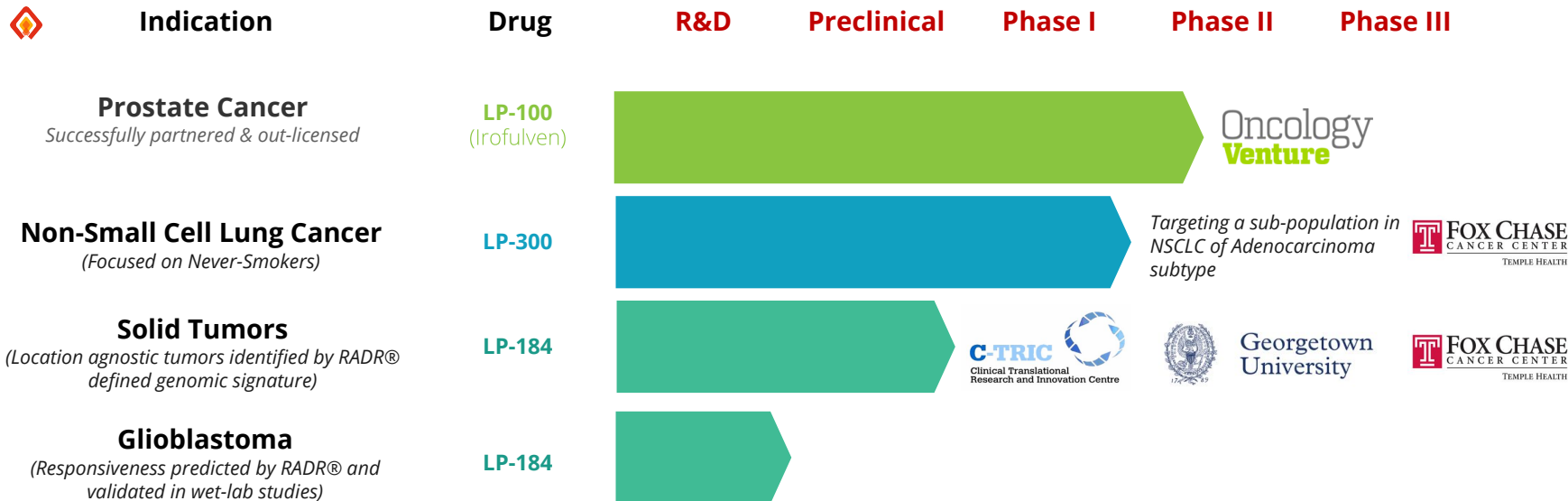
Scientific Value +

1. Rapid identification of potential compounds to rescue and develop
2. Improved and more nuanced understanding of responder groups, and non-responder groups based on biological networks
3. Feedback for potential mechanisms to be exploited in target-based development activity

Patient Value +

4. More rapid entry into clinical trials and patient subgroups
5. Robust companion diagnostics that can be used to accelerate trials and commercial traction
6. Potential for improved patient outcomes with drastically reduced costs and economic burden

# Lantern's Unique & Rapidly Developing Pipeline



**Accelerated Development by Leveraging the RADR® A.I. platform**  
108 issued patents and 7 pending applications across 14 patent families

## Summary Results of Operations\*

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Operating expenses:				
General and administrative	676,399	268,120	1,016,571	536,049
Research and development	157,023	361,273	294,127	547,317
Total operating expenses	833,422	629,393	1,310,698	1,083,366
<b>NET LOSS</b>	<b>\$ (833,422)</b>	<b>\$ (629,393)</b>	<b>\$ (1,310,698)</b>	<b>\$ (1,083,366)</b>
<i>Net loss per common share, basic and diluted</i>	<i>\$ (0.31)</i>	<i>\$ (0.32)</i>	<i>\$ (0.55)</i>	<i>\$ (0.55)</i>

\* Unaudited



## Summary of Initial Public Offering

Date Closed: June 15, 2020  
Shares Sold: 1,750,000 shares  
Price: \$15.00 per share

### LANTERN PHARMA INC. ( Nasdaq : LTRN)

Common Shares Outstanding	6,217,577
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Warrants (Weighted Average Exercise Price of \$3.13)	262,014
Underwriter Warrants (Exercise Price at \$18.75)	70,000

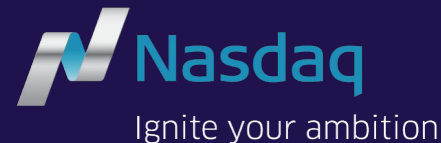
Options (Employees, Management and Directors)	820,608
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<b><i>Fully Diluted Shares Outstanding</i></b>	<b>7,370,199</b>
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Gross Proceeds  
**\$26,250,000 USD**

Net Proceeds  
**\$23,420,000 USD**



## Balance Sheet Highlights & Summary

	<b>06/30/2020</b> <i>(Unaudited)</i>	<b>12/31/2019</b>
<b>Cash</b>	<b>\$ 23,798,343</b>	<b>\$1,232,030</b>
Other Current Asset	\$1,728,539	-
<b>Prepaid Expense</b>	<b>\$70,775</b>	<b>\$788</b>
<b>Total Assets</b>	<b>\$ 25,613,034</b>	<b>\$ 1,432,576</b>
<b>Total Liabilities</b>	<b>\$ 2,385,165</b>	<b>\$ 489,292</b>
<b>Total Stockholders' Equity</b>	<b>\$ 23,227,869</b>	<b>\$ 943,284</b>

# Key Value Building Objectives



## Foundational Year

Advance Platform  
Prepare Trial Launches  
Prioritize Additional Compounds

**Second Half of 2020**

- Advances for launch of LP-184 IND-Enabling studies
- Data from collaboration with Georgetown in Prostate and Pancreatic Cancers
- Results from preclinical work in Glioblastoma w/ LP-184
- FDA related activity to explore launch of Phase 2 for LP-300 as a rare cancer trial for never-smoking females
- Further validation of RADR® platform and signatures
- Validate signature for LP-184 to design pan-tumor clinical studies and trial
- Focus on increasing RADR® A.I. Platform to 700+ million data points



## Multiple Streams of Value Creation

Launch Multiple Precision Trials  
Leverage Platform for Pharma Partners  
Secure Additional Compounds

**2021-22**

- Readout from targeted Ph. 2 trial in Europe in prostate cancer by first half of 2021 with LP-100
- Launch Ph. 2 clinical trial for LP-300 in NSCLC (never-smokers) by mid 2021
- Launch Ph. 1 clinical trial for LP-184 in solid tumors
- Launch Ph. 1/2 clinical trial for LP-184 in GBM
- Explore potential combinations for LP-184 & LP-300 with other existing approved drugs (inc. I-O agents)
- Strategically grow RADR® A.I. Platform beyond 1 Billion data-points
- Big pharma partnership and collaboration on drug rescue, repurposing or development

## Upcoming Conference & Presentation Schedule



**7/31/20** [LD Micro -- "Zooming with L.D."](#)

**8/24 - 8/27/20** [World Orphan Drug Congress USA](#)

**9/8 - 9/10/20** [MedInvest A.I., Big Data & Digital Health Conference](#)

**9/10/20** [Colliers 5th Annual Institutional Investor Conference](#)

**9/14 - 9/16/20** [H.C. Wainwright & Co. 22nd Annual Global Investment Conference](#)

Unless otherwise noted, all events are virtual and based on confirmed registration and subject to the policies of the event organizer.



Lantern Pharma

**Investor Contact:**

Marek Ciszewski, J.D.

[investor@lanternpharma.com](mailto:investor@lanternpharma.com)

ph: 1.628.777.3167

# Q & A

LTRN Operating & Financial Results Call  
July 30, 2020

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