UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 OR 15(d) of The Securities Exchange Act of 1934

August 9, 2023
Date of Report (date of earliest event reported)

LUMOS PHARMA, INC.

(Exact name of registrant as specified in its charter)

Delaware	**001-35342**	**42-1491350**
(State or other jurisdiction of incorporation or organization)	(Commission File Number)	(I.R.S. Employer Identification No.)

4200 Marathon Blvd., Suite 200
Austin, Texas 78756
(Address of Principal Executive Offices)
(512) 215-2630
Registrant's telephone number, including area code

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
S
☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock	LUMO	The Nasdaq Stock Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Section 2 - Financial Information

Item 2.02. Results of Operations and Financial Condition.

On August 9, 2023, Lumos Pharma, Inc., a Delaware corporation (the “Company”), issued a press release providing an operational update and reporting results for the second quarter ended June 30, 2023 ("Press Release").

A copy of the Press Release and the Second Quarter 2023 Financial Results Presentation are attached hereto as Exhibits 99.1 and 99.2, respectively, and are incorporated herein by reference.

The information in this Current Report, including Exhibits 99.1 and 99.2 attached hereto are furnished under Item 2.02 of this report and shall not be deemed to be “filed” for purposes of Section 18 of the Securities Exchange Act of 1934 (the “Exchange Act”) or otherwise subject to the liabilities of that section, nor shall be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, regardless of any general incorporation language in such filing.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit Number	Description
99.1	Press Release, dated August 9, 2023, entitled "Lumos Pharma Reports Second Quarter 2023 Financial Results, Provides Clinical Update"
99.2	Second Quarter 2023 Financial Results Presentation

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: August 9, 2023

LUMOS PHARMA, INC.,
a Delaware corporation

By: /s/ Richard J. Hawkins
Richard J. Hawkins
Its: Chief Executive Officer

Lumos Pharma Reports Second Quarter 2023 Financial Results, Provides Clinical Update

- *Confirms Timing for Primary Outcome Data Readout for two Phase 2 OraGrowtH Trials in Q4 2023*
- *Late Breaking Abstract Accepted for Oral Presentation at ESPE 2023*
- *Encouraging Interim Data from OraGrowtH Trials Presented at ENDO 2023, Highlighted in KOL Webinar*
- *Conference Call Scheduled for Today at 4:30pm ET*

AUSTIN, TX, August 9, 2023 – Lumos Pharma, Inc. (NASDAQ:LUMO), a biopharmaceutical company advancing an oral therapeutic candidate for Pediatric Growth Hormone Deficiency (PGHD) through Phase 2 clinical trials, today announced financial results for the second quarter ended June 30, 2023.

"We are pleased to confirm our expectation for primary data readout from our two Phase 2 OraGrowtH Trials evaluating LUM-201 in idiopathic PGHD in the fourth quarter of 2023," said Rick Hawkins, Chairman and CEO of Lumos Pharma. "The primary endpoint for these trials is annualized height velocity at six months on treatment with LUM-201. Given the encouraging data and new analysis presented at ENDO and highlighted in the Key Opinion Leader (KOL) webinar we hosted in June, our convictions are further reinforced that at least one of the LUM-201 dose cohorts will meet growth expectations based on historical averages, and that the LUM-201 mechanism of action and potency can elicit sustained improvements in growth in the moderate PGHD patient population. We look forward to additional analysis of LUM-201 data to be presented at the upcoming ESPE conference in September, and to continuing to advance our LUM-201 clinical program for potentially the first oral therapeutic for PGHD."

Recent Highlights

- **Company reiterates Q4 2023 timing for primary outcome data readout of OraGrowtH210 & OraGrowtH212 Trials**
  - Primary endpoint is annualized height velocity (AHV) at 6 months on treatment with the prediction of growth of 8.3 to 8.6 cm/yr based on historical data for this moderate idiopathic PGHD population
  - Other objectives of the OraGrowtH210 Trial are to confirm the utility of the predictive enrichment marker (PEM) strategy and determine the optimal dose for a Phase 3 trial
  - Up to 82 subjects (approximately 20 per cohort) were enrolled in the OraGrowtH210 Trial
  - Up to 22 subjects (approximately 11 per cohort) were enrolled in the OraGowtH212 Trial
  - AHV data at 12 months on treatment is expected for up to 12 subjects per OraGrowtH210 cohort and up to 7 subjects per OraGrowtH212 cohort, for a total of up to 62 subjects from both trials
  - Additional AHV data at 18 and 24 months on treatment are also expected for a small number of subjects

- As with all Phase 2 trials in PGHD, OraGrowtH210 is ***not*** powered to show non-inferiority of AHV between LUM-201 and the control; these Phase 2 data will support the safety profile and the selection of a LUM-201 dose for Phase 3 wherein non-inferiority to a control rhGH arm of < 2 cm should determine success based on historical approvals.

- **Data abstract accepted for oral presentation at upcoming European Society of Pediatric Endocrinology (ESPE) annual meeting, September 21-23, 2023, in The Hague, Netherlands**
  - Late-breaking abstract—*Deconvolution Analysis: GH secretagogue (LUM-201) enhances growth in individuals with moderate idiopathic Pediatric Growth Hormone Deficiency (iPGHD) by enhancing endogenous GH secretion and increasing IGF-1*, (Fernando Cassorla, MD)—accepted for oral presentation Saturday, September 23 (9:30-10:30 AM CET)
- **Positive results from Massachusetts General Hospital (MGH) study of injectable growth hormone in NAFLD published in Journal of Clinical Endocrinology and Metabolism – Data support MGH pilot trial evaluating oral LUM-201 in same indication**
  - *Growth Hormone Administration Improves Nonalcoholic Fatty Liver Disease in Overweight/Obesity: A Randomized Trial*—Dichtel, et al.
    - Investigators hypothesized that growth hormone may reduce hepatic steatosis in obese subjects with NAFLD
    - Subjects were randomly assigned to a treatment group (27 GH; 26 placebo), with 41 completers (20 GH and 21 placebo) at 6 months.
    - Reduction in absolute % Intrahepatic Lipid (IHL) content by proton magnetic resonance spectroscopy was significantly greater in the GH vs placebo cohorts
  - Investigators concluded that GH reduces liver fat without commensurate weight loss; data support evaluation of oral LUM-201 in the same indication (NAFLD)
  - The LUM-201 pilot trial in NAFLD continues to enroll; the Company's primary near-term focus remains on advancing LUM-201 in PGHD
- **New LUM-201 data and analysis presented at ENDO 2023, highlighted in KOL webinar**
  - Data from two oral presentations presented at ENDO were highlighted by two distinguished KOLs in a webinar held on June 21, 2023. Details included:
  - New data from the OraGrowtH212 Trial showed an increase in IGF-1 levels on LUM-201 at 6 months that remained within normal range, an increase in IGF-1 SDS to > 0, and a durable growth response after 12 months of LUM-201 administration; clear evidence of potential drug effect for LUM-201 was also observed in consistent improvement in AHV over baseline
  - New analysis of combined OraGrowtH210 and OraGrowtH212 trial data at the 1.6 mg/kg/day and 3.2mg/kg/day dose levels (15 subjects from OraGrowtH212, 20 subjects from OraGrowtH210): results continue to demonstrate that there is a durable response to LUM-201 from 6 to 12 months
  - A replay of the webinar is here and the presented slides are available here

Financial Results for the Quarter Ended June 30, 2023

Cash Position – Lumos Pharma ended the quarter on June 30, 2023 with cash, cash equivalents and short-term investments totaling $50.9 million compared to $67.4 million on December 31, 2022. The Company expects an average cash use of approximately $9.5 to $10.5 million per quarter through 2023. Cash on hand as of June 30, 2023 is expected to support operations for at least 12 months following the date of the filing of our second quarter 2023 financial statements.

R&D Expenses – Research and development expenses increased by $1.4 million for the three months ended June 30, 2023 compared to the same period in 2022 primarily due to increases of $1.1 million in contract manufacturing expenses, $0.4 million in clinical trial expenses and $0.1 million in personnel-related expenses, offset by a $0.2 million decrease in consulting expenses.

G&A Expenses – General and administrative expenses increased by $0.5 million for the three months ended June 30, 2023 compared to the same period in 2022 primarily due to increases of $0.2 million in personnel-related expenses, $0.1 million in stock compensation expenses, $0.1 million in travel expenses and $0.1 million in royalty expenses.

Net Loss – The net loss for the quarter ended June 30, 2023 was $8.9 million compared to a net loss of $7.8 million for the same period in 2022.

Lumos Pharma ended Q2 2023 with 8,041,345 shares outstanding.

Conference Call and Webcast Details

The Company has scheduled a conference call and webcast for 4:30 p.m. ET today to discuss its financial results and to give an update on clinical programs. There will also be a question-and-answer session following management's prepared remarks.

Investors and the general public are invited to listen to the conference call. To access the call by phone, please click on this Registration Link, complete the form and you will be provided with dial in details and a PIN. To avoid delays, we encourage participants to dial into the conference call ten minutes ahead of the scheduled start time. The webcast may be accessed through this Webcast Link and may also be found in the "Investors & Media" section of the Lumos Pharma website, under "Events & Presentations." A replay of the call will be available after the date of the call and may be accessed through the same link above or found on our website.

About Lumos Pharma's Clinical Trials

Phase 2 OraGrowthH210 Trial of Oral LUM-201 in PGHD

The OraGrowthH210 Trial is a multi-site, global trial evaluating orally administered LUM-201 at three dose levels (0.8, 1.6, 3.2 mg/kg/day) against a standard dose of injectable rhGH in approximately 80 subjects diagnosed with idiopathic (moderate) PGHD, which is less severe than organic PGHD. The objective of this trial is to identify the optimal dose of LUM-201 to be used in a Phase 3 registration trial, based on annualized height velocity from a 6-month dataset, and to prospectively confirm the preliminary validation of our Predictive Enrichment Marker (PEM) strategy. The complete set of 6-month, primary outcome data for 82 subjects is anticipated in the fourth quarter of 2023. Subjects will be dosed for a total of 24 months.

OraGrowthH212 Trial Evaluating PK/PD and Pulsatility of Oral LUM-201 in PGHD

The OraGrowthH212 Trial is a single site, open-label trial evaluating the pharmacokinetic (PK) and pharmacodynamic (PD) effects of oral LUM-201 in up to 24 PGHD subjects at two dose levels, 1.6 and 3.2 mg/kg/day. The primary objective of the OraGrowthH212 Trial is to confirm prior clinical data demonstrating the amplified pulsatile release of endogenous growth hormone from LUM-201 therapy, contributes to its efficacy in PGHD. The primary endpoint for this trial is 6 months of PK/PD (pulsatility) and height velocity data in the randomized subjects. Subjects will be allowed to remain on treatment until

they reach a bone age of 14 for females and 16 for males reflecting near-adult height. Primary data readout in 22 subjects is anticipated in the fourth quarter of 2023.

Switch Study, OraGrowtH213 Trial, Evaluating LUM-201 in OraGrowtH210 Subjects Previously on rhGH

The OraGrowtH213 Trial is an open-label, multi-center, Phase 2 study evaluating the growth effects and safety of LUM-201 following 12 months of daily rhGH in up to 20 idiopathic PGHD patients who have completed the OraGrowtH210 Trial. Subjects will be administered LUM-201 at a dose level of 3.2 mg/kg/day for up to 12 months.

Lumos Pharma Collaboration with Massachusetts General Hospital Evaluating LUM-201 in NAFLD

Lumos Pharma has entered a collaboration with Massachusetts General Hospital (MGH) to evaluate LUM-201 in patients with nonalcoholic fatty liver disease (NAFLD). GH is a critical stimulator of lipolysis, and shows anti-inflammatory effects, and preclinical data suggest that amplifying GH secretion has the potential to reduce hepatic steatosis and prevent NAFLD progression. Interestingly, enhancing the natural pulsatile release of GH has been shown clinically in short-term studies to be more efficacious in inducing lipolysis than continuous infusions of GH. This MGH investigator-initiated trial is a single-site, 6-month, open-label pilot study of daily oral LUM-201 in adults with NAFLD. The trial will evaluate a dose of 25 mg/day of LUM-201 in 10 subjects with NAFLD and relative IGF-1 deficiency. The primary endpoints will be to determine the reduction in liver lipid content, inflammation, and fibrosis in these subjects administered LUM-201 compared to each subject's baseline.

About Lumos Pharma

Lumos Pharma, Inc. is a clinical stage biopharmaceutical company focused on the development and commercialization of therapeutics for rare diseases. The Company was founded and is led by a management team with longstanding experience in rare disease drug development. Lumos Pharma's lead therapeutic candidate, LUM-201, is a novel, oral growth hormone (GH) secretagogue, seeking to transform the $4.5B global GH market from injectable to oral therapy. LUM-201 is currently being evaluated in multiple Phase 2 clinical studies in Pediatric Growth Hormone Deficiency (PGHD) and has received Orphan Drug Designation in both the US and EU. For more information, please visit https://lumos-pharma.com/.

Cautionary Note Regarding Forward-Looking Statements

This press release contains forward-looking statements of Lumos Pharma, Inc. that involve substantial risks and uncertainties. All such statements contained in this press release are forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. A law that, in part, gives us the opportunity to share our outlook for the future without fear of litigation if it turns out our predictions were not correct.

We are passionate about our business - including LUM-201 and the potential it may have to help patients in the clinic. This passion feeds our optimism that our efforts will be successful and bring about therapeutics that are safe, efficacious, and offer a meaningful change for patients. Please keep in mind that actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements that we make.

We have attempted to identify forward-looking statements by using words such as “projected,” "upcoming," "will," “would,” "plan," “intend,” "anticipate," "approximate," "expect," “potential,” “imminent,” and similar references to future periods or the negative of these terms. Not all forward-looking statements contain these identifying words. Examples of forward-looking statements include, among others, progress in our clinical efforts including the timing of expected results on our LUM-201 trials and our ability to continue advancing our trials, encouraging interim data and new analysis presented, that our convictions are further reinforced that at least one of the LUM-201 dose cohorts will meet growth expectations based on historical averages, that the LUM-201 mechanism of action and potency can elicit sustained improvements in growth in the moderate PGHD patient population, looking forward to additional analysis of LUM-201 data to be presented at the upcoming ESPE conference, continuing to advance our LUM-201 clinical program for potentially the first oral therapeutic for PGHD, that growth hormone may reduce hepatic steatosis in obese subjects with NAFLD, future financial performance, results of operations, our expected average cash use per quarter through 2023 and that cash on hand as of June 30, 2023 is expected to support operations for the next 12 months and any other statements other than statements of historical fact.

We wish we were able to predict the future with 100% accuracy, but that just is not possible. Our forward-looking statements are neither historical facts nor assurances of future performance. You should not rely on any of these forward-looking statements and, to help you make your own risk determinations, we have provided an extensive discussion of risks that could cause actual results to differ materially from our forward-looking statements including risks related to the final results of our LUM-201 Trials being different than our interim results, the outcome of our future interactions with regulatory authorities, the timing and ability of Lumos to raise additional equity capital as needed to fund our Phase 3 Trial or for other purposes, our ability to project future cash utilization and reserves needed for contingent future liabilities and business operations, the ability to obtain and maintain the necessary patient enrollment for our product candidate in a timely manner, the ability to successfully develop our product candidate, the effects of pandemics, other widespread health problems or military conflicts including the Ukraine-Russia conflict and other risks that could cause actual results to differ materially from those matters expressed in or implied by such forward-looking statements including information in the "Risk Factors" section and elsewhere in Lumos Pharma’s Annual Report on Form 10-K for the year ended December 31, 2022, as well as other reports filed with the SEC. All of these documents are available on our website. Before making any decisions concerning our stock, you should read and understand those documents.

We anticipate that subsequent events and developments will cause our views to change. We may choose to update these forward-looking statements at some point in the future, however, we disclaim any obligation to do so. As a result, you should not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this press release.

###

Investor & Media Contact:

Lisa Miller
Lumos Pharma Investor Relations
512-792-5454
ir@lumos-pharma.com

Lumos Pharma, Inc.
Condensed Consolidated Statements of Operations and Comprehensive Loss
(unaudited)
(In thousands, except share and per share amounts)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Revenues:				
Royalty revenue	$ 527	$ 403	$ 1,218	$ 514
Total revenues	527	403	1,218	514
Operating expenses:				
Research and development	6,024	4,645	10,393	8,866
General and administrative	4,146	3,682	8,503	7,303
Total operating expenses	10,170	8,327	18,896	16,169
Loss from operations	(9,643)	(7,924)	(17,678)	(15,655)
Other income and expense:				
Other income, net	124	6	243	12
Interest income	559	74	1,129	79
Other income, net	683	80	1,372	91
Net loss before taxes	(8,960)	(7,844)	(16,306)	(15,564)
Income tax benefit	29	—	29	—
Net loss	$ (8,931)	$ (7,844)	$ (16,277)	$ (15,564)
Net loss per share:				
Basic and diluted	$ (1.09)	$ (0.94)	$ (1.98)	$ (1.86)
Weighted average number of common shares outstanding:				
Basic and diluted	8,164,603	8,366,445	8,205,625	8,361,907
Other comprehensive loss:				
Unrealized loss on short-term investments	(6)	—	(2)	—
Total comprehensive loss	$ (8,937)	$ (7,844)	$ (16,279)	$ (15,564)

Lumos Pharma, Inc.
Condensed Consolidated Balance Sheets
(In thousands, except share and per share amounts)

	June 30, 2023 (unaudited)	December 31, 2022
Assets		
Current assets:		
Cash and cash equivalents	$ 37,862	$ 56,007
Short-term investments	12,989	11,352
Prepaid expenses and other current assets	4,899	4,427
Other receivables	233	223
Total current assets	55,983	72,009
Non-current assets:		
Property and equipment, net	45	53
Right-of-use asset	345	230
Total assets	$ 56,373	$ 72,292
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 279	$ 275
Accrued expenses	6,087	6,200
Current portion of lease liability	179	233
Total current liabilities	6,545	6,708
Long-term liabilities:		
Royalty obligation payable to Iowa Economic Development Authority	6,000	6,000
Lease liability	167	—
Total liabilities	12,712	12,708
Commitments and contingencies:		
Stockholders' equity:		
Undesignated preferred stock, $0.01 par value: Authorized shares - 5,000,000 at June 30, 2023 and December 31, 2022; issued and outstanding shares - 0 at June 30, 2023 and December 31, 2022	—	—
Common stock, $0.01 par value: Authorized shares - 75,000,000 at June 30, 2023 and December 31, 2022; issued 8,061,920 and 8,283,708 at June 30, 2023 and December 31, 2022, respectively and outstanding shares - 8,041,345 and 8,267,968 at June 30, 2023 and December 31, 2022, respectively	80	82
Treasury stock, at cost, 20,575 and 15,740 shares at June 30, 2023 and December 31, 2022, respectively	(187)	(170)
Additional paid-in capital	187,539	187,164
Accumulated deficit	(143,760)	(127,483)
Accumulated other comprehensive loss	(11)	(9)
Total stockholders' equity	43,661	59,584
Total liabilities and stockholders' equity	$ 56,373	$ 72,292


lumos
PHARMA
Second Quarter 2023
Financial Results &
Clinical Update
August 9, 2023

Forward Looking Statements

This presentation contains proprietary and confidential information of Lumos Pharma, Inc. (“Lumos,” “we,” “us” and “our”), and such content should be considered “Confidential Information” and covered by your confidentiality obligations to Lumos. This presentation is made solely for informational purposes, and no representation or warranty, express or implied, is made by Lumos or any of its representatives as to the information contained in these materials or disclosed during any related presentations or discussions.

This presentation contains forward-looking statements of Lumos that involve substantial risks and uncertainties. All such statements contained in this presentation are forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995.

We are passionate about our business, including LUM-201 and the potential it may have to help patients in the clinic. This passion feeds our optimism that our efforts will be successful and bring about therapeutics that are safe, efficacious, and offer a meaningful change for patients. Please keep in mind that actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements that we make.

We have attempted to identify forward-looking statements by using words such as “projected,” "upcoming," "will," “would,” "plan," “intend,” "anticipate," "approximate," "expect," “potential,” “imminent,” and similar references to future periods or the negative of these terms. Not all forward-looking statements contain these identifying words. Examples of forward-looking statements include, among others, statements we make regarding progress in our clinical efforts including comments concerning screening and enrollment for our trials, momentum building in our LUM-201 program for PGHD, anticipated timing of interim analyses of trials, LUM-201’s therapeutic potential when administered to pediatric subjects with idiopathic or moderate growth hormone deficiency, that the interim sample size should be adequate to provide an initial indication of LUM 201’s impact, expecting the primary outcome data readout for our trials, market size potential for LUM-201, predictions regarding LUM-201, goals with respect to LUM-201, the potential to expand our LUM-201 platform into other indications, future financial performance, results of operations, cash position, cash use rate and sufficiency of our cash resources to fund our operating requirements through the primary outcome data readout from the OraGrowthH210 and OraGrowthH212 Trials, and any other statements other than statements of historical fact.

We wish we were able to predict the future with 100% accuracy, but that just is not possible. Our forward-looking statements are neither historical facts nor assurances of future performance. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements that we make due to a number of important factors, including potential material differences between the interim results of our LUM-201 trials and the final results of the trials which are not known at this time, the effects of pandemics (including COVID-19), other widespread health problems, the Ukraine-Russia conflict, the outcome of our future interactions with regulatory authorities, our ability to project future cash utilization and reserves needed for contingent future liabilities and business operations, the ability to obtain the necessary patient enrollment for our product candidate in a timely manner, the ability to successfully develop our product candidate, the timing and ability of Lumos to raise additional equity capital as needed and other risks that could cause actual results to differ materially from those matters expressed in or implied by such forward-looking statements. You should not rely on any of these forward-looking statements and, to help you make your own risk determinations, we have provided an extensive discussion of risks that could cause actual results to differ materially from our forward-looking statements in the "Risk Factors" section and elsewhere in our Annual Report on Form 10-K for the year ended December 31, 2022, as well as other reports filed with the SEC including our Quarterly Reports on Form 10-Q filed after such Annual Report. All of these documents are available on our website. Before making any decisions concerning our stock, you should read and understand those documents.

We anticipate that subsequent events and developments will cause our views to change. We may choose to update these forward-looking statements at some point in the future; however, we disclaim any obligation to do so. As a result, you should not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this presentation.

The data contained herein is derived from various internal and external sources. All of the market data in the presentation involves a number of assumptions and limitations, and there can be no guarantee as to the accuracy or reliability of such assumptions. Further, no representation is made as to the reasonableness of the assumptions made within or the accuracy or completeness of any projections or modeling or any other information contained herein. Any data on past performance or modeling contained herein is not an indication as to future performance. 8.9.2023

Agenda

Welcome

- Lisa Miller, *Senior Director of Investor Relations*

Review of Highlights & Clinical Development Program

- Rick Hawkins, *Chief Executive Officer & Chairman*

Financial Results

- Lori Lawley, *Chief Financial Officer*

Questions & Answers

- Rick Hawkins, *Chief Executive Officer & Chairman*
- John McKew, PhD, *President & Chief Scientific Officer*
- Lori Lawley, *Chief Financial Officer*
- Duke Pitukcheewanont, MD, *SVP, Clinical Development & Medical Affairs*

Primary Outcome Data for Two Phase 2 Trials in PGHD Expected Q4 2023

OraGrowtH210 TRIAL

Dose-finding Phase 2 Trial

Topline data on up to 82 PEM+ subjects

- Primary 6-month AHV & safety data on
  - ~20 subjects on 0.8 mg/kg/day LUM-201
  - ~20 subjects on 1.6 mg/kg/day LUM-201
  - ~20 subjects on 3.2 mg/kg/day LUM-201
  - ~20 subjects on daily rhGH
- 12-month AHV data on ~12 per cohort
- 18 & 24-month data on small group

OraGrowtH212 TRIAL

Mechanistic Phase 2 PK/PD Trial

Topline data on up to 22 PEM+ subjects

- Primary 6-month AHV & safety data on
  - ~11 subjects on 1.6 mg/kg/day LUM-201
  - ~11 subjects on 3.2 mg/kg/day LUM-201
- 12-month AHV data on ~7 per cohort
- 18 & 24-month data on small group

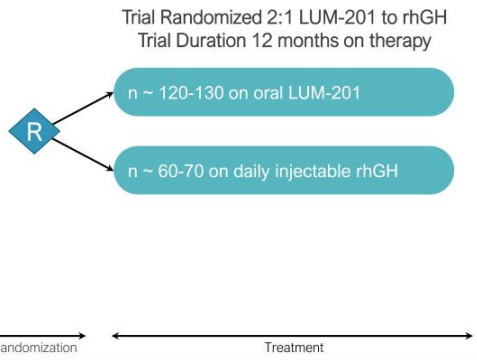
Phase 2 OraGrowtH210 Trial is not powered for non-inferiority vs rhGH

PGHD = Pediatric Growth Hormone Deficiency PEM = Predictive Enrichment Strategy = ability to identify likely responders to therapeutic candidate
PEM-positive (PEM+) = PGHD patients with baseline IGF-1 > 30 ng/ml & peak stimulation GH ≥ 5 ng/ml from single dose of LUM-201

Expected Registrational Phase 3 Trial Design Based on Recent Pivotal Trials in PGHD

Phase 3 Trial

- n = ~180-200
- Randomized 2:1 LUM-201 to rhGH control arm
- PEM(+) PGHD subjects
  - Peak stim GH ≥ 5 ng/ml after 1 LUM-201 dose
  - Baseline IGF-1 >30 ng/ml
- rhGH treatment naïve
- Multiple trial sites US & International
- 12 months on therapy



Phase 3 Objectives

- Annual Height Velocity (AHV) at 12 months on LUM-201 comparable to rhGH control
- Non-inferiority margin of less than 1.8 to 2 cm between LUM-201 and rhGH arm based on recent approvals
- Growth on treatment in line with AHV of ~8.3-8.6 cm/yr observed in historical datasets of moderate PGHD patients on rhGH

Phase 3 primary outcome data: AHV at 12 months on therapy
Phase 3 design dependent upon End of Phase 2 meeting with FDA and results from OraGrowthH210 Trial

Novel LUM-201 Formulation for Phase 3 and Commercial Use

Novel LUM-201 formulation

- Mini-tablets inside of a capsule
- Unique LUM-201 manufacturing techniques enabled novel formulation

Advantages of novel formulation

- Minimizes dose variability across wide weight range of patients on drug
- Easy form for oral administration across younger and older patients

Patent filed for new formulation

- USPTO response likely later this year
- Expect orange book listing with IP protection through late 2042

Image is not actual representation of novel LUM-201 formulation

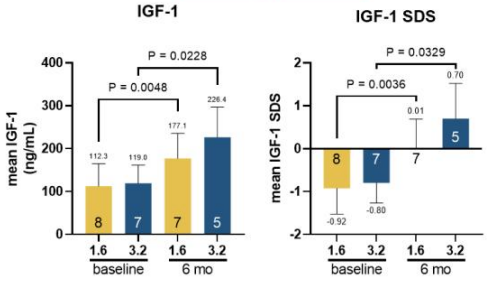
Endocrine Society Meeting (ENDO) Oral Presentations on LUM-201

ENDO Oral Presentation (Cassorla, et al)

Additional OraGrowtH212 Interim Data:

- LUM-201 produced an increase in IGF-1 levels that remained within normal range and an increase in IGF-1 SDS > 0
- Consistent increase in AHV over baseline observed on LUM-201 with durable response to 12 months[1]

OraGrowtH212 TRIAL

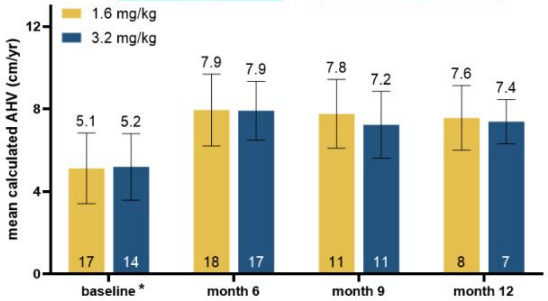


ENDO Oral Presentation (Tansey, et al)

Combined Interim OraGrowtH210 and '212 Data:

- Combined data from both trials at 1.6 and 3.2 mg/kg doses show improved AHV over baseline and durable response to 12 months, as well as equivalent AHV effect at both LUM-201 doses

OraGrowtH210 TRIAL + OraGrowtH212 TRIAL



Endocrine Society Meeting (ENDO) – June 2023

[1] Data included in ENDO presentation on Lumos Pharma website

*Pre-treatment baseline AHV was not required for OraGrowtH studies, but available data shown

**Interim data from 50% enrolled OraGrowtH210 Trial (N=20 at top 2 LUM-201 doses) & from ~70% enrolled OraGrowtH212 Trial (N=15)

Additional Highlights

European Society for Paediatric Endocrinology (ESPE) – September 2023

- Late-Breaking Abstract Accepted for Oral Presentation: *Deconvolution Analysis: GH secretagogue (LUM-201) enhances growth in individuals with moderate idiopathic Pediatric Growth Hormone Deficiency (iPGHD) by enhancing endogenous GH secretion and increasing IGF-1,* Cassorla, F.

Publication of GH in NAFLD in JCEM supports MGH evaluation of LUM-201

- Positive data from prior MGH study of growth hormone (GH) in NAFLD recently published in *JCEM*
- Data show GH reduces liver steatosis in obese subjects with NAFLD without worsening glycemic measures
- These data support MGH collaboration with Lumos Pharma to evaluate oral LUM-201 in NAFLD
- MGH-initiated pilot trial of LUM-201 in NAFLD continues to enroll

Next target indications narrowed for LUM-201

- Narrowed next indication targets for LUM-201 to ISS and PWS with analysis continuing

JCEM, June 2023, Dichtel, L, et al. NAFLD = Non-alcoholic fatty liver disease MGH = Massachusetts General Hospital ISS Idiopathic Short Stature PWS Prader-Willi Syndrome

Lumos Pharma Financial Information as of June 30, 2023

Values in USD

Cash, equivalents & short-term investments	$50.9M
Debt	$0
Shares Outstanding	8.0M
Cash Use per Quarter in 2023	$9.5-$10.5M
Fiscal Year End	December 31

Cash, cash equivalents, & short-term investments to support operations into 3Q 2024, beyond primary outcome data readouts for OraGrowtH210 and OraGrowtH212 Trials 4Q 2023

Overview
Lead asset targeting children with growth disorders

Novel Oral Rare Disease Asset	• Novel **oral** therapeutic asset, **LUM-201**, for growth hormone deficiency (GHD) disorders • LUM-201 **acts within natural endocrine pathway**, differentiated from injectable therapies
Pipeline in a Product	• **Worldwide** injectable **market** for GHD disorders is **$3.4 billion, excluding China*** • Market for **Pediatric GHD (PGHD)**, initial oral LUM-201 indication, is **$1.2 billion***
Late-stage Trials in PGHD	• **Primary outcome data** for two Phase 2 OraGrowtH Trials expected **4Q 2023** • PEM strategy **de-risks trials** by identifying and enrolling likely LUM-201 responders**
Solid Financial Position	• Cash balance of **$50.9 million** as of close of **2Q 2023** • Cash runway **into 3Q 2024,** beyond Phase 2 OraGrowtH Trials primary outcome data

PGHD = Pediatric Growth Hormone Deficiency
* USA, Germany, France, Italy, Spain, UK, Japan (Grandview Research, Growth Hormone Market Forecast, 2019)
** PEM (Predictive Enrichment Marker) strategy consists of screening for PEM+ PGHD patients = Baseline IGF-1 > 30 ng/ml & Peak stimulation GH ≥ 5 ng/ml from single oral dose of LUM-201