Avadel Pharmaceuticals plc

(NASDAQ: AVDL)

2024

Safe Harbor Statements

This presentation may include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These forward-looking statements relate to our future expectations, beliefs, plans, strategies, objectives, results, conditions, financial performance, prospects or other events. Such forward-looking statements include, but are not limited to, expectations regarding the potential therapeutic benefit of LUMRYZ; the success of the commercialization of LUMRYZ and expansion into additional patient populations; the anticipated market demand and sales opportunity of LUMRYZ; the potential for the Company to be a leader in the market; the Company's idiopathic hypersomnia clinical study for LUMRYZ, including enrollment and timing related thereto; the Company's anticipated financial condition, expenses, uses of capital and other future financial results. In some cases, forward-looking statements can be identified by use of words such as "will," "may," "could," "believe," "expect," "look forward," "on track," "guidance," "anticipate," "estimate," "project," "next steps" and similar expressions and the negatives thereof (if applicable).

The Company's forward-looking statements are based on estimates and assumptions that are made within the bounds of our knowledge of our business and operations and that we consider reasonable. However, the Company's business and operations are subject to significant risks, and, as a result, there can be no assurance that actual results and the results of the company's business and operations will not differ materially from the results contemplated in such forward-looking statements. Factors that could cause actual results to differ from expectations in the Company's forward-looking statements include the risks and uncertainties described in the "Risk Factors" section of Part I, Item 1A of the Company's most recent Annual Report on Form 10-K and subsequent filings with the Securities and Exchange Commission.

Forward-looking statements speak only as of the date they are made and are not guarantees of future performance. Accordingly, you should not place undue reliance on forward-looking statements. The Company does not undertake any obligation to publicly update or revise our forward-looking statements, except as required by law.

Avadel is a global biopharmaceutical company focused on transforming medicines to transform lives – starting with narcolepsy

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Avadel: All the Components for Long-Term Growth

LUMRYZ™ represents $1B+ peak sales opportunity in narcolepsy

U.S net product revenue of **$50.0M* for the third quarter** of 2024

More than **2,300* patients on LUMRYZ** as of Q3 2024

Strong representation across all narcolepsy patient segments*

500 **top prescribers** compose 50% of prescription volume

85%* of top HCPs have prescribed LUMRYZ

Recently received **FDA approval** for LUMRYZ's use in pediatric narcolepsy patients 7 years and older

Ongoing Phase 3 **REVITALYZ™ trial** evaluating LUMRYZ for use in **Idiopathic Hypersomnia**

Future oxybate estimated **market value**:

>$5B

Represented by:

> 50K Patients

** = With respect to LUMRYZ in adults with narcolepsy*

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Landmark Moments for LUMRYZ

Milestones Met & Upcoming

Market research and RESTORE study demonstrate patient & physician preference for LUMRYZ

FDA Approval in adult narcolepsy population May 1, 2023; **Orphan Drug Exclusivity (ODE)** through May 1, 2030; **17+ Years Intellectual Property Protection** into early 2042

LUMRYZ launched June 2023 and has since shown strong consistent uptake among adult narcolepsy patients

FDA Approval in pediatric narcolepsy population 7 years and older October 16, 2024**; ODE** through October 16, 2031

Lifecycle management expansion underway with first patient dosed in REVITALYZ™ Phase 3 trial in Idiopathic Hypersomnia

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LUMRYZ has Significant Potential Future Peak Revenue Opportunity

Addressable market opportunity	**50k+** patients
HCP reported market expansion[1]	**+35% - 113%** of new patient starts
Future oxybate-treated patients (est)	**Today** 16k ▶ **Future** 20-25k
HCP reported market share[1]	**50-60%**
Potential future range of LUMRYZ treated patients	**>10k**

Peak sales[2] opportunity

>$1B

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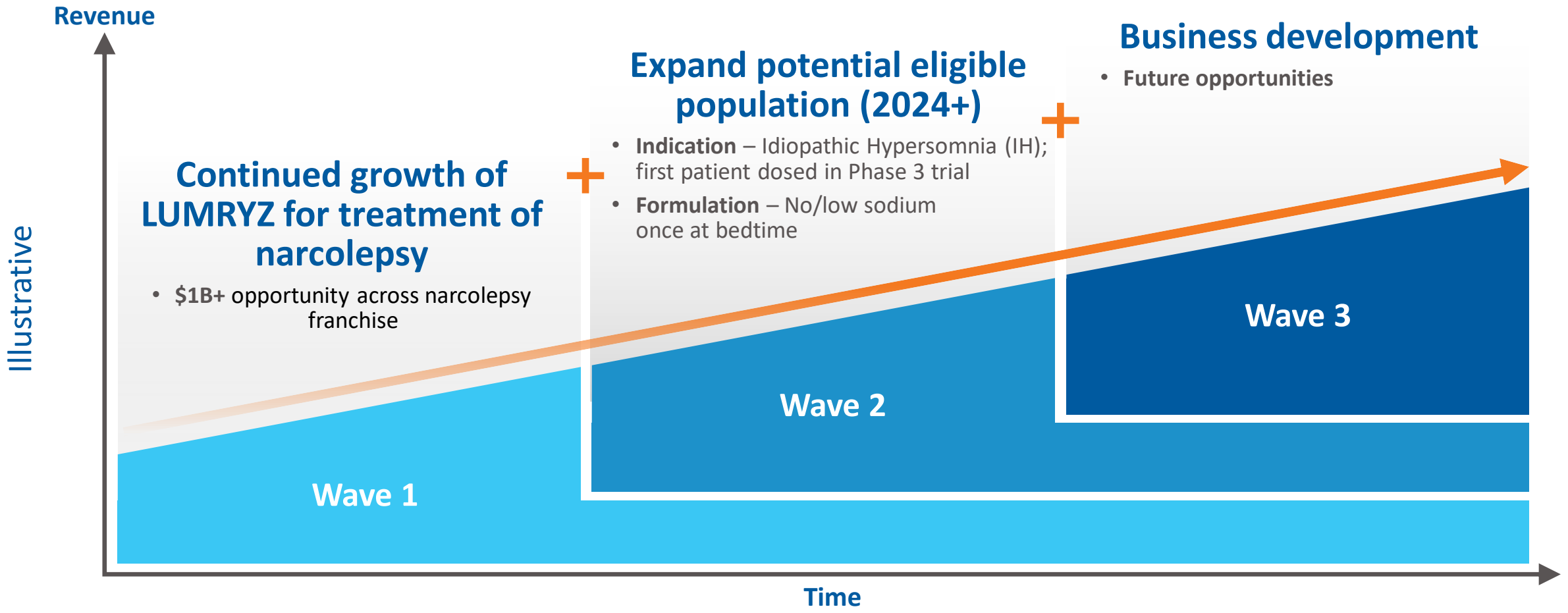
Note: Figures above represent market opportunity, peak sales opportunity and potential patient opportunity based on available information and management's current beliefs regarding these opportunities but do not reflect estimates, expectations, guidance or plans. Actual results may differ materially from the opportunities disclosed above. Subject to change based on updated information and actual results.

Source: 1. Avadel proprietary market research (6 quantitative demand studies across ~700 oxybate prescribers) 2. Based on estimated current net pricing in the market, subject to change

Success of LUMRYZ in Narcolepsy Offers Opportunity to Further Expand Franchise



Strategically positioned to leverage the innovation and investment into LUMRYZ

Narcolepsy: A Serious Unmet Need

Addressing Clear and Indisputable Unmet Need

Only Avadel has addressed the need

- ✓ **Most important attribute** for patients and HCPs – 1x at bedtime dosing[2]
- ✓ **94%** of patients who switched from first generation oxybates **prefer LUMRYZ dosing[3]**
- ✓ FDA found LUMRYZ to provide a **major contribution to patient care** (MCPC) over all 1st gen oxybates and rewarded Avadel with ODE[4]

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Source: 1. Broughton R and Mamelak M. The Treatment of Narcolepsy-Cataplexy with Nocturnal Gamma-Hydroxybutyrate. *Can J Neurol Sci*. 1979 : 2. Dubow J, Avidan AY, Corser B, et al. Preferences for attributes of sodium oxybate treatment: a discrete choice experiment in patients with narcolepsy. Patient Prefer Adherence. 2022;16:937-947. 3. Roy A, Harsh J, Akinyemi AO, et al. Patient Preference and Nocturnal Experience With Oxybate Treatment for Narcolepsy: Interim Analysis of Data From RESTORE. Chest 2022, Oct 16-19, 2022: Nashville, TN. 4 . From FDA website: www.fda.gov/industry/designating-orphan-product-drugs-and-biological-products/clinical-superiority-findings

Narcolepsy

An under-diagnosed, chronic neurological disorder that affects the brain's ability to control sleep-wake cycles

2 cardinal symptoms:

- **Excessive daytime sleepiness** (EDS)
- **Cataplexy** (a sudden loss of muscle tone, which can be triggered by strong emotion)

Patients With Narcolepsy experience disrupted nocturnal sleep

Current treatments also disrupt sleep:

- Wake promoting agents and stimulants can cause insomnia
- Current twice nightly oxybates require patients and/or caregivers to wake up during the middle of the night to take a second dose

Oxybates are the current standard of care for both EDS and cataplexy

First generation, immediate-release oxybate therapies have a short half-life and require twice nightly dosing, the 2nd dose being taken 2.5-4 hours after falling asleep

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LUMRYZ Opportunity

Middle of night dosing required by 2x-nightly oxybates creates challenges for patients, caregivers, & physicians

Current Challenges in the Narcolepsy Market

- At least 65%[1] of people with narcolepsy experience disturbances in nocturnal sleep
- The American Academy of Sleep Medicine (AASM) 2021 Clinical Practice Guidelines recognize insomnia as a common AE for daytime meds to treat narcolepsy
- Market research shows that only about half of eligible patients are receiving oxybates, citing physician perception for patients being unable to comply with twice nightly dosing

What Once-at-Bedtime LUMRYZ can Offer People with Narcolepsy

- Pivotal Phase 3 REST-ON trial data demonstrated clinically meaningful improvement for two cardinal symptoms of narcolepsy, EDS and cataplexy, as well as improvements in disturbed nocturnal sleep
- With once-at-bedtime dosing of LUMRYZ, patients have the opportunity for an uninterrupted night's sleep

Patients and Physicians Prefer LUMRYZ

- 94% of patients participating in the RESTORE study who switched from twice-nightly preferred the once-at-bedtime dosing of LUMRYZ
- 91% of participants in the RESTORE study reported being better able to sleep through the night with LUMRYZ and 89% would recommend LUMRYZ to a family or friend with narcolepsy

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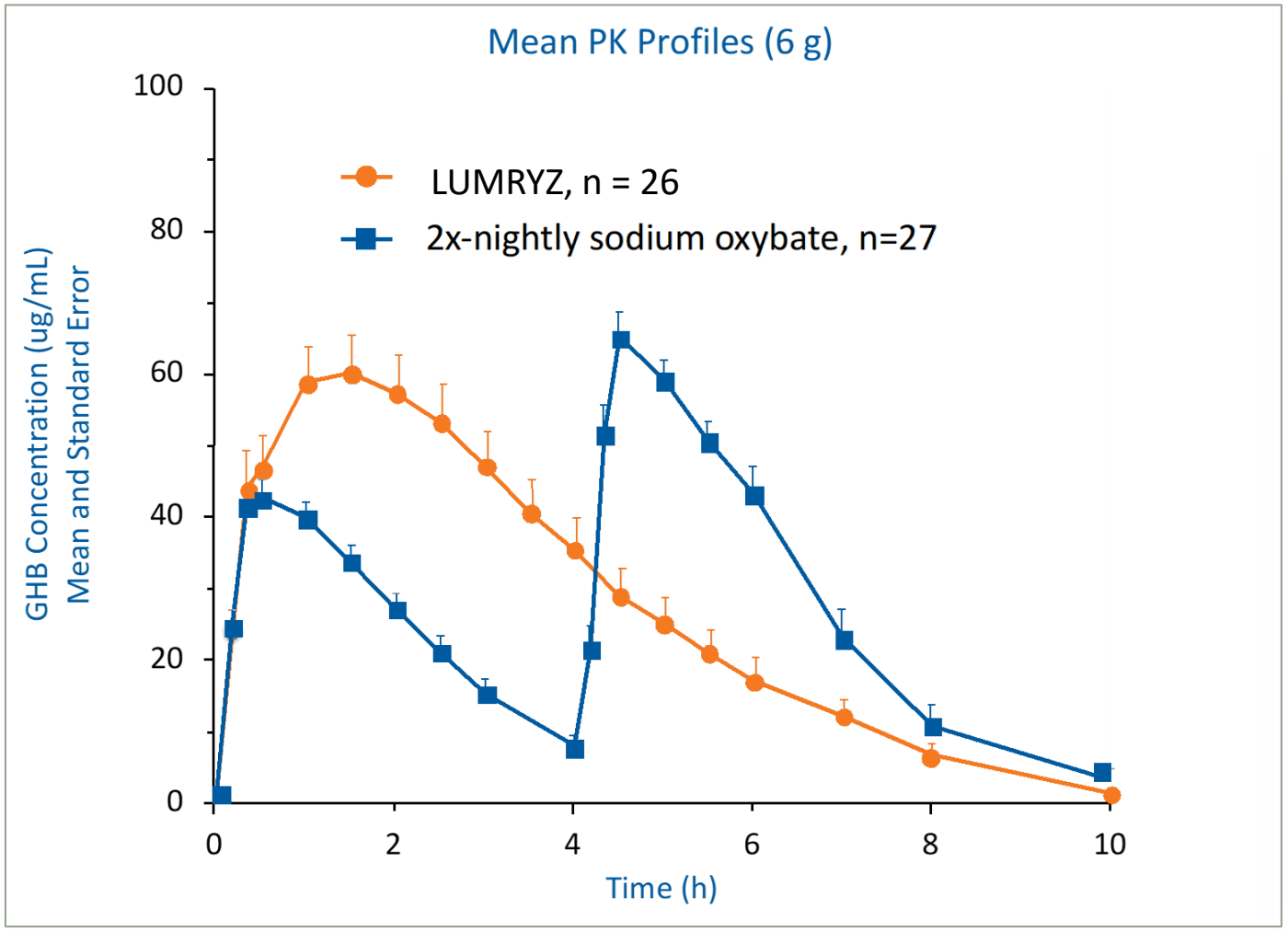
[1] Bassetti et al. Eur J Neurol 2021

PK Profile Optimized for Once-At-Bedtime Dosing



Comparison to 2x-Nightly

Advantage	Single, pre-measured, once-at-bedtime dose
Advantage	No middle-of-the-night dosing; eliminates potential of second dose taken too early, too late, or completely missed
Similar	Overall exposure (AUC) – bioequivalent to SoC
Similar	Onset time

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Pivotal Phase 3 REST-ON Trial Results

Positive Results Across All Co-Primary Endpoints For All Doses

Once-at-bedtime LUMRYZ:
6, 7.5 and 9 g all demonstrated <0.001 compared to placebo, for each of the 3 co-primary endpoints

Improvement of:

1. Excessive daytime sleepiness (MWT)
2. Clinician's overall assessment of patient function (CGI-I)
3. Reduction in cataplexy attacks

LUMRYZ was generally well-tolerated; commonly known sodium oxybate adverse reactions occurred at low rates even at the highest dose (9 g)

Pivotal publication for LUMRYZ Ph III study: Kushida et al. *Sleep.* 2022
Plain Language Summary by Kushida et al. *Future Neurology*. 2022

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Pivotal Phase 3 REST-ON Trial Results

LUMRYZ 9g was Generally Well-Tolerated

	LUMRYZ (%) | N=77	Placebo (%) | N=80
Any Adverse Drug Reaction (ADR)	35.1	5.0
Any Serious ADR	1.3	0.0
ADR Leading To Discontinuation	3.9	0.0
ADRs ≥2% and greater than placebo in LUMRYZ		
Decreased Weight	3.9	0.0
Vomiting	5.2	0.0
Decreased Appetite	2.6	0.0
Dizziness	5.2	0.0
Somnolence	3.9	0.0
Enuresis	9.1	0.0

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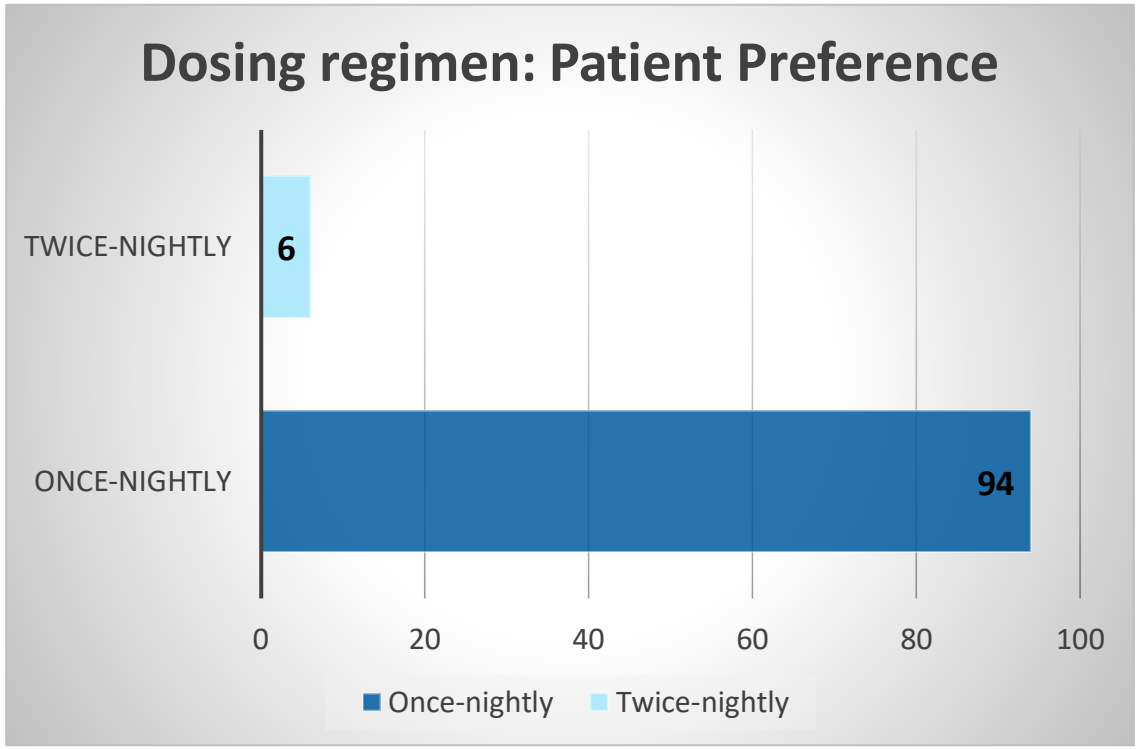
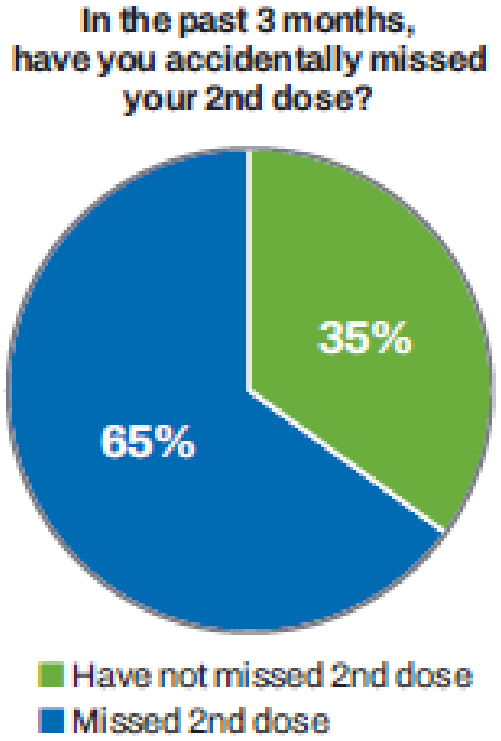
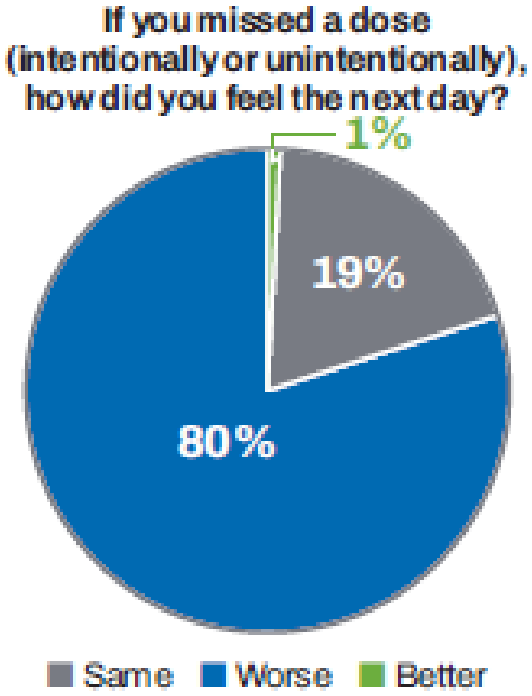
RESTORE
Long-Term Study Designed to Evaluate Safety and Tolerability of LUMRYZ

- **94% of patients prefer once-nightly dosing**
- Low rate of discontinuation due to adverse reactions; largest cohort of switch patients
- Patients on twice-nightly oxybates report missing and/or taking second dose too late resulting in negative impacts on narcolepsy symptoms and patient quality of life







Roy et al. CHEST 2022. Nashville TN

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Data Suggests Patient Preference for Once-at-Bedtime LUMRYZ

RESTORE study results demonstrate 94% of switch patients prefer once-at-bedtime LUMRYZ

"Taking twice nightly Oxybate is annoying, not only do I have to measure it out and put it in the medication cup and fill it up, I have to put it on my nightstand, if I oversleep, I can't take it if too close to getting kids up for school. Once at bedtime would simplify a lot."

*– Oxybate Experienced Patient**

* Source: Based on proprietary in-depth commercial research conducted on behalf of Avadel

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Physicians Prefer Once-at-Bedtime Dosing Regimen Over Twice Nightly Dosing

"Looks like wouldn't be too hard to switch over. I would discuss [LUMRYZ] with all my patients and see if patients want it and I have no problem doing this if a patient asked to switch"

*- Sleep Medicine Specialist HCP**

"I would use [LUMRYZ] even if patients are well controlled, because it's better to not have to wake up during the night and patients would be more compliant. Therefore, it's also more cost effective as [compliance is higher]"

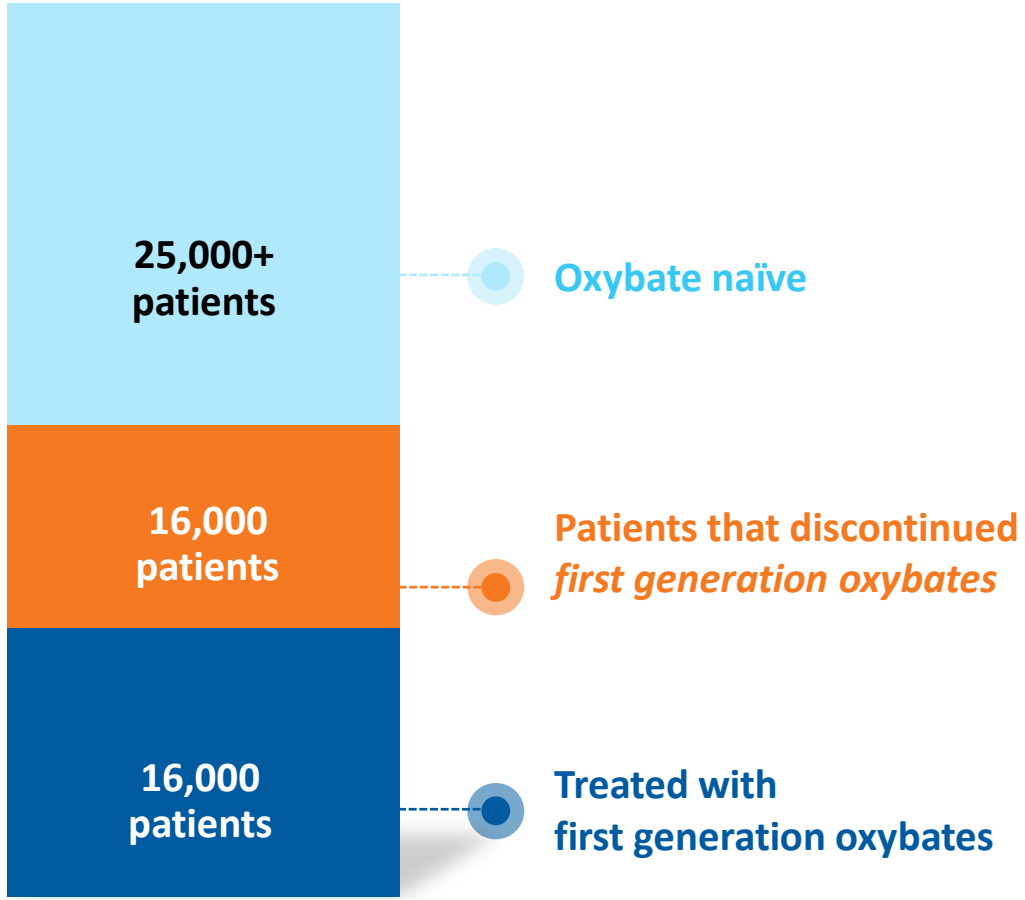
*-Sleep Medicine Specialist HCP**

* Source: Based on proprietary in-depth commercial research conducted on behalf of Avadel

Commercial Strategy

LUMRYZ has an Addressable Market of >50k Patients

MARKET SEGMENTS



LUMRYZ launch opportunities in each segment

- **Oxybate use will expand because of LUMRYZ, large opportunity for future growth**
- **Exclusively for LUMRYZ, high HCP and patient interest**
- **Clear relative benefit, high HCP and patient intent to use**

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* Source: Based on proprietary in-depth, pre-launch commercial research conducted on behalf of Avadel

LUMRYZ is Well-Positioned to Lead Across All Narcolepsy Patient Segments

Current 2X-nightly OXB (~16K patients)

- **70%+** of patient on current oxybates experience **"poor quality sleep"** several times a week*
- **High patient interest in LUMRYZ (80%+)***
- **Once at bedtime dosing preferred over all attributes** (including sodium content) for patients and physicians in 2021 Discrete Choice Experiment (DCE)

Recently discontinued 2X nightly OXB (~10-15K patients)

- Current discontinuation rates are estimated to be **20-25% after month one, and 40-50% across first year***
- Many discontinued patients remain **highly interested in learning about LUMRYZ (60%+)***
- Discontinuations typically driven by a variety of **efficacy, dosing and tolerability related challenges**

Annual New Oxybate Patients (~3K annually)

- **Inconvenient dosing** is the most frequently cited challenge why patients decline to initiate 2x-nightly oxybates
- Patients express dissatisfaction with wake promoting agents and stimulant, **interest in LUMRYZ is high (70%+)***
- **New starts expected to grow** with introduction of LUMRYZ, potential for new starts to grow to **4-5K annually**

* Source: Based on proprietary in-depth, pre-launch commercial research conducted on behalf of Avadel

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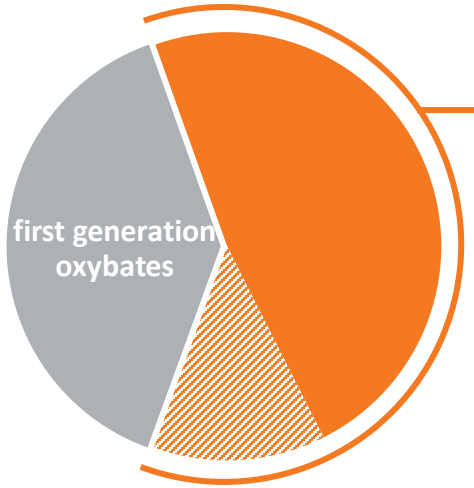
LUMRYZ Can Become the Oxybate Market Leader and Grow the Market

The Results:
HCP oxybate market share given to LUMRYZ



HCP projected share

48-61%

Average: 54%

lumryz™
sodium oxybate for extended-release oral suspension Ⓒ

The Results

New-to-oxybate patient market expansion
(new to oxybate patient starts)

+35% to 113%
Average: 58%

All market research conducted prior to any promotional support and not tested with ODE LUMRYZ clinical superiority over first generation oxybates message

Source: Avadel proprietary market research studies including 2020 Demand Study, HCP; 2020 Pre-launch Quant study - Patients; 2021 HCP ATU, Wave 1; 2022 HCP ATU, Wave 2; 2023 Qual Demand; 2023 HCP ATU, Wave 3

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Bringing LUMRYZ to the Narcolepsy Community has Focused on Three Core Elements for Continued Commercial Execution

1	2	3
Demand Generation	Reimbursement	Product Fulfillment

Built a Strong Foundation for Continued Growth

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LUMRYZ Launched in June 2023

4 pre-measured once-at-bedtime packets

- (4.5, 6, 7.5 or 9g) help ensure patients receive full therapeutic effects of their prescribed dose / ensure patients can reliably receive a consistent full dose
- Available in 7 and 30 counts

LUMRYZ available at our specialty pharmacy network

accredo®

CVS specialty®

Optum Frontier Therapies

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LUMRYZ Commercial Execution

LUMRYZ Outlook

- ✓ Project LUMRYZ's **potential beyond** the 16,000 individuals on 1st generation oxybates
- ✓ Forecast a total addressable narcolepsy population of **50,000 people across all 3 segments**

Patient Segment Dynamics

- ✓ **Strong representation** across all three patient segments in adult population
- ✓ Switches from 1st generation oxybates make up a **significant portion** of patients on LUMRYZ in the adult population
- ✓ Naïve adult population uptake **underscores LUMRYZ's potential** to **grow the market** beyond 1st generation oxybate limitations
- ✓ Previously discontinued twice nightly oxybate patients represent a **unique segment** for LUMRYZ

Key Commercial Indicators

- ✓ **More than 2,300* patients on therapy** as of September 30th
- ✓ **Consistent quarter over growth** with > **than 3,100* patients initiated therapy** as through September 30th

** = With respect to LUMRYZ franchise in adults with narcolepsy*

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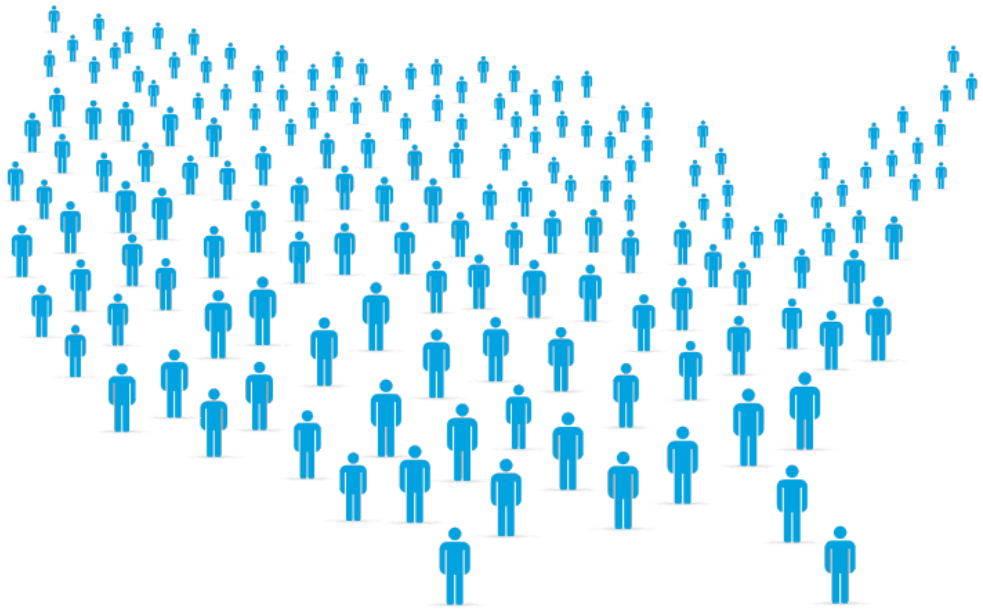
Concentrated U.S. HCP Universe
Foundation for Continued Efficient Commercial Expansion



Concentrated Prescriber Base (% oxybate total prescription volume)

- ~4,500 prescribers account for 100%
- ~1,600 prescribers account for 80%
- ~500 prescribers account for 50%
  - 90% of ~500 prescriber population have written for LUMRYZ

Launch Strategy

- High volume oxybate prescribers are a core focus

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Payers: Excellent Progress Achieving Parity Access

2

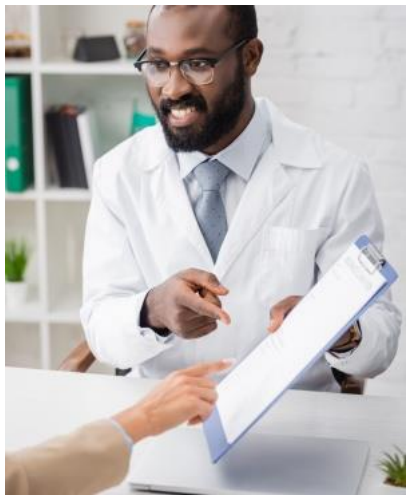
Reimbursement

Commercial coverage

- ✓ LUMRYZ payer channel mix initially estimated to be more than 80% commercial

GPOs/PBMs

- ✓ **Contracts in place with all 3 PBM-owned GPOs** (Ascent/ESI, Zinc/CVS, Emisar/Optum) covering 80-85% of commercial lives
- ✓ **LUMRYZ** commercial coverage at 85% of lives where there is a policy for LUMRYZ



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Priority is Supporting LUMRYZ Patients

RYZUP™
SUPPORT SERVICES

Essential access & affordability programs

- **$0 commercial copay program**
- **Patient assistance program**
- **Temporary assistance program**

Personalized support for patients and offices

- Nurse Care Navigators (NCNs), all nurses by training
- **NCNs individually assigned to each patient and office**
- NCNs are prior authorization certified

- **>100 years collective clinical experience**
- **Avg 5+ years of reimbursement experience**

In office pull through support

- **Team of Field Reimbursement Managers directly supporting HCP offices**
- Integrated data platform triggers to field teams and RYZUP team

- **>50 years collective reimbursement experience**
- **Avg 15+ years of pharmaceutical experience**

3

Product Fulfillment

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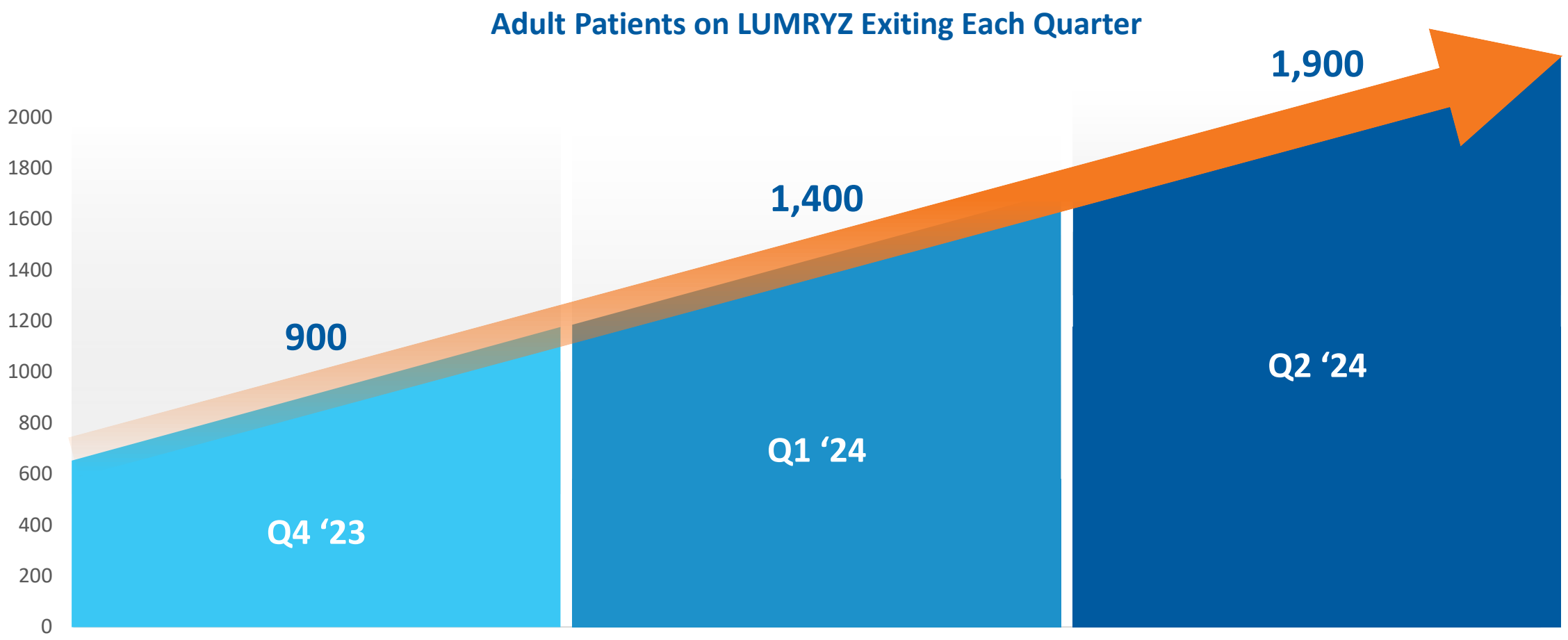
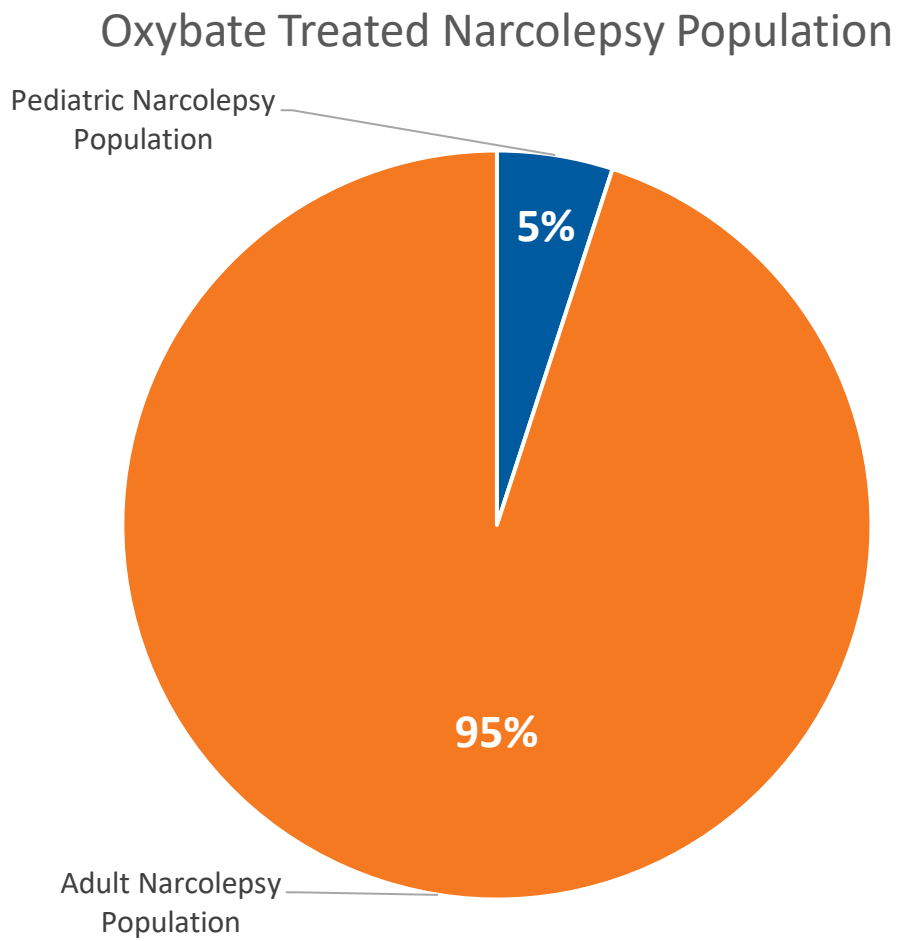
Quarterly Growth in Patients on LUMRYZ



LUMRYZ Continued Growth Opportunity

Pediatric Approval for Treatment of Narcolepsy



Pediatric Patient Opportunity

- LUMRYZ's received FDA approval on October 16, 2024 for use in pediatric narcolepsy
- Approval **compliments** LUMRYZ's prior approval in adult patients with narcolepsy
- Unique ability to offer **undisrupted sleep** to children and their dedicated caregivers

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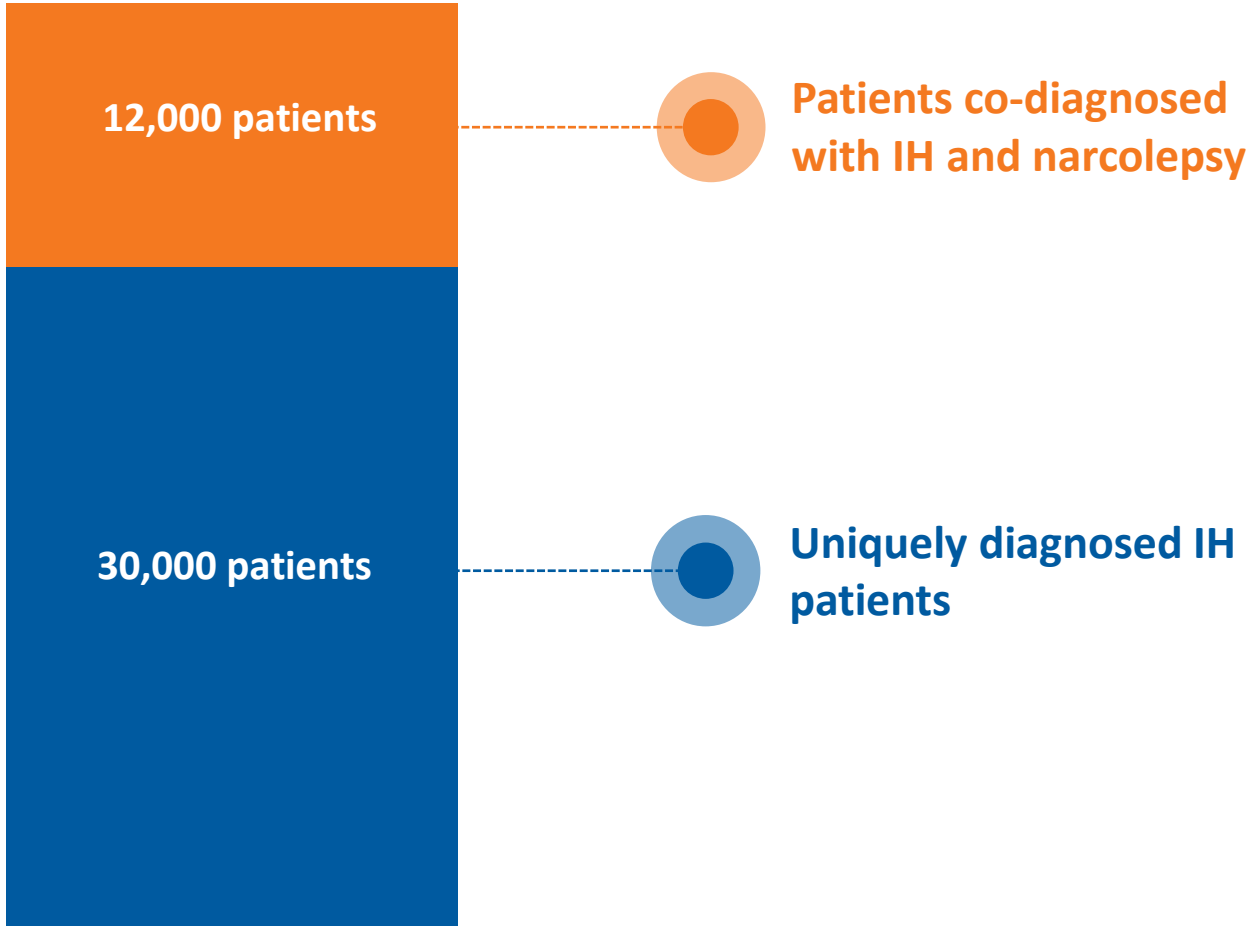
Phase 3 Study: Idiopathic Hypersomnia (IH)



Ongoing REVITALYZ™ Trial

- Double-blind, placebo-controlled randomized withdrawal, multicenter Phase 3 study
- Evaluating safety and efficacy of LUMRYZ
- Targeting to enroll 150 adults diagnosed with IH

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Financial Summary

Financial Summary[1,2]

($ In Thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
Net Product Revenue	**$50,025**	**$7,014**	**$118,707**	**$8,510**
Gross Profit	**$43,870**	**$6,897**	**$108,242**	**$8,357**
Total Operating Expenses	**$44,197**	**$42,007**	**$147,344**	**$121,306**
Research & development expense	*3,803*	*2,849*	*10,922*	*10,902*
Selling, general & administrative expense	*40,394*	*39,158*	*136,422*	*110,404*
Operating Loss	**($327)**	**($35,110)**	**($39,102)**	**($112,949)**
Net Loss	**($2,625)**	**($36,274)**	**($43,789)**	**($131,490)**
Cash, Cash Equivalents & Marketable Securities	**$65,807**	**$153,179**	**$65,807**	**$153,179**

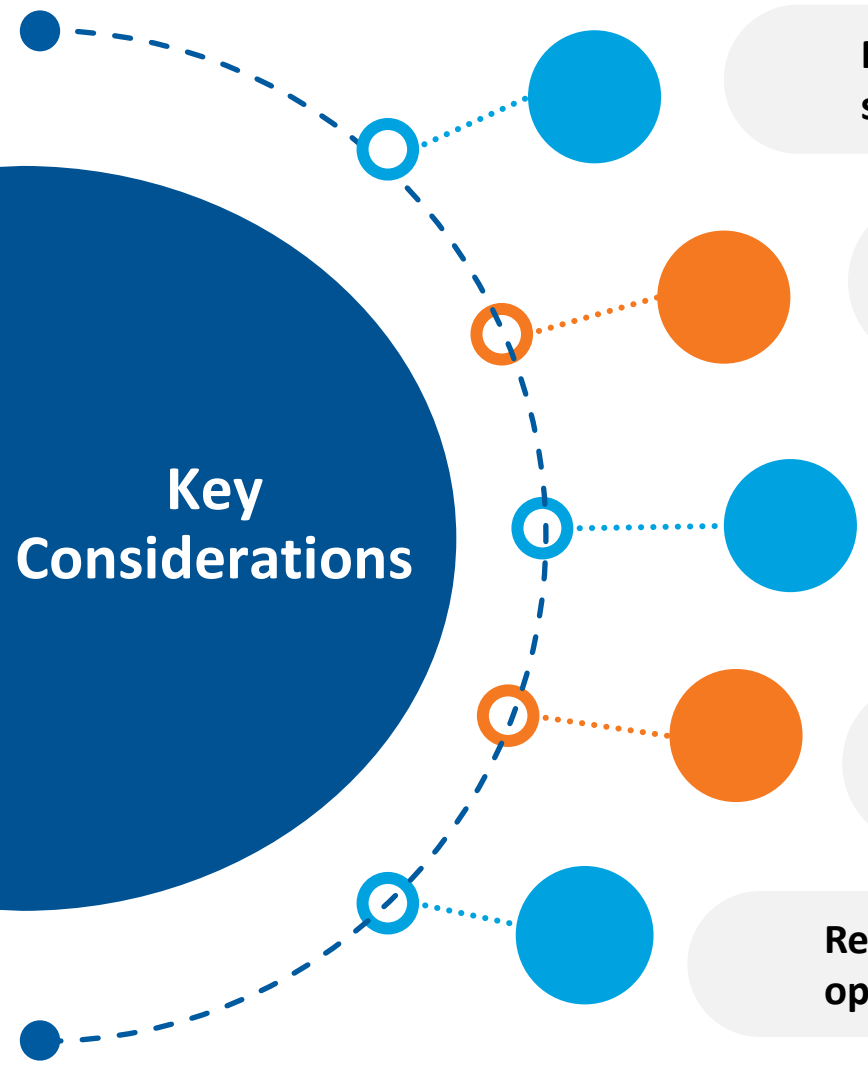
1) *Refer to Forms 10-Q for quarters ended September 30, 2024 & 2023 filed on November 12, 2024, and November 8, 2023, respectively, for financial statements and management's discussion and analysis of financial condition and results of operations*
2) *Totals may not sum due to rounding*

GAAP vs. Non-GAAP Reconciliation

($ In Thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
GAAP Operating Loss	**($327)**	**($35,110)**	**($39,102)**	**($112,949)**
Stock Based Compensation Expense	5,410	3,127	16,262	12,292
Depreciation & Amortization [1]	997	1,145	3,072	3,222
Transaction Costs [2]	-	-	5,468	-
Non-GAAP Operating Profit / (Loss) [3]	**$6,080**	**($30,838)**	**($14,300)**	**($97,435)**

1) *Includes depreciation of fixed assets and amortization of prepaid expenses*
2) *Expenses incurred for the mandatory exchange of the Company's American Depository Shares for the underlying ordinary shares and the termination of the American Depository Receipt Program*
3) *Totals may not sum due to rounding*

Investment Thesis



- Market research and RESTORE study consistently demonstrate significant patient & physician preference for LUMRYZ
- > $1B peak sales opportunity for LUMRYZ in +$5B oxybate market
- Orphan Drug Exclusivity in adult and pediatric narcolepsy populations
- Strong IP Protection - Multiple Orange Book Listed Patents; 17+ Years Intellectual Property protection into 2042
- Strong balance sheet with no debt; Existing capital resources + cash receipts from sales sufficient to support LUMRYZ launch
- Recent expansion into pediatric narcolepsy and future opportunity in Idiopathic Hypersomnia

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