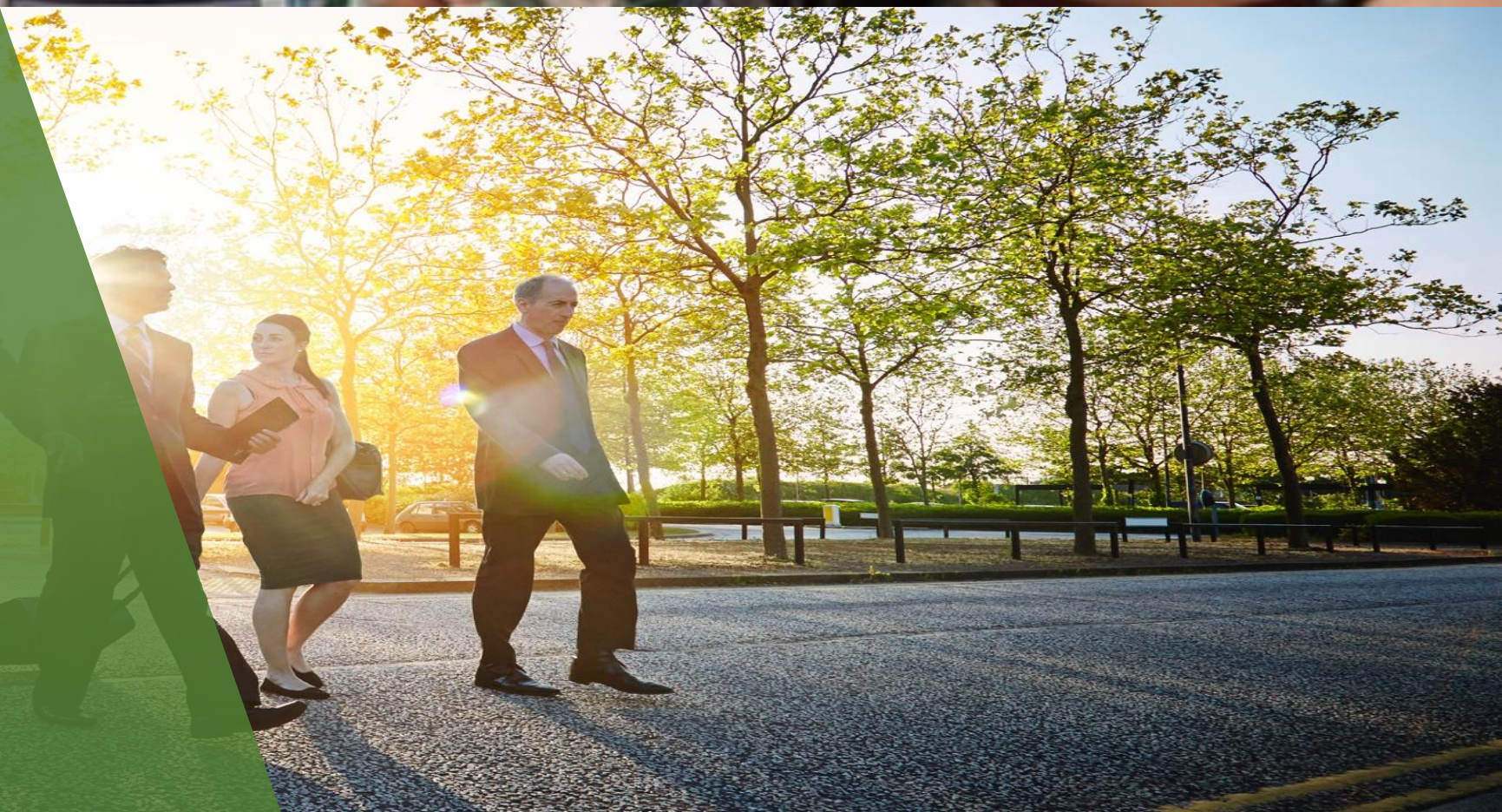




41st Annual J.P. Morgan Healthcare Conference

January 2023



Forward Looking Statements

This presentation includes forward-looking statements within the meaning of the Private Securities Reform Act of 1995. All statements other than statements of historical facts contained in these materials or elsewhere, including statements regarding Harmony Biosciences Holdings, Inc.'s (the "Company") future financial position, business strategy and plans and objectives of management for future operations, should be considered forward-looking statements. Forward-looking statements use words like "believes," "plans," "expects," "intends," "will," "would," "anticipates," "estimates," and similar words or expressions in discussions of the Company's future operations, financial performance or the Company's strategies. These statements are based on current expectations or objectives that are inherently uncertain, especially in light of the Company's limited operating history. These and other important factors discussed under the caption "Risk Factors" in the Company's Annual Report on Form 10-K filed with the U.S. Securities and Exchange Commission (the "SEC") on February 28, 2022 and its other filings with the SEC could cause actual results to differ materially and adversely from those indicated by the forward-looking statements made in this presentation. While the Company may elect to update such forward-looking statements at some point in the future, it disclaims any obligation to do so, even if subsequent events cause its views to change.

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Who We Are



OUR MISSION

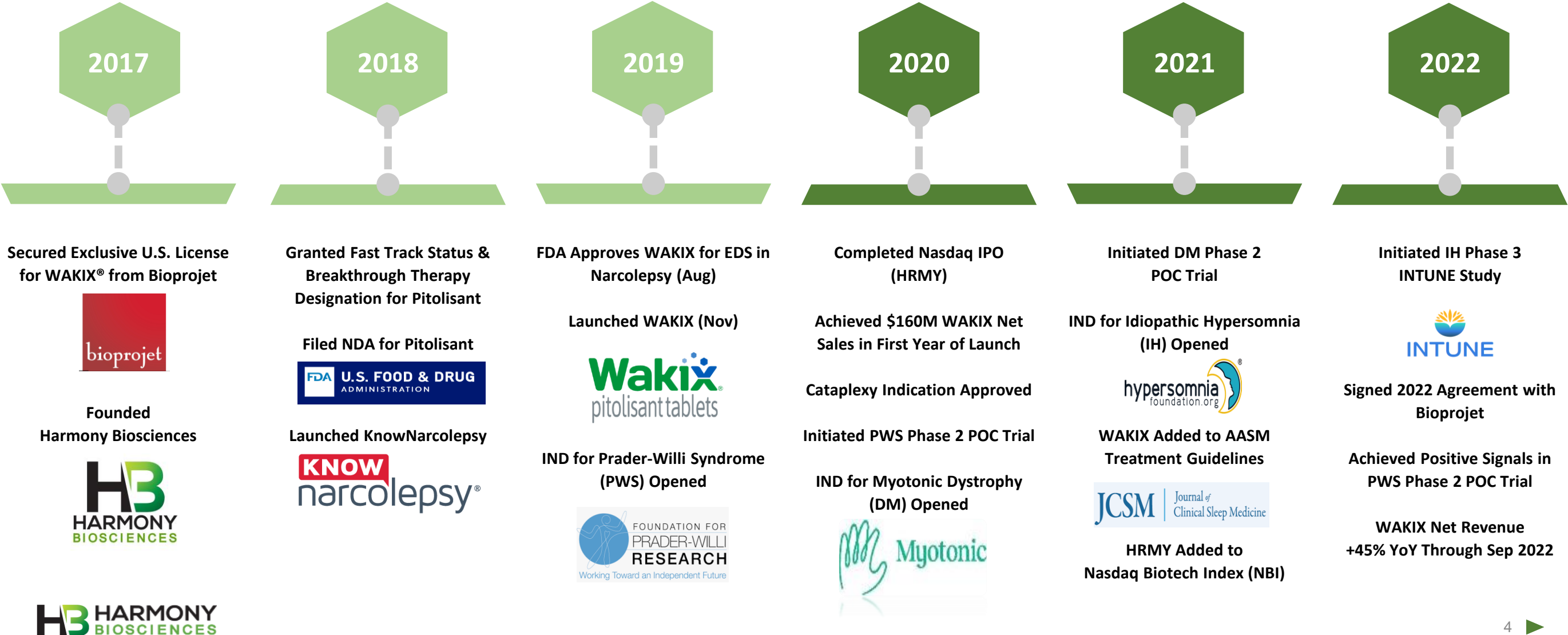
At Harmony Biosciences, we specialize in developing and delivering treatments for rare neurological diseases that others often overlook. We believe that where empathy and innovation meet, a better life can begin for people living with neurological diseases.



Our Journey

FOUNDATION

GROWTH & EXPANSION



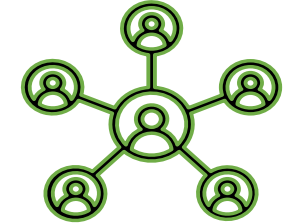
Harmony Today

A Rapidly Growing, Emerging Leader in the Neurology Arena



**Strong Launch Success With
WAKIX® in Narcolepsy**
**>\$1B+ Net Revenue
Opportunity Via Narcolepsy
and Additional Indications**

**Established Infrastructure and
Proven Capabilities Including
Clinical Development, Regulatory
Affairs, and Commercial**



**Multiple Phase 2/3
Programs Underway to
Expand Utility of Pitolisant
Beyond Narcolepsy**

**Award Winning Team and Culture
With Deep Expertise in
Rare-Orphan Neurology**



Our Three-Pillar Growth Strategy



Optimize WAKIX®
Performance



Expand Clinical Utility of
Pitolisant



Acquire
New Assets

DESIGNED TO SUPPORT LONG TERM SUSTAINABLE GROWTH

Our Three-Pillar Growth Strategy

2022 Accomplishments



Optimize WAKIX® Performance

Continued performance with WAKIX in Narcolepsy

- ✓ Strong commercial performance for WAKIX (Net Revenue ~\$310M Sep YTD; +45% YoY)
- ✓ Continued growth in patients with 4,600¹ average patients on WAKIX



Expand Clinical Utility of Pitolisant

Expand utility beyond Narcolepsy

- ✓ Initiated Phase 3 INTUNE Study in patients with IH
- ✓ Generated positive signals in Phase 2 POC study in patients with PWS



Acquire New Assets

Expand our portfolio beyond WAKIX

- ✓ Signed new agreement with Bioprojet for up to two new pitolisant based assets
- ✓ Strong financial position

Our Three-Pillar Growth Strategy

A Look Forward to 2023



Optimize WAKIX® Performance

- Continue strong commercial execution for WAKIX
- Continue growing average number of patients on WAKIX
- Expect to surpass \$1B in cumulative net revenue since launch



Expand Clinical Utility of Pitolisant

- Continue patient enrollment in Phase 3 INTUNE registrational trial
- Engage with FDA on next steps to advance the PWS development program
- Anticipate topline data from Phase 2 POC study in DM1



Acquire New Assets

- Acquire assets to expand portfolio beyond WAKIX
- Focused on rare/orphan neurology assets and/or assets in other neurological diseases
- Continue strengthening our financial position

Our Three-Pillar Growth Strategy



Optimize WAKIX®
Performance



Expand Clinical
Utility of
Pitolisant



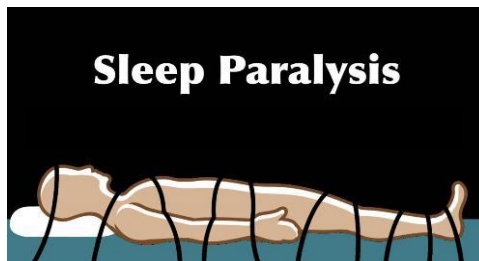
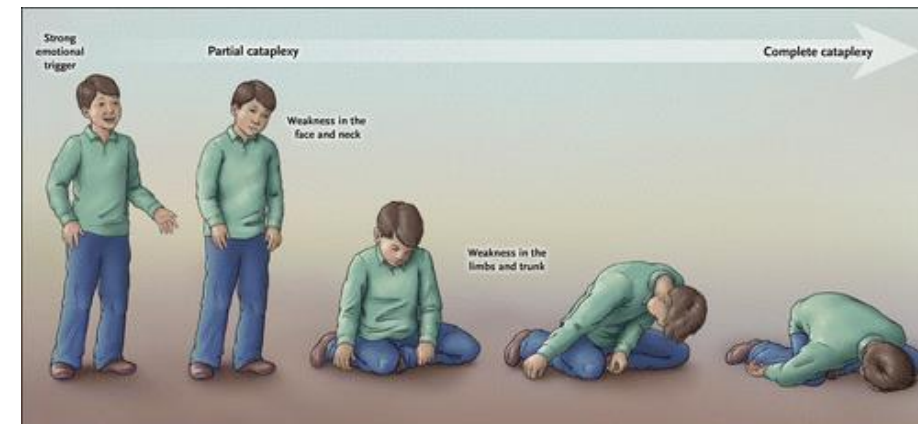
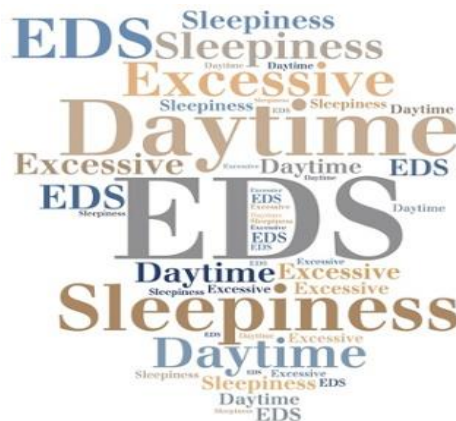
Acquire
New Assets

DESIGNED TO SUPPORT LONG TERM SUSTAINABLE GROWTH

Narcolepsy: A Chronic Debilitating Neurological Disease



- Orphan/rare disease thought to affect up to **165,000 Americans¹**
- All patients with narcolepsy have excessive daytime sleepiness (EDS), which is the primary symptom of the disorder
- Type 1 (narcolepsy with cataplexy) and Type 2 (narcolepsy without cataplexy) differentiated by cataplexy as an additional symptom beyond EDS



Disturbed or Fragmented Nighttime Sleep

Hypnagogic and Hypnopompic Hallucinations



"These hallucinations can be very vivid, and sometimes disturbing. Especially if you see creatures appearing in your room, voices saying unpleasant things or feeling something touch you."

86% of people living with narcolepsy surveyed reported narcolepsy is a life-changing disorder³

Patient Perspectives: The Impact of Living with Narcolepsy

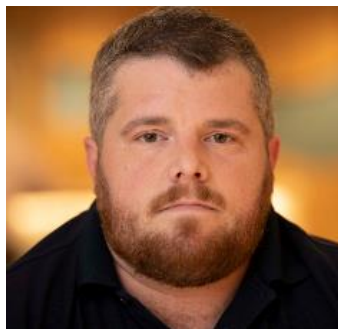


"Narcolepsy severely impacts not only me, but my family and friends. It's a daily battle fought over a lifetime."

"My biggest accomplishment every day is getting out of bed."



"Narcolepsy is an ugly life stealing disease – it makes you feel useless and labeled as lazy and unmotivated. I couldn't hold a job or drive a car for years."

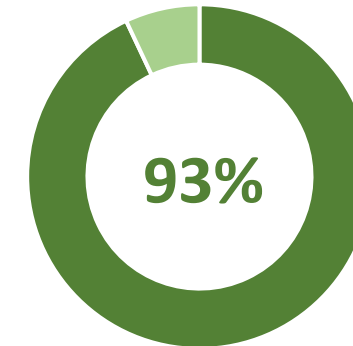
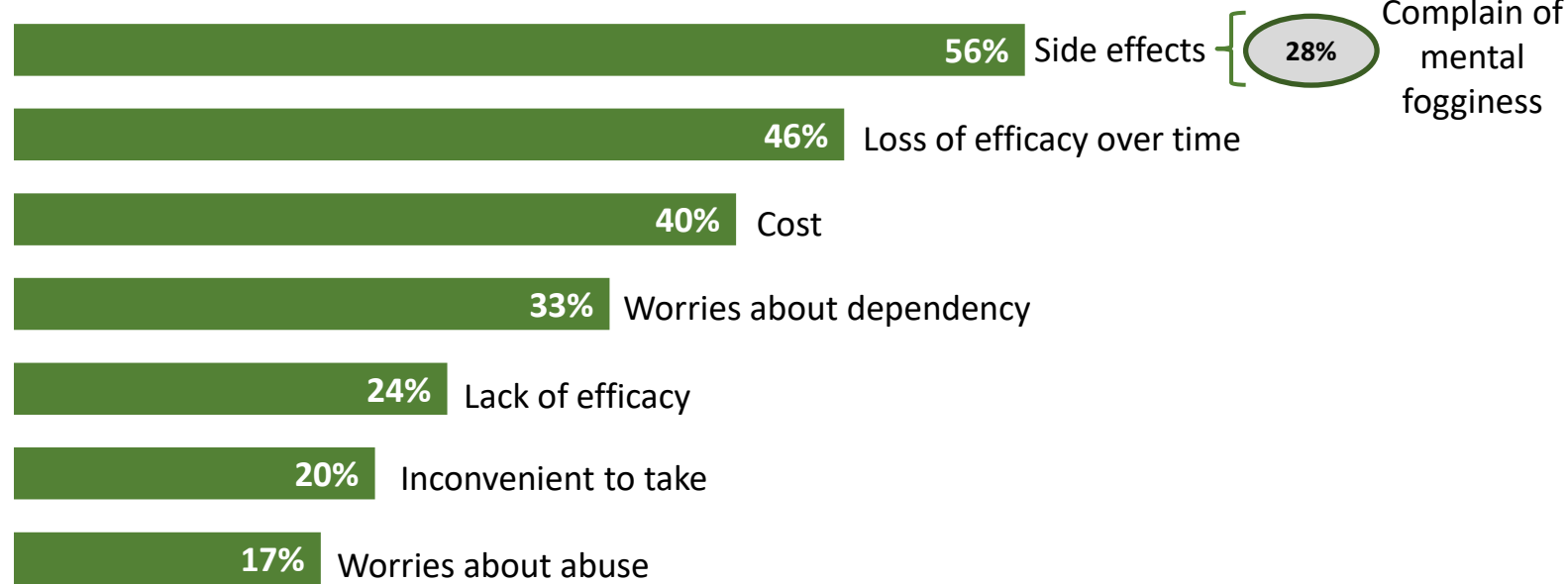


"I lost my best friend, my spouse and my daughter for a number of years because I couldn't function. I'll never get that time back with them."

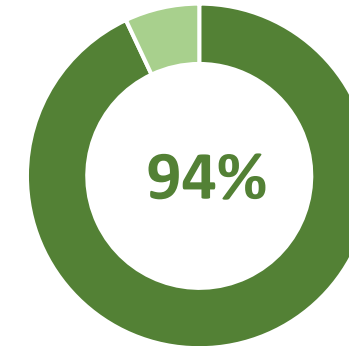
- Excerpts from patient stories on www.KnowNarcolepsy.com
- 10x Award winning disease education website designed to advance the understanding of the disorder and the impact of narcolepsy

Market Research Supports the Need for Novel Treatment Options for People Living with Narcolepsy

Patient survey of 200 people living with narcolepsy showed:



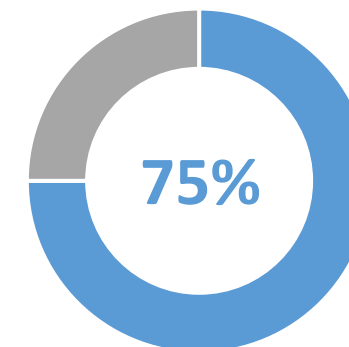
Expressed frustrations with narcolepsy medications



Believed they needed new treatment options

Versta Research, Know Narcolepsy Survey ("Know Narcolepsy"), October 2018

A retrospective, electronic chart review of 97 treated narcolepsy patients conducted at Rush University Medical Center found the majority of patients reported unresolved symptoms even while on treatment



Patients reported having residual symptoms that disrupt their life even while on current medications

McCullough et al. Novel treatments options in narcolepsy, Chicago Rush Memorial Center - SLEEP 2019 Abstract

WAKIX® – Unique & Meaningfully Differentiated Product Profile



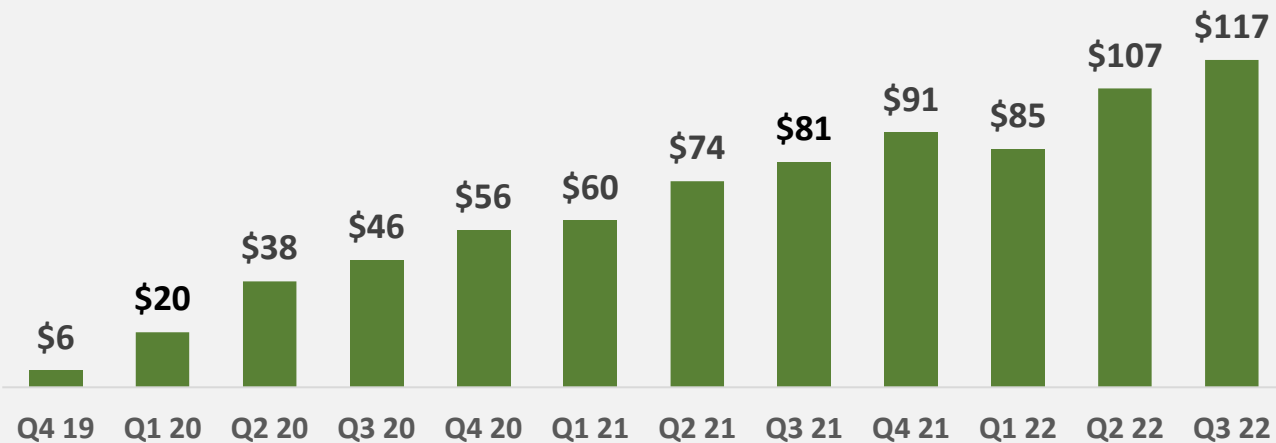
- First in class molecule with a **novel MOA**
 - The only selective H3 receptor antagonist/inverse agonist approved by the FDA
- First and only FDA-approved **non-scheduled** treatment for narcolepsy
- **Not a stimulant** - no evidence of drug tolerance or withdrawal symptoms
- Can be used as **monotherapy or administered concomitantly** with other narcolepsy treatments (modafinil and sodium oxybate)
- **Once-daily** oral tablet administered in the morning upon waking

Strong Track Record of Performance

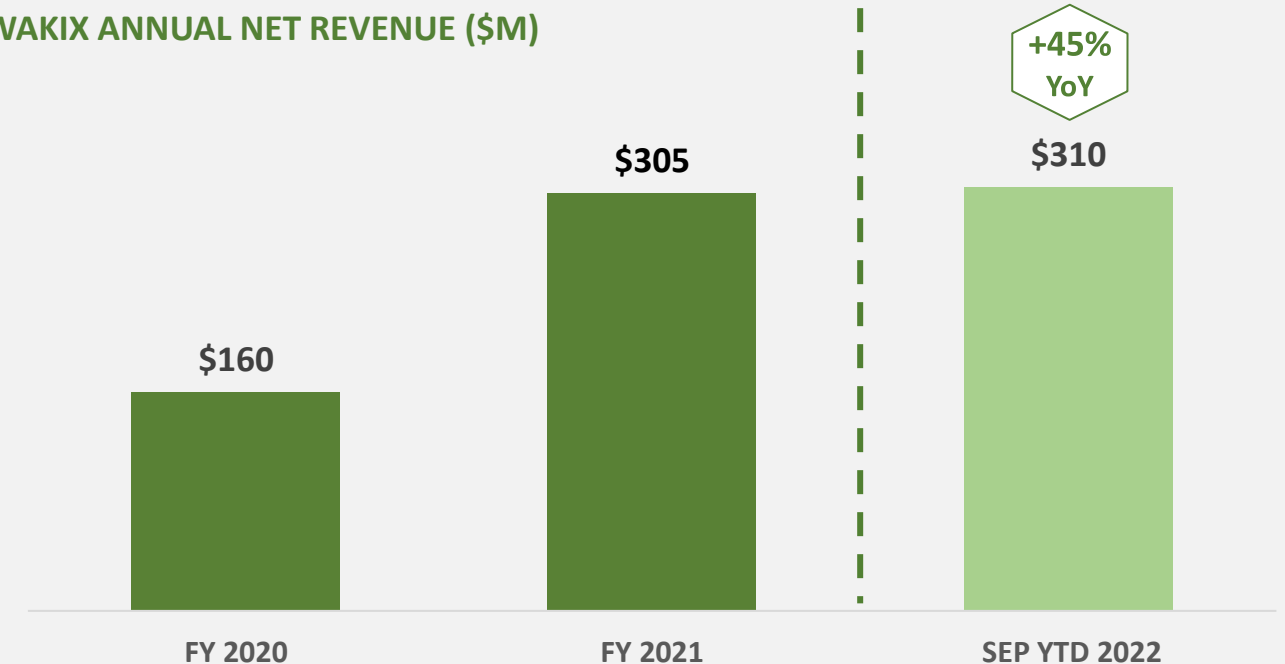
CONFIDENT IN WAKIX BECOMING A POTENTIAL >\$1B+ FRANCHISE VIA NARCOLEPSY AND ADDITIONAL INDICATIONS

WAKIX QUARTERLY NET REVENUE (\$M)

~\$780M Cumulative Net Revenue
Since Launch



WAKIX ANNUAL NET REVENUE (\$M)

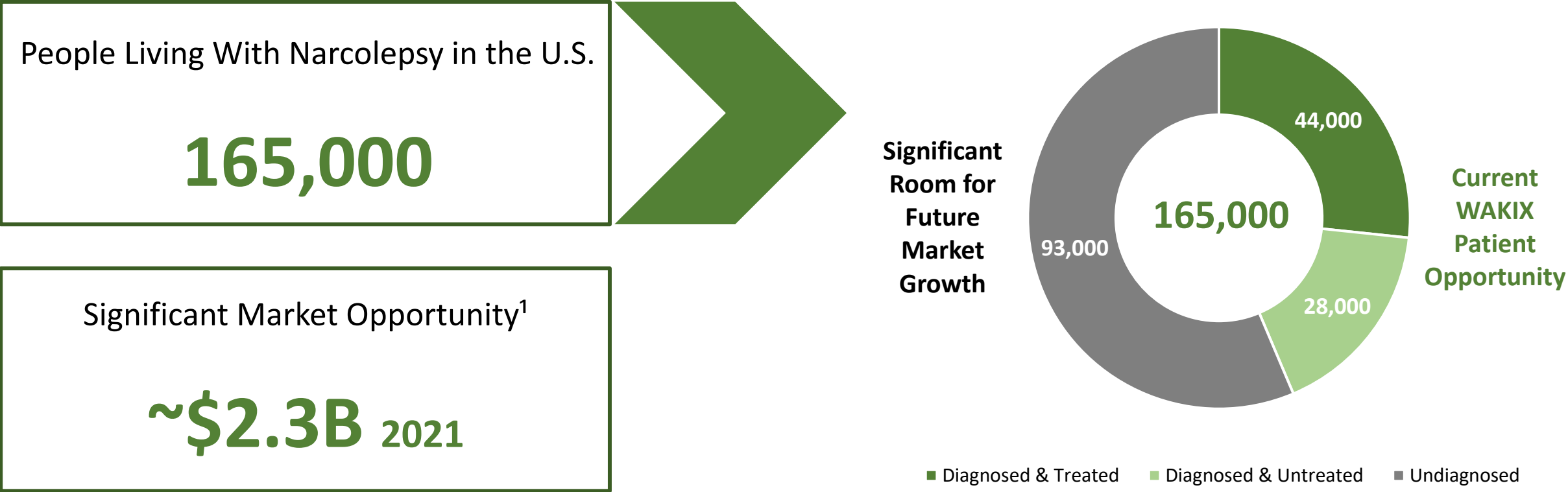


~4,600¹ Average # of
WAKIX Patients

Continued Growth in Depth
& Breadth of Prescriber Base

>80% U.S. Covered Lives With
Formulary Access

Narcolepsy: Significant Market Opportunity



Factors contributing to market growth

- Growth in diagnosis rates in recent years
- Increased investment in education
- Introduction of new treatments
- Low satisfaction with traditional treatment options

Our Three-Pillar Growth Strategy



Optimize WAKIX®
Performance



Expand Clinical
Utility of
Pitolisant



Acquire
New Assets

DESIGNED TO SUPPORT LONG TERM SUSTAINABLE GROWTH

Development Pipeline

Product / Indication	Pre-IND	Phase 1	Phase 2	Phase 3	Regulatory Filing ¹	Marketed Product	Milestone
WAKIX®							
EDS in Narcolepsy (Adults)							
Cataplexy in Narcolepsy (Adults)							
Pitolisant							
Pediatric Narcolepsy ²							EMA decision 1Q2023
Idiopathic Hypersomnia (IH)							Trial initiated 2Q2022
Prader-Willi Syndrome (PWS)							Topline data 4Q2022
Myotonic Dystrophy (DM)							Topline data 2023
New Pitolisant Assets							New Bioprojet Agreement Closed 3Q2022
HBS-102							
PWS							Preclinical POC study initiated 3Q2022

Pitolisant: Key Clinical Programs

Idiopathic Hypersomnia (IH)

- Rare, chronic, neurological disease characterized by EDS despite sufficient or long sleep; other key features include sleep inertia after waking and impaired cognition, attention, and alertness (known as 'brain fog')¹⁻⁵
- Like narcolepsy, another central disorder of hypersomnolence
- Estimated number of diagnosed **patients in U.S. currently about 30,000 to 40,000⁶**; epidemiological data suggest about **80,000 people living with IH in U.S.**
- **Only one approved treatment** for patients with IH

Prader-Willi Syndrome (PWS)

- Rare, genetic multi-system, neurodevelopmental disorder characterized by hypothalamic dysfunction
- Decreased hypocretin levels in some patients^{7,8}
- **~15,000-20,000 patients in U.S.** and more than 50% have EDS⁷
- **No approved treatments for EDS in patients with PWS**; unmet medical need

Myotonic Dystrophy (DM)

- Rare, genetic multi-system disease; myotonia and progressive muscle weakness hallmark symptoms; EDS most common non-muscular symptom (~80% - 90% of patients)
- Decreased hypocretin levels in some patients^{9,10,12}
- ~160,000 people in the US with genetic defect for DM1; of those, ~50% symptomatic and of those, ~50% diagnosed (**~40,000 patients**)¹³
- **No approved treatments for DM**; significant unmet medical need

Idiopathic Hypersomnia: A Debilitating Neurological Disorder With Significant Unmet Need

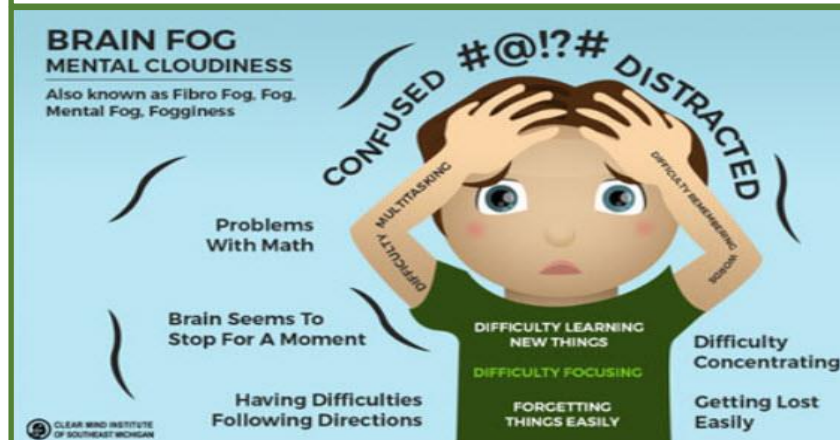
Irresistible need to sleep for long periods
and non-refreshing daytime napping



Sleep 9-14 hours per night but
never feel rested



Brain fog
Mental cloudiness

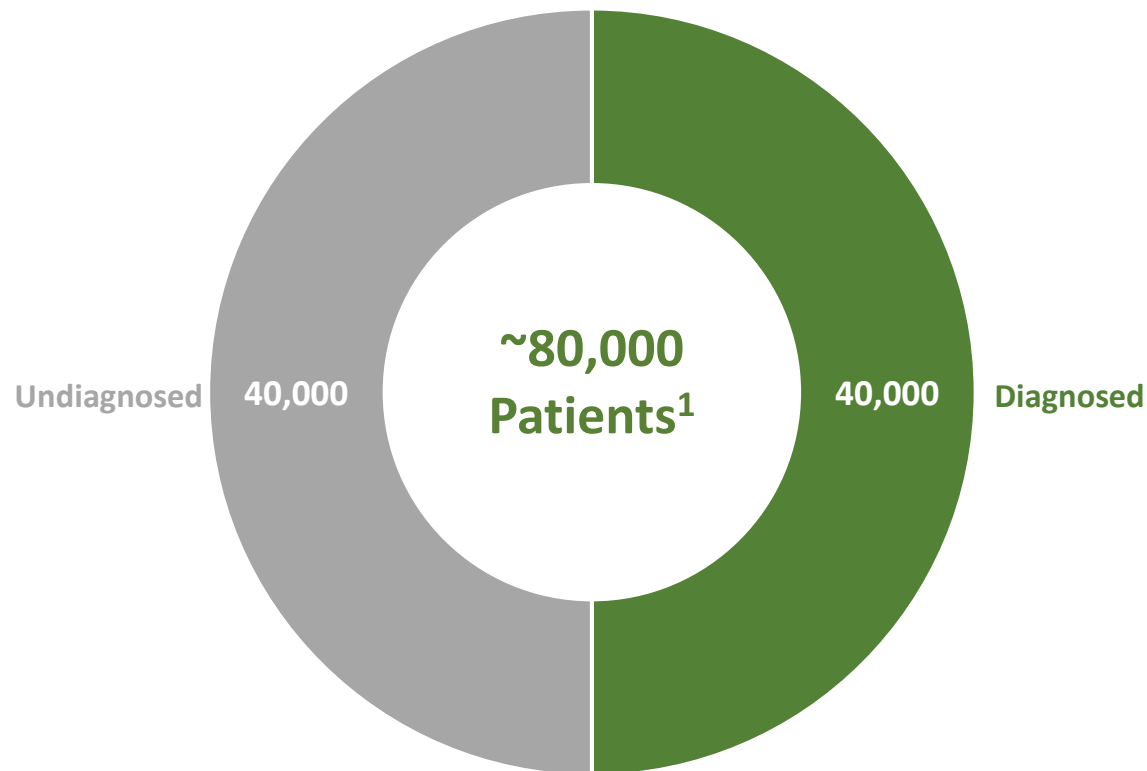


Very difficult to
wake up!



Idiopathic Hypersomnia: Large Market With Significant Unmet Need

Market Opportunity

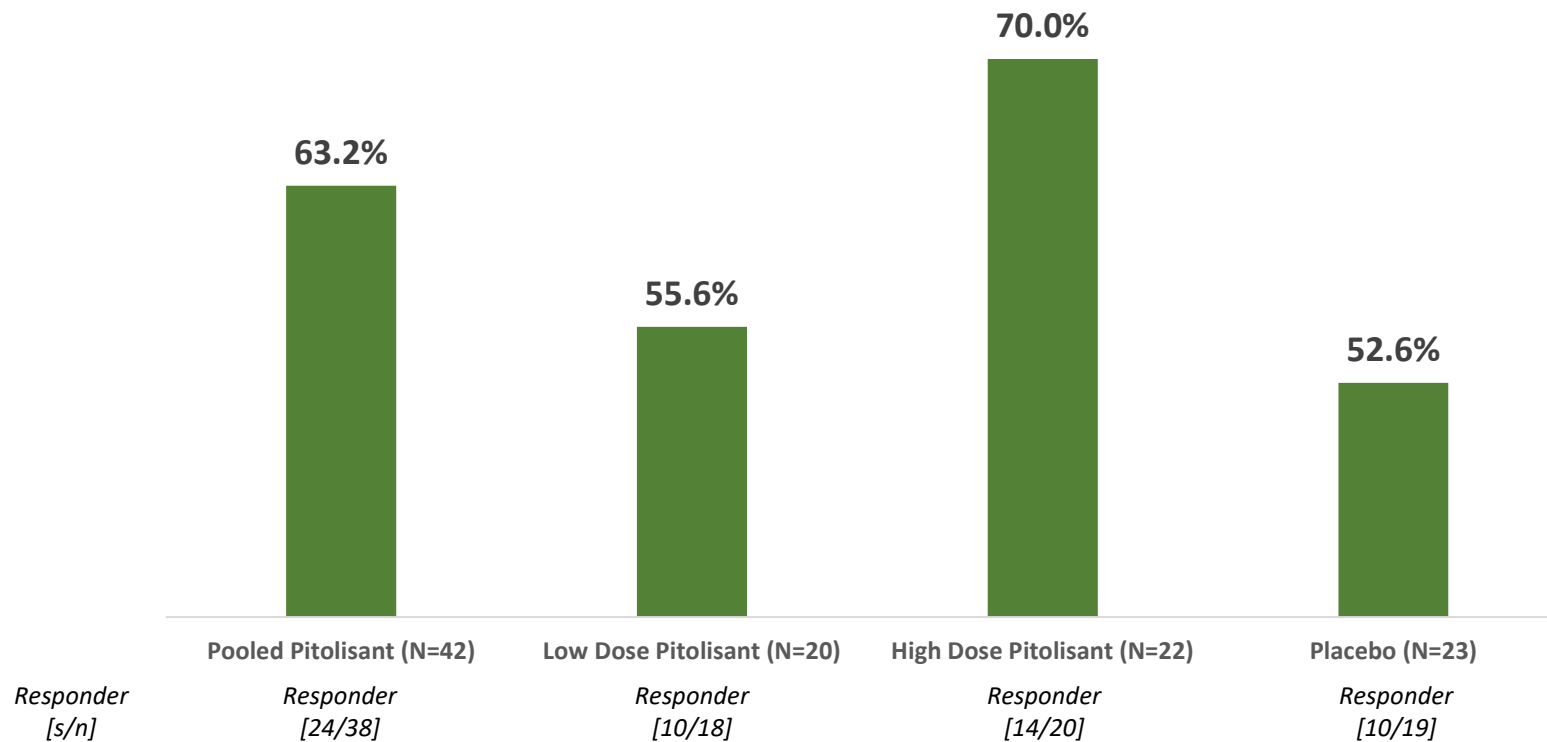


- Significant unmet need
- Only one FDA approved treatment for IH
- Amphetamine, methylphenidate, modafinil and armodafinil, are used off-label for treatment
 - Efficacy of these treatments for the symptoms of IH has not been established
 - Most patients still suffer with residual symptoms
- Pitolisant being investigated in IH with a unique MOA, working through histamine to improve wakefulness
- If approved, opportunity for significant synergy with existing commercial infrastructure

PWS Phase 2 POC Study Topline Data: Responder Analysis

Higher Responder Rate for Pitolisant vs. Placebo:
Driven by High Dose Group

Responder Rates at Visit 5 (Day 77)



s = Number of responders

n = Number of subjects with baseline assessment and post-baseline assessment at the visit

A responder was defined as a subject with an improvement of ≥ 3 points from Baseline or a score ≤ 10 at EOT on the ESS-CHAD

Topline Data Highlights

- **Clinically meaningful reduction** in the ESS-CHAD Parent/Caregiver scores in all age groups and across both low-dose and high-dose treatment groups
- **Higher responder rate** for Pitolisant vs Placebo
- Evidence of a dose-response, favoring high dose group
- **Well tolerated** with an overall safety/tolerability profile consistent with the known profile of pitolisant

Our Three-Pillar Growth Strategy



Optimize WAKIX®
Performance



Expand Clinical
Utility of
Pitolisant



Acquire
New Assets

DESIGNED TO SUPPORT LONG TERM SUSTAINABLE GROWTH



Business Development Framework

- Intend to acquire a portfolio of rare/orphan neurology assets and/or assets in other neurological diseases
 - Leverage existing expertise and infrastructure
 - Potential synergies with WAKIX and our current footprint
- Focus across development stages, both early and later stage assets
- Dedicated BD team and internal capabilities across clinical development, regulatory affairs and commercial launch and execution



Financial Flexibility

- Strong financial position
- **\$316M** in cash, cash equivalents and investments as of September 30, 2022
- Additional **\$100M** under Blackstone delayed draw debt facility
- **Profitable** and **cash generating**
- Access to capital markets

Evolve into a leading pharmaceutical company focused on developing and commercializing innovative therapies for patients living with rare neurological diseases who have unmet medical needs

Our Three-Pillar Growth Strategy

A Look Forward to 2023



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Thank You

