HARMONY BIOSCIENCES

43rd Annual JP Morgan Healthcare Conference

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NASDAQ LISTED HRMY

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Preliminary Financial Results

The preliminary financial results of the Company for the fiscal year ended December 31, 2024 included in this presentation are estimates and represent the most current information available to the Company's management, as financial closing procedures for the fourth quarter and fiscal year ended December 31, 2024 are not yet complete. The Company expects that its actual results to be reported in its Annual Report on Form 10-K for the year ended December 31, 2024 will not differ materially from the preliminary results, however, these results are subject to change following the completion of year-end accounting procedures and adjustments, including the execution of the Company's internal control over financial reporting, the completion of the preparation and audit of the Company's financial statements and the subsequent occurrence or identification of events prior to the formal issuance of the audited financial statements for fiscal year 2024.

HARMONY BIOSCIENCES

- INNOVATIVE
- PATIENT-FOCUSED
- PROFITABLE BIOTECH
- CATALYST-RICH PIPELINE

HARMONY BIOSCIENCES

MULTIPLE MILESTONES IN 2025

4 Key Catalysts

One every Q in 2025

6 Phase 3

Development programs by year end 2025

DURABLE LONG-TERM VALUE CREATION

$1B+

Potential opportunity for WAKIX in narcolepsy

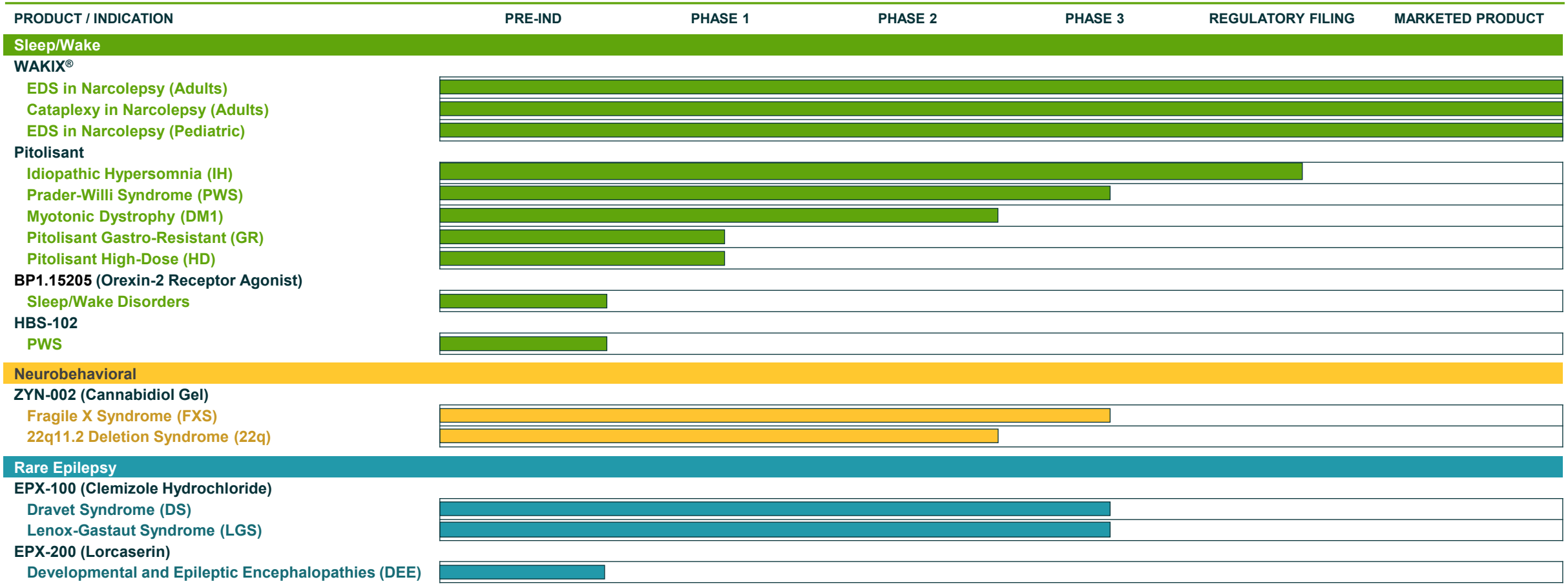
$3B+

Establishing leadership position in CNS

EACH FRANCHISE WITH POTENTIAL

Peak Sales of $1-2B

Innovative Late-Stage Pipeline



3 CNS FRANCHISES

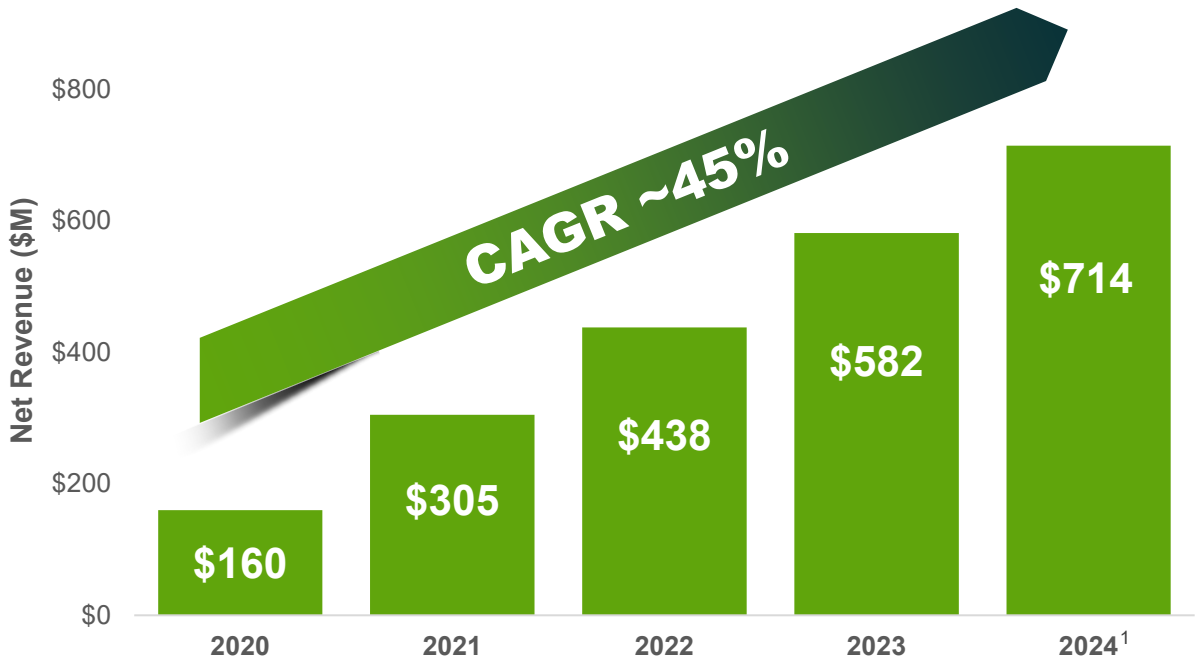
8 ASSETS

13 DEVELOPMENT PROGRAMS

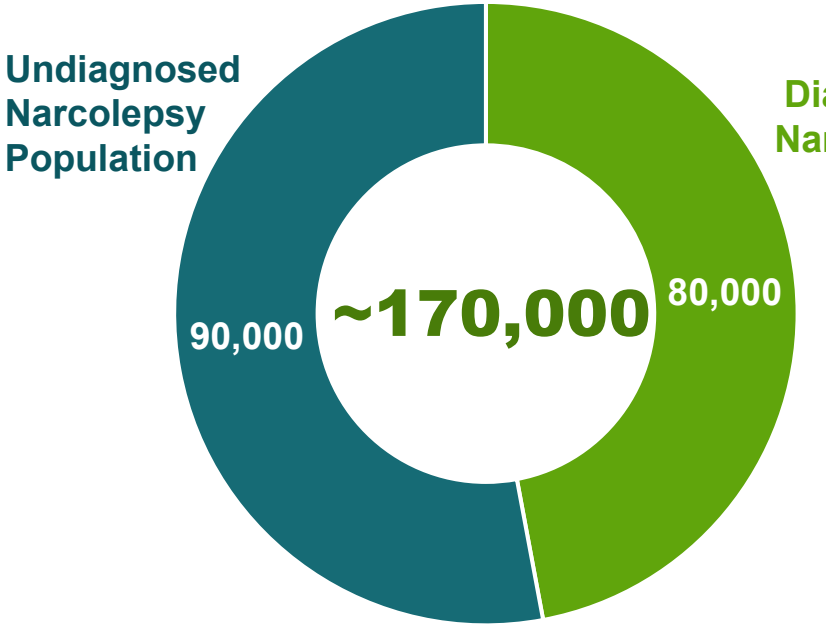
6 PHASE 3 PROGRAMS BY YEAR END

WAKIX® Is One of the Most Successful Orphan/Rare Launches With Demonstrated Durable Revenue Generation

WAKIX Net Revenue Growth 2020–2024



People Living With Narcolepsy in the U.S[2]



> 50% of Patients Undiagnosed

KEY TAKEAWAY

Sustained, durable revenue for WAKIX over 5 years on the market

1. Net Revenue for fiscal year 2024 is preliminary, unaudited and subject to change 2. https://narcolepsynetwork.org/accessed Feb 2024

2025 Net Revenue Guidance

$820M-$860M

NET REVENUE GUIDANCE

KEY TAKEAWAY

WAKIX represents a potential $1B+ opportunity in narcolepsy alone

2025 Anticipated Catalysts

1Q25

Pitolisant IH sNDA
FDA decision on file acceptance (potential approval in 2025)

2Q25

BP1.15205 (OX2R agonist)

- Preclinical data presentation at SLEEP 2025
- IMPD submission (IND submission 2H)

3Q25

ZYN002
FXS Phase 3 topline data readout

Pitolisant-GR
Pivotal BE study readout

4Q25

Pitolisant-HD
initiation of pivotal Phase 3 trial in Narcolepsy

KEY TAKEAWAY

Late-stage pipeline driving a catalyst-rich 2025

Q1 Catalyst: Pitolisant for Idiopathic Hypersomnia (IH)

FDA decision on IH sNDA file acceptance (potential approval in 2025)

TOTALITY OF DATA FROM THE PHASE 3 INTUNE STUDY

Open-label, randomized withdrawal and long-term extension data

REAL WORLD AND CLINICAL EXPERIENCE DATA

Data from compassionate use program and top KOL clinical experience

ESTABLISHED SAFETY

Non-scheduled and simple dosing regimen

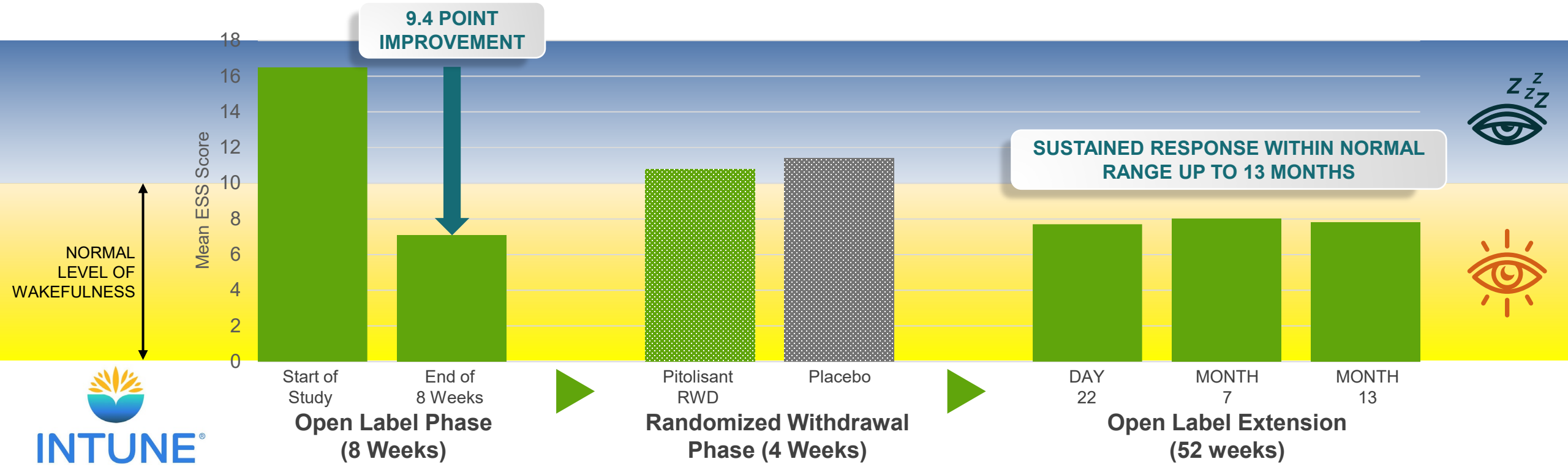
FAVORABLE BENEFIT / RISK PROFILE

Unmet medical need/unique safety profile

VOICE OF THE PATIENT REPORT

Output from Externally-Led Patient-focused Drug Development meeting with active FDA participation

Strong and Durable Improvement in EDS in Patients With IH (as Measured by ESS)



INTUNE®

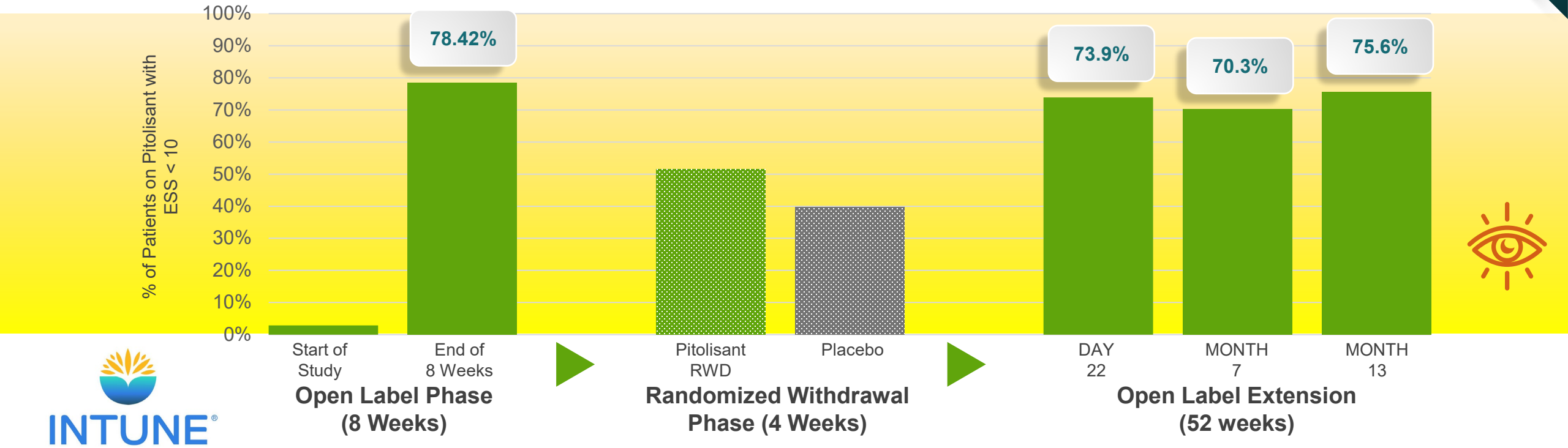
KEY TAKEAWAY

The mean ESS Score stayed within the normal level of wakefulness throughout the long-term extension period

ITT population: Data on file

Percentage of Pitolisant Patients within the Normal Level of Wakefulness

NEW DATA



INTUNE®

KEY TAKEAWAY

Pitolisant demonstrates high patient response rates in maintaining normal level of wakefulness observed through 13 months of treatment

ITT population: Data on file

Q2 Catalyst: Potential Best-in-Class Orexin 2 Receptor (OX2R) Agonist

Preclinical Data Presentation at SLEEP 2025

OREXIN CLASS

Next wave of Sleep/Wake therapeutic innovation

PRECLINICAL DATA PRESENTATION AT SLEEP IN JUNE

Preclinical data presentation at SLEEP 2025 meeting in June

UNIQUE STRUCTURE/CHEMICAL SCAFFOLD

Differentiated from other known OX2R agonist chemical structures

CLINICAL POTENTIAL

- Potency and selectivity
- Potent on-target effects
- Potentially better AE profile
- Once-daily dosing

BP1.15205: Most potent OX2R Agonist (*In Vitro* Pharmacology Data)

Select DMPK parameters	HRMY/BP[1] BP1.15205	Centessa[2] ORX750	Eisai[3] E2086	Takeda[4] TAK-861	Takeda[5] TAK-925	Takeda[4] TAK-994	Alkermes[6] 2680	Jazz JZP441
Potency (hOX2R, EC50)	**0.015 nM**	0.11 nM	2.3 nM	2.5 nM	5.5 nM	19 nM	Not reported	Not reported
Selectivity for hOX2R vs hOX1R	**> 600x**	9800x	> 2000x	3000x	> 5000x	Not reported	Not reported	Not reported
Dosing regimen	**Potential for once-daily oral dosing**	Once a day dosing	Not reported	Twice a day dosing	IV dosing	Twice a day dosing	Once a day dosing	Not reported

KEY TAKEAWAY

The most potent orexin-2 receptor agonist (based on publicly available data)

1.Bioprojet/Harmony data on file; 2. Lack et al., World Sleep 2023, abstract; 3. Hatanaka et al., ACNP 2022, poster; 4. Kimura et al., World Sleep 2023, abstract; 5. Yukitake et al., Pharmacol Biochem Behav. 2019, publication; 6. Clinicaltrials.gov.

Orexin-2 Receptor Agonist: Distinct Chemical Structure with Unique Properties and Potential Clinical Benefits

Excellent Potency

Highest potency compared to other OX2R agonists to-date

and

Selectivity

Excellent selectivity in the context of potency that is several orders of magnitude higher compared to other OX2R agonists

- ✓ Over 140-fold selectivity over OX1R based on highest anticipated human dose from pre-clinical efficacy data
- ✓ Over 1000-fold selectivity against 150 other targets of interest

Combination of **high potency** and **excellent selectivity** translates to potentially low dose(s) for efficacy which provides dosing flexibility across all central disorders of hypersomnolence

KEY TAKEAWAY

Potential best-in-class OX2R agonist with possibility for broad clinical utility

Q3 Catalyst: ZYN002 for the Treatment of Fragile X Syndrome

Topline Data Readout from Pivotal Phase 3 RECONNECT Trial

ZYN002: INNOVATIVE PRODUCT PROFILE

Purely synthetic cannabidiol (CBD); devoid of THC

LEAD PROGRAM IN FRAGILE X SYNDROME (FXS)

Additional opportunity in related disorder, 22q deletion syndrome (22q)

MARKET OPPORTUNITY

~80,000 patients in the US with FXS; similar for 22q, Worldwide rights

VERY HIGH UNMET NEED

No approved products for FXS or 22q

Would be first approved treatment for patients with FXS

Phase 2 CONNECT Trial[1]: Completely Methylated Subgroup

40%

MEDIAN IMPROVEMENT

in socially avoidant behaviors

(p=0.027*)

Key secondary outcomes

SOCIAL INTERACTION

63% vs 37%

(*p*=0.005*)

IRRITABLE/DISRUPTIVE BEHAVIORS

54% vs 33%

(*p*=0.027*)

SOCIAL AVOIDANCE (≥ 3 POINTS)

56% vs 37%

(*p*=0.030*)

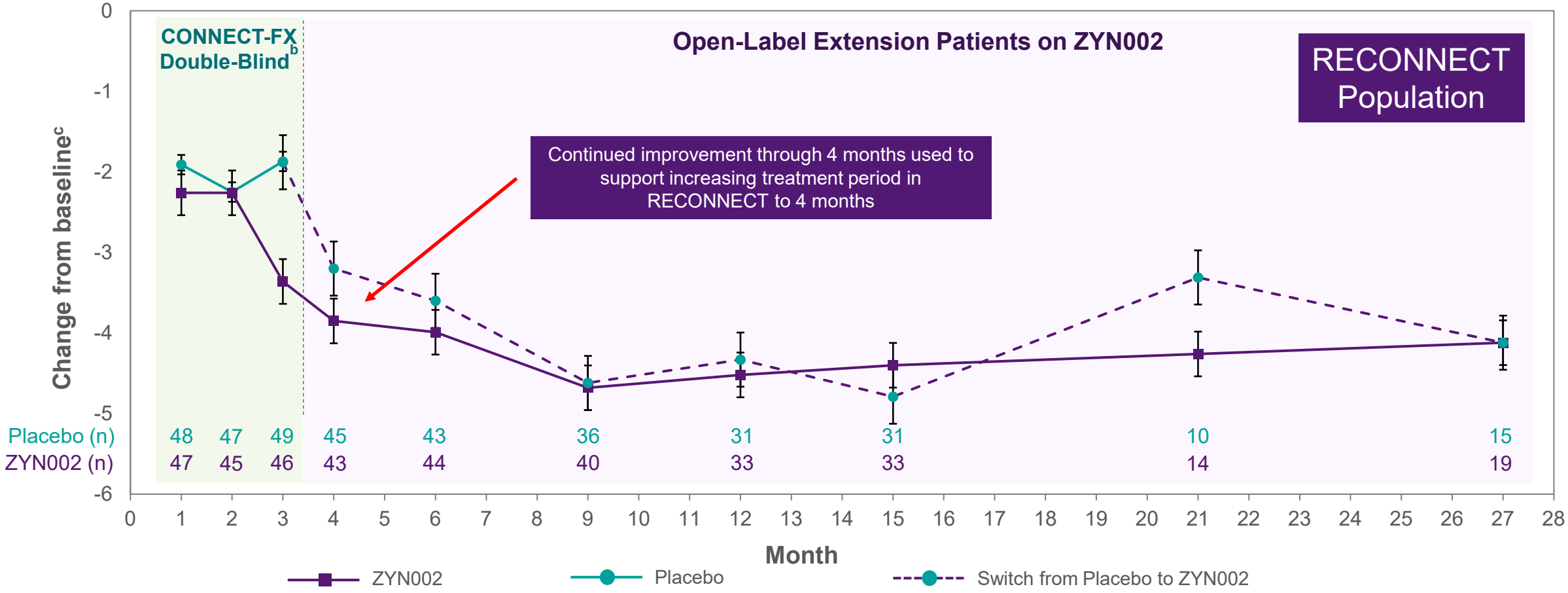
KEY TAKEAWAY

Clinically meaningful improvement in patients with complete methylation

1. Berry-Kravis et al 2022
* nominal statistical significance

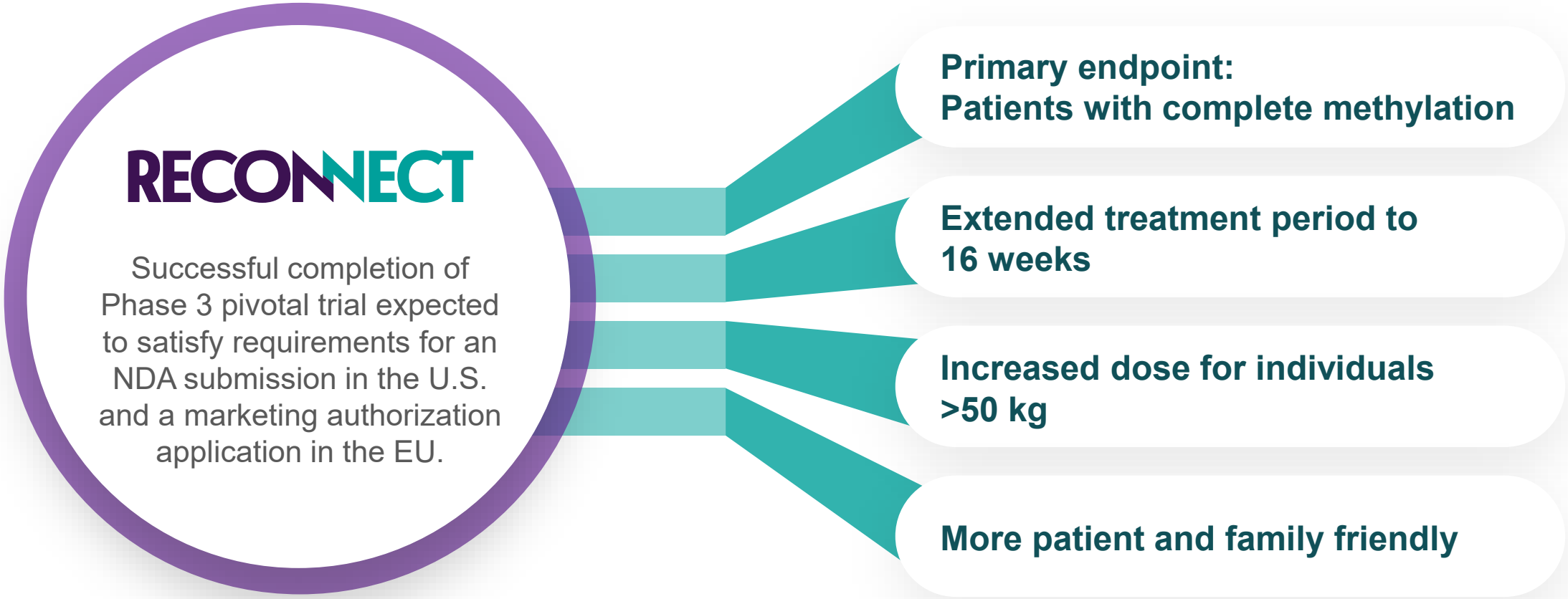
Sustained Improvement in Patients With Complete Methylation of FMR1[a]

Change in ABC-C_{FXS} Social Avoidance



a. Patients matching primary efficacy population in RECONNECT.
b. ZYN2-CL-016 (CONNECT-FX).
c. Least square mean ± SE; reduction equals improvement.

Pivotal Phase 3 RECONNECT Trial: Design Optimized from Phase 2 CONNECT-FX Trial



KEY TAKEAWAY

Learnings from Connect-FX trial informed RECONNECT study design

Q4 Catalyst: Pitolisant-HD in Narcolepsy

Initiation of pivotal Phase 3 trial of Pitolisant-HD in narcolepsy

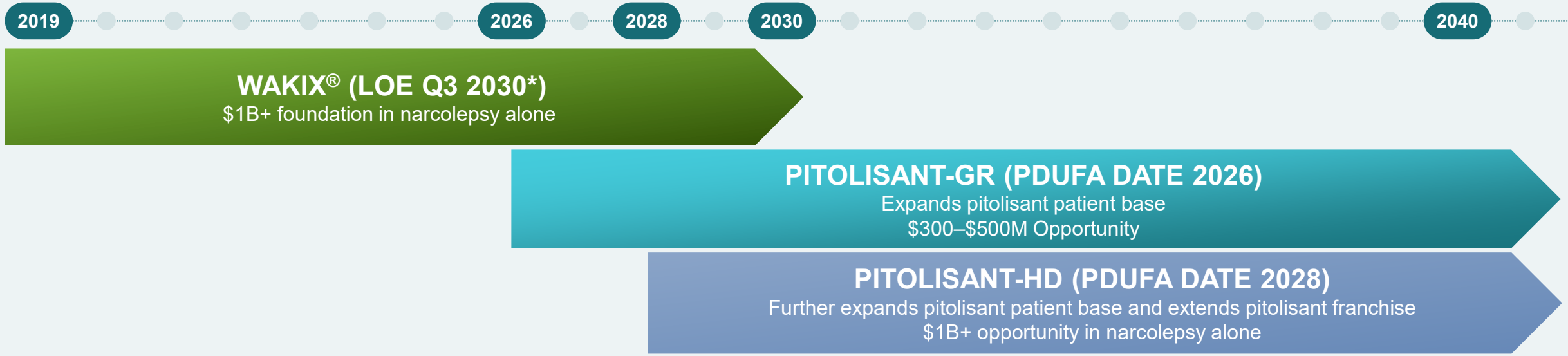
DESIGNED TO ADDRESS THE LARGEST UNMET MEDICAL NEED IN NARCOLEPSY

- Providing greater efficacy for both excessive daytime sleepiness and cataplexy

PROGRAM TO INCLUDE NOVEL ENDPOINT TO ASSESS NARCOLEPSY-RELATED FATIGUE

PRELIMINARY IP FILED TO EXTEND PITOLISANT FRANCHISE INTO 2040'S

Pitolisant Franchise Poised to Drive Durable Patient and Revenue Growth to the Mid-2040s



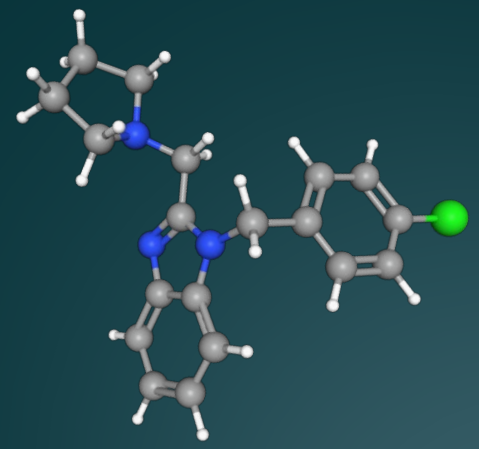
- Two meaningfully differentiated product profiles building off WAKIX with PDUFAs prior to LOE
- Provisional patents filed out to 2044 to extend durable patient and net revenue growth
  - Pursuing other indications (IH, DM1) to drive incremental patient, net revenue growth

KEY TAKEAWAY

- **Extension of Pitolisant franchise beyond 2030 with enhanced product profiles**
- **Poised to deliver durable patient growth and significant revenue to the mid 2040s**

*With pediatric exclusivity; on-track to meet the requirements for pediatric exclusivity

EPX-100: Most Advanced and Differentiated 5HT2 (serotonin) Agonist Development Program



EPX-100

PROVEN MoA

Established serotonergic mechanism of action – confirmed via highly predictive zebra-fish model

PROVEN SAFETY

- Clemizole was marketed for ~ 20 yrs with no significant safety and/or tolerability signals from post marketing exposure
- Emerging safety and tolerability profile from the Phase 3 study in DS is promising; no need for special laboratory or cardiac monitoring required

DOSING REGIMEN

BID dosing; very important clinical consideration for patients with DEEs

ADVANCED CLINICAL DEVELOPMENT

- Actively enrolling patients in US and EU in a phase 3 registrational study in Dravet syndrome; Topline data in 2026
- Initiated Phase 3 registrational study in LGS in Q4 2024; Topline Data in 2026

https://pubchem.ncbi.nlm.nih.gov/compound/Clemizole

Catalyst-Rich Pipeline Driving Value Beyond 2025

2026

- **ZYN002** FXS PDUFA
- **Pitolisant-GR** PDUFA
- **EPX100** DS/LGS Phase 3 topline data (TLD)
- **Pitolisant** PWS Phase 3 TLD
- **OX2R** SAD/MAD PK readouts

2027 – 2028

- **Pitolisant-HD** Phase 3 TLD in narcolepsy (2027)
- **Pitolisant-HD** PDUFA for narcolepsy (2028)
- **ZYN002** 22q deletion syndrome – Phase 3 TLD
- **EPX100** DS/LGS PDUFA
- **Pitolisant** PWS PDUFA

KEY TAKEAWAY

Pipeline poised to deliver one or more new product or indication launches each year over the next 4 years

HARMONY BIOSCIENCES

MULTIPLE MILESTONES IN 2025

4 Key Catalysts

One every Q in 2025

6 Phase 3

Development programs by year end 2025

DURABLE LONG-TERM VALUE CREATION

$1B+

Potential opportunity for WAKIX in narcolepsy

$3B+

Establishing leadership position in CNS

THANK YOU

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