HARMONY BIOSCIENCES

Q4 and Full Year 2023 Financial and Business Update

February 22, 2024

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 22, 2024 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.

This presentation includes information related to market opportunity as well as cost and other estimates obtained from internal analyses and external sources. The internal analyses are based upon management's understanding of market and industry conditions and have not been verified by independent sources. Similarly, the externally sourced information has been obtained from sources the Company believes to be reliable, but the accuracy and completeness of such information cannot be assured. Neither the Company, nor any of its respective officers, directors, managers, employees, agents, or representatives, (i) make any representations or warranties, express or implied, with respect to any of the information contained herein, including the accuracy or completeness of this presentation or any other written or oral information made available to any interested party or its advisor (and any liability therefore is expressly disclaimed), (ii) have any liability from the use of the information, including with respect to any forward-looking statements, or (iii) undertake to update any of the information contained herein or provide additional information as a result of new information or future events or developments.

Strong Momentum in Execution of Our Growth Strategy

Continued Strong Growth For WAKIX® in Adult Narcolepsy

- FY 2023 WAKIX Net Revenue of $582.0M **+33% Year-over-Year Growth**
- **~6,150** average number of patients on WAKIX in Q4 2023
- **Continued strong growth** in average number of patients & WAKIX prescriber base
- **Demonstrated durability of the brand** entering year five on the market; **2024 Net Revenue guidance of $700-$720M**

Strong Momentum in Advancing and Expanding the Pipeline

- **FDA granted Priority Review for pediatric narcolepsy sNDA;** PDUFA date of June 21, 2024
- **Meeting with the FDA** to discuss Idiopathic Hypersomnia development program scheduled for March 2024
- **FDA granted Orphan Drug designation** to Pitolisant for PWS; Phase 3 TEMPO study expected to initiate in Q1 24
- **Reported positive topline results** from DM1 Phase 2 POC study in EDS and fatigue
- **Advanced Next-Gen pitolisant based** formulations into the clinic; on track to report pharmacokinetic data in 1H 24
- **Expanded the pipeline and diversified the portfolio** with acquisition of Zynerba; ZYN002 in Phase 3 pivotal trial for Fragile X syndrome and Phase 3 ready for 22q deletion syndrome

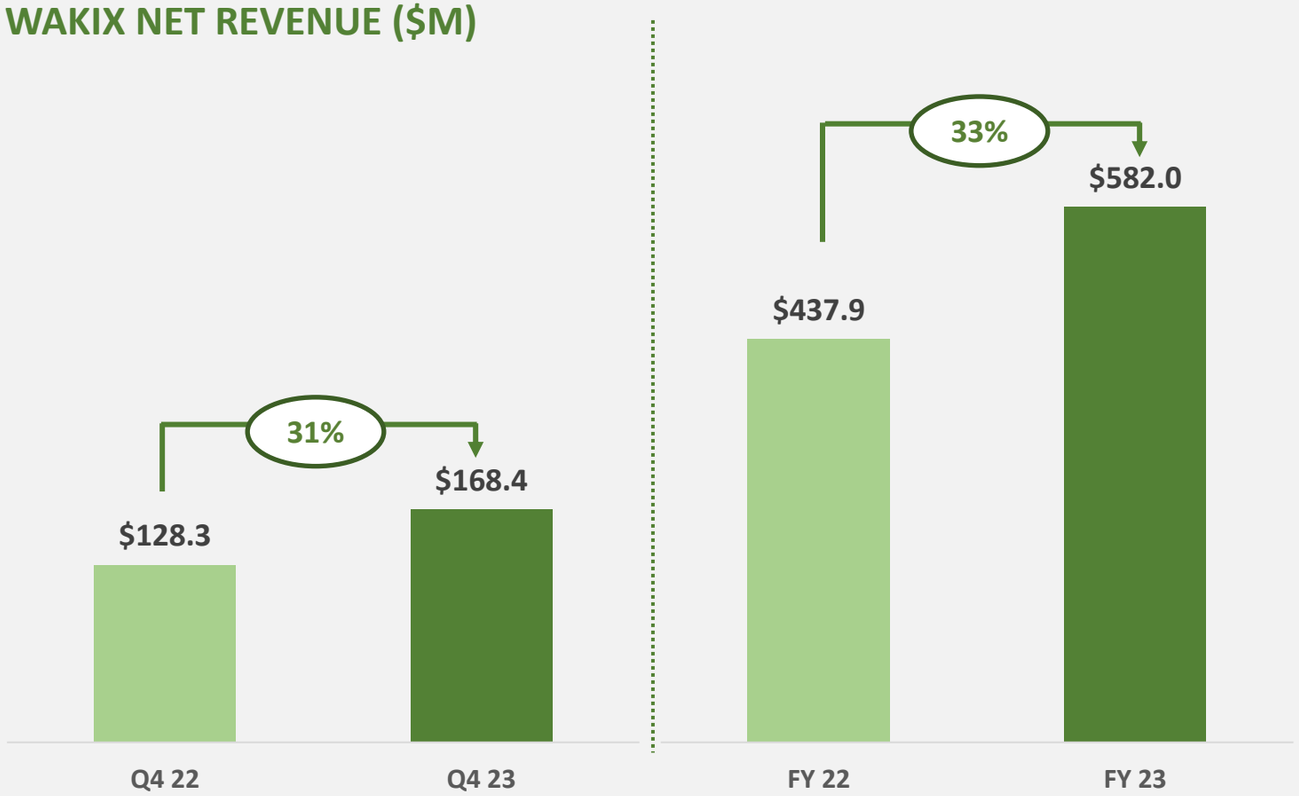
Disciplined Capital Allocation to Maximize Shareholder Value

- **Profitable**, **cash generating** with **$425.6M** on the balance sheet as of December 31, 2023
- **Share repurchase program**: Repurchased ~3.2M shares of common stock at an aggregate cost of $100M during 2023; remaining authorization of $150M
- **Well positioned** to execute on business development to build out robust pipeline

WAKIX® Net Revenue Performance

CONFIDENT IN WAKIX BEING A POTENTIAL $1B+ OPPORTUNITY IN ADULT NARCOLEPSY ALONE WITH THE POTENTIAL TO CONTRIBUTE UP TO AN ADDITIONAL $1B, IF APPROVED IN OTHER CURRENT PITOLISANT LIFECYCLE MANAGEMENT PROGRAMS

WAKIX NET REVENUE ($M)



HIGHLIGHTS

- Q4 23 represented the highest quarter of Net Revenue in our history ($168.4M)
- FY 23 Net Revenue of $582.0M
- Underlying demand drove continued double-digit revenue growth
  - Strong patient interest
  - Continue to add new prescribers and grow WAKIX prescriber base

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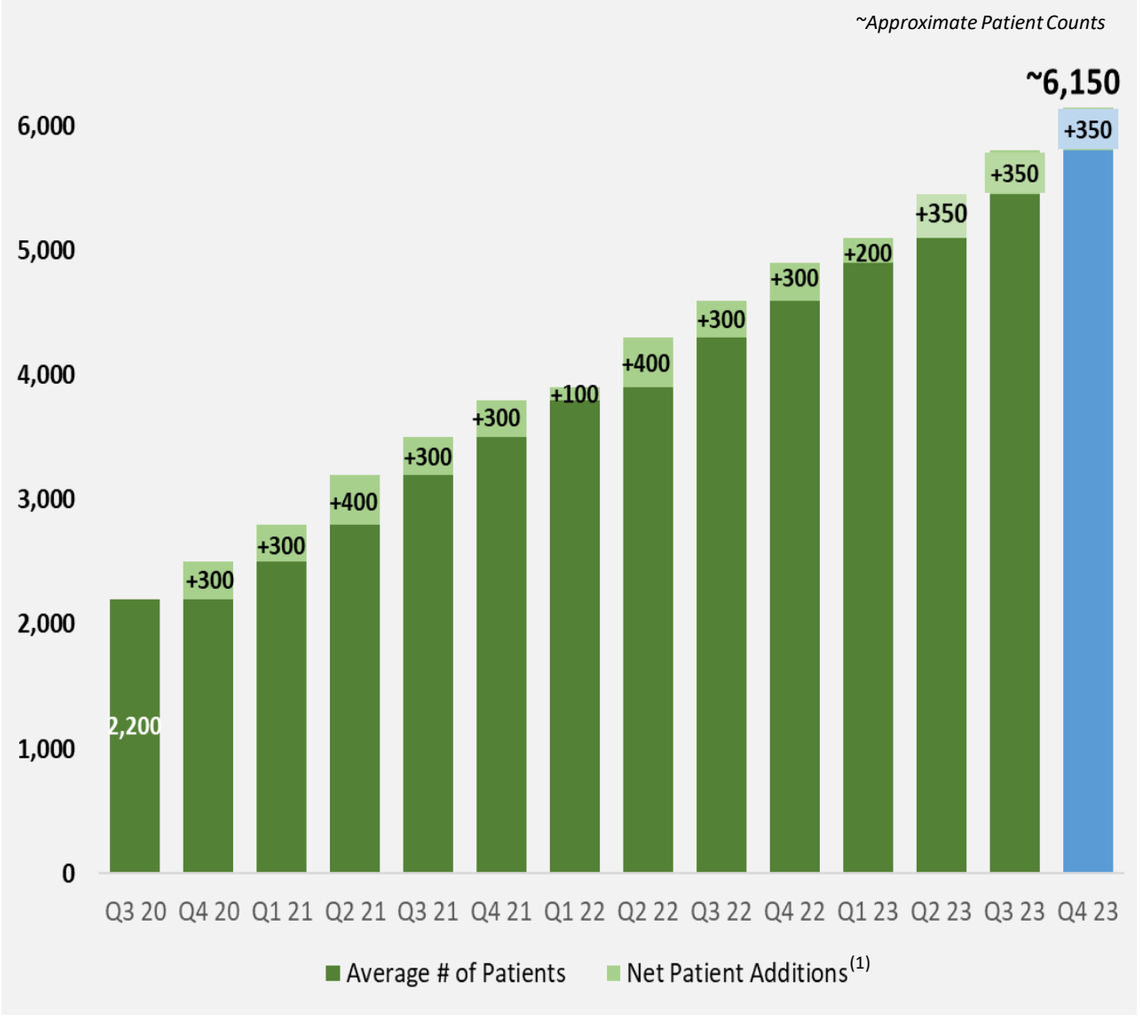
Solid Business Fundamentals Driving Growth

Continued Strong Performance in 2023 - Year 4 of Commercialization



2023 Highlights

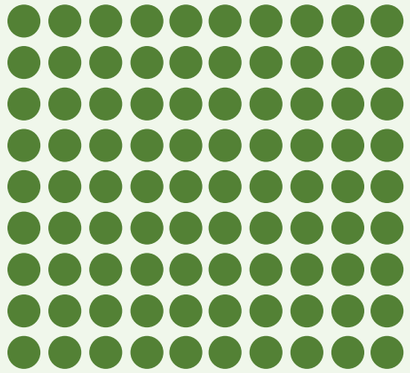
- Highest Number of New Patient Starts in our history (Q2 23)
- ~6,150 Average number patients on WAKIX and growing (Q4 23)
- Highest Quarter of Net Sales in our history- $168.4M (Q4 23)
- On our way to a $1B+ opportunity in adult narcolepsy

More unique prescribers of WAKIX than sodium oxybate

Strong market access coverage (~84%) - *even with the launch of generic and new oxybate options*

(1) Net Patient Additions based on previously disclosed quarterly average number of patients on WAKIX

Prescriber Dynamics Support Continued WAKIX® Growth in Adult Narcolepsy



~9,000
Narcolepsy Treating HCPs

Harmony Field Sales Team covers narcolepsy treating HCP universe

Access to ~100% of diagnosed adult patient opportunity

~4,000 HCPs enrolled in oxybate REMS

~5,000 HCPs not enrolled in oxybates REMS

WAKIX **growth**

Depth of prescribing in oxybate REMS enrolled HCPs

Breadth of prescribing in HCPs not enrolled in oxybate REMS

100% of HCPs surveyed with WAKIX experience stated they would write the **same/increase Rx in next 6 months**.[1]

>40% of HCPs surveyed who had not prescribed WAKIX to date indicated intent to **Rx in next 6 months**.[1]

Unique feature as **non-scheduled treatment** is the **highest performing driver and differentiator for WAKIX.**[1]

1. Harmony Market Research, October 2023

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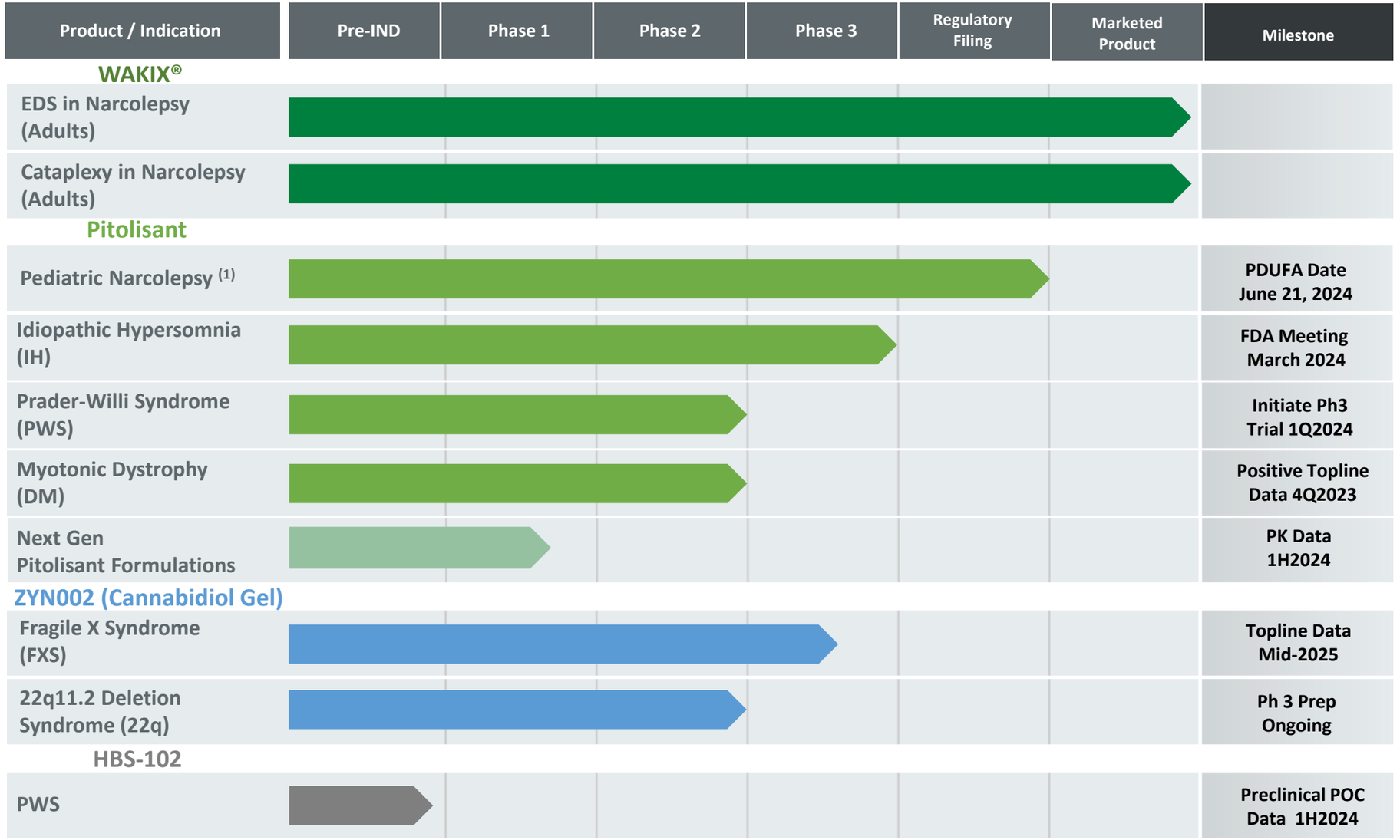
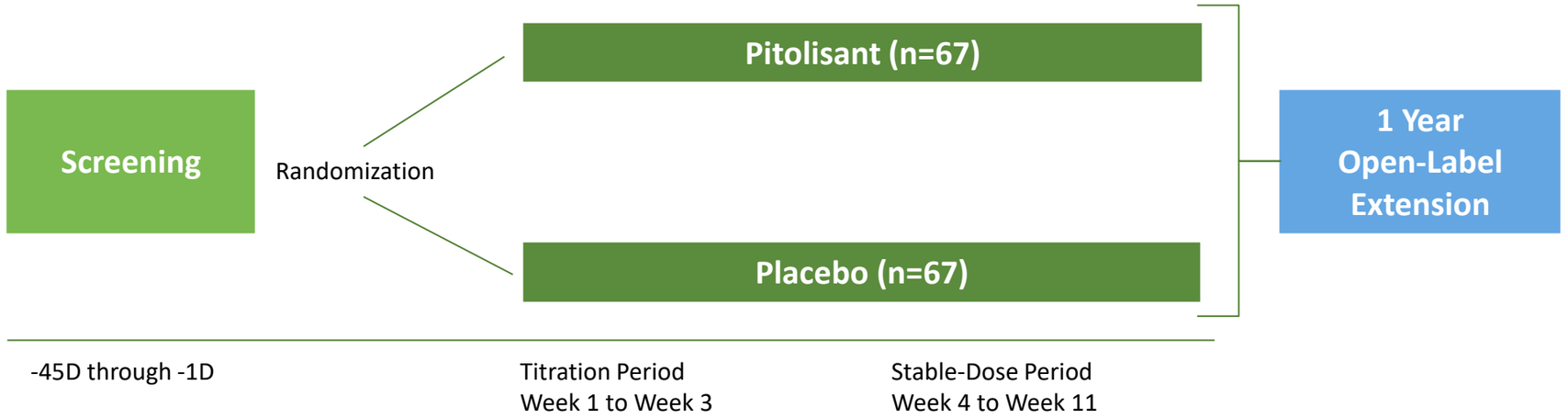
Development Pipeline: Continues to Grow



(1) Trial conducted by Bioprojet; received EMA approval on March 15, 2023.

TEMPO:
Global Phase 3 Trial of Pitolisant in PWS



Trial Design:

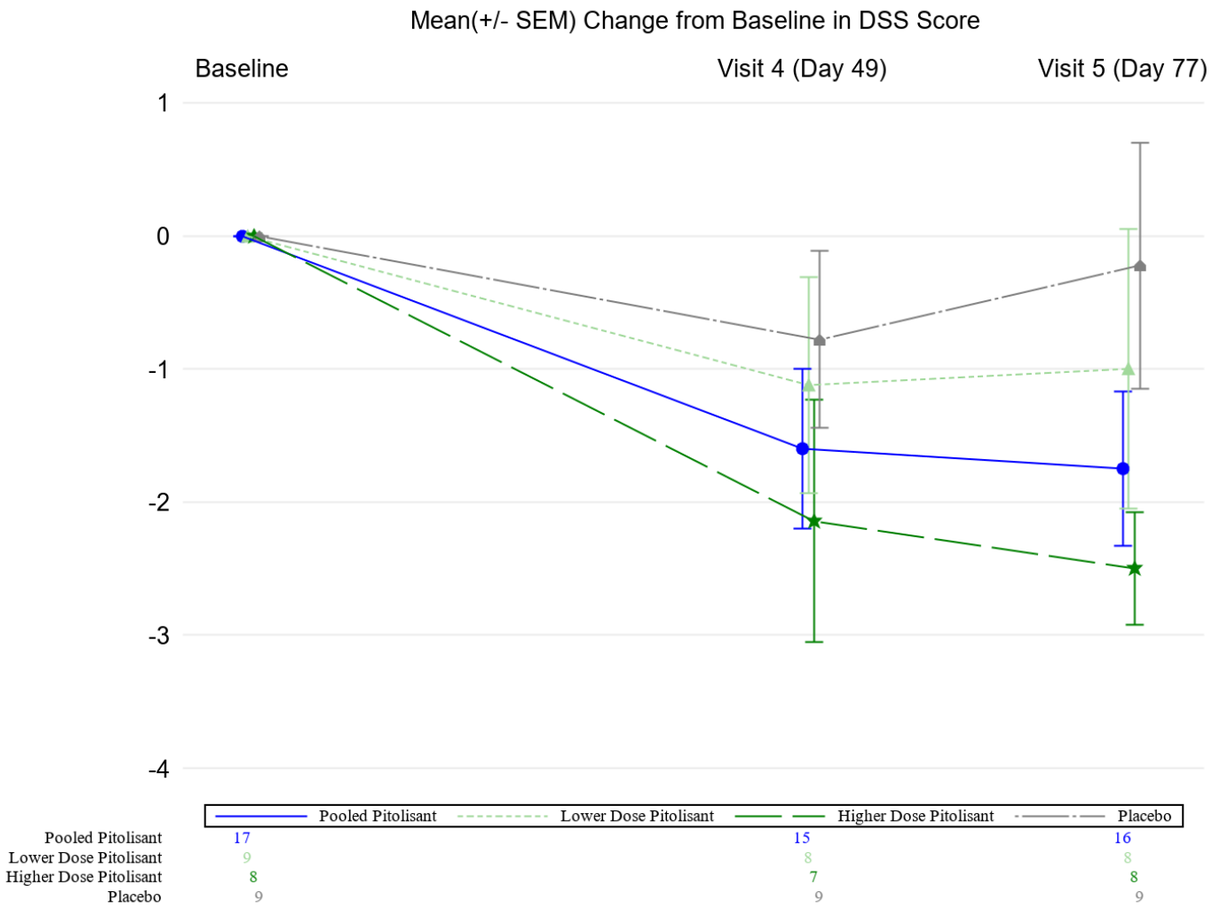
- Randomized, double-blind, placebo-controlled, parallel-group study
- 1:1 pitolisant : placebo
- 134 patients; ages 6 and older

Objectives / Endpoints:

- **Primary objective:** to evaluate the efficacy of pitolisant on EDS in patients with PWS
- **Primary endpoint:** change in severity of EDS as measured by PROMIS-SRI T-score from Baseline to the end of the Double-Blind Treatment Period (Day 77)
- **Secondary objectives:** to evaluate the efficacy of pitolisant on irritability, hyperphagia and behavioral problems in PWS
- **Secondary endpoints:** ABC-C Irritability domain, HQ-CT, ABC-C Other domains

DM1 Phase 2 POC Study Topline Data

Change in Daytime Sleepiness Scale (DSS) from Baseline to End of Treatment Period



Topline Data Highlights

- **Clinically meaningful signal** in **EDS** (DSS, ESS and CGI-S)
- **Clinically meaningful signal** in **Fatigue** (FSS)
  - Mean change from baseline of -0.86 and -0.36 for high-dose and low-dose pitolisant, respectively, compared to -0.13 for placebo
- **A clear and consistent dose-response** was demonstrated across the efficacy outcomes
- **Well tolerated** with an overall safety/tolerability profile consistent with the known profile of pitolisant
- **Next Steps:** Evaluate full data set and assess opportunity. Potentially pivot to next-gen formulations of pitolisant to advance program

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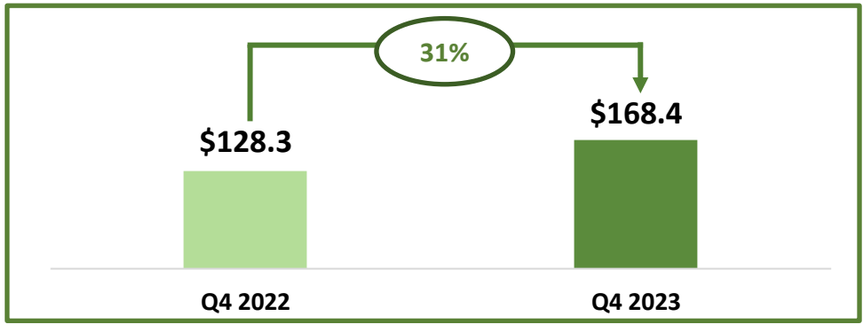
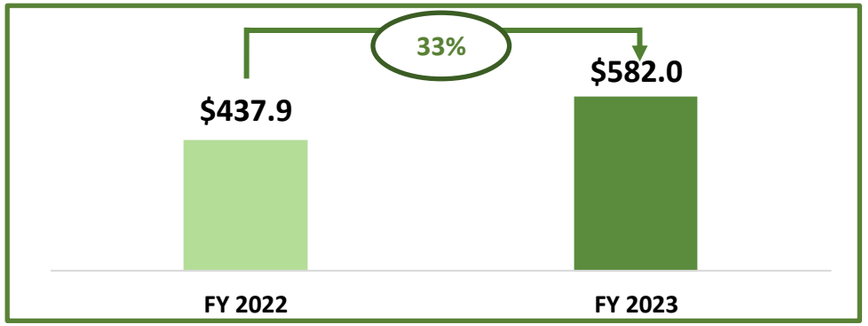
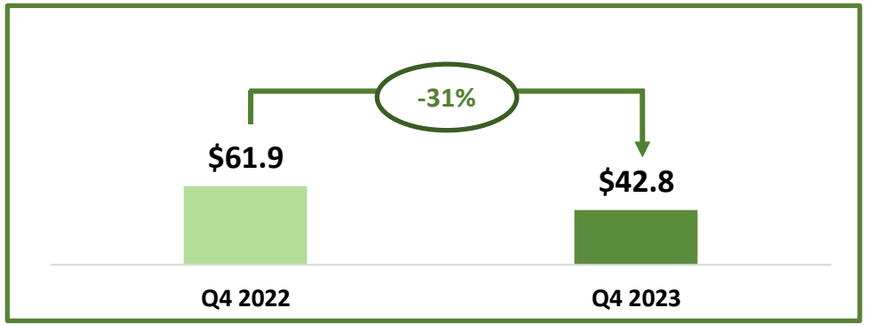
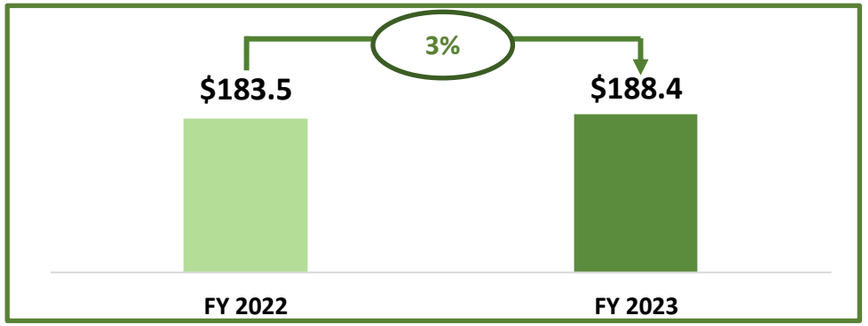
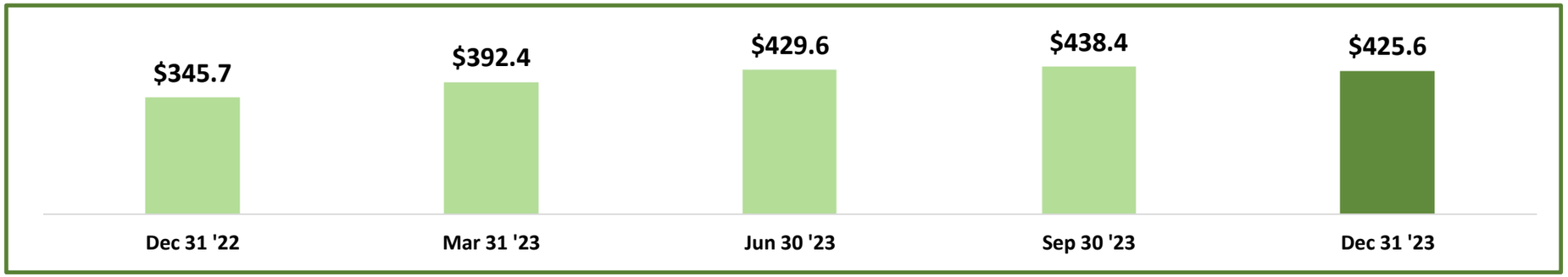
Financial Highlights

(In millions, USD)

	Three Months Ended December 31, 2023	Year Ended December 31, 2023
Net Product Revenue		
Non-GAAP Adjusted Net Income[1]		
Cash, Cash Equivalents & Investment Securities		

(1) Non-GAAP Adjusted Net Income= GAAP Net Income excluding non-cash interest expense, depreciation, amortization, stock-based compensation, other non-operating items and tax effect of these items

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Financial Summary

(In millions, USD) Totals may not foot due to rounding	Three Months Ended December 31,		% Change	Year Ended December 31,		% Change
	2023	2022		2023	2022	
Net Product Revenue	**$168.4**	**$128.3**	**31%**	**$582.0**	**$437.9**	**33%**
Cost of Product Sold	43.2	26.9	61%	121.2	83.5	45%
Total Operating Expenses	**$85.1**	**$53.8**	**58%**	**$268.8**	**$234.2**	**15%**
R&D Expense (1)	30.3	10.1	NM	76.1	70.9	7%
S&M Expense	26.9	21.1	28%	97.4	79.3	23%
G&A Expense (2)	27.9	22.6	23%	95.3	84.0	13%
Net Income	**$26.6**	**$48.5**	**(45%)**	**$128.9**	**$181.5**	**(29%)**
Cash, cash equivalents & investment securities				**$425.6**	**$345.7**	**23%**

NM denotes not meaningful % change

(1) Includes one-time Zynerba transaction related costs of $6.0M for the three months and year ended December 31, 2023
(2) Includes one-time Zynerba transaction related costs of $3.8M for the three months and year ended December 31, 2023

GAAP vs NON-GAAP Reconciliation

(In millions, USD)	Three Months Ended December 31,		Year Ended December 31,	
Totals may not foot due to rounding	2023	2022	2023	2022
GAAP net income	**$26.6**	**$48.5**	**$128.8**	**$181.5**
Non-cash interest expense[1]	0.2	0.4	3.2	1.7
Depreciation	0.2	0.1	0.5	0.4
Amortization[2]	6.0	6.0	23.8	23.0
Stock-based compensation expense	8.9	7.7	31.2	26.9
Transaction related costs[3]	9.8	-	9.8	-
Loss on debt extinguishment	-	-	9.8	-
Licensing fees and milestone payments[4]	-	-	0.8	30.0
Valuation allowance release	-	-	-	(74.5)
Income tax effect related to Non-GAAP adjustments[5]	(8.8)	(0.7)	(19.6)	(5.4)
Non-GAAP adjusted net income	**$42.8**	**$61.9**	**$188.4**	**$183.5**
GAAP net income per diluted share	**$0.45**	**$0.79**	**$2.13**	**$2.97**
Non-GAAP adjusted net income per diluted share	**$0.73**	**$1.01**	**$3.12**	**$3.00**
Weighted average number of shares of common stock used in non-GAAP diluted per share	58,853,292	61,620,712	60,372,397	61,097,045

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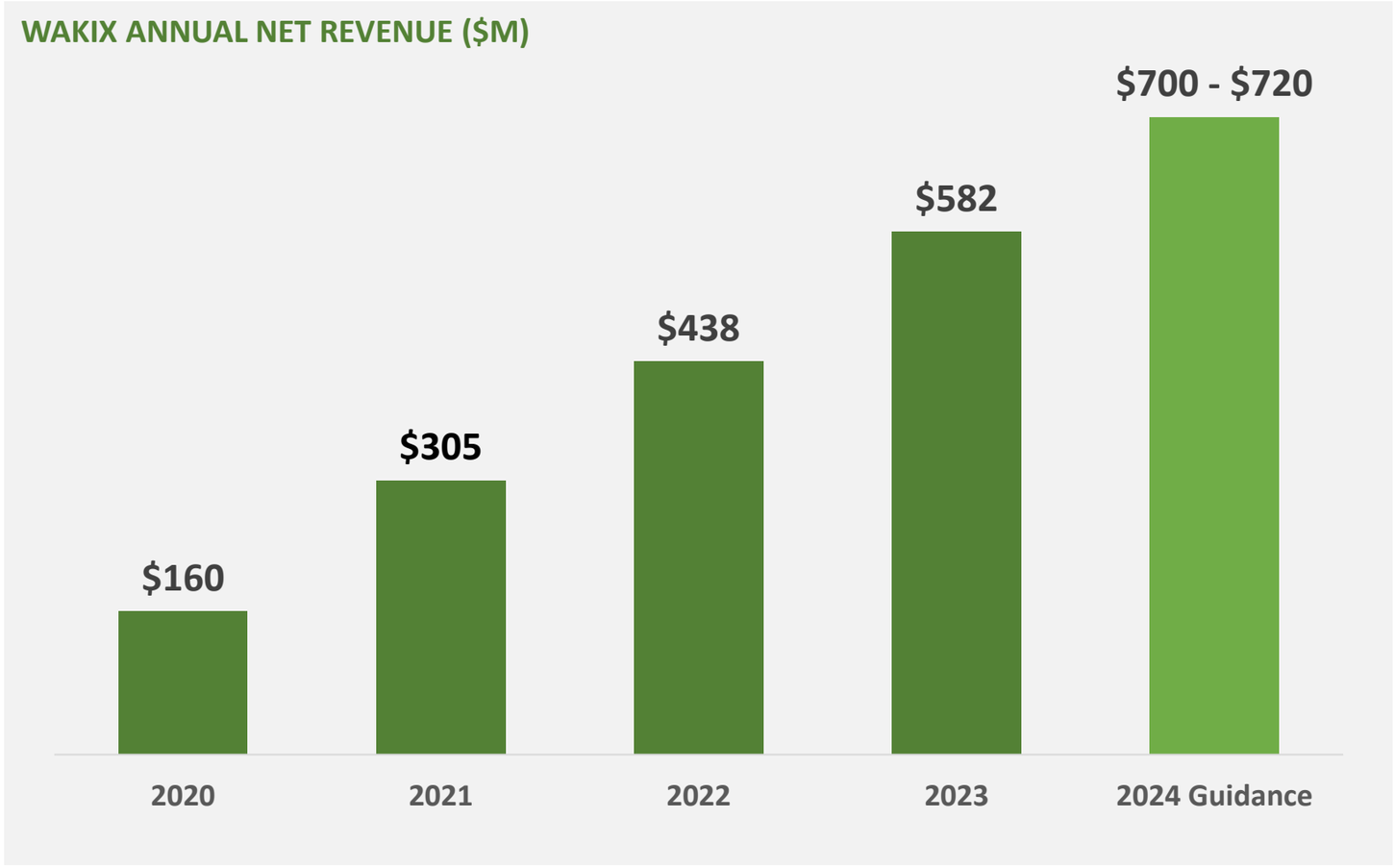
(1) Includes amortization of deferred finance charges.
(2) Includes amortization of intangible asset related to WAKIX.
(3) Includes costs associated with the acquisition of Zynerba in October 2023. There were $2.3M of IPR&D charges and $3.7M of severance recorded in research and development expenses and $3.8M of severance recorded in general and administrative expenses.
(4) Includes a $0.8M milestone payment related to HBS-102 preclinical milestone in March 2023 and $30M licensing fee incurred upon closing the 2022 Licensing and Commercialization Agreement with Bioprojet in August 2022.
(5) Calculated using the reported effective tax rate for the periods presented less impact of valuation allowance release and discrete items.

2024 Net Revenue Guidance

CONFIDENT IN WAKIX BEING A POTENTIAL $1B+ OPPORTUNITY IN ADULT NARCOLEPSY ALONE WITH THE POTENTIAL TO CONTRIBUTE UP TO AN ADDITIONAL $1B, IF APPROVED IN OTHER CURRENT PITOLISANT LIFECYCLE MANAGEMENT PROGRAMS



$582M 2023 Net Revenue

33% Growth vs. 2022

$700-$720M 2024 Guidance

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Thank You