First Quarter 2024 Earnings Call

May 8, 2024







Welcome	Al Kildani Senior Vice President, Investor Relations and Corporate Communications
CEO Opening Remarks	Steve Davis President and Chief Executive Officer
Commercial Update	Brendan Teehan Chief Operating Officer, Head of Commercial
R&D Update	Kimberly Manhard Senior Vice President, Global Strategic Planning and Execution
Financial Update	Mark Schneyer Chief Financial Officer
Closing Remarks	Steve Davis President and Chief Executive Officer
Q&A Session	Parag Meswani, Pharm D. Senior Vice President, Trofinetide – Rare Disease Franchise, <i>available for</i> Q&A

Forward-Looking Statements

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include all statements other than statements of historical fact and can be identified by terms such as "may," "will," "should," "could," "would," "expects," "plans," "anticipates," "believes," "estimates," "projects," "outlook," "potential" and similar expressions (including the negative thereof) intended to identify forward-looking statements. Forward-looking statements contained in this presentation, include, but are not limited to, statements about: (i) our business strategy, objectives and opportunities; (ii) plans for, including timing, development and progress of commercialization or regulatory timelines for, NUPLAZID, DAYBUE and our product candidates; (iii) benefits to be derived from and efficacy of our products, including the potential advantages of NUPLAZID and DAYBUE and expansion opportunities for NUPLAZID and DAYBUE in other indications, and for DAYBUE in jurisdictions outside the U.S.; (iv) estimates regarding the prevalence of the diseases targeted by our products and product candidates; (v) potential markets for any of our commercial products; and (vi) our estimates regarding our future financial performance, cash position, profitability or capital requirements.

Forward-looking statements are subject to known and unknown risks, uncertainties, assumptions and other factors that may cause our actual results, performance or achievements to differ materially and adversely from those anticipated or implied by our forward-looking statements. Such risks, uncertainties and other factors include, but are not limited to: our dependency on the continued successful commercialization of NUPLAZID and DAYBUE and our ability maintain or increase sales of NUPLAZID or DAYBUE; the costs of our commercialization plans and development programs, and the financial impact or revenues from any commercialization we undertake; our ability to obtain necessary regulatory approvals for our product candidates and, if and when approved, market acceptance of our products; our dependence on third-party collaborators, clinical research organizations, manufacturers, suppliers and distributors; the impact of competitive products and therapies; our ability to generate or obtain the necessary capital to fund our operations; our ability to grow, equip and train our specialized sales forces; our ability to manage the growth and complexity of our organization; our ability to maintain, protect and enhance our intellectual property; and our ability to continue to stay in compliance with applicable laws and regulations. Given the risks and uncertainties, you should not place undue reliance on these forward-looking statements. For a discussion of these and other risks, uncertainties and other factors that may cause our actual results, performance or achievements to differ, please refer to our annual report on Form 10-K for the year ended December 31, 2023 as well as our subsequent filings with the Securities and Exchange Commission from time to time, including our guarterly report on Form 10-Q for the period ended March 31, 2024. The forward-looking statements contained herein are made as of the date hereof, and we undertake no obligation to update them after this date, except as required by law.

Opening Remarks

Steve Davis, President and Chief Executive Officer



Acadia Investment Thesis





Two successful commercial franchises

> \$205.8M in Q1 2024 revenues

- NUPLAZID[®] \$129.9M
- DAYBUE™ \$75.9M

Two late-stage assets with strong early-stage pipeline

- Ongoing P3 trial of ACP-101 in Prader-Willi syndrome
- Ongoing seamless P2 / P3 program of ACP-204 in Alzheimer's disease psychosis
- Numerous early-stage programs



Financial strength

- 74% YoY revenue growth in 1Q24
- Cash balance of \$470.5M as of March 31, 2024

DAYBUE Overview

DAYBUE Today

- 5,000 diagnosed population
 - 25% penetration to date
- Persistency continues to track ~10 percentage points above clinical experience
- Average dose (post titration) remains ~75-80%
- >650 prescribers to date
- Broad payor access

DAYBUE Outlook

- Sizeable untreated population
- Growing body of real-world benefits
- Facilitate consistent application of GI management strategies
- Drive depth of prescribing outside of COEs
- Continue net patient growth
 - Net patient adds in each of last six weeks

Deep CNS Pipeline



Program	Indication	Preclinical	Phase 1	Phase 2	Phase 3	Marketed
NUPLAZID [®] (pimavanserin)	Parkinson's Disease Psychosis					
DAYBUE™ (trofinetide)	Rett Syndrome					
ACP-101 ^{1,2}	Hyperphagia in Prader-Willi Syndrome					
ACP-204 ²	Alzheimer's Disease Psychosis					
ACP-2591 ²	Rett Syndrome; Fragile X Syndrome					
ASO Programs ²	SYNGAP1; Rett syndrome; Undisclosed					
Multiple Undisclosed Programs	Neuropsychiatric and Rare Disorders					

¹ Acadia acquired Levo Therapeutics and its rights/licenses to ACP-101.

² The safety and efficacy of these investigational agents have not been established. There is no guarantee these investigational agents will be filed with or approved by any regulatory agency.

DAYBUE (trofinetide) is only approved in the U.S. by the FDA for the treatment of Rett syndrome in adults and pediatric patients two years of age and older.

NUPLAZID (pimavanserin) is only approved in the U.S. by the FDA for the treatment of hallucinations and delusions associated with Parkinson's disease psychosis.

Commercial Update

Brendan Teehan, Chief Operating Officer, Head of Commercial



Key Drivers of Long-Term Value for DAYBUE

1 out of 4 diagnosed Rett patients have received treatment with DAYBUE; large remaining untreated patient population

- Successfully penetrated COEs; now have ~50% share of patients treated
- Driving further depth of prescribing outside of COEs, where large majority of patient population exists

Foundation of real-world experience across HCPs and families to drive adoption

- Real-world benefits serve as examples of clinical success on DAYBUE treatment
- Sharing successful GI management strategies broadly
- Time to benefit is a key consideration

%



 9-month persistency rate in real world vs. 9-month persistency in LILAC placebo rollover patients (58% vs. 47%)¹



Expanding DAYBUE Internationally



Pediatric investigation plan (PIP) filed with and accepted by EMA in Europe

• Filing anticipated in 1Q25

Formal meeting with Japanese regulatory agency (PMDA) scheduled in 2Q24 to discuss clinical plan

NDS in Canada accepted for filing and priority review granted; potential approval around YE24

DAYBUE Real-World Experience

) A C A D I A

"This child is 9 years old and just told her mom she loves her for the first time." "It was her engagement level with the world outside of her; it just blossomed, and it was like a light was turned on."

"I've re-met my daughter."

"She is more alert, will move her head back and forth following a conversation between two people, she laughs appropriately during conversations."

Caregiver testimonials are sourced from AnovoRx as well as from poster titled Assessing Experiences With Trofinetide for Rett Syndrome: Interviews With Caregivers of Patients in LAVENDER, LILAC, and LILAC-2 Studies.

NUPLAZID Strategy: Optimize Cash Flow



Franchise generates >\$300 million in annual cash flow

NUPLAZID 1Q24 Commercial Update



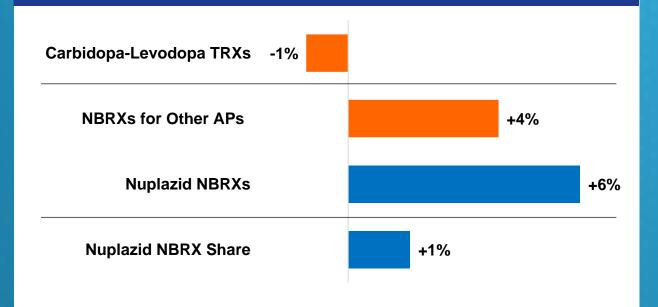


Key takeaways

> \$129.9M in net product sales in 1Q24

NBRXs for both NUPLAZID and other atypical antipsychotics (APs) grew in 1Q24 relative to 4Q23; NUPLAZID outpaced market growth

PDP: Office-Based and LTC Channels 4Q23 vs 1Q24



R&D Update

Kimberly Manhard, Senior Vice President, Global Strategic Planning and Execution



Prader-Willi Syndrome Opportunity



Significant Unmet Need

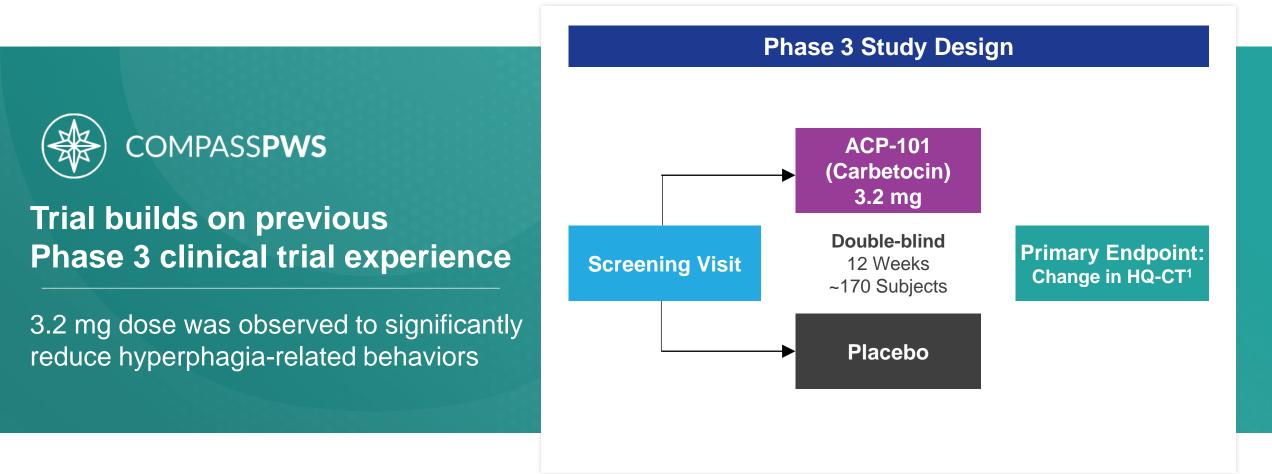
~8,000-10,000 patients in the U.S.

No FDA approved medicine to treat hyperphagia in PWS

- Rare and complex neurobehavioral genetic disorder that often leads to social isolation
- Hyperphagia is a defining characteristic of Prader-Willi syndrome (PWS) and commonly begins between the ages of 3-8
- Hyperphagia is characterized by unrelenting hunger
 - Often leads to obesity and behavioral challenges including anxiety and aggression
 - Extremely distressing for patients, parents and caregivers

30 years average life expectancy¹

Ongoing Phase 3 Study of ACP-101 for the Treatment of Hyperphagia in PWS



ACP-204 in Alzheimer's **Disease Psychosis (ADP)**

ACP-204 is a next generation 5HT_{2A} blocker that builds on the learnings of pimavanserin

Target Product Profile

Mitigate or eliminate QT prolongation

Explore doses higher than pimavanserin 34 mg equivalent

Improved time to onset of action



Phase 1 Results



- No sign of QT prolongation

Wide dose range established supporting potential for ~2x pimavanserin 34 mg equivalent

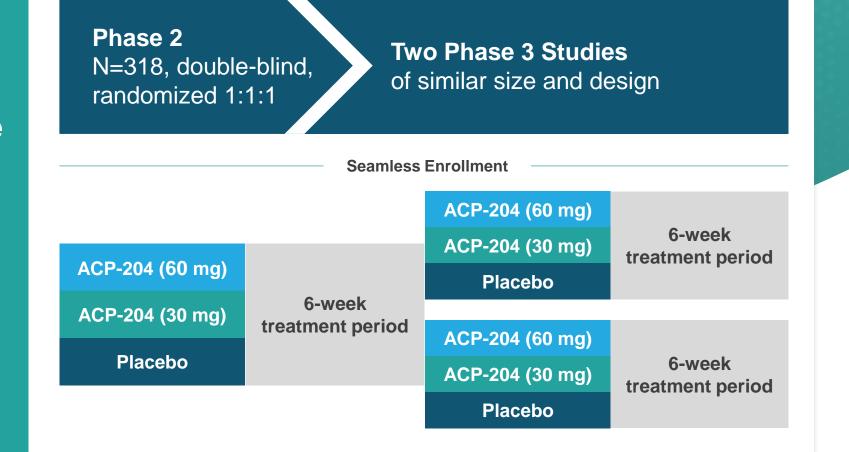
Steady state PK (5 days) achieved in less than half the time of pimavanserin (12 days)

ACP-204: Phase 2 / Phase 3 Seamless Program for the Treatment of ADP



Our clinical experience with pimavanserin supports seamless P2 / P3 program

Phase 2 and each Phase 3 study designed and sized to be considered pivotal study if successful



Financial Update

Mark Schneyer, Chief Financial Officer



1Q24 Financial Highlights



Millions, Except EPS	1Q24	1Q23	YoY Change
TOTAL Net Sales	\$205.8	\$118.5	74%
NUPLAZID Net Product Sales	\$129.9	\$118.5	10%
DAYBUE Net Product Sales	\$75.9	-	-
R&D	\$59.7	\$69.1	-14%
SG&A	\$108.0	\$101.2	7%
Net Income (Loss)	\$16.6	(\$43.0)	
EPS	\$0.10	(\$0.27)	
		Year End 2023	
Cash Balance	\$470.5	\$438.9	

Reiterating FY 2024 Financial Guidance

	FY24 Guidance
DAYBUE Net Sales	\$370 - 420 Million
NUPLAZID Net Sales	\$560 - \$590 Million
NUPLAZID Gross-to-Net	25% - 29%
R&D Expense	\$305 - \$325 Million
SG&A Expense	\$455 - \$480 Million

A C A D I A[°]

Building On Our Success

2024 and Beyond



Penetrate substantial market opportunity for DAYBUE in the U.S.

Strong growth from both DAYBUE and NUPLAZID franchises

Bring trofinetide to new markets outside the U.S. including Europe, Japan and Canada

Progress P3 study of ACP-101 in Prader-Willi syndrome

Progress seamless P2 / P3 program for ACP-204 in Alzheimer's disease psychosis

Substantial and growing cash flow from operations

Q&A Session

