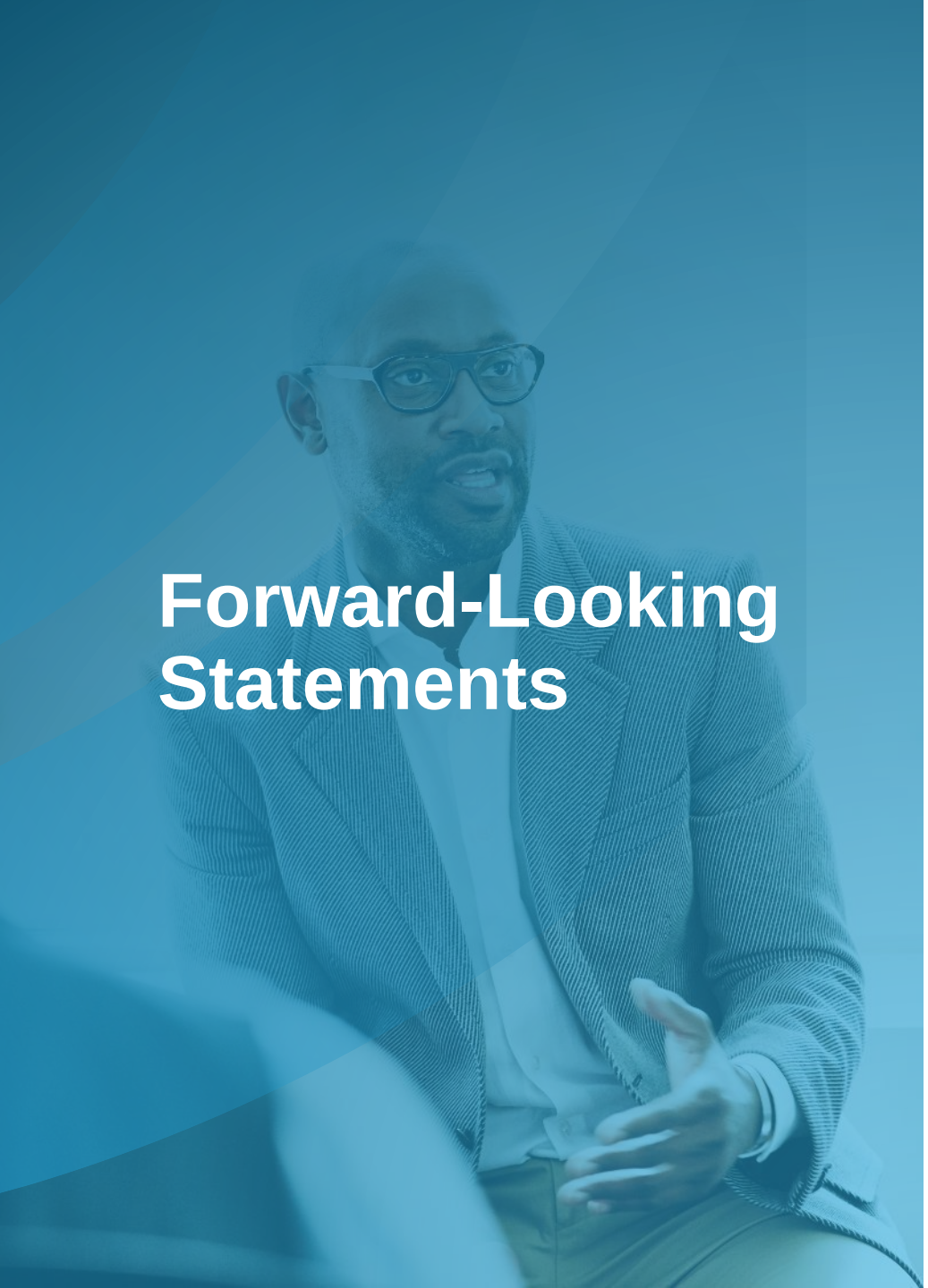
ACADIA

Acadia Corporate Presentation

August 2024



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,” “predicts,” “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: (a) our dependency on the continued successful commercialization of NUPLAZID and DAYBUE and our ability maintain or increase sales of NUPLAZID or DAYBUE; (b) the costs of our commercialization plans and development programs, and the financial impact or revenues from any commercialization we undertake; (c) our ability to obtain necessary regulatory approvals for our product candidates and, if and when approved, market acceptance of our products; (d) our dependence on third-party collaborators, clinical research organizations, manufacturers, suppliers and distributors; (e) the impact of competitive products and therapies; (f) our ability to generate or obtain the necessary capital to fund our operations; (g) our ability to grow, equip and train our specialized sales forces; (h) our ability to manage the growth and complexity of our organization; (i) our ability to maintain, protect and enhance our intellectual property; and (j) 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 materially and adversely from those anticipated or implied by our forward-looking statements, 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 quarterly report on Form 10-Q. 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.

Acadia Investment Thesis

Two successful commercial franchises

- $242.0M in Q2 2024 revenues
  - NUPLAZID® $157.4M
  - DAYBUE™ $84.6M

Two late-stage assets with strong early-stage pipeline

- Ongoing Pivotal Phase 3 trial of ACP-101 in Prader-Willi syndrome
- Ongoing Phase 2 / Phase 3 program of ACP-204 in Alzheimer's disease psychosis
- Numerous early-stage programs

Financial strength

- Positive cash flow generation
- Cash balance of $500.9M as of June 30, 2024

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.
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.

Rett Syndrome

~5,000
diagnosed patients in the US

~6,000 - 9,000
prevalent population in the US

Debilitating Symptoms of Rett Syndrome[1]

- Fine and gross motor impairment
- Loss of verbal and nonverbal communication
- Hand stereotypies
- Loss of independence and require 24/7 support
- G.I. symptoms, including severe constipation
- Seizures

[1]Acadia market research, Neul JL et al, Annal Neurol. 2010;68;944-50 and and https://www.rettsyndrome.org/about-rett-syndrome/what-is-rett-syndrome/.

DAYBUE for the Treatment of Rett Syndrome

Daybue™ (trofinetide)

First and only FDA-approved drug for the treatment of Rett syndrome in adults and pediatric patients 2 years of age and older. Received priority review, orphan drug and fast track drug designations.

- A twice-daily liquid medication that can be orally-administered or via gastrostomy tube
- Approval based on improvement in point scales measuring severity of disease including RSBQ (caregiver assessed) and CGI-I (clinician rated)
- Most common adverse reactions include diarrhea and vomiting
- Method-of-use patent to 2036
- Received a Priority Review Voucher on approval[1]
- Acadia owns worldwide rights

[1]Acadia owes Neuren Pharmaceuticals 1/3 of the value at the time it is used or sold by Acadia

DAYBUE Opportunity

DAYBUE Today

- ~30% of 5,000 diagnosed population penetrated to date
- Expectation of long-term persistency on drug is ~50%
- Approximate long-term average dose ~75-80% of labeled dose
- Broad payor access with over 80% of Rett lives covered

DAYBUE Outlook

- Sizeable untreated population
- Growing body of real-world benefits
- Significant opportunity to drive depth of prescribing outside of Centers of Excellence
- Pursuing approval and commercialization in Europe, Japan, and Canada

DAYBUE Real-World Experience

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> I've **re-met my daughter.**"

> It was her engagement level with the world outside of her; **it just blossomed, and it was like a light was turned on.**"

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

> This child is 9 years old and just told her mom **she loves her for the first time.**"

UPDATE QUOTES

Caregiver testimonials are sourced from AnovoRx.

NUPLAZID for the Treatment of Hallucinations and Delusions Associated with Parkinson's Disease

- **~50%** of people with PD may develop hallucinations and/or delusions at some point during the course of their disease[1]
- **~130,000 patients** each year are PD patients treated with an Atypical Antipsychotic[2]

Debilitating Symptoms

- Seeing things that others don't
- Hearing sounds, music or voices
- Paranoia
- False beliefs

NUPLAZID® (pimavanserin) 34mg capsules

NUPLAZID is the first and only FDA-approved drug for the treatment of hallucinations and delusions associated with Parkinson's disease psychosis.

- **Composition of matter patent to 2030**
- **Formulation patents to 2038**

[1] Elin B Forsaa , et al. A 12-year population-based study of psychosis in Parkinson disease *Arch. Neurol.*. 2010; Aug;67(8):996-1001
[2] Acadia estimate as of June 2024 based on claims data

Dynamics Supporting Growth in NUPLAZID

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$157.4M in net product sales in 2Q24, up 11% year-over-year

Real-World Evidence[1-3] findings:

- Reduced mortality when using pimavanserin as compared to off-label atypical antipsychotics
- Lower all-cause hospitalizations, ER visits, and shorter length of stays vs. atypical antipsychotics

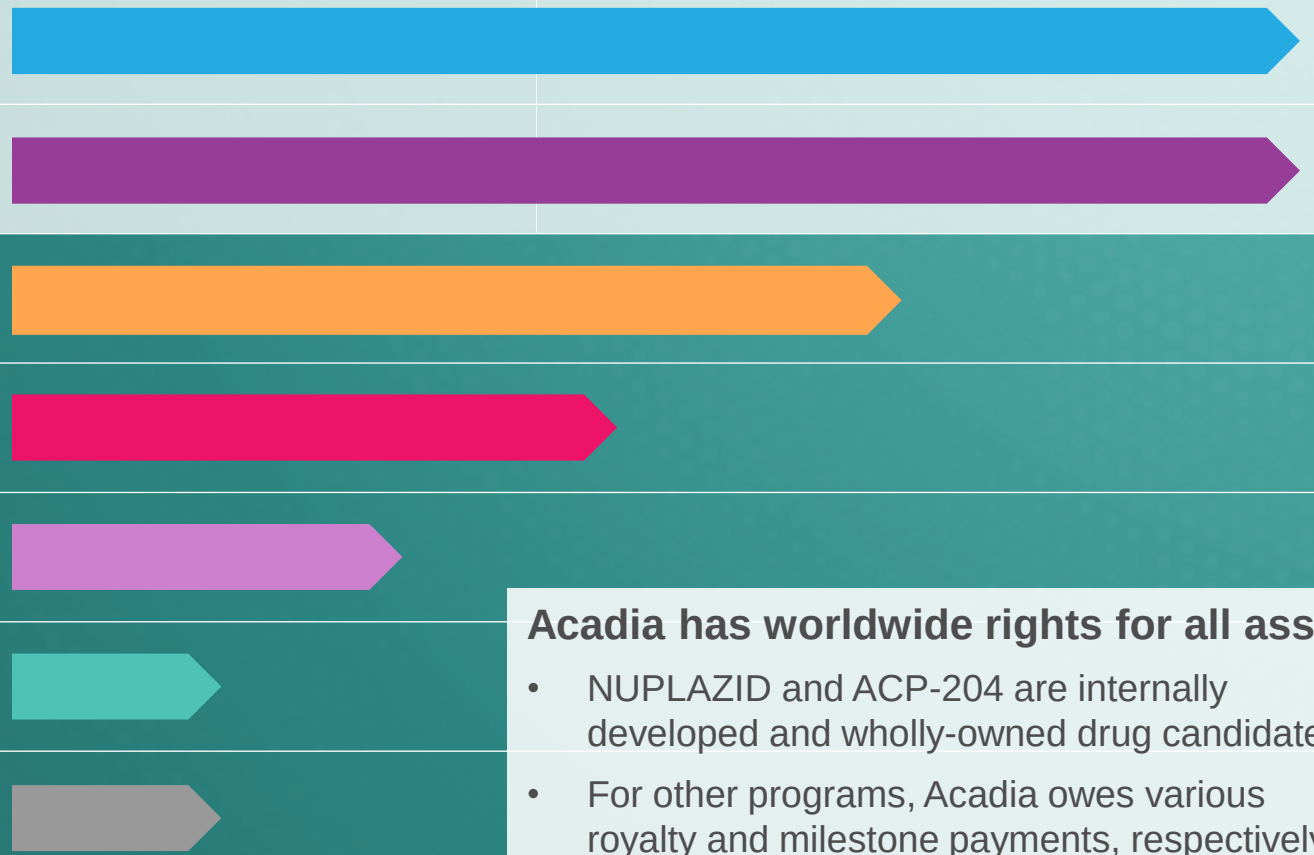
Label Change clarifying:

- NUPLAZID can be prescribed to treat patients with PDP, *with or without* dementia
- Thereby addressing confusion that existed in the marketplace about NUPLAZID's addressable population

1.Mosholder AD, Ma Y, Akhtar S, et al. Mortality among Parkinson's disease patients treated with pimavanserin or atypical antipsychotics: an observational study in Medicare beneficiaries. Am J Psychiatry. 2022;179(8):553-561.
2.Layton JB, Forns J, McQuay LJ, et al. Mortality in patients with Parkinson's disease-related psychosis treated with pimavanserin compared with other atypical antipsychotics: a cohort study. Drug Safety. Published online December 14, 2022. doi:10.1007/s40264-022-01260-6.;
3.Layton JB, Forns J, McQuay LJ, et al. Mortality in patients with Parkinson's disease-related psychosis treated with pimavanserin compared with other atypical antipsychotics: a cohort study. Supplementary material. Online resource. Drug Safety. Published online December 14, 2022. doi:10.1007/s40264-022-01260-6.

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]	Hyperphagia in Prader-Willi Syndrome					
ACP-204[1]	Alzheimer's Disease Psychosis					
ACP-2591[1]	Rett Syndrome; Fragile X Syndrome					
ASO Programs[1]	SYNGAP1; Rett syndrome; Undisclosed					
Multiple Undisclosed Programs	Neuropsychiatric and Rare Disorders					



Acadia has worldwide rights for all assets

- NUPLAZID and ACP-204 are internally developed and wholly-owned drug candidates
- For other programs, Acadia owes various royalty and milestone payments, respectively

[1] 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.

Prader-Willi Syndrome Opportunity

Significant Unmet Need

- ~8,000-10,000 patients in the U.S.
- In countries across the globe, incidence rates are similar to those in the U.S.
- No FDA approved medicine to treat hyperphagia in PWS patients in the U.S.

- 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 expectancy[1]

[1]Causes of Death in Prader-Willi Syndrome: Prader-Willi Syndrome Association (USA) 40-Year Mortality Survey. Genet Med. 2017 June ; 19(6): 635–642.

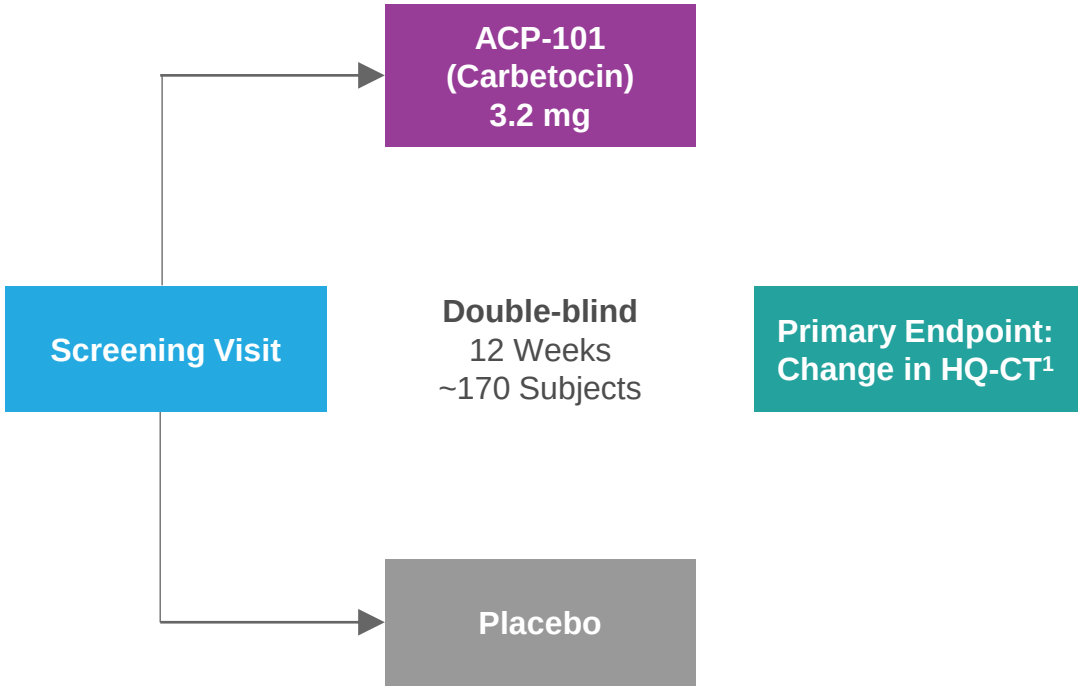
Ongoing Phase 3 Study of ACP-101 for the Treatment of Hyperphagia in PWS

COMPASSPWS

Trial builds on previous Phase 3 clinical trial experience

3.2 mg dose was observed to reduce hyperphagia-related behaviors

Phase 3 Study Design



[1]Hyperphagia Questionnaire for Clinical Trials (HQ-CT) is an observer-reported outcome measure that has been widely used in interventional studies to assess changes in hyperphagic behaviors in individuals with PWS.

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

Strategic goal: expand and extend neuropsychiatry portfolio

Target Product Profile

Mitigate or eliminate QT prolongation

Explore doses higher than pimavanserin 34 mg equivalent

Improved time to onset of action

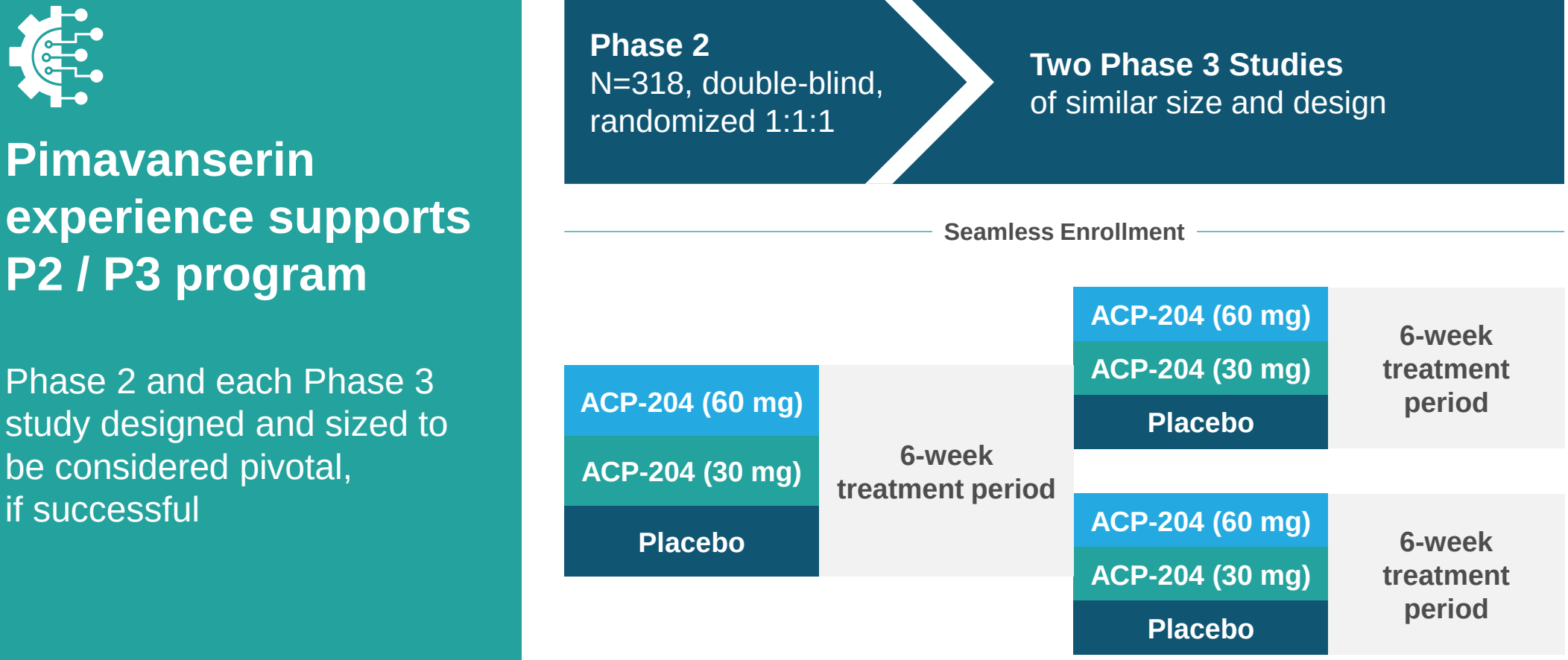
Phase 1 Results

- 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 Program for the Treatment of ADP

Pimavanserin experience supports P2 / P3 program

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



2024 Financial Guidance

	FY23 Actual	FY24 Guidance[1]
NUPLAZID Net Sales	$549.2 Million	$590 - $610 Million
DAYBUE Net Sales	$177.2 Million	$340 - $370 Million
Total Revenue	$726.4 Million	$930 - $980 Million
R&D Expense	$351.6 Million	$305 - $315 Million
SG&A Expense	$406.6 Million	$465 - $480 Million
YE Cash	$438.9 Million (as of 12/31/2023)	$575 - $625 Million[2] (year-end projection)

[1]Updated guidance provided on August 6, 2024.
[2]Subject to the size and scope of potential future business development.

Building On Our Success

2024 and Beyond

- Leverage physician and caregiver real world experience and capitalize on DAYBUE long-term value drivers
- Build on real-world evidence and favorable label clarification while introducing new DTC campaigns to grow NUPLAZID franchise
- Bring trofinetide to new markets outside the U.S. including Europe, Japan and Canada
- Progress P3 study of ACP-101 in hyperphagia in Prader-Willi syndrome
- Progress P2 / P3 program for ACP-204 in Alzheimer's disease psychosis
- Substantial and growing cash flow from operations