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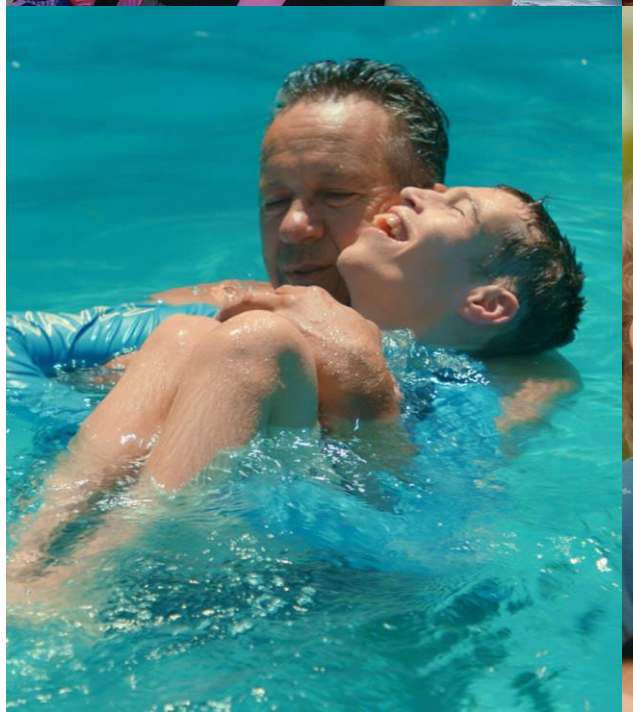
2023 Financial Results Investor Webinar

29 February 2024

IMPROVING THE LIVES OF PEOPLE WITH NEURODEVELOPMENTAL DISABILITIES






Forward looking statements

This presentation contains forward looking statements that involve risks and uncertainties. Although we believe that the expectations reflected in the forward looking statements are reasonable at this time, Neuren can give no assurance that these expectations will prove to be correct. Actual results could differ materially from those anticipated. Reasons may include risks associated with drug development and manufacture, risks inherent in the regulatory processes, delays in clinical trials, risks associated with patent protection, future capital needs or other general risks or factors.

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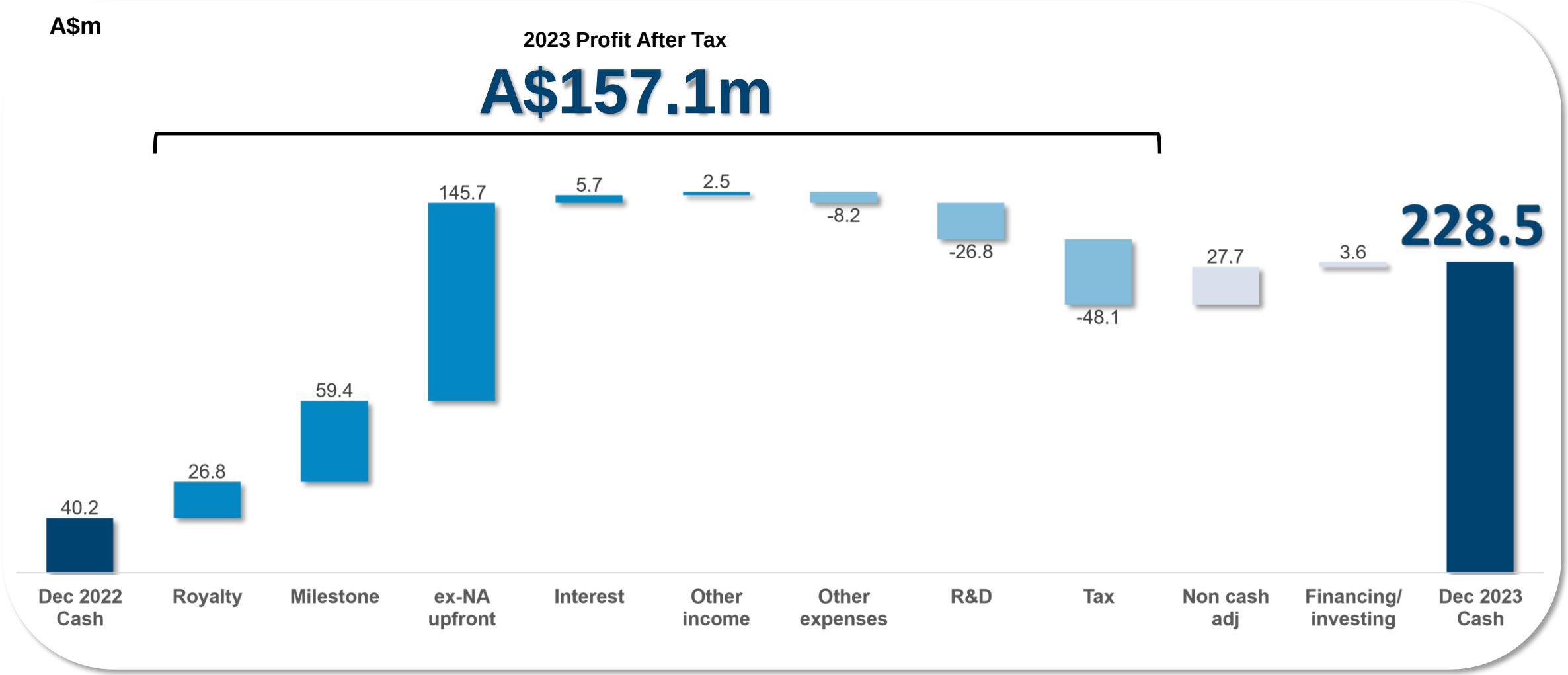
Financial strength to maximise growth opportunities



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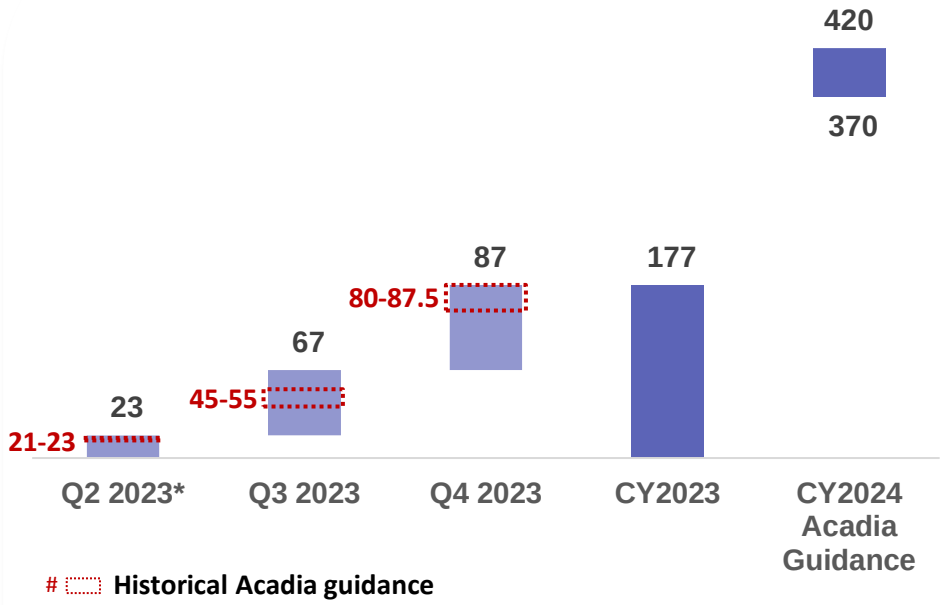
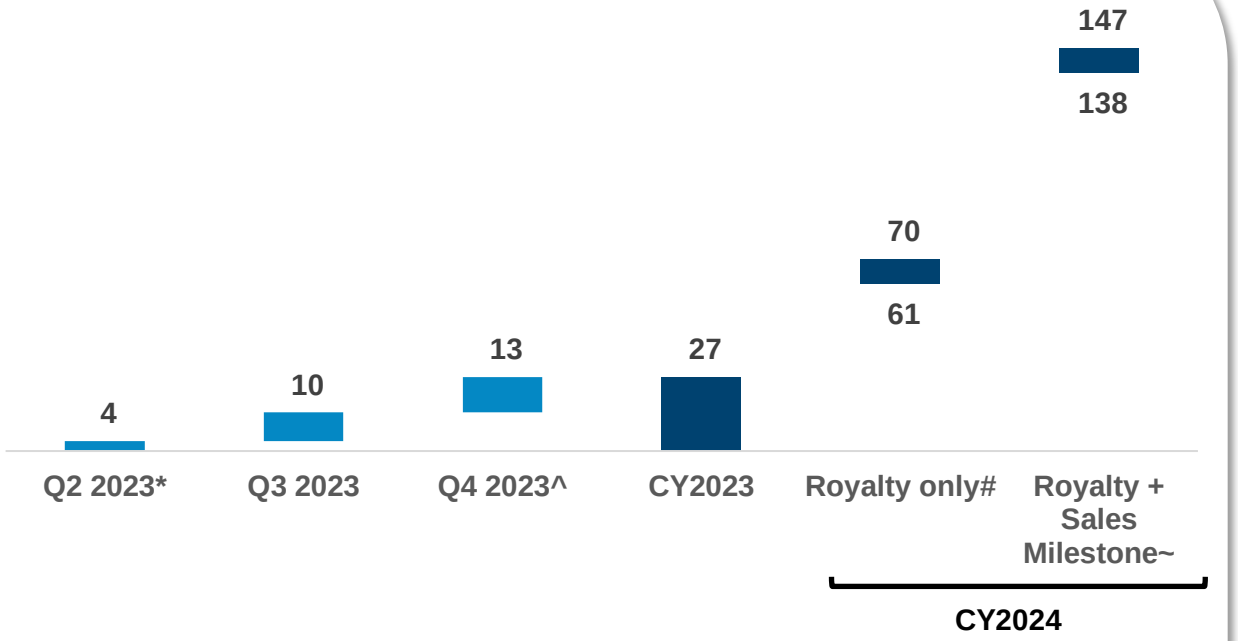
Growing sustainable income from commercialised product

DAYBUE Net Sales (US$m)



2023 net sales of US$177m
2024E net sales of US$370 – 420m

Royalty and Sales Milestone to Neuren (A$m)



2023E royalty of A$27m
2024E royalty of A$61 – 70m, plus A$77m sales milestone

* Since launch to 30 Jun 2023
^ Based on 10% of DAYBUE net sales and AUDUSD of 0.6805 for Q4 2023
# Based on 10% of DAYBUE net sales up to US$250m and 12% of DAYBUE net sales between US$250m and US$500m, and AUDUSD of 0.65
~ Neuren will be entitled to US$50m sales milestones (receivable in Q1 2025) if CY2024 DAYBUE net sales reaches US$250m; assumes AUDUSD of 0.65

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Three key drivers transforming near term value

1 Realise Neuren's share of **trofinetide value in the US** through Acadia's successful commercialization of

Daybue™ (trofinetide)

2 Realise Neuren's share of **trofinetide ex-US** value through expanded global partnership with Acadia

3

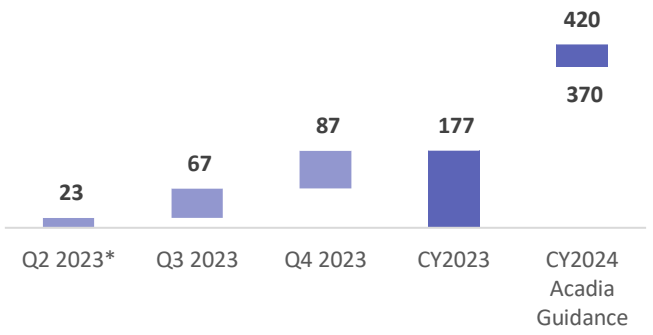
Confirm efficacy of **NNZ-2591** in Phase 2 trials for four valuable indications, with global rights retained by Neuren

✓ Positive top-line results for **Phelan-McDermid syndrome**

- Top-line results for **Pitt Hopkins** and **Angelman syndromes** in **Q2** and **Q3 2024**

North America – DAYBUE™ US launch in April 2023

	US	Canada
Potential Rett patients	6,000 - 9,000[1]	600 - 900[1]
Currently identified Rett patients	5,000[1]	NDS filing in Q1 2024 and potential approval around year-end 2024[3]



2023 net sales of US$177m
2024E net sales of US$370 – 420m

Economics to Neuren:

- ✓ **US$10m** **upfront in 2018**
- ✓ **US$10m** **in 2022 following acceptance of NDA for review**
- ✓ **US$40m** **in Q2 2023 following 1st commercial sale in the US**
- **US$33m** one third share of Priority Review Voucher awarded to Acadia (assuming market value US$100m)
- **US$55m** Milestone payments related to Fragile X

Tiered Royalty Rates (% of net sales)[2]

Annual Net Sales	Rates
≤US$250m	**10%**
>US$250m, ≤US$500m	**12%**
>US$500m, ≤US$750m	**14%**
>US$750m	**15%**

Sales Milestones

Net Sales in one calendar year	US$m
≥US$250m	**50**
≥US$500m	**50**
≥US$750m	**100**
≥US$1bn	**150**

* Since launch to 30 Jun 2023
[1] Acadia estimates
[2] Royalty rates payable on the portion of annual net sales that fall within the applicable range
[3] Acadia Fourth Quarter and Full Year 2023 Earnings Call presentation in Feb 2024

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Meaningful real world benefits reported

LILAC-2 Caregiver Exit Interviews[1]

Area/type of improvement with trofinetide reported by ≥15% of caregivers, n (%)	Caregivers N=25 (%)
Engagement with others	*11 (42.3)*
Hand use	*10 (38.5)*
Eye gaze	*8 (30.8)*
Attention/focus/concentration	*7 (26.9)*
Tobii eye trackers use	*7 (26.9)*
Ability to make sounds	*6 (23.1)*
Happier mood or disposition	*6 (23.1)*
Ability to walk	*5 (19.2)*
Alertness	*5 (19.2)*
New words	*5 (19.2)*
Seizures	*4 (15.4)*
Aware of environment	*4 (15.4)*
Repetitive hand movements	*4 (15.4)*

Real World Experience[1]

"It was her engagement level with the world outside of her – to me and to friends in school; it just blossomed, and it was like a light was turned on."

"Her verbalization definitely improved, and she started saying more things."

"Picking up things a lot more (mostly her cup), happens daily and she is now trying to drink by herself."

"Improved cognitive ability, and [the parents] are hearing new words or words they have not heard in a while."

[1] Acadia Fourth Quarter and Full Year 2023 Earnings Call presentation in Feb 2024

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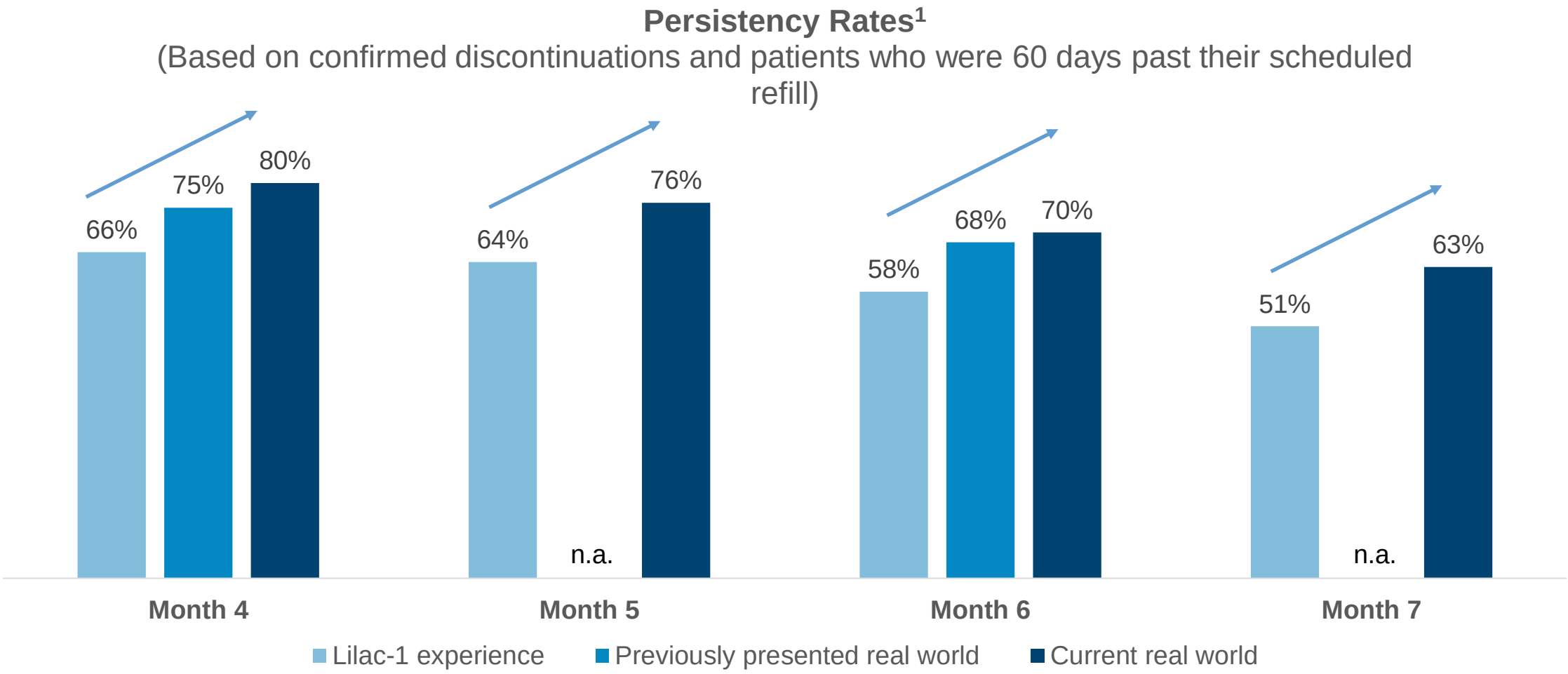
Persistency rates improving in new patient cohorts



[1] Acadia Fourth Quarter and Full Year 2023 Earnings Call presentation in Feb 2024

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Outside North America

	Europe	Japan	Other
Potential Rett patients	9,000 - 14,000[1]	1,000 - 2,000[1]	~30,000[2]
Currently identified Rett patients	~4,000[2]	~800 - 1,000[2]	~2,000[2]

- **Europe:** engaging with the EMA in Q1 2024, with a potential Marketing Authorisation Application filing in H1 2025[3]
- **Japan:** engaging the regulatory agency (PMDA) in 2024[3]

Economics to Neuren:

✓ **US$100m**	**upfront**
US$35m	following 1st commercial sale in Europe
US$15m	following 1st commercial sale in Japan
US$10m	following 1st commercial sale of a 2nd indication Europe
US$4m	following 1st commercial sale of a 2nd indication Japan
Sales milestones	On achievement of escalating annual net sales thresholds: Europe: up to **US$170m** Japan: up to **US$110m** RoW: up to **US$83m**
Tiered royalties	**Mid-teens to low-20s %** of net sales

[1] Acadia estimates
[2] Neuren estimates based on prevalence studies and patient organisations
[3] Acadia Fourth Quarter and Full Year 2023 Earnings Call presentation in Feb 2024

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5x larger opportunity for NNZ-2591

Disorder	Gene mutation	Published prevalence estimates	Potential patients		
			US[1]	Europe[1]	RoW[1, 2]
Phelan-McDermid	*SHANK3*	1/8,000 to 1/15,000 males and females	24,000	31,000	104,000
Pitt Hopkins	*TCF4*	1/34,000 to 1/41,000 males and females	6,000	8,000	28,000
Angelman	*UBE3A*	1/10,000 to 1/20,000 males and females	19,000	24,000	81,000
Prader-Willi	*15q11-q13*	1/10,000 to 1/30,000 males and females	17,000	21,000	72,000
			66,000	**84,000**	**285,000**

- Current opportunity for NNZ-2591 is more than 5 times the Rett Syndrome opportunity[3]
- **Positive top-line results from Phelan McDermid syndrome Phase 2 trial**
- **Top-line results from Pitt Hopkins and Angelman syndrome Phase 2 trials expected in Q2 and Q3 2024**
- Rett and Fragile X syndromes are licensed to Acadia, with same economics to Neuren as trofinetide; Neuren retains worldwide rights to all other indications
- The mechanism of action of NNZ-2591 is relevant for many other neurodevelopmental synaptopathies

[1] Estimates derived by applying the mid-point of the prevalence estimate range to the populations under 60 years
[2] RoW comprises Japan, China (urban population), Brazil, Israel, South Korea, Australia and New Zealand
[3] Based on number of potential patients globally

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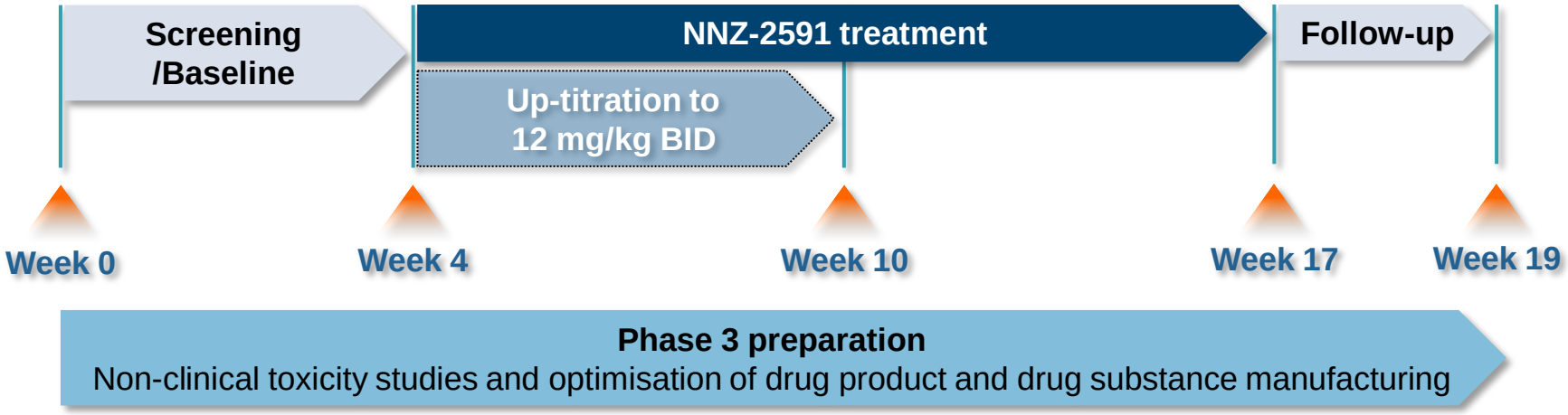
Key features of first Phase 2 trials

Overall aim – expedite data that informs the design of subsequent registration trials and prepare for Phase 3 in parallel

- Prioritising speed to data
- Maximising opportunity to demonstrate effects
- Confirm safety and PK in pediatric patients
- Assess treatment impact across multiple efficacy measures to select primary endpoint for registration trial
- **First top-line results for Phelan-McDermid syndrome positive**
- **Top-line results for Pitt Hopkins and Angelman syndromes in Q2 and Q3 2024**

	✓ Phelan-McDermid	Pitt Hopkins	Angelman	Prader-Willi
n subjects	Up to 20	Up to 20	Up to 20	Up to 20
Age range	3 to 12	3 to 17	3 to 17	4 to 12
Location	US	US	Australia	US



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Phase 2 clinical trial results highlights

- **NNZ-2591 was safe and well tolerated, with no clinically significant changes in laboratory values or other safety parameters during treatment**
- **Significant improvement was assessed by both clinicians and caregivers across multiple efficacy measures**
- **Improvements were consistently seen across clinically important aspects of Phelan-McDermid syndrome, including communication, behaviour, cognition/learning and socialisation**
- **Clinician and caregiver global efficacy measures showed a level of improvement typically considered clinically meaningful:**
  - **Clinical Global Impression of Improvement (CGI-I) – mean score of 2.4 with 16 out of 18 children showing improvement assessed by clinicians**
  - **Caregiver Overall Impression of Change (CIC) – mean score of 2.7 with 15 out of 18 children showing improvement assessed by caregivers**
- **For 10 out of 14 efficacy endpoints, improvement from baseline on overall/total scores was statistically significant ($p<0.05$)[1]**

[1] Wilcoxon signed rank test

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Safety and tolerability summary

NNZ-2591 was safe and well tolerated

- ✓ Well tolerated
- ✓ Most Treatment Emergent Adverse Events (TEAE) were mild to moderate
  - 1 Serious TEAE (gastroenteritis) not related to study drug, occurred during safety follow-up period after end of treatment
  - 3 discontinuations due to TEAEs not related to study drug: 2 due to testing positive for COVID-19 and 1 due to seizures
- ✓ No clinically significant changes in laboratory values, electrocardiogram (ECG) or other safety parameters were observed during treatment

TEAEs in 2 or more subjects

Event	N=18 n (%)	Event	N=18 n (%)
Constipation	2 (11.1)	Somnolence	3 (16.7)
Diarrhea	2 (11.1)	Pyrexia	3 (16.7)
Nausea	2 (11.1)	Fatigue	2 (11.1)
Vomiting	2 (11.1)	Aggression	2 (11.1)
COVID-19	3 (16.7)	Insomnia	2 (11.1)
Nasopharyngitis	2 (11.1)	Decreased Appetite	3 (16.7)
Otitis Media	2 (11.1)	Rhinorrhea	2 (11.1)
Psychomotor Hyperactivity	4 (22.2)		

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Efficacy endpoints summary

- Statistically significant improvement vs baseline in **10/14** efficacy endpoints
- Mean **CGI-I** of **2.4** and Median of 2.0 with p-value <0.0001
- Mean **CIC** of **2.7** and Median of 3.0 with p-value =0.0003

Efficacy measures and p-values[1] (Total/Overall scores)

Global

CGI-I	**<0.0001**
CIC	**0.0003**
CGI-S	**0.0156**

GI Health

GIHQ total frequency	**0.0013**

Quality of Life

QL Inventory-Disability total	**0.0066**
Impact of Childhood Neurologic Disability	0.1094

Sleep

CSHQ total	**0.0191**

Behaviour

Aberrant Behavior Checklist-2 total	**0.0013**
Behavior Problems Inventory total frequency	**0.0326**
Vineland Adaptive Behavior Scales Composite	0.1710

Symptom Specific

PMS Clinician Domain Specific Rating Scale total	**0.0156**
Caregiver Top 3 Concerns total	**0.0005**

Communication

MB-CDI Total Vocabulary	0.0647
ORCA T-Score	0.0714

[1] Wilcoxon signed rank test

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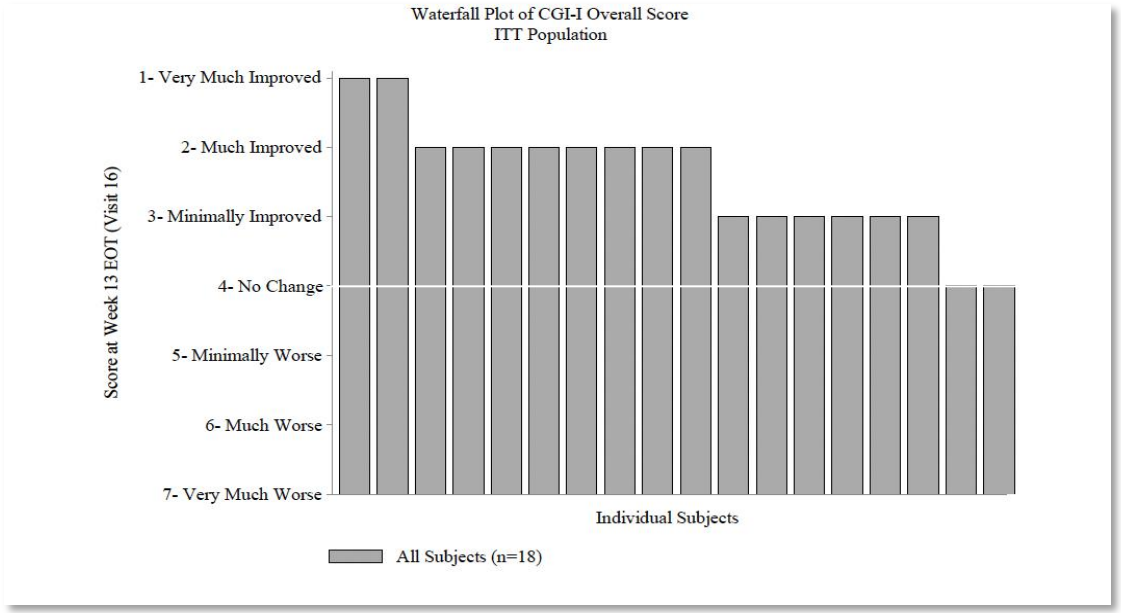
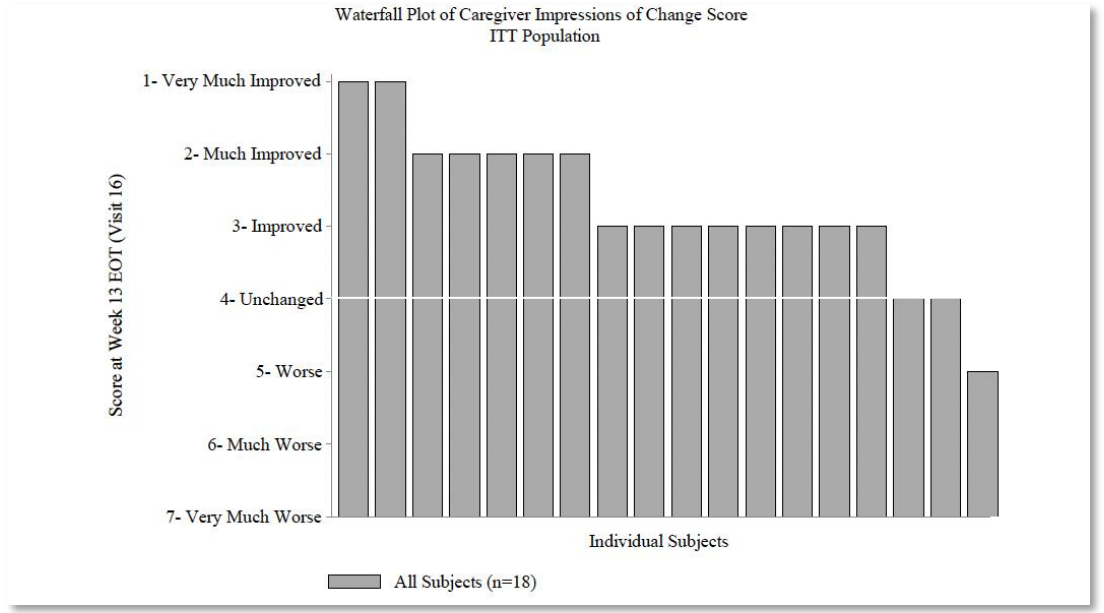
Significant improvement assessed by both clinicians and caregivers

Clinician and caregiver global efficacy measures showed a level of improvement typically considered clinically meaningful

Mean CGI-I score of 2.4 with 16 out of 18 children showing improvement



Mean CIC score of 2.7 with 15 out of 18 children showing improvement



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Clinician and caregiver testimonials

Clinicians

"Marked improvement in expressive language and moderate improvement in socialization."

"Teachers noted improvement in learning new skills."

"Able to focus work at school, both to the things they always enjoy and new tasks."

"Expressive communication- significant improvement in using more complex phrases, better back and forth communication. Better expressing needs. Some commentary on how mom is feeling, "I want you to be happy"."

"Expressive communication- babbling much more than baseline."

"A few 1-2 word phrases that were not at baseline "oh boy", "Hi Mama", "I love you", "oh my"."

"Gross motor- Stronger climbing ladders, comes downstairs which never did before, Walks upstairs without help (needed help at baseline)."

Caregivers

"Using more words while retaining eye contact… Improved pretend play… Initiating eye contact"

"Less scripting, less stimming… More flexible with changes… In general, they are more safe-even at bus stop"

"More focused , engaged, aware of their environment, people."

"So much happier, not throwing self to ground when can't get his way"

"More attentive and it makes for an easy learner, Now can focus better on what we are trying to teach."

"Attention span is great right now… He can focus long enough to complete tasks and try new things."

"Can now run instead of walking fast… Good balance, not needing assistance on stairs."

Highlights

1. DAYBUE™ (trofinetide) approved by US FDA as the first and only treatment for Rett syndrome, launched by partner Acadia in Apr 2023

2. Total economics to Neuren from global trofinetide partnership with Acadia up to US$1bn[1] plus 10 to low 20s % royalties

3. Successful DAYBUE US launch, with expected 2023 net sales of US$177m and 2024E net sales of US$370-420m[2]

4. Accelerating Phase 2 development of NNZ-2591 in 4 indications. First top-line results for Phelan-McDermid syndrome positive

5. NNZ-2591 novel mechanism of action has many more potential applications, with Rett and Fragile X licensed to Acadia

6. A$229m cash at 31 Dec 2023 – well positioned to maximize the benefits of all value creating opportunities

[1] Including payments already received and future payments
[2] Acadia guidance provided in Fourth Quarter and Full Year 2023 Earnings Call presentation in Feb 2024

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