Neuren Pharmaceuticals

Shareholder Update
Q3 2006

Disclaimer

This presentation includes forward-looking statements that are subject to risks and uncertainties. Such statements involve known and unknown risks and important factors that may cause the actual results, performance or achievements of Neuren to be materially different from the statements in this presentation.

Actual results could differ materially depending on factors such as the availability of resources, the results of clinical studies, the timing and effects of regulatory actions, the strength of competition and the effectiveness of patent protection

Contents

1. Corporate Snapshot

Repairing brain damage from ageing and injury

Glypromate® Phase 3 trial

- Glypromate® successfully completed its Phase 1 trial and Phase 2a trial
  - FDA has offered to move Glypromate® to Phase 3 on the back of excellent safety profile
  - Safe, non-toxic, and well-tolerated in humans
- The first pivotal Phase 3 study has been structured in close consultation with the FDA and is extremely cost effective
  - 520 patient multi-site trial, completion within 18 months
  - Lead US clinical sites selected
  - Significant time and cost savings: One less trial required
  - A$10 million for first pivotal Phase 3 study
  - Unique position: Not forced to partner or sell
- Neuren has the option to license Glypromate® out following first pivotal Phase 3 trial (2008) , *or* take to Market

Value proposition: tier one biotech company

- Solid drug pipeline – not a “one drug” company
  - In 2 human clinical trials now, 4 trials by end 2007
  - 4 separate out-licensing programmes in 2007
- Reduced cost of trials due to collaborators and design
  - Advanced development and affordable clinical trials
  - Phase 3 Glypromate® trial will cost A$10m for US FDA trial
  - Including US Army Walter Reed Institute, Metabolic Pharmaceuticals, UCLA Medical Center and National Trauma Institute in Melbourne
- Limited competition for drugs - All indications have minimal or no effective treatments available on market
- Experienced management team who have taken drugs to market before
- Established presence in the US

Operational management

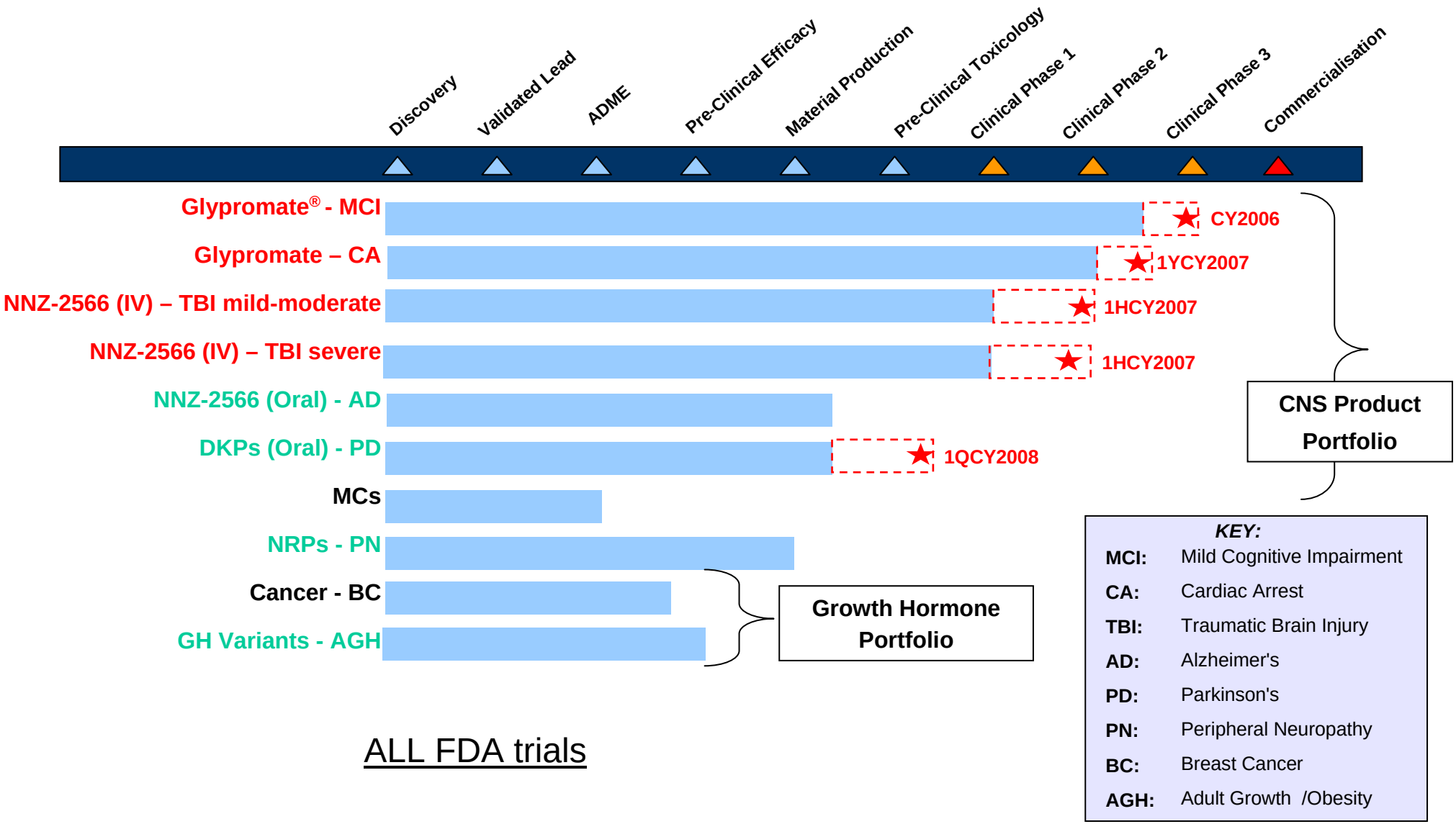
David Clarke - ME, MBA ***Executive Director, CEO***	• Senior positions in healthcare, technology and finance • Former CEO, South Auckland Health
Dr Douglas Wilson - MB, ChB, PHD ***Executive Director, CMO***	• Former SVP, World Head Medical and Regulatory Affairs, Boehringer Ingelheim • Participated in bringing 10 new drugs to market
Dr Parmjot Bains - MBBS, MA, MBA ***Chief Operating Officer***	• Overseeing clinical trial program • Previously at Fonterra Co-Operative Group, McKinsey and Company, Rubicon, World Health Organisation
Lawrence Glass - BSc, MSc ***Chief Business Officer***	• 25+ years experience in biomedical research and product development • Former CEO of a CRO that was a subsidiary of a NYSE public company

Experienced management team who have taken drugs to market before

2. Development Pipeline

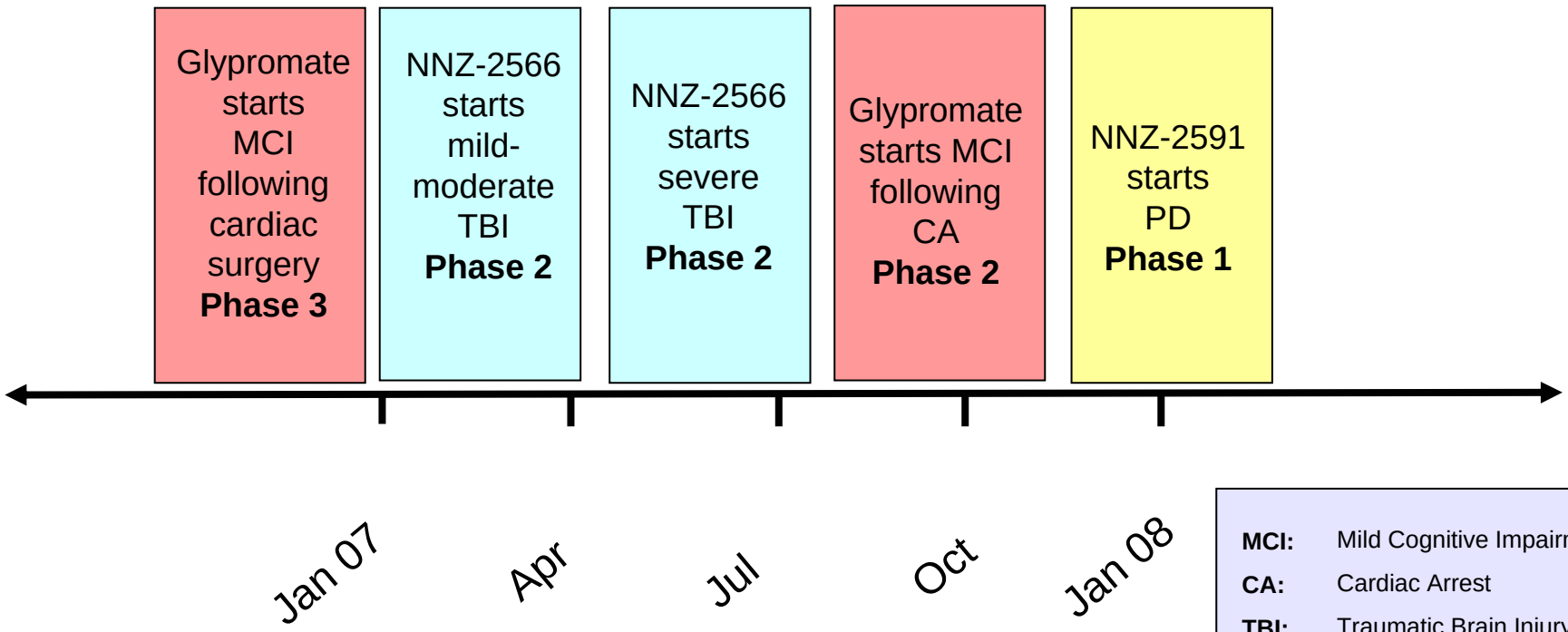
Extensive and focused on risk reduction

Development pipeline



ALL FDA trials

Near-term value drivers: 4 trials in 2007



MCI:	Mild Cognitive Impairment
CA:	Cardiac Arrest
TBI:	Traumatic Brain Injury
PD:	Parkinson's disease

Significant market opportunities

- Several significant applications for both acute (short-term) and chronic (long-term) indications:

Acute Indications	Chronic Indications
♦ Stroke	♦ Alzheimer's Disease
♦ Coronary Artery Bypass (CABG) Surgery	♦ Parkinson's Disease
♦ Traumatic Brain Injury	♦ Multiple Sclerosis

- Large and growing markets with unmet needs:

Indication	Market Size US$	Effective treatment
Bypass surgery	$1.2b	No
Traumatic Brain Injury	$1.5b	No
Stroke	$3.5b	No
Parkinson's disease	$2.0b	Minimal
Alzheimer's disease	$2.5b	Minimal
Multiple Sclerosis	$2.5b	Minimal

Four near-term out-licensing opportunities

- NEU has an extensive pipeline as a result of its Right to Own agreement with the University of Auckland
- NEU has focused on developing four product lines such that they are **attractive near-term out-licensing opportunities**

NNZ-2566 (oral)

- **Targeting Alzheimer's Disease / Dementia**
- **Confirmed oral bioavailability**
- **Highly protective in stroke (90%)**
- **Results in AD**
- **Excellent IP position**

NRP: NNZ-4921

- **Peripheral Neuropathy - Unmet need**
- **In vivo successful**
- **Joint venture with Metabolic**

Cancer: NNZ-8000

- **Breast cancer – Growth hormone mediated: 90% relevant**
- **Unique pathway, wide applicability**
- **Ab programme**
- **Q2 milestone – pAb**
- **Q3 milestone - mAb**

Obesity: NNZ-3600

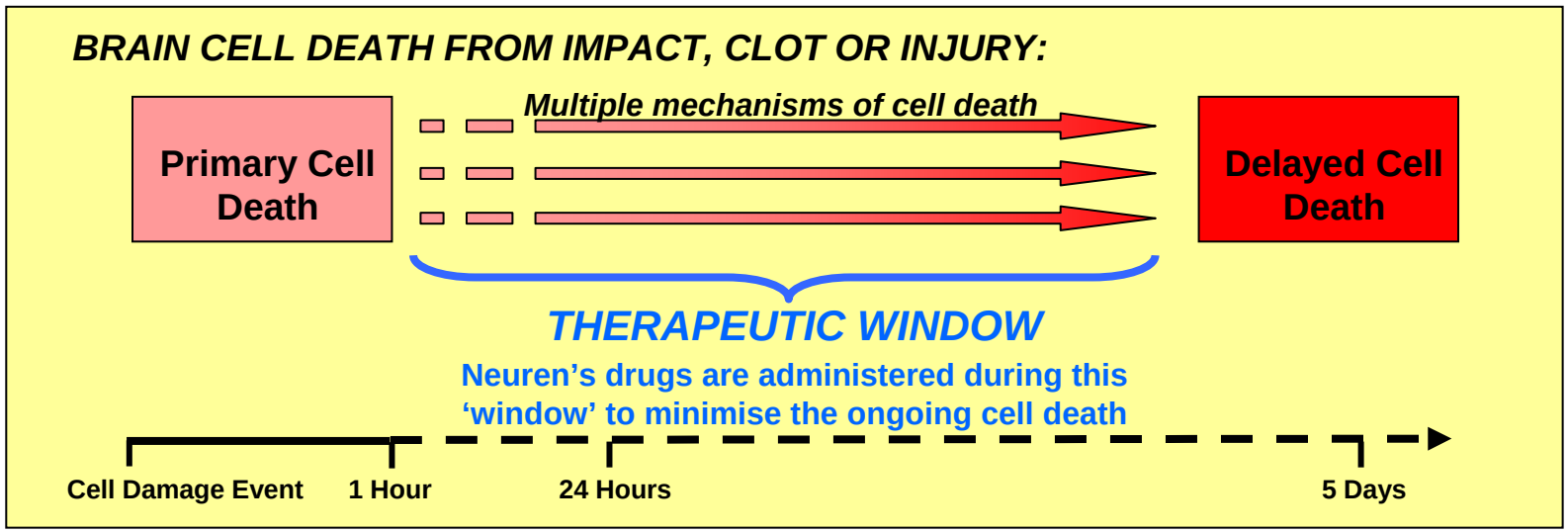
- **Obesity - Form of growth hormone (GH)**
- **No unwanted side effects**
- **Reduces fat deposits**

3. Scientific Rationale

Derived from and based on the brain's own process for healing – Better chance of success

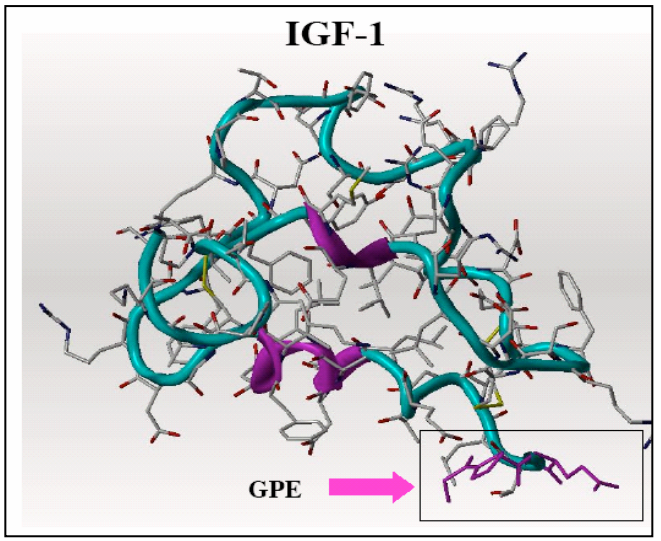
Founding hypotheses of Neuren's lead compounds

- Founded upon three scientific hypotheses that are now the generally accepted principles of brain repair:
  1. The brain self-repairs
  2. There is a window of time for brain rescue
  3. Brain cells die via several mechanisms: Brain repair agents cannot focus on neurons alone (NEJM, Feb 2005)



4. Glypromate®

Safe, non-toxic and entering Phase 3 trial



Glypromate®

- Protection against cognitive impairment following cardiac surgery was selected as the first indication because it is:

1) A good proxy for stroke; and
   - Cost effective trial design
2) Has excellent drug trial characteristics
   - **Surgery scheduling is timed and known**
   - **Patients tested before surgery, can rapidly assess results**
   - **Drug can be administered prior to surgery for <u>maximum effect</u>**
3) Large unmet need
   - Market in its own right (US$1b)
   - No current therapy – first in class

New trial: Glypromate® Phase 2 in cardiac arrest

- US Army to conduct Phase 2 Glypromate® trial to reduce brain injury from cardiac arrest
  - Utilise US Army hospitals (Tacoma, Washington)
- Army investigators to submit IND for clinical trial approval
- Glypromate® for the indication to be submitted for Orphan Drug and Fast Track designation
- Trial could provide entry point to large market for emergency treatment of cardiac arrest and related conditions
- Estimated Market size is US$800m
- Minimal costs to Neuren and Neuren retains all rights

5. NNZ-2566

Longer lasting, orally bioavailable and entering Phase 2 trials

NNZ-2566 – Traumatic brain injury

- NNZ-2566 is initially being tested for neuroprotection in patients that have experienced **Traumatic Brain Injury (TBI)**
  - US Army is co-development partner
  - Delivered up to 70% improvement in behavioral outcomes
- Neuren's clinical trial strategy has been developed in collaboration with the US Army and involves two Phase 2 trials:
  1. Mild to moderate TBI
  2. Severe TBI patients

Long treatment window, orally bio-available and poised to commence its Phase 2 trial in 2H2006

NNZ-2566 – US Army relationship

- US Army provides half of the development funding
- Neuren retains all future commercial rights to NNZ-2566 outside the US Military (1-2% of the total market)
- **Highly Motivated and Publicly supportive:** If successful in Phase 2, option for the US Army to take the drug through development
- Non-threatening to Big Pharma: Does not preclude Neuren also partnering with Pharma
- NNZ-2566 selected as lead therapeutic molecule for grant application by John Hopkins, University of Florida and US Army in US blast injury program

The US Army is a highly motivated partner with significant global influence

neuren pharmaceuticals

6. NNZ-2591

Oral treatment for Parkinson's disease

NNZ-2591 – Oral treatment for Parkinson's disease

- Meets all requirements for a CNS drug candidate
  - Safe, non-toxic, crosses into brain, therapeutic window
  - Stable, low cost of goods
- Parkinson's disease: Long-term diseases modifying effects as well as short-term
- Enhances memory
- Market position…Parkinson's disease (PD), dementia
  - 50% PD acquire dementia.
  - Market size US$1.2b
  - Only one current drug in market

Now a third drug aimed at long term brain disease

7. Commercialisation Strategy

Early cost effective proof of concept in unmet markets

Commercialisation strategy

1. Risk Reduction on three levels
    1. Science :Safe, crosses blood brain barrier, window, manufacturing …. why 2/3 drugs fail
    2. Trial design : power and end points and US Army and FDA
    3. Company : 4 FDA clinical trials + 4 out-licensing ops, 2008 multiple results

2. Neuren understands and focuses on Big Pharma's pricing points, cost of goods and margins
    - Unmet needs, large markets, limited competition, US presence, FDA
    - Price less Product .. > 80% - estimated margins on Glypromate® and NNZ-2566 beat industry norms

3. Neuren's team has done this many times before
    - Extensive experienced team, including FDA experience
    - Unique position: Cost of trials mean Neuren are not forced to partner or sell

ie Three stage strategy……..

Maximise potential Rate of Return

Potential Deal Structures[1]

- Glypromate®
  (End of Ph 3a)

Deal

- **2008**
- **Up front: US$25-30m**
- **Royalties: 12-18%**

- 2566 (IV and Oral)
  (End of Ph 2 in severe TBI)

Deal

- **2008**
- **Up front: US$15-20m**
- **Milestones: US$60-65m**
- **Royalties: 10-12%**

- 2591
  (End of Phase 2a in PD dementia)

Deal

- **2009**
- **Up front: US$15-20m**
- **Milestones: US$60-65m**
- **Royalties: 10-12%**

[1] Based on data from Recombinant Capital, 2004 and Ernst & Young, 2003

8. Summary

Summary

- History of meeting all milestones
- 2007:
  - 4 FDA clinical trials and
  - 4 out-licensing compound programs
- FDA strategy
- Supportive partners
- US presence