Developing innovative new medicines for acute and chronic neurological and psychiatric conditions

Larry Glass, CEO

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Neuren Pharmaceuticals

- Created to commercialize University of Auckland intellectual property
- Focused on acute and chronic indications in neurology and psychiatry
- Two molecules in Phase II clinical trials under US INDs
- Trial costs covered by grants from US Army and NHMRC—$23 million total
- Subsidiary (Perseis Therapeutics) developing mAbs for breast, other cancers
- Operations in US, New Zealand and Australia
- Experienced management team (all with >5 years at Neuren)

Larry Glass, Chief Executive Officer

30+ years of life sciences experience in management and business development; former CEO of CRO supporting major pharmaceutical and biotechnology companies and US government agencies including NIH, CDC and the US Army

Rob Turnbull, Chief Financial Officer

20+ years experience in corporate finance; former PricewaterhouseCoopers accountant in Auckland, Toronto and London specializing in financial reporting by foreign registrants in the U.S. and securities regulation

Maggie Scott, RN, CCRP, Director, Clinical Operations

25+ years of management experience in global clinical trials and regulatory affairs; former manager of Greenlane Clinical Research organization; led 3 clinical development programs resulting in NDAs

Douglas Wilson, MB, ChB, PhD (Director and CMO)

40+ years in academic medicine and the pharmaceutical industry in the US and EU ; former CMO of Boehringer Ingelheim responsible for all clinical development and FDA interactions

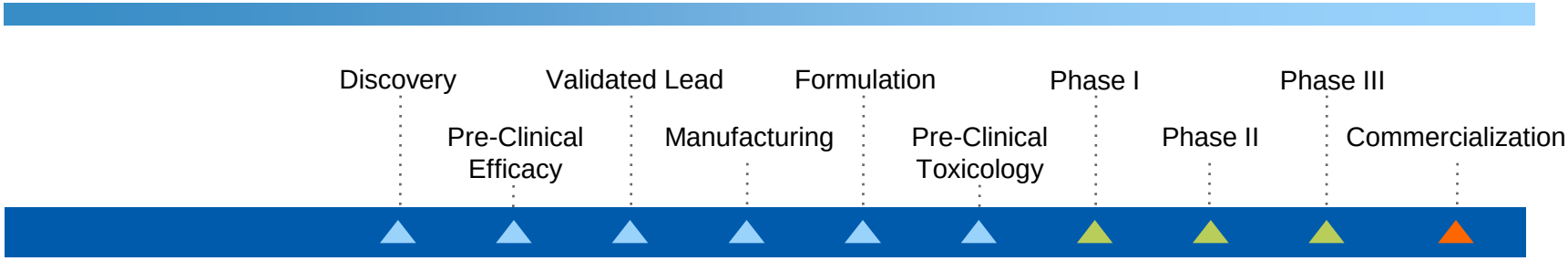
Mike Bickerdike, PhD, Director, Preclinical R&D

20+ years of research, drug discovery and non-clinical development in the neurosciences; former research project leader and department director at Vernalis Research (UK)

James Bonnar, Director, QA and Regulatory Affairs

20+ years of experience in quality assurance and regulatory affairs for drug development and manufacturing in NZ, China, the US and the UK

Product Pipeline



Motiva™ (nefiracetam)	Apathy and depression (post-stroke, Parkinson's, Alzheimer's)
NNZ-2566 (IV)	Traumatic brain injury (moderate to severe)
NNZ-2566 (oral)	Mild TBI/stroke recovery/Rett Syndrome
NNZ-2591 (DKP)	Parkinson's / peripheral neuropathy
Perseis Therapeutics (Oncology Subsidiary)	Breast/other cancers

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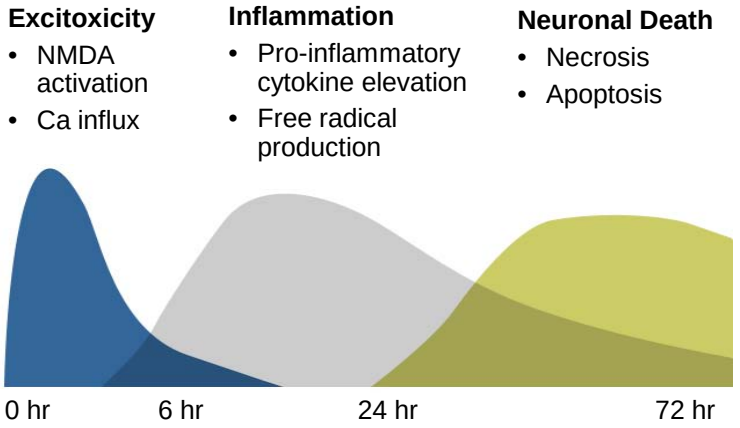
NNZ-2566 product overview

- IGF-1(1-3) is a naturally occurring neuroprotective peptide
- NNZ-2566 is a synthetic analog of IGF-1(1-3)
- Phase II for moderate to severe traumatic brain injury (Fast Track)
- Direct costs covered by grants from US Army
- 18 Level I and II trauma centers in the US and AU (10 active)
- 3 cohorts (20 mg/kg bolus plus 72 hr infusion at 1, 2, 6 mg/kg/hr)
- Cohort 1 (30 patients) completed; cohort 2 underway
- IND for exception from informed consent filed May 2011
- Forecast completion: Q4 2012
- Regulatory strategy: single Phase II, single pivotal trial under SPA
- Oral formulation in development for mild TBI; Phase II Q1 2012
- Oral formulation also targeting Rett Syndrome/Autism

NNZ-2566 clinical profile

Mechanism of action

- Inhibits upregulation of inflammatory cytokines (IL-6, IL-1β, TNF-α, E-Selectin, IFN-δ)
- Normalizes pro-apoptotic Bax and anti-apoptotic Bcl-2 expression
- Inhibits microglial activation
- Attenuates post-injury seizures (convulsive and non-convulsive)



Clinical trial design

- Double-blind, placebo controlled, rising dose
- 260 acute, non-penetrating TBI patients (Glasgow Coma Scale 4-12); 16-75 years
- Randomized 2:1 drug to placebo
- Administration of drug within 8 hours of injury
- Endpoints
  - Safety
  - Pharmacokinetics
  - Functional outcomes: Glasgow Outcome Scale-Extended (GOS-E); ADL (Mayo-Portland Adaptability Index); neurocognitive function; mood
  - Biological outcomes: seizures detected by continuous EEG; serum biomarkers of neuronal, glial and axonal cell damage; intracranial pressure

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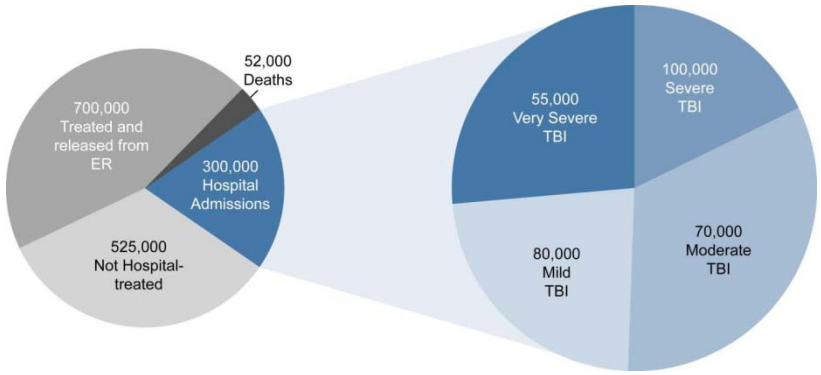
NNZ-2566 commercialization strategy

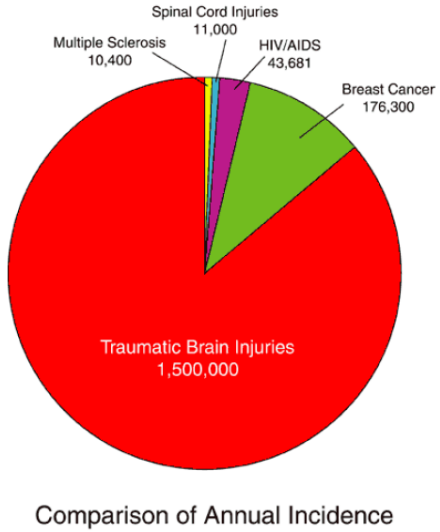
Market

- 1.5 million brain injuries per year in the US alone
- No approved therapies
- At $12,000 for IV and $3,000 for oral:
  - Moderate – severe = ~$2 billion
  - Mild = ~$2 billion



Competitive advantages

- Only product that addresses the full range of TBI from mild to severe
- Only competitive product at Phase II or beyond is progesterone
- Two approvable outcomes: neurological function *and* prevention of seizures
- Broad MOA reflects polypharmacology of a naturally occurring neuropeptide
- Excellent safety profile; no known or expected drug interactions
- KOLs already involved and committed



Comparison of Annual Incidence

Partnership status

- US Army supporting development; will be a major client (no residual rights)
- Partnership discussions underway

First sales expected — 2016

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Financials

- Market cap = US$13 million
- Cash on hand = US$3.3 million
- Burn rate = US$200k per month (net of clinical development costs covered by grants)
- Shares on issue = 618 million
- Share price = A$0.02

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