



ASX ANNOUNCEMENT

ASX:NSB

NeuroScientific to present at The TechKnow Invest Roadshow

Perth, Australia; 19 March 2019 – Mr Brian Leedman, Chairman of NeuroScientific Biopharmaceuticals Limited (**ASX:NSB**) will present a business update at the *TechKnow Invest Roadshow* commencing in Sydney on 19 March 2019 and concluding in Melbourne on 21 March 2019. A copy of the presentation is attached.

The *TechKnow Invest Roadshow* is an opportunity for NSB to present to a highly diverse investment audience including institutional investors, brokers and retail investors across two major Australian cities.

Commenting on the event, Mr Leedman said “the roadshow provides an excellent platform to showcase the company’s development following its ASX listing mid last year”.

About NeuroScientific Biopharmaceuticals Limited

NeuroScientific (ASX:NSB) is a company developing peptide-based pharmaceutical drugs that target a number of neurodegenerative conditions with high unmet medical demand. The company’s product portfolio includes EmtinB, a therapeutic peptide initially targeting Alzheimer’s disease; 15mS.A. which is being developed as a diagnostic peptide for early-stage Alzheimer’s disease; and other Emtin peptides (EmtinAc, EmtinAn, and EmtinBn) which have demonstrated similar therapeutic potential as EmtinB. For more information, please visit www.neuroscientific.com

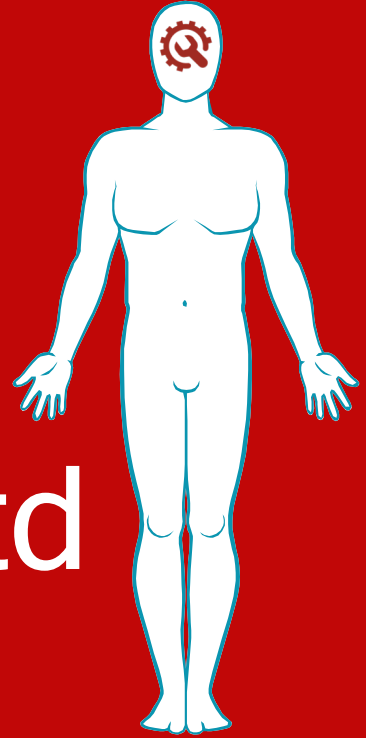
Contacts

Mr Matthew Liddelov
CEO and Managing Director
ml@neuroscientific.com
+61 8 6382 1805

Thomas Spencer
CFO & Company Secretary
ir@neuroscientific.com
+61 491 108 250

NeuroScientific Biopharmaceuticals Ltd

ASX.NSB



NeuroScientific
BIOPHARMACEUTICALS

Novel drug therapies for neurodegenerative
conditions

DISCLAIMER

The purpose of the presentation is to provide an update of the business of NeuroScientific Biopharmaceuticals Ltd (“NeuroScientific”, or “the Company”). These slides have been prepared as a presentation aid only and the information they contain may require further explanation and/or clarification. Further information is available upon request.

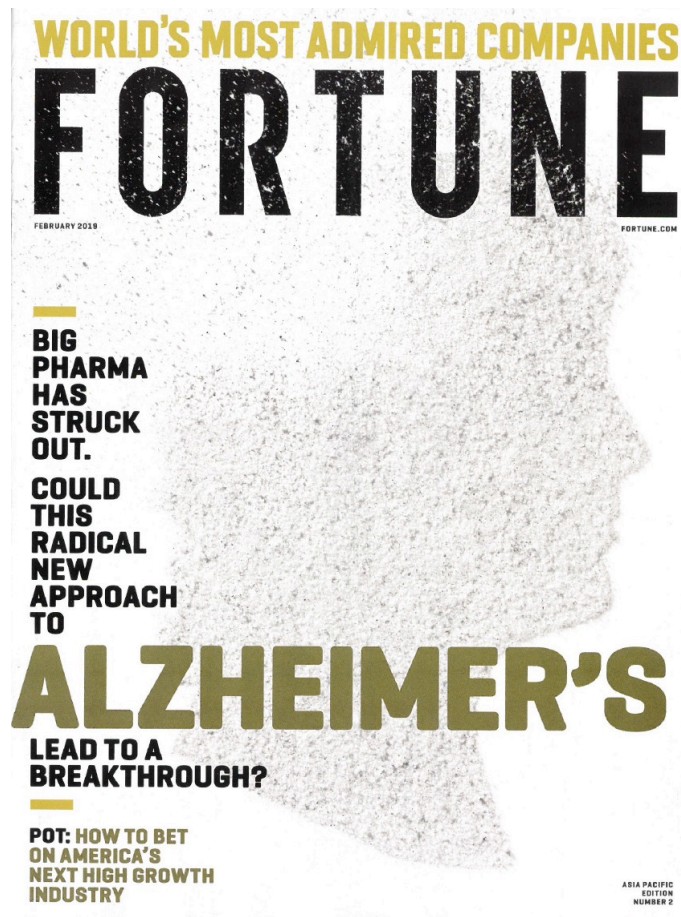
The views expressed in this presentation contain information derived from publicly available sources that have not been independently verified. No representation or warranty is made as to the accuracy, completeness or reliability of the information. Any forward looking statements in this presentation have been prepared on the basis of a number of assumptions which may prove incorrect and the current intentions, plans, expectations and beliefs about future events are subject to risks, uncertainties and other factors, many of which are outside NeuroScientific’s control. Important factors that could cause actual results to differ materially from assumptions or expectations expressed or implied in this presentation include known and unknown risks. Because actual results could differ materially to assumptions made and NeuroScientific’s current intentions, plans, expectations and beliefs about the future, you are urged to view all forward looking statements contained in this presentation with caution.

This presentation should not be relied on as a recommendation or forecast by NeuroScientific. Nothing in this presentation should be construed as either an offer to sell or a solicitation of an offer to buy or sell shares in any jurisdiction.



'BIG PHARMA HAS STRUCK OUT'

3



4

COMPANY HIGHLIGHTS



Advanced preclinical lead drug candidate with multiple treatment indications



Strong strategic partnerships geared towards success



Validated strategy and business model



Experienced board and management team



Leadership Team



BRIAN LEEDMAN

Co-founder of ResApp Health Ltd (ASX.RAP), Imugene Ltd (ASX:IMU) and Oncosil Ltd (ASX.OSL). Formerly Director of Alcidion (ASX: ALC) and Chairman of Ausbiotech (WA)

Non-executive Chairman



MATT LIDDELOW

12+ years experience commercialising medical devices and pharmaceuticals for Multi-national companies including AstraZeneca

MD & CEO



ANTON UVAROV PhD

Founding director of Actinogen Medical (ASX:ACW) an advanced Alzheimer's biotechnology company. Former Equities Analyst with Citigroup, US

Executive Director



STEPHEN QUANTRILL

20 years' experience in corporate advisory and company directorship, Executive Chairman of McRae Investments

Non-executive Director

TREATMENT MARKETS WITH UNMET NEED

Alzheimer's disease



48M people globally
have dementia

70% of dementias
Alzheimer's disease

US \$818B global
economic burden

US\$5B drug sales pa

Optic nerve conditions



5% of population
suffer vision loss due to
damaged optic nerve

60M people
affected by glaucoma

US\$3B sales pa

ALZHEIMER'S DISEASE:

The need for novel therapeutics

Drugs targeting the beta-amyloid protein have all failed in late-stage clinical trials...

- Pathology of Alzheimer's disease still not definitive
- Drugs may have been administered too late
- Patient selection for clinical trials

Frequency of Alzheimer's disease could be reduced by 50% if the onset could be delayed by 5-years

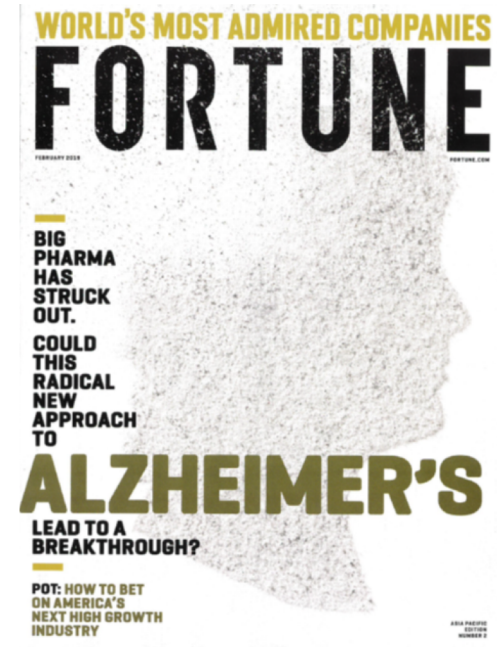


ALZHEIMER'S DISEASE:

The need for novel therapeutics

Drugs targeting the beta-amyloid protein have all failed in late-stage clinical trials...

- During 2018 alone, Eli Lilly, AstraZeneca, Johnson & Johnson, Merck, and Eisai / Biogen all halted clinical trials
- 20-years of research and BILLIONS of \$ focused on beta-amyloid plaques has not translated to any effective treatment
- Recent note-worthy publications - The Economist and Fortune have publicized the need alternative approaches, with neuroprotection the most promising pathway; prestigious medical journal Nature recently published a study supporting NSB's treatment approach
- NSB is the only company in the world actively pursuing the alternative approach of combating Alzheimer's through active neuroprotection mechanisms via the LRP-1 receptor.



LEAD CANDIDATE: EMTINB



NOVEL

- Modeled on Metallothionein (MT-II) - a well known neuroprotective and neurogenerative brain factor, with EmtinB showing superior drug properties
- Binds LRP-1 receptors - novel Mechanism of Action (MOA)
- Stops cell death & stimulates regeneration



VALIDATED

- Preclinical in vitro models - successfully repeated
- Animal models demonstrated efficacy and unique properties



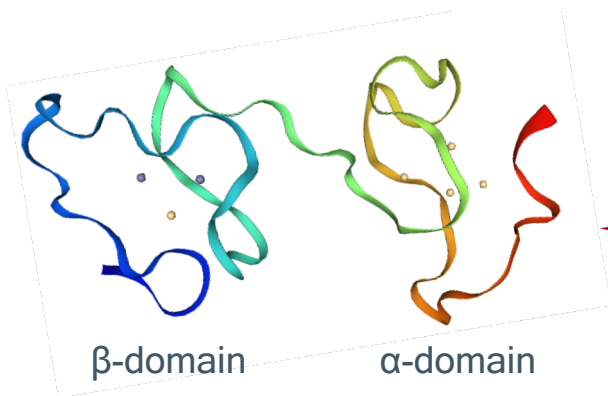
MULTIPLE INDICATIONS

- MOA: LRP-1 receptor ubiquitous
- Not directly targeting a process of disease



EVOLUTION OF EMTINB

MT-II Structure



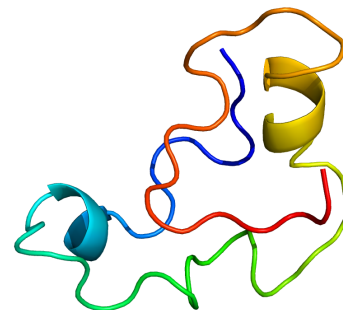
- ▶ 61 amino acid length
- ▶ Binds divalent metal ions
- ▶ Difficult to manufacture

EmtinB Peptide



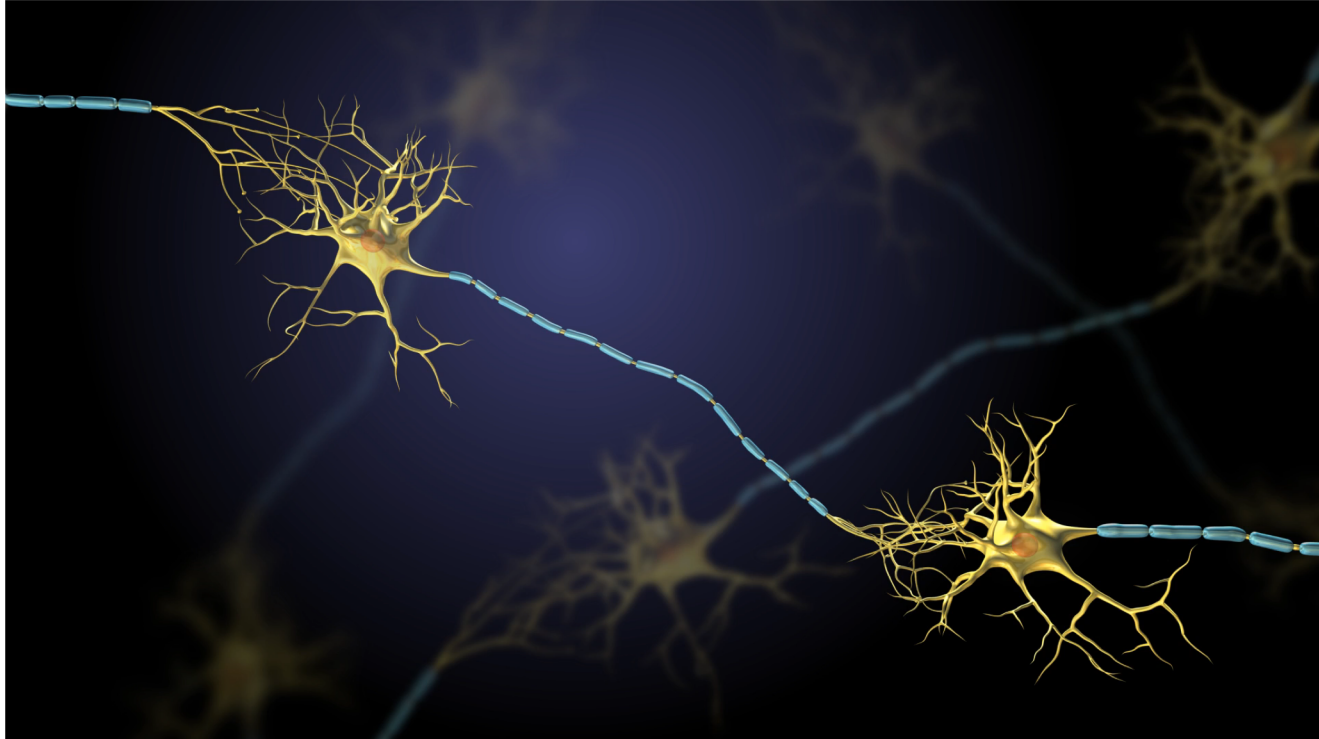
- ▶ 14 amino acid length
- ▶ Isolated from the β-domain of MT-II protein

EmtinB Peptide Dendrimer



- ▶ Synthesised as a dendrimer:
 - Increased potency and stability

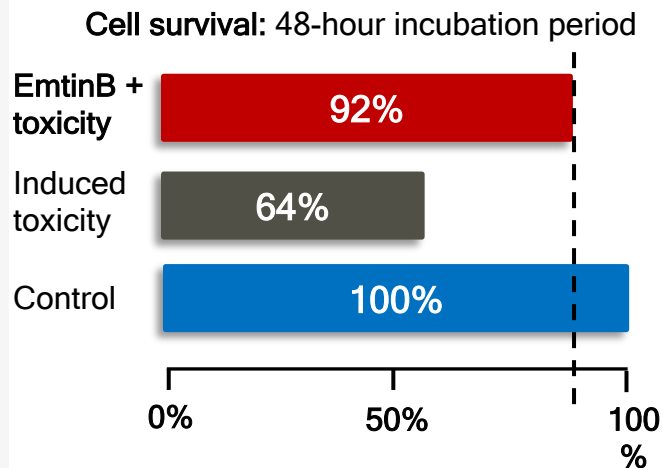
EMTINB MECHANISM OF ACTION: Binding LRP-1 receptor



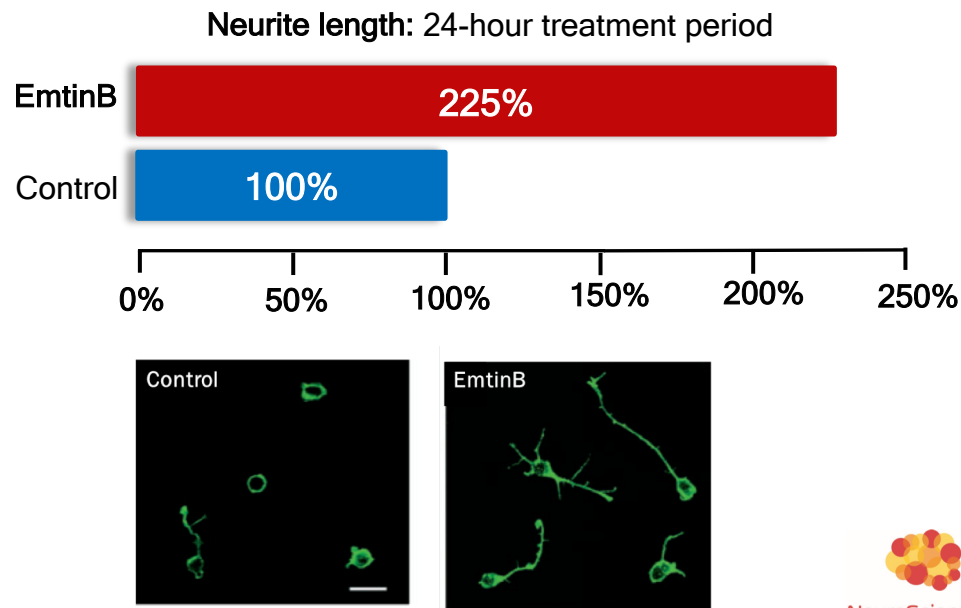
EMTINB SCIENTIFIC DATA

Preclinical studies

Increased mean survival of
brain cells >90%



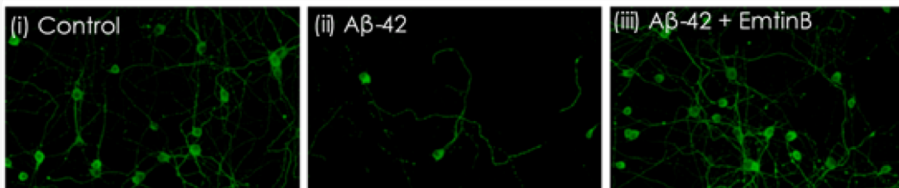
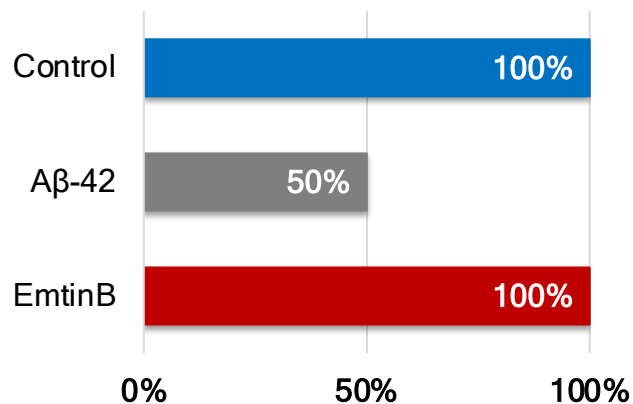
Stimulates neurite
outgrowth by up to 300%



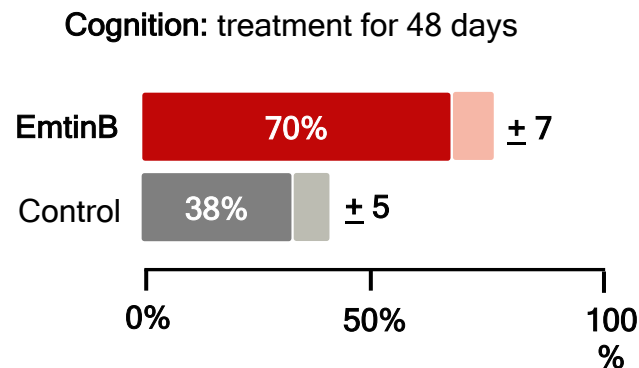
EMTINB SCIENTIFIC DATA

Preclinical studies in AD models

Prevented cell death in *in vitro*
Alzheimer's model of toxicity



Slowed progression of disease
(memory impairment) by >80%
in Alzheimer's animal model

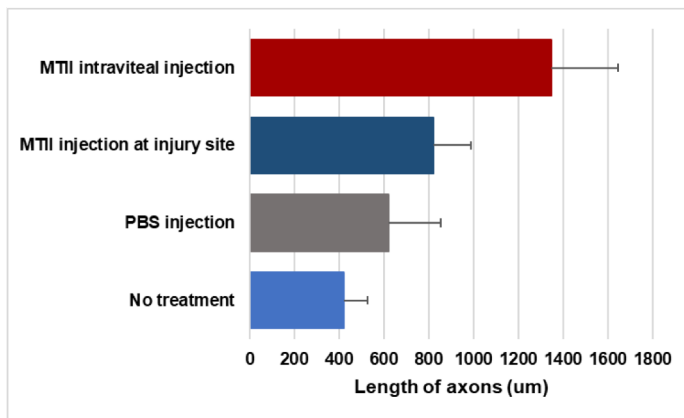


SUPPORTING SCIENTIFIC DATA

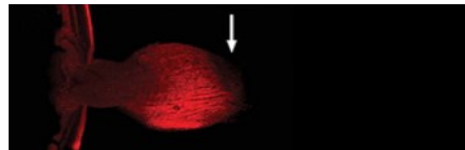
Regenerating the optic nerve

- ▶ Precursor to EmtinB (MT-II) stimulated regenerative growth of optic nerve after complete surgical transection
- ▶ Promotes axonal regeneration through an inhibitory environment in vivo

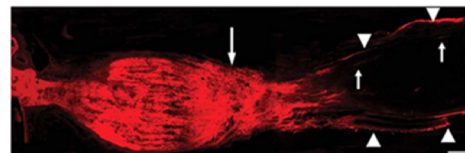
Optic Nerve Growth



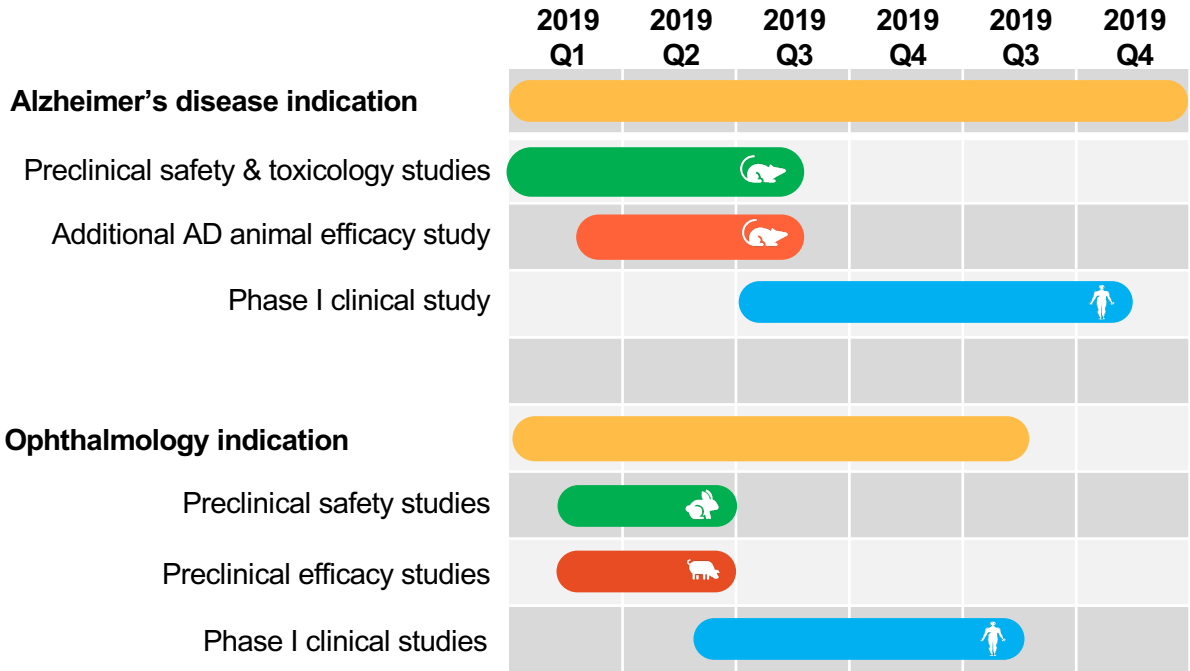
No treatment



Treatment



EMTINB DEVELOPMENT SCHEDULE



STRATEGIC PARTNERSHIPS



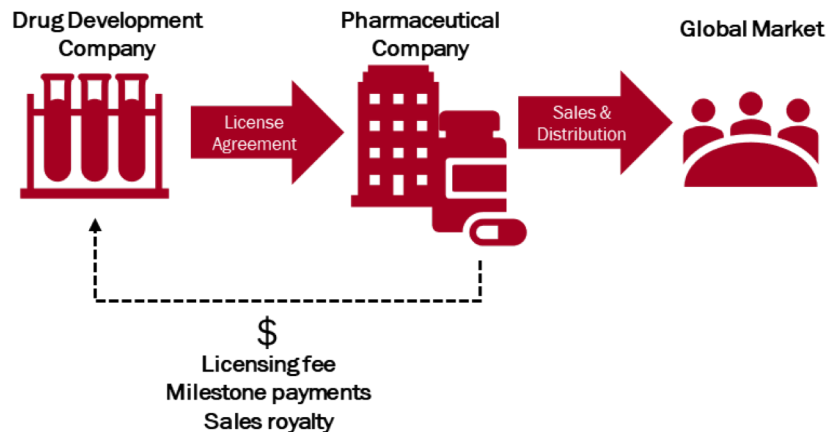
- ▶ Partner for preclinical studies
- ▶ Managed >3300 unique compounds
- ▶ >500 IND/CTD programs in the last 5-years
- ▶ Offer complete development solution from preclinical to clinical to market



- ▶ Partner for ophthalmology studies
- ▶ Developed 1st artificial cornea
- ▶ Developed 1st transgenic animal model for macular degeneration
- ▶ Glaucoma treatment recently acquired by global pharma Allergan

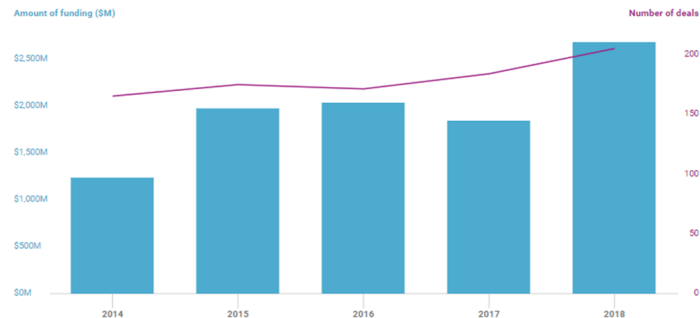
BUSINESS MODEL

- ▶ Company will seek to out-license EmtinB for late-stage clinical development
- ▶ Potential for multiple treatment indications will be attractive to “big pharma”



Neuroscience startups saw an increase in funding in 2018

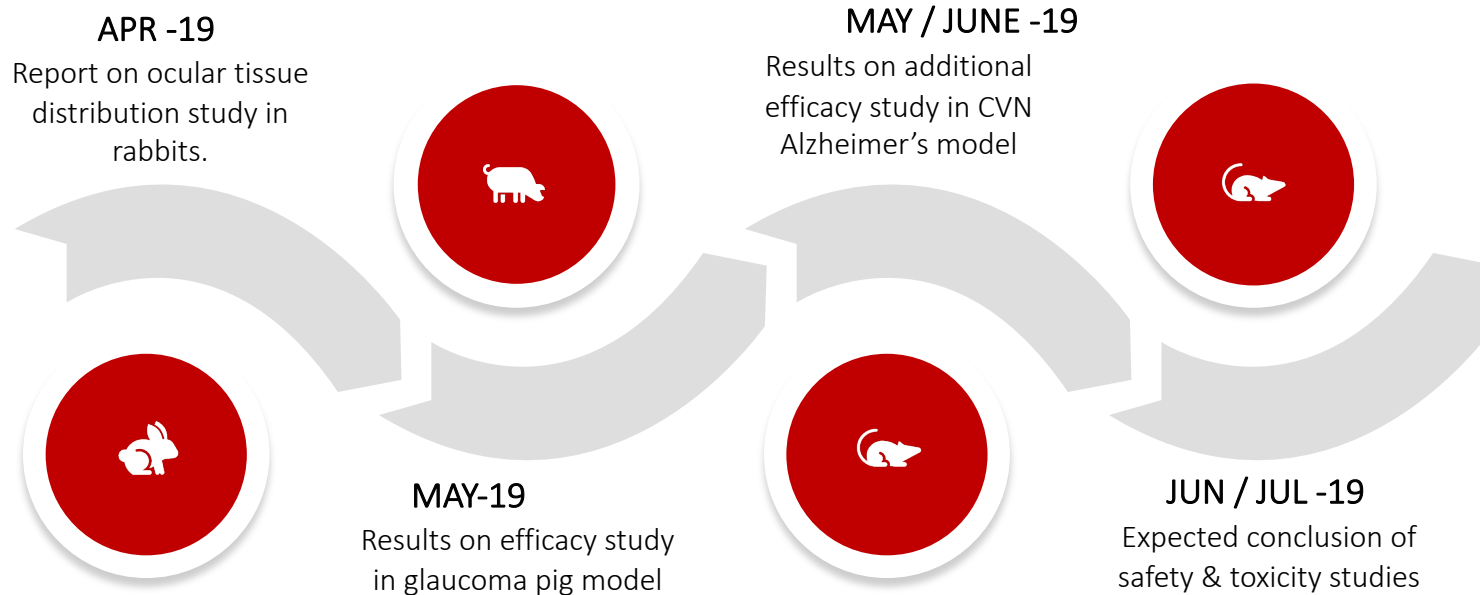
Funding activity between 2014 – 2018



Source: cbinsights.com

CBINSIGHTS

KEY MILESTONES



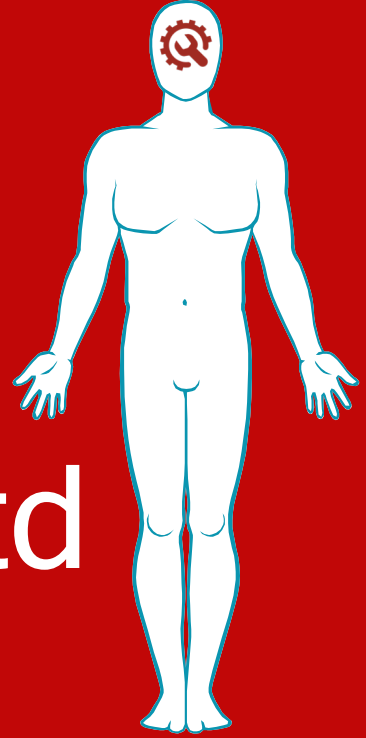
CORPORATE OVERVIEW

- ▶ Completed IPO listing on the ASX on the 27 July 2018
- ▶ Lead candidate funded through to completion of Phase I
- ▶ Pipeline of potential therapeutic candidates with strong IP protection

Capital Structure	
ASX Code	NSB
Shares on Issue	73,580,592
Shares Escrowed (12 Months)	1,906,269
Shares Escrowed (24 Months)	19,349,506
Share Price (as 17 March 2019)	A\$0.175
Market Capitalisation	A\$13.36M
Cash (31 December 2018)	A\$5.08M
Number of shareholders (31 Aug 2018)	4,051
IPO Date	27 July 2018

NeuroScientific Biopharmaceuticals Ltd

ASX.NSB



NeuroScientific
BIOPHARMACEUTICALS

Novel drug therapies for neurodegenerative
conditions