NeuroScientific
BIOPHARMACEUTICALS
ASX:NSB

ASX ANNOUNCEMENT
3 FEBRUARY 2023

INVESTOR UPDATE WEBINAR PRESENTATION

NeuroScientific Biopharmaceuticals Ltd (**ASX:NSB**) (**"NeuroScientific"** or **"the Company"**) wishes to advise shareholders and investors that the Company will be conducting a live investor update on Friday 3rd February 2023.

A copy of the investor presentation to be delivered during the webinar is attached.

The company invites shareholders and investors to participate in this online event by registering via the link below:

https://us06web.zoom.us/webinar/register/WN_aH-CzUA8SKKRZKWTm3vQZg

Start time:

11.00am Perth Time (AWST) / 14.00pm Sydney Time (AEST)

Authorised by the board of NeuroScientific Biopharmaceuticals Ltd.

-ENDS-

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About NeuroScientific Biopharmaceuticals Ltd

NeuroScientific Biopharmaceuticals Limited (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 and glaucoma, as well as other Emtin peptides (EmtinAc, EmtinAn, and EmtinBn) which have demonstrated similar therapeutic potential as EmtinB™. For more information, please visit www.neuroscientific.com

About EmtinB™

EmtinB™ is a peptide-based compound that binds to surface-based cell receptors from the LDLR family, activating intracellular signalling pathways that stimulate neuroprotection, neuroregeneration and modulate neuroinflammation. EmtinB™ is modelled on a specific active domain of the complex human protein called Metallothionein-IIA, which is produced as part of the human body's innate immune response to cell injury.

Our preclinical research has established that EmtinB™ is highly specific and selective for its target receptor, safe and well tolerated at high concentrations, and is able to penetrate the blood brain barrier. A series of Phase I clinical studies will be conducted to establish the safety profile of EmtinB™ in humans.

NeuroScientific
BIOPHARMACEUTICALS

NOVEL DRUG THERAPIES FOR
NEURODEGENERATIVE CONDITIONS

December Quarterly PRESENTATION

FEBRUARY 2023 · ASX: NSB

neuroscientific.com

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.

LEADERSHIP & MANAGEMENT

BOARD & MANAGEMENT

Paul Rennie
Chairman & Interim CEO
- Founder & Managing Director of Paradigm (ASX: PAR)
- Former COO of Mesoblast (ASX: MSB)

Dr Anton Uvarov
Non-Executive Director
- Director of Actinogen (ASX: ACW)
- Former equities analyst with Citigroup, US

Stephen Quantrill
Non-Executive Director
- 20+ years corporate advisory
- Managing Director of McRae Investments

SENIOR MANAGEMENT

Dougal Thring
Chief Operating Officer
B.MedPharBio
M.PharmMed

Simon Scott
Director of Clinical Development
B.Sci M.PharmMed

Abby Macnish
Chief Financial Officer / Company Secretary
B.Com CFA

NEW PATENT FILED

NSB has filed a new patent for EmtinB® to be used in combination with Copaxone® as a possible therapy for Multiple Sclerosis (MS).

- **Copaxone®**
  - registered for relapsing remitting MS and marketed in 50+ countries.
  - Peak sales approximately USD$1b, down to USD$850M coming off patent.

- ***In vitro* proof of concept study**
  - Showed the combination of EmtinB® and Copaxone® resulted in significant increase in neurite length, neuron cell survival and new myelin formation.
  - This combination may result in a synergistic meaningful benefit to MS patients.

EXECUTIVE CHANGES

- **Paul Rennie appointed as interim CEO**
  - Serving this role concurrently with his role as Managing Director of Paradigm Pharmaceuticals (ASX:PAR).
- **Search for Permanent CEO is ongoing**
- **Dr Anton Uvarov**
  - Moved from Executive Director to Non-Executive Director.

APPROVAL OF R&D ADVANCE AND OVERSEAS FINDING

NSB has received approval for an advance and overseas finding under the R&D Tax Incentive program for preclinical efficacy studies focused on Multiple Sclerosis (MS)

- **Rebates**
  - Up to 1.62M for costs associated with preclinical MS and MRI based studies.

- ***In vivo* Models**
  - Animal models of MS may be used in association with novel MRI imaging techniques.
  - Results will potentially supply supportive evidence of EmtinB®'s disease modifying action in MS.

LOOKING TO A PHASE I CLINICAL TRIAL SUBMISSION

- **Safety:**
  - Toxicology reviews complete by 2 x independent toxicologist.
  - Formulation evolution is underway and close to completion to ensure injectable product has the highest chance of tolerability for clinical trials and next animals studies.
  - Bridging toxicology studies designed and contracts in place for their execution. This will assist in confirming the local and systemic tolerability of the new formulation is appropriate for clinical application.

LOOKING TO A PHASE I CLINICAL TRIAL SUBMISSION

- **Purity of EmtinB®**
  - Extensive analysis of all EmtinB® batches complete.
  - Thorough impurity identification to enable qualification of impurities complete.
  - Regulatory position paper close to completion for a European Scientific Meeting regulatory submission.
  - Ongoing stability studies to support long term storage of already manufactured EmtinB® for use in future clinical trials ongoing with early signs of extensive stability under frozen conditions.

LOOKING TO A PHASE I CLINICAL TRIAL SUBMISSION

- **Efficacy :**
  - NSB will present efficacy data on the preclinical multiple sclerosis model. The data and the final report are due from the external provider the end of this month
  - NSB has designed and has signed a work order for a study to confirm the presence of quantifiable EmtinB® in CSF following subcutaneous administration to rats. This study assists our understanding how much EmtinB® is required to cross the blood brain barrier for efficacy to occur.

QUARTERLY CASH FLOW

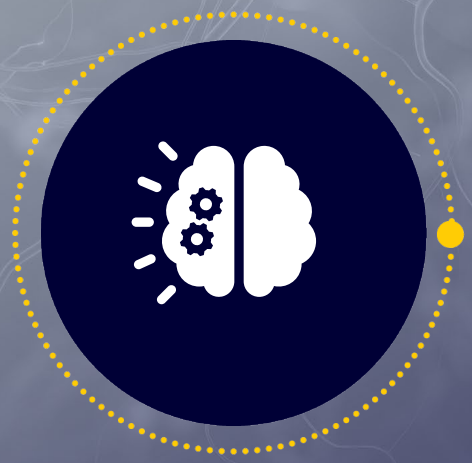
NSB cash position was **$3.33 million** as at end December 2022.

The Company has maintained a strong cash position during the initial execution of its R&D program and corporate expenses continue to be carefully managed.

- **Operating Cash Flows for December 2022 quarter**
  - Net operating cash outflows for the quarter were $814k
  - Research and development activities payments totaled $365k
  - Staff costs for the quarter were $197k. Administration and corporate costs were $269k

- **R&D Tax Incentive Refund Received**
  - In early February, NSB received $3,744,137 R&D Tax Incentive refund
  - This refund relates to the 2021/2022 financial year

EMTINB™
Potential disease-modifying treatment for all stages of MS



STIMULATES CELL SURVIVAL PATHWAYS

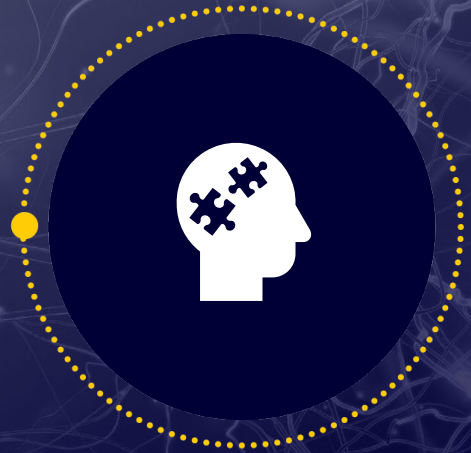
Activates cell survival pathways by specifically binding to the LRP-1 transmembrane receptor

PROMOTES AXONAL REGENERATION

Activation of LRP-1 also promotes regeneration of axons of damaged neurons and formation of synaptic connections

REGULATES INFLAMMATION

Downregulates inflammatory responses from activated immune cells (macrophages and glial cells)



PROMOTES REMYELINATION

Stimulates proliferation and differentiation of myelin producing cells (oligodendrocytes)

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