

DECEMBER 2021 QUARTERLY ACTIVITY REPORT

HIGHLIGHTS

- Successful completion of pivotal nonclinical GLP safety pharmacology studies and off-target safety assessment
- Partnerships with leading research companies Biospective and Imeka to accelerate Multiple sclerosis R&D program
- Positive biomarker data demonstrates therapeutic potential of other Emtin peptides
- Participation in key industry events attracts prospective interest from "Big Pharma"
- Strong cash position with A\$9.5M held as at 31 December 2021

NeuroScientific Biopharmaceuticals Ltd (ASX: **NSB**) ("NeuroScientific" or "the company") today submitted its Appendix 4C and quarterly activity report for the period ended 31 December 2021.

Quarterly Activity Report

Throughout the December quarter, NeuroScientific reported several significant events that position the Company for further success in CY 2022. The Company continues to maintain a strong cash position going forward and is steadfastly approaching the major milestone of its first Phase I clinical study involving its lead drug candidate EmtinB™ in H1 2022.

During the December quarter, NeuroScientific significantly advanced its preclinical neurology R&D safety program for its lead drug candidate EmtinB™ towards clinical development with the reporting of the successful completion of pivotal nonclinical GLP safety pharmacology studies and successful results from important off-target safety assessments. Nonclinical GLP safety pharmacology studies are an essential step in assessing the safety of pharmaceuticals for human use and a key regulatory requirement for approval to start Phase I clinical studies, evaluating the potential for EmtinB™ to cause undesirable effects on the central nervous, cardiovascular, and respiratory systems. The off-target safety assessment involved a comprehensive *in vitro* screening program to predict drug-induced toxicities in humans prior to first-inhuman Phase I studies. EmtinB™ did not interact with any known targets associated with toxicities in humans, demonstrating a low potential to cause any major adverse events in clinical studies. The Company also initiated pivotal nonclinical GLP toxicity studies; the final safety studies necessary for regulatory approval to begin Phase I clinical studies.

Major progress was also achieved in the preclinical ocular R&D program with the conclusion of dosing in the pivotal nonclinical GLP 13-week ocular toxicity study, which is due to report in the coming months.

In another positive event for the Company, NeuroScientific partnered with leading Canadian-based research companies BioSpective, Inc. (BioSpective) and Imeka to support its Multiple sclerosis R&D program. BioSpective will undertake animal studies at their state-of-the-art facilities during H1 2022, which will incorporate Imeka's powerful diffusion MRI imaging technology to assess different aspects of activity in the brain. This advanced imaging technology will assist with the assessment of the disease modifying effects of EmtinB™ in Multiple sclerosis.

Also during the December quarter, NeuroScientific reported positive results from biomarker studies involving other Emtin peptide candidates EmtinAC, EmtinAN, and EmtinBN. Both EmtinAC and EmtinAN significantly impacted key immune and inflammatory biomarkers for important drug targets, most notably EmtinAC modulated a major driver of inflammation, TNFα.

NeuroScientific participated in a number of promotional events during the December quarter, with company presentations at key industry conferences BIO Europe 2021 and AusBiotech Invest 2021. During BIO Europe 2021, the Company participated in many high-level prospective partnering discussions with "Big Pharma" and looks forward to continuing such discussions in 2022. The Company also presented at the inaugural South-West Connect ASX Showcase in WA, as well as taking part in the Broker Briefing Investor Webinar series and Share Café Small Cap Webinar series.

Quarterly Cash Flow Summary

NeuroScientific's cash position was \$9.50 million as at 31 December 2021. The Company maintains a strong cash position towards the delivery of the planned clinical development program and corporate expenses continue to be carefully managed.

Net operating cash outflows for the quarter was \$3,396,000. Research and development activities payments totalled \$2,809,000 for the quarter. Staff costs for the quarter were \$246,000. Administration and corporate costs were \$333,000. During the quarter, the company spent \$28,000 in advertising and marketing costs.

Payments to related parties during the December 2021 quarter totalled \$229,000 and relate to Director fees, salaries and superannuation (\$200,000) and Administration and Management fees (\$29,000).

The level of net cash burn for the March 2022 quarter is expected to be less than the December 2021 quarter, which involved an increase in R&D expenditure related to final preparations for the Company's transition into clinical development in 2022.

This announcement is authorised by the Board of NeuroScientific Biopharmaceuticals Ltd.

For more information please contact:

Matthew Liddelow CEO and Managing Director ml@neuroscientific.com + 61 8 6382 1805 Lucas Robinson
Investor Relations
Corporate Storytime
lucas@corporatestorytime.com
+ 61 408 228 889

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 $\mathsf{EmtinB}^\mathsf{TM}$, 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 $\mathsf{EmtinB}^\mathsf{TM}$. For more information, please visit $\mathsf{www.neuroscientific.com}$

About EmtinB™

EmtinBTM 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. EmtinBTM 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 $EmtinB^{TM}$ 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 $EmtinB^{TM}$ in humans.

Appendix 4C

Quarterly cash flow report for entities subject to Listing Rule 4.7B

Name of entity

13 102 832 995

NeuroScientific Biopharmaceuticals Limited	
ABN	Quarter ended ("current quarter")

31 December 2021

Cor	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) research and development	(2,809)	(3,613)*
	(b) product manufacturing and operating costs	-	-
	(c) advertising and marketing	(28)	(54)
	(d) leased assets	-	-
	(e) staff costs	(246)	(471)
	(f) administration and corporate costs	(333)	(560)*
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	20	38
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	(3,396)	(4,660)

^{*} Year to date figures for items 1.2(a) and 1.2(f) have been adjusted since the previous quarter Appendix 4C to reflect \$547k of prepayments & consulting fees that were previously classified as Corporate Costs but were research-related expenses so have been reallocated to 1.2(a) reflect the correct amount spent.

2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) businesses	-	-
	(c) property, plant and equipment	(3)	(3)
	(d) investments	-	-

ASX Listing Rules Appendix 4C (17/07/20)

Page 1

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
	(e) intellectual property	-	-
	(f) other non-current assets	-	-
2.2	Proceeds from disposal of:		
	(a) entities	-	-
	(b) businesses	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) intellectual property	-	-
	(f) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(3)	(3)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	- -
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	(0)	(0)

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	12,898	14,162
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(3,396)	(4,660)

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000	
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(3)	(3)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	9,499	9,499

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	1,103	4,533
5.2	Call deposits	8,396	8,366
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	9,499	12,898

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	(229)
6.2	Aggregate amount of payments to related parties and their associates included in item 2	

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

Item 6.1 above includes Director salaries, fees & superannuation (\$200k) and management & administration fees (\$29k)

7.	Financing facilities Note: the term "facility' includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	-	-
7.5	Unused financing facilities available at qu	uarter end	-
7.6	Include in the box below a description of each rate, maturity date and whether it is secured facilities have been entered into or are proposinclude a note providing details of those facilities.	or unsecured. If any add osed to be entered into af	itional financing

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(3,396)
8.2	Cash and cash equivalents at quarter end (item 4.6)	9,499
8.3	Unused finance facilities available at quarter end (item 7.5)	-
8.4	Total available funding (item 8.2 + item 8.3)	9,499
8.5	Estimated quarters of funding available (item 8.4 divided by item 8.1)	2.8
	Note: if the entity has reported positive net operating cash flows in item 1.9. answer item	8.5 as "N/A" Otherwise a

Note: if the entity has reported positive net operating cash flows in item 1.9, answer item 8.5 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.5.

8.6 If item 8.5 is less than 2 quarters, please provide answers to the following questions:

8.6.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: N/A

8.6.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer: N/A

8.6.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: N/A

Note: where item 8.5 is less than 2 quarters, all of questions 8.6.1, 8.6.2 and 8.6.3 above must be answered.

Compliance statement

- This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 31 January 2022

Authorised by: The Board of Directors