APPENDIX 4C

Quarter Ended
31 December 2023

An Alternate Future

Alterity Therapeutics Limited
(formerly Prana Biotechnology Limited)
ACN 080 699 065

Lodged with the ASX under Listing Rule 4.3A.
This information should be read in conjunction with the Annual report.

Alterity

Appendix 4C – Q2 FY24 Quarterly Cash Flow Report

Highlights

- Completed enrollment in for ATH434-201 Phase 2 study
- Delivered promising data on ATH434 in Parkinson's disease and on its novel mechanism of action
- Strengthened the balance sheet with successful A$4.8M financing
- Closed Securities Purchase Plan (SPP) on 25 January
- Cash balance on 31 December 2023 of A$12.3M

MELBOURNE, AUSTRALIA AND SAN FRANCISCO, USA – 31 January 2024, Alterity Therapeutics Limited (ASX: ATH, NASDAQ: ATHE) ("Alterity" or "the Company"), a biotechnology company dedicated to developing disease modifying treatments for neurodegenerative diseases, releases its Appendix 4C Quarterly Cash Flow Report and update on company activities for the quarter ending 31 December 2023 (Q2 FY24).

"The second quarter of our fiscal year was extremely productive and provided great momentum to carry us into the 2024 calendar year," said David Stamler, M.D., Chief Executive Officer of Alterity. "Completing enrolment in our ATH434-201 clinical trial in early-stage multiple system atrophy (MSA) was a major milestone as we look to change the treatment paradigm for individuals living with this rare and devastating disease. We expect to complete the 201 trial in November 2024 and report topline results in January 2025. For our ATH434-202 trial in more advanced MSA, we plan to report preliminary six-month data in the first half of 2024."

Dr. Stamler, continued, "During the quarter, we also had several important data presentations related to ATH434 that validate the treatment approach in our ongoing clinical trials. Most notably, for the first time we demonstrated the efficacy of ATH434 in a primate model of Parkinson's disease. ATH434 treatment improved both motor performance and general function in this higher order animal, and these benefits were associated with reductions in iron in affected brain regions. In a separate investigation, a new mechanism was described for ATH434 – direct antioxidant activity. By protecting vital mitochondrial function, we believe ATH434 has increased potential to slow disease progression."

"During 2024, we will continue to reap benefits from our bioMUSE natural history study as we deepen our understanding of the biomarker evaluation of MSA. We are excited about the progress of all of our studies to date and look forward to the data readouts coming over the next year," concluded Dr. Stamler.

Alterity's cash position on 31 December 2023 was A$12.3M with operating cash outflows for the quarter of A$4.9M. The company strengthened its balance sheet through a Two Tranche placement raising approximately A$1.3M during the quarter from qualified institutional investors in Tranche One, with the balance of approximately A$3.5M from Tranche Two of the Placement raised in January 2024. In conjunction with this offering, a Security Purchase Plan (SPP) was approved by shareholders at the Extraordinary General Meeting held on 29 December 2023. The SPP results will be released this week and the Company is pleased to report that there was significant interest from current shareholders.

In accordance with ASX Listing Rule 4.7C, payments made to related parties and their associates included in item 6.1 of the Appendix 4C incorporates directors' fees, consulting fees, remuneration

and superannuation at commercial rates.

Operational Activities

ATH434–201: Randomized, Double-Blind Phase 2 Clinical Trial in Early-State MSA

On 8 November 2023, Alterity announced that enrollment was successfully completed in the ATH434-201 Phase 2 clinical trial. This randomized, double-blind, placebo-controlled study enrolled participants with early-stage multiple system atrophy (MSA) across the U.S., Europe, Australia and New Zealand. The ATH434-201 study is treating participants for 12 months and, therefore, the study will complete in November 2024. Once complete, the data from the trial will be analyzed and the Company expects to report topline results by January 2025.

ATH434–202: Open-label, Biomarker Phase 2 Clinical Trial in More Advanced MSA

The ATH434-202 trial continues to enroll participants with more advanced MSA than in the 201 trial. A key aim of the 202 study is to assess the efficacy of ATH434 treatment on neuroimaging and protein biomarkers to evaluate target engagement, in addition to clinical measures, safety, and pharmacokinetics. While the 202 trial is also treating participants for 12-months, it has an open label design that will allow Alterity to perform interim analyses of biomarker and clinical data while the study is ongoing, providing a potential early indication of efficacy. The Company expects to report preliminary six-month data from the initial patients enrolled in the ATH434-202 trial in the first half of 2024.

ATH434 for the Treatment of Parkinson's Disease

On 4 December 2023, Alterity announced that promising new data on the effect of ATH434 in a Parkinson's disease primate model was presented at the Future of Parkinson's Disease Conference. The poster, entitled, "Effects of ATH434, a Clinical-Phase Small Molecule with Moderate Affinity for Iron, in Hemiparkinsonian Macaques" demonstrated that ATH434 treatment improved motor performance and general function in monkeys with experimentally induced Parkinson's disease. Importantly, the improvements in motor skills and general functioning in this higher order animal - the monkey - parallel human parkinsonism and were associated with reductions in iron in affected brain regions.

Novel Mechanisms for ATH434 as a Treatment for Neurodegenerative Diseases

On 16 November 2023, Alterity announced that promising new data related to ATH434 was presented at the Society for Neuroscience. The poster entitled, "Potent Antioxidant and Mitochondrial-protectant Effects of ATH434, a Novel Inhibitor of α-Synuclein Aggregation with Moderate Iron-binding Affinity," demonstrated new data indicating that ATH434 can preserve mitochondrial function after oxidative injury and exert direct anti-oxidant activity independent of its iron binding properties. These features were not observed with another iron binding agent approved for treating iron overload that was also investigated. The demonstrated mitochondrial protection may reveal additional mechanisms that augment the ability of ATH434 to slow disease progression and underscores the potential of ATH434 as a treatment for neurodegenerative diseases.

bioMUSE Natural History Study

The bioMUSE study continues to generate invaluable data related to the understanding of MSA and its early presentation and demonstrates that Alterity is leading the way in biomarker evaluation of this

rare disease. On 27 November 2023, a data presentation entitled, “Relationship between N-acetylaspartate and neurofilament light chain in multiple system atrophy” was presented at the recent 34th International Symposium on the Autonomic Nervous System (AAS). In the study, the data provided evidence that N-acetylaspartate (NAA) correlates with levels of neurofilament light chain (NfL) in patients with early MSA. NfL is a widely used biomarker that is a measure of neuronal damage. The findings suggest that the NAA metabolite may be a useful biomarker for assessing disease severity and treatment response in MSA.

About Alterity Therapeutics Limited

Alterity Therapeutics is a clinical stage biotechnology company dedicated to creating an alternate future for people living with neurodegenerative diseases. The Company’s lead asset, ATH434, has the potential to treat various Parkinsonian disorders. Alterity also has a broad drug discovery platform generating patentable chemical compounds to intercede in disease processes. The Company is based in Melbourne, Australia, and San Francisco, California, USA. For further information please visit the Company’s web site at www.alteritytherapeutics.com.

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Authorisation & Additional information
This announcement was authorised by David Stamler, CEO of Alterity Therapeutics Limited.

Investor and Media Contacts:

Australia
Hannah Howlett
we-aualteritytherapeutics@we-worldwide.com
+61 4 5064 8064

U.S.
Remy Bernarda
remy.bernarda@iradvisory.com
+1 (415) 203-6386

Forward Looking Statements

This press release contains "forward-looking statements" within the meaning of section 27A of the Securities Act of 1933 and section 21E of the Securities Exchange Act of 1934. The Company has tried to identify such forward-looking statements by use of such words as "expects," "intends," "hopes," "anticipates," "believes," "could," "may," "evidences" and "estimates," and other similar expressions, but these words are not the exclusive means of identifying such statements.

Important factors that could cause actual results to differ materially from those indicated by such forward-looking statements are described in the sections titled “Risk Factors” in the Company’s filings with the SEC, including its most recent Annual Report on Form 20-F as well as reports on Form 6-K, including, but not limited to the following: statements relating to the Company's drug development program, including, but not limited to the initiation, progress and outcomes of clinical trials of the Company's drug development program, including, but not limited to, ATH434, and any other statements that are not historical facts. Such statements involve risks and uncertainties, including, but not limited to, those risks and uncertainties relating to the difficulties or delays in financing, development, testing, regulatory approval, production and marketing of the Company’s drug components, including, but not limited to, ATH434, the ability of the Company to procure additional future sources of financing, unexpected adverse side effects or inadequate therapeutic efficacy of the Company's drug compounds, including, but not limited to, ATH434, that could slow or prevent products coming to market, the uncertainty of obtaining patent protection for the Company's intellectual property or trade secrets, the uncertainty of successfully enforcing the Company’s patent rights and the uncertainty of the

Company freedom to operate.

Any forward-looking statement made by us in this press release is based only on information currently available to us and speaks only as of the date on which it is made. We undertake no obligation to publicly update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.

Appendix 4C

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

Name of entity	
Alterity Therapeutics Limited	
ABN	**Quarter ended ("current quarter")**
37 080 699 065	31 December 2023

Consolidated 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	(3,471)	(6,422)
	(b) product manufacturing and operating costs	-	-
	(c) advertising and marketing	(69)	(114)
	(d) leased assets	-	-
	(e) staff costs	(922)	(1,752)
	(f) administration and corporate costs	(417)	(787)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	17	99
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	4,679
1.8	Other (provide details if material)	-	(17)
1.9	**Net cash from / (used in) operating activities**	**(4,862)**	**(4,314)**

2.	**Cash flows from investing activities**		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) businesses	-	-
	(c) property, plant and equipment	(2)	(6)
	(d) investments	-	-
	(e) intellectual property	-	-
	(f) other non-current assets	-	-

Consolidated statement of cash flows		Current quarter $A'000	Year to date (6 months) $A'000
2.2	Proceeds from disposal of:		
	(a) entities	-	-
	(b) businesses	-	-
	(c) property, plant and equipment	1	1
	(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**	**(1)**	**(5)**

3.	**Cash flows from financing activities**		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	1,126	1,126
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	(238)	(237)
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)	82	63
3.10	**Net cash from / (used in) financing activities**	**(970)**	**(952)**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	16,709	15,773
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(4,862)	(4,314)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(1)	(5)

Consolidated statement of cash flows		Current quarter $A'000	Year to date (6 months) $A'000
4.4	Net cash from / (used in) financing activities (item 3.10 above)	969	952
4.5	Effect of movement in exchange rates on cash held	(495)	(86)
4.6	**Cash and cash equivalents at end of period**	**12,320**	**12,320**

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	12,320	16,709
5.2	Call deposits	-	-
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)**	**12,320**	**16,709**

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	131
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.

The amount at 6.1 includes payment of director's fees and salaries and consulting fees, excluding GST where applicable.

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 quarter end**	-

7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.

8.	**Estimated cash available for future operating activities**	**$A'000**
8.1	Net cash from / (used in) operating activities (item 1.9)	**(4,862)**
8.2	Cash and cash equivalents at quarter end (item 4.6)	**12,320**
8.3	Unused finance facilities available at quarter end (item 7.5)	**-**
8.4	Total available funding (item 8.2 + item 8.3)	**12,320**
8.5	**Estimated quarters of funding available (item 8.4 divided by item 8.1)**	**2.5**

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

1 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 2024

Authorised by: Phillip Hains – Company Secretary

(Name of body or officer authorising release – see note 4)

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.

2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies to this report.

3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [*name of board committee – eg Audit and Risk Committee*]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".

5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.