APPENDIX 4C

Quarter Ended 30 June 2024

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 – Q4 FY24 Quarterly Cash Flow Report

Highlights

- Positive interim data reported from ATH434-202 Phase 2 clinical trial showing improvement on the UMSARS Activities of Daily Living Scale and stable or improved neurological symptoms in some patients
- Data from the bioMUSE Natural History Study continues to characterize early stage MSA and inform Alterity's Phase 2 clinical trials
- Multiple data presentations at the World Orphan Drug Congress and the American Academy of Neurology (AAN) Annual Meeting
- Cash balance on 30 June 2024 of A$12.6

MELBOURNE, AUSTRALIA AND SAN FRANCISCO, USA – 31 July 2024: Alterity Therapeutics (ASX: ATH, NASDAQ: ATHE) ("Alterity" or "the Company"), a biotechnology company dedicated to developing disease modifying treatments for neurodegenerative diseases, today released its Appendix 4C Quarterly Cash Flow Report and update on company activities for the quarter ending 30 June 2024 (Q4 FY24).

"We have made great strides over the last two months with the positive interim data readout from our ATH434-202 Phase 2 clinical trial and the important observations from our bioMUSE Natural History Study that continue to guide development of ATH434," said, David Stamler, M.D., Chief Executive Officer of Alterity. "I am very encouraged by the results from our 202 study in patients with advanced Multiple System Atrophy (MSA) where we saw favorable clinical and biomarker outcomes in some patients suggesting that ATH434 has the potential to modify the course of this devastating condition. We were also very pleased to see that the clinical responders had biomarker evidence of stable disease as this provides an objective indication of potential efficacy."

"Our bioMUSE study continues to provide valuable information to inform our patient selection criteria and choose endpoints for our Phase 2 clinical trials. This observational study has allowed us to monitor the progression of MSA in earlier stage patients and further characterize this devastating disease. Working with our colleagues at Vanderbilt University, we have employed novel MRI technology and machine learning to precisely analyze brain iron content and brain volumes in these patients over time. The results from the study have guided us to modify our endpoints in the ATH434-202 study. The data from our 202 and bioMUSE studies increases my overall confidence in the ATH434 development program," concluded, Dr. Stamler

Alterity's cash position on 30 June 2024 was A$12.6 with operating cash outflows for the quarter of A$5.6M.

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 May 2024, Alterity announced that an independent Data Monitoring Committee (DMC) completed its third prespecified review of unblinded clinical trial data from the ATH434-201 Phase 2 study. The DMC expressed no concerns about safety and recommended that the study continue as planned without modification. This recommendation is an important milestone as participants are able to safely tolerate ATH434 as their time on study increases.

In April 2024, important new data on ATH434 was presented at the World Orphan Drug Congress in a poster presentation, entitled, "Biophysical Characteristics of ATH434, a Unique Iron-Targeting Drug for Treating Friedreich's Ataxia." The study evaluated the ability of ATH434 to target the toxic form of iron that drives the pathology of Friedreich's Ataxia, a rare neurodegenerative disease that affects young children to young adults. The investigation provides important insights into the mechanism of action of ATH434, namely that it selectively targets the labile iron implicated in the pathology of important neurodegenerative diseases. In this way, ATH434 behaves like a chaperone to redistribute iron within the body.

In April 2024, a poster was presented at the American Academy of Neurology (AAN) 2024 Annual Meeting, entitled, "A Phase 2 Study of ATH434, a Novel Inhibitor of α-Synuclein Aggregation, for the Treatment of Multiple System Atrophy". The poster described the baseline characteristics for the 65 evaluable participants from the ATH434-201 with a focus on baseline fluid biomarkers, neuroimaging and clinical data. The participants met strict selection criteria designed to confirm they had early-stage MSA. Overall, the participants had a mean duration of motor symptoms of two years. The data showed increased iron in areas of pathology and elevated plasma Neurofilament Light Chain (NfL) levels at baseline that correlated significantly with disease severity.

The trial remains on track to complete in November 2024. The data from the trial will then 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

Subsequent to the quarter end, on 17 July 2024, Alterity reported positive interim data from the ATH434-202 trial in participants with advanced MSA. The interim analysis included clinical and biomarker data on 7 participants treated with ATH434 for 6 months and neuroimaging data on 3 participants who were treated for 12 months. After 6 months of treatment, 43% of participants showed improvement on the UMSARS[1], indicating reduced disability on activities of daily living. Over the same period, 29% of participants had stable or improved neurological symptoms (clinical responders) as assessed by the global impression of change by both the treating physician and the patient. Importantly, the clinical responders on average had reduced accumulation of iron on MRI in the substantia nigra, putamen and globus pallidus and stable levels of NFL, a marker of axonal injury, when compared to participants who declined.

bioMUSE Natural History Study

On 30 May 2024 Alterity hosted a webinar to discuss data from the bioMUSE Natural History Study. The goal of the observational bioMUSE study is to optimize patient selection and choose endpoints for the Company's Phase 2 clinical trials. This study enrolled 21 individuals who were observed for 12 months to characterize early-stage MSA in terms of various biomarkers. In particular, the focus is on brain iron, brain volume, and the pathology in glial support cells. Utilizing novel MRI technology, Alterity's partners at Vanderbilt University have optimized specialized MRI methods, including machine learning (a form of artificial intelligence), to establish standardized methods to analyze brain iron and brain volumes with precision. Importantly, they developed a new, novel imaging biomarker to assess brain volume in MSA affected regions. The bioMUSE data showed a statistically significant increase in iron over 12 months in the substantia nigra, and statistically significant decreases in brain volume observed in affected regions at 12 months.

Also at AAN, a poster was presented at the AAN 2024 Annual Meeting, entitled, "Neurofilament Light Chain and Clinical Progression in Early Multiple System Atrophy". The poster described results from bioMUSE in which changes in clinical severity of 15 patients across a span of 12 months were compared with plasma biomarkers with a goal of establishing meaningful correlations. Importantly, the observational data suggest the fluid biomarker NfL may be used as a marker of disease severity in studies of MSA as it holds promise for measuring the extent of disease, tracking its progression, and forecasting the onset of clinical manifestations associated with MSA.

ATH434 for the Treatment of Parkinson's Disease

A poster was also presented at AAN entitled, "Effects of ATH434, a Clinical-Phase Small Molecule with Moderate Affinity for Iron, in Hemiparkinsonian Macaques". The presentation showed that ATH434 can reduce Parkinsonism in a higher order animal, the monkey, with symptoms that closely parallel human disease. Importantly, the improvements in motor skills and general

functioning that parallel human parkinsonism were associated with reductions in abnormal iron in affected brain regions. These favorable parkinsonian outcomes observed in the ATH434-treated monkeys were also associated with increased levels of striatal synaptophysin, a protein marker that reflects functional connections between neurons, suggesting functional recovery of nerve endings in this critical motor pathway. Taken together, the findings in this study increase the Company's confidence in their approach in the ongoing Phase 2 program 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 and is currently being evaluated in two Phase 2 clinical trials in Multiple System Atrophy. Alterity also has a broad drug discovery platform generating patentable chemical compounds to treat the underlying pathology of neurological diseases. 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.

Authorisation & Additional information

This announcement was authorized by David Stamler, CEO of Alterity Therapeutics Limited.

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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	30 June 2024

Consolidated statement of cash flows		**Current quarter $A'000**	**Year to date (12 months) $A'000**
1.	**Cash flows from operating activities**		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) research and development	(3,933)	(15,303)
	(b) product manufacturing and operating costs	-	-
	(c) advertising and marketing	(56)	(261)
	(d) leased assets	-	-
	(e) staff costs	(746)	(3,370)
	(f) administration and corporate costs	(1,008)	(2,409)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	126	268
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	(57)	(57)
1.7	Government grants and tax incentives	-	8,584
1.8	Other (provide details if material)	-	(17)
1.9	**Net cash from / (used in) operating activities**	**(5,674)**	**(12,565)**

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

Consolidated statement of cash flows		Current quarter $A'000	Year to date (12 months) $A'000
2.2	Proceeds from disposal of:		
	(a) entities	-	-
	(b) businesses	-	-
	(c) property, plant and equipment	-	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**	**-**	**(5)**

3.	**Cash flows from financing activities**		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	45	10,095
3.2	Proceeds from issue of convertible debt securities	50	50
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(23)	(904)
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)	(15)	20
3.10	**Net cash from / (used in) financing activities**	**57**	**9,261**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	18,301	15,773
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(5,674)	(12,565)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	(5)

Consolidated statement of cash flows		Current quarter $A'000	Year to date (12 months) $A'000
4.4	Net cash from / (used in) financing activities (item 3.10 above)	57	9,261
4.5	Effect of movement in exchange rates on cash held	(45)	175
4.6	**Cash and cash equivalents at end of period**	**12,639**	**12,639**

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	12,639	18,301
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)**	**12,639**	**18,301**

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	107
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)	**(5,674)**
8.2	Cash and cash equivalents at quarter end (item 4.6)	**12,639**
8.3	Unused finance facilities available at quarter end (item 7.5)	**-**
8.4	Total available funding (item 8.2 + item 8.3)	**12,639**
8.5	**Estimated quarters of funding available (item 8.4 divided by item 8.1)**	**2.2**

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 July 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.