Public Announcement
ASX Code: 1AI

March Quarterly Activities Report and Appendix 4C Cash Flow Statement

Highlights:

- Development of version 1 of AlgoraeOS is anticipated by Q3 of 2024, with subsequent versions to be upgraded over a period of at least 3 years.
- Artificial intelligence-predicted fixed dose combination drug targets from version 1 of AlgoraeOS to be assessed in the laboratory to determine their potential for development internally, or in partnership.
- AI-116 drug candidate for dementia and neurodegenerative disorders observed to outperform a well-known AChE Inhibitor in cell viability studies, RNA sequencing studies have commenced.
- Pre-clinical studies over AI-168 drug candidate for cardiovascular disease have commenced.

Melbourne, Australia – 29 April 2024: Algorae Pharmaceuticals Ltd (ASX Code: 1AI) ("Algorae" or "the Company") is pleased to provide its quarterly activities report and appendix 4C for the period ended 31 March 2024.

Development of Artificial Intelligence Biopharmaceutical Prediction Platform

Algorae Operating System ('AlgoraeOS') is the Company's proprietary artificial intelligence ('AI') biopharmaceutical prediction platform being developed in collaboration with AI experts from the University of New South Wales ('UNSW') and supported by co-funding from the CSIRO Next Generation AI Graduate Program.

AlgoraeOS is designed to predict **synergistic fixed dose combination ('FDC') drug targets** using machine learning, deep learning, and neural network algorithms within the setting of a vast compilation of medical and scientific data curated for the purpose of AI-enabled combination drug discovery.

AlgoraeOS is hosted by the 'Gadi' supercomputer operated by National Computational Infrastructure (NCI Australia) and previously used for the likes of climate modelling and natural disaster prediction. The supercomputer has peak operational capacity of over 10 petaFLOPS, which exceeds the computational capacity of many other AI-enabled biopharmaceutical prediction platforms.

Development of version 1 of AlgoraeOS is on schedule and anticipated by Q3 of 2024, with subsequent versions being progressively upgraded over a period of at least 3 years. Once version 1 is launched, projected FDC drug targets will be assessed in the laboratory to determine their potentiality for development within Algorae or with commercial partners.

Positive Pre-clinical Results for AI-116 Drug Candidate for Dementia

Algorae received positive results from the pre-clinical *in vitro* assessment of AI-116 undertaken at La Trobe University. AI-116 is Algorae's FDC drug candidate comprising an acetylcholinesterase inhibitor ('AChE inhibitor') and cannabidiol ('CBD'). AChE inhibitors are FDA registered first-line treatments for Alzheimer's Disease, which are also prescribed off-label for other neurodegenerative disorders, in a market estimated to be worth approximately US$21B per annum in 2024.

In vitro assays were conducted to further assess the therapeutic potential of AI-116 by comparing the viability of neuronal cells in the presence of Amyloid β with varying exploratory doses of AI-116 against the AChE inhibitor and CBD administered alone. The *in vitro* assays measured cell viability and drug synergy, which occurs when the effect of the two drugs in combination is superior to the sum of their individual effects.

In the data reported below, the control arm of the *in vitro* study demonstrated high levels of toxicity when neuronal cells are exposed to Amyloid β, the improvements in cell viability observed with the AChE inhibitor and CBD alone were substantially improved with the administration of the optimal fixed dose combination of AI-116 (Figure 1).

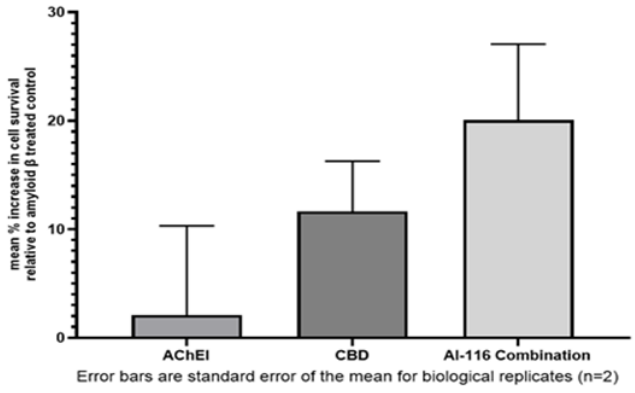

Figure 1. Average percentage increase in cell survival relative to amyloid β treated control cells. Zero is the benchmark for AB effected cells with no treatments, whereby cell viability was 65.5%. Cell viability increased by 2.1% to 67.6% for the AChE Inhibitor, by 11.6% to 77.1% for CBD and by 20.1% to 85.6% for AI-116.

These results demonstrate that the combination of CBD and AChE inhibitors synergise to increase the neuroprotective effect in neuronal cells that are exposed to Amyloid β, with the observed combined effect of the two drugs on cell viability being 33% greater than what would be expected if we added together the effects of each drug used alone.

Additional analyses, including RNA sequencing analysis has commenced to assess the therapeutic mechanism associated with the use of AI-116, including assessments for neuroinflammation, which plays a multifaceted role in the pathogenesis of neurodegenerative disorders and dementia.

Commencement of Pre-clinical Studies over AI-168 Drug Candidate for Cardiovascular Disease

During the quarter, Algorae commenced preliminary *in vitro* assessments of AI-168 for cardiovascular disease at Monash University ('Monash'). AI-168 includes a cannabinoid and another pharmaceutical drug that is currently confidential due to intellectual property considerations as Algorae has filed a provisional patent application over AI-168 to establish a patent priority date for the fixed dose combination drug invention.

In performing the preclinical studies, the models undertaken by Monash are expected to provide an understanding of the mechanism of action of AI-168 across a range of cardiovascular diseases ('CVDs'). Initial toxicity-based experiments began after the end of the quarter. The experiments compare AI-168 to an existing class of drugs used to treat CVDs.

NTCELL for Parkinson's Disease

The Company continued to progress a scientific review of the NTCELL clinical trial protocol and development plan with a primary focus on assessing potential enhancements to the therapeutic value of NTCELL. The NTCELL scientific review is being undertaken by Algorae's chief scientific officer Dr James McKenna, with specific advice available from a dedicated NTCELL advisory board.

Corporate Activities

As at March 31, 2024, Algorae recorded A$3.37M in cash at bank. A total of $249K was spent on operating activities. R&D comprised $173K (approximately 70% of all operating expenditure) and included payments to the Company's

research partners at La Trobe, Monash and UNSW, and procurement of cannabinoid pharmaceutical ingredients. Algorae is eligible to receive an annual ATO cash rebate equivalent to approximately 43.5% of all monies spent on R&D in Australia.

After the end of the March quarter, Algorae resolved to discontinue its legacy American depositary share ('ADS') program in the United States that was initiated in 2007. The ADS securities represent only a very minor component of the Company's capital structure. Terminating the program will simplify the Company's corporate activities and reduce fixed expenditure. ADS holders will be advised of the process to transition their LVCLY ADS securities to 1AI shares in due course.

Item 6.1 of Appendix 4C (below) represents amounts paid to directors and related parties.

Algorae released a non-deal corporate presentation after the end of the quarter, which can be accessed at the Company's website here www.algoraepharma.com.

Ends

This announcement has been approved for release to ASX by the Algorae Board of Directors.

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About Algorae Pharmaceuticals Limited

Algorae is a pharmaceutical development company focussed on addressing unmet medical needs through the discovery and development of novel treatments. The Company has assembled a proficient R&D team and established collaborations with reputable academic institutions to advance its promising drug candidates, which include AI-116 for the treatment of neurodegenerative disorders and/or dementia, AI-168 for cardiovascular disease and NTCELL for Parkinson's disease.

Algorae intends to expand its therapeutic pipeline using a proprietary artificial intelligence (AI) drug discovery and development platform. Known as Algorae Operating System (AlgoraeOS), the AI platform leverages extensive medical and scientific databases from various disciplines within an advanced system at the intersection of AI and pharmaceutical research. By employing machine learning, deep learning, and neural networks, the aim of AlgoraeOS is to uncover synergistic drug combinations that lead to the development of novel and effective treatments for any medical condition, aligning with Algorae's commitment to address unmet medical needs. Algorae is listed and publicly traded on the Australian Stock Exchange (ASX: 1AI), providing investors an opportunity to participate in the Company's growth.

For more information visit www.algoraepharma.com or follow @algoraepharma on X or LinkedIn.

Forward-looking statements

This document may contain certain forward-looking statements, relating to Algorae's business, which can be identified by the use of forward-looking terminology such as "promising," "probable", "plans," "anticipated," "will," "project," "believe," "forecast," "expected," "estimated," "targeting," "aiming," "set to," "potential," "seeking to," "goal," "could provide," "intends," "is being developed," "could be,""on track," or similar expressions, or by express or implied discussions regarding potential filings or marketing approvals, or potential future sales of product candidates. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results to be materially different from any future results, performance or achievements expressed or implied by such statements. There can be no assurance that any existing or future regulatory filings will satisfy the FDA's and other health authorities' requirements regarding any one or more product candidates, nor can there be any assurance that such product candidates will be approved by any health authorities for sale in any market or that they will reach any particular level of sales. In particular, management's expectations regarding the approval and commercialisation of the product candidates could be affected by, among other things, unexpected clinical trial results, including additional analysis of existing clinical data, and new clinical data; unexpected regulatory actions or delays, or government regulation generally; our ability to obtain or maintain patent or other proprietary intellectual property protection; competition in general; government, industry, and general public pricing pressures; and additional factors that involve significant risks and uncertainties about our products, product candidates, financial results and business prospects. Should one or more of these risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary materially from those described herein as anticipated, believed, estimated, or expected. Algorae is providing this information and does not assume any obligation to update any forward-looking statements contained in this document as a result of new information, future events or developments or otherwise.

Appendix 4C

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

Name of entity	
Algorae Pharmaceuticals Limited	
ABN	**Quarter ended ("current quarter")**
14 104 028 042	31 March 2024

Consolidated statement of cash flows		Current quarter $A	Year to date (9 months) $A
1.	**Cash flows from operating activities**		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) research and development	(172,761)	(470,532)
	(b) product manufacturing and operating costs	-	-
	(c) advertising and marketing	(2,168)	(25,365)
	(d) leased assets	-	-
	(e) staff costs	(47,834)	(253,597)
	(f) administration and corporate costs	(90,183)	(603,169)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	63,326	94,449
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**	**(249,620)**	**(1,258,214)**
2.	**Cash flows from investing activities**		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) businesses	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-

Consolidated statement of cash flows		Current quarter $A	Year to date (9 months) $A
	(e) intellectual property	-	-
	(f) other non-current assets	-	-
2.2	Proceeds from disposal of:		
	(g) entities	-	-
	(h) businesses	-	-
	(i) property, plant and equipment	-	-
	(j) investments	-	-
	(k) intellectual property	-	-
	(l) 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.	**Cash flows from financing activities**		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	562,805
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	1,684	8,809
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	(49,260)
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**	**1,684**	**522,354**
4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	3,622,436	4,111,074
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(249,620)	(1,258,214)

4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	-
4.4	Net cash from / (used in) financing activities (item 3.10 above)	1,684	522,354
4.5	Effect of movement in exchange rates on cash held	(1,004)	(1,718)
4.6	**Cash and cash equivalents at end of period**	**3,373,496**	**3,373,496**

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**	**Previous quarter $A**
5.1	Bank balances	523,496	622,436
5.2	Call deposits	2,850,000	3,000,000
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)**	**3,373,496**	**3,622,436**

6.	**Payments to related parties of the entity and their associates**	**Current quarter $A**
6.1	Aggregate amount of payments to related parties and their associates included in item 1	40,000
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.

Payments of director's fee.

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	Amount drawn at quarter end $A
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
8.1	Net cash from / (used in) operating activities (item 1.9)	(249,620)
8.2	Cash and cash equivalents at quarter end (item 4.6)	3,373,496
8.3	Unused finance facilities available at quarter end (item 7.5)	-
8.4	Total available funding (item 8.2 + item 8.3)	3,373,496
8.5	**Estimated quarters of funding available (item 8.4 divided by item 8.1)**	13.5

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:

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:

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:	

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: 29 April 2024.....

Authorised by: By the Board.....
(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.