Public Announcement
ASX Code: 1AI

September Quarterly Activities Report and Appendix 4C Cash Flow Statement

Highlights:

- Successful launch of AlgoraeOS Artificial Intelligence ('AI') platform
- AI models validated for fixed-dose combination ('FDC') drug target prediction
- Initial *in-silico* FDC drug target predictions expected to be reported on imminently regarding their scientific assessment and commercial potential
- AI-116 drug candidate for dementia and neurological diseases exceeded benefit of glutamate-induced toxicity versus existing FDA-registered drug, Donepezil (marketed as 'Aricept') in preclinical studies:
    - Relative cell viability increased by 53% for AI-116 versus 17% for Donepezil in the presence of elevated glutamate in SH-SY5Y neuroblastoma cells
- Clinical trial planning activities have commenced for AI-116, and discussions have commenced with major Australian organisations with specific expertise in dementia treatment and research
- International Patent Cooperation Treaty ('PCT') application filed to pursue patent protection for AI-116
- Results from preclinical assessments of AI-168 for cardiovascular disease nearing finalisation

Melbourne, Australia – 23 October 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 30 September 2024.

AlgoraeOS Artificial Intelligence ('AI') Platform Successfully Launched

Algorae Operating System ('AlgoraeOS'), the Company's proprietary artificial intelligence biopharmaceutical prediction platform, was launched during the quarter. The platform integrates four proprietary AI neural networks to analyse vast datasets, predicting synergistic responses in FDC drug targets. It operates on the 'Gadi' supercomputer, managed by National Computational Infrastructure ('NCI Australia'), which has previously been utilised for climate modelling and natural disaster prediction.

To further the development of the platform, Algorae is collaborating with leading experts from the UNSW AI Institute, with economic support from the data and digital specialist arm of Australia's national science agency, CSIRO's Data61. AlgoraeOS is wholly owned by Algorae and will undergo iterative improvements over the next 2.5 years, with version 2.0 development already underway.

Pleasingly, initial system training indicated high prediction correlation of major pharmaceutical synergy metrics (Bliss, Loewe and HSA) ranging from 0.91 – 0.98 "predicted" versus "actual" data, demonstrating high confidence in the AI models built by Algorae's collaborators at UNSW AI Institute.

Initial *in-silico* FDC drug target predictions are expected to be reported on imminently regarding their scientific assessment and commercial potential. Preclinical assessments of all drug targets generated by AlgoraeOS are under discussion with potential laboratory partners, focusing on development paths, intellectual property strategies, and potential commercial partnerships.

On 24 September 2024, Algorae published a non-deal presentation of AlgoraeOS. This is available on the Company's website, which can be accessed here.

Positive Pre-clinical Results for AI-116 Drug Candidate for Dementia & PCT Patent Application Filing
Algorae has previously observed that AI-116 outperformed Donepezil using a preclinical model of neuroprotection in the presence of elevated amyloid β (Aβ).

To build on those results, during the quarter, Algorae completed additional preclinical assessments of glutamate toxicity (refer ASX announcement: 31 July 2024). Elevated glutamate in neuroblastoma cells significantly contribute to the progression of dementia through mechanisms involving excitotoxicity, oxidative stress, neuroinflammation, synaptic dysfunction, and the interplay with Aβ and tau pathology. These processes are neurotoxic, ultimately resulting in cognitive decline and memory impairment.

In vitro assays compared cell viability in the presence of abnormal glutamate following treatment with AI-116. Relative to glutamate-only treated control cells, AI-116 restored a mean of 53% of total relative cell viability, which exceeded the effect of either CBD or Donepezil alone, as demonstrated in Figure 1.

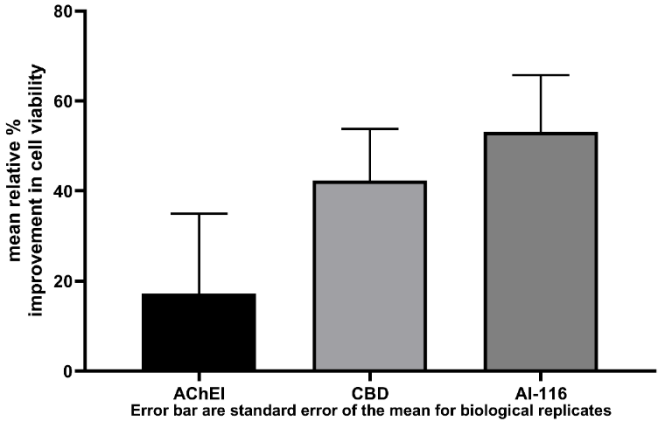

Figure 1. Average percentage increase in cell survival relative to glutamate treated control cells. Relative to the glutamate treated toxic control, Donepezil (represented as AChEI) alone restored a mean of 17% of total relative cell viability, CBD alone restored a mean of 42% of total relative cell viability and AI-116 at the optimal dosages restored a mean of 53% of total relative cell viability.

AI-116 is Algorae's FDC drug candidate comprised of Donepezil and CBD. Donepezil is off-patent and was created by Eisai Co. Limited, a leader in dementia research. It is FDA registered and the first line treatment for Alzheimer's disease, also prescribed off-label for other neurodegenerative disorders and dementia. Development of AI-116 aligns with Algorae's goal to develop and commercialise new FDC therapeutics that improve upon current first line treatments by embracing combination pharmaceutical development.

Algorae has filed an international patent application under the Patent Cooperation Treaty (PCT) (International (PCT) Application No. PCT/AU2024/050791) as part of its intellectual property strategy.

Clinical trial planning activities have commenced for AI-116 and discussions have commenced with major Australian organisations with specific expertise in dementia.

Pre-clinical Studies in AI-168 Drug Candidate for Cardiovascular Disease Nearing Completion
During the quarter, Algorae progressed preclinical assessments of AI-168 for cardiovascular disease at Monash University ('Monash').

In performing the preclinical studies, the results from 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'). Various preclinical assessments have rapidly advanced during the current quarter and Algorae anticipates finalising results

during the coming weeks. The experiments compare AI-168 to an existing class of drugs used to treat CVDs to ensure that Algorae advances only drug candidates that demonstrate observable outperformance of other pharmaceutical drugs already registered and marketed in the healthcare market.

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 30 September 2024, Algorae recorded A$2.77M in cash at bank. A total of $340K was spent on operating activities. Algorae is eligible to receive an annual Research and Development Tax Incentive ('RDTI') rebate equivalent to approximately 43.5% of all monies spent on research and development in Australia.

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

The Company notes that the Annual General Meeting of Shareholders of Algorae Pharmaceuticals Limited will be held on Friday, 25 October 2024 commencing at 11:00 am (AEDT) at the offices of Thomson Geer at Level 23, Rialto South Tower, 525 Collins Street, Melbourne VIC 3000 Australia.

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	30 September 2024

Consolidated statement of cash flows		**Current quarter $A**	**Year to date (12 months) $A**
1.	**Cash flows from operating activities**		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) research and development	(110,141)	(110,141)
	(b) product manufacturing and operating costs	-	-
	(c) advertising and marketing	(35,255)	(35,255)
	(d) leased assets	-	-
	(e) staff costs	(40,000)	(40,000)
	(f) administration and corporate costs	(210,561)	(210,561)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	56,085	56,085
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**	**(339,872)**	**(339,872)**

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

Consolidated statement of cash flows		Current quarter $A	Year to date (12 months) $A
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.	**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**	**-**	**-**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	3,108,365	3,108,365
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(339,872)	(339,872)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	-

Consolidated statement of cash flows		Current quarter $A	Year to date (12 months) $A
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-
4.5	Effect of movement in exchange rates on cash held	(456)	(456)
4.6	**Cash and cash equivalents at end of period**	**2,768,037**	**2,768,037**

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	668,037	808,365
5.2	Call deposits	2,100,000	2,300,000
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)**	**2,768,037**	**3,108,365**

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 directors 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)	(339,872)
8.2	Cash and cash equivalents at quarter end (item 4.6)	2,768,037
8.3	Unused finance facilities available at quarter end (item 7.5)	-
8.4	Total available funding (item 8.2 + item 8.3)	2,768,037
8.5	**Estimated quarters of funding available (item 8.4 divided by item 8.1)**	8.1

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: 23 October 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.