Public Announcement
25th October 2023

Algorae Collaborates with UNSW to Establish Artificial Intelligence Platform for Drug Discovery and Enhanced Development Outcomes

Highlights:

- AlgoraeOS AI drug discovery platform is being established in collaboration with AI experts from the University of New South Wales, Sydney, Australia
- AlgoraeOS intended to use AI predictive modelling to generate drug targets for internal clinical investigation, expansion of drug development pipeline and other commercial opportunities
- AlgoraeOS will have predictive capabilities over all pharmaceutical drugs and therapeutic molecules of interest, however, it will encompass an innate specialisation in cannabinoid and cannabinoid combination drug targets
- The directors of Algorae believe that it has recruited the best credentialed team and facilities available in Australia to build a biopharmaceutical AI prediction platform
- AI platforms represent unmatched innovation and efficiency capabilities, leveraging enormous and ever-growing data banks.

Algorae Pharmaceuticals Limited ('1AI' or the 'Company') today announces that it has executed an agreement with the University of New South Wales ('UNSW') to advance the development of Algorae Operating System ('AlgoraeOS'), a proprietary artificial intelligence ('AI') platform for biopharmaceutical prediction of drug candidates and enhanced development outcomes.

AlgoraeOS, will build upon an AI model trained for pharmaceutical prediction already developed by data specialists within the UNSW Data Science Hub (uDASH). In collaboration with UNSW, Algorae intends to expand and refine this model specifically for the Company's purposes, which includes generating novel drug candidates for clinical investigation. Algorae will retain 100% ownership rights to all project intellectual property.

AlgoraeOS will harness complex data derived from extensive molecular screening profiles, molecular structures, drug targets, omics profiles, among other information, for the purpose of identifying novel combination drug candidates and repositioning opportunities through contemporary and sopshisticated AI-enabled predictive modelling. To achieve this objective, the following specific aims have been delineated:

- **Development of a Comprehensive Dataset:** this endeavour involves the continuous and iterative compilation of a comprehensive drug discovery dataset, encompassing information such as drug combination screening results, drug-related data, disease and cell line-related information, and clinical data. Much of this information has been earmarked for inclusion in the platform.
- **Creation of an AI-driven Platform:** AlgoraeOS will use an AI-driven platform designed to learn from an ever growing, heterogeneous, yet complementary dataset, with the goal of predicting synergistic drug combinations and other repurposing opportunities.

- **Model Refinement:** the performance of AlgoraeOS will be progressively upgraded and refined using information and data iteratively provided by Algorae (including pre-clinical and clinical results), and data collected from independent sources, other third-party sources and scientific literature.

The first version of AlgoraeOS will be delivered within 6 – 9 months and immediately capable of deriving insights for the Company. Subsequently, AlgoraeOS will evolve across iterative phases during the project's duration by incorporating additional data, enhancing the output magnitude and credibility of the platform.

AlgoraeOS will encompass data and predictive capabilities over all registered drugs and therapeutic molecules of interest, however, it will encompass an innate specialisation in cannabinoid and cannabinoid combination drug targets. The competitive landscape for the development of cannabinoid and cannabinoid-like pharmaceutical agents has increased following high-profile M&A activity and is considered to be a valuable field investigation by Algorae's directors.

The principal investigator for AlgoraeOS is Associate Professor Fatemeh Vafee, who will be supported by staff and other participants associated with the UNSW AI Institute. A/Professor Fatemeh Vafaee said; "Combination therapies with synergistic effects represent a potent strategy for addressing the complexities of treating various diseases. The discovery of these synergistic combinations often involves exploring a vast landscape of compound pairings, which is hampered by practical constraints such as cost, feasibility, and complexity, limiting the scope of in vivo and in vitro experiments. In recent years, the field of pharmacology has witnessed remarkable advancements in leveraging artificial intelligence (AI) techniques to conquer traditional restraints to pharmaceutical investigation".

Algorae forecasts that AI platforms will become increasingly influential pharmaceutical research and development (R&D) tools, presenting unmatched innovation and efficiency capabilities. There are a range of emerging biopharmaceutical companies underpinned by AI engines, predominately based in the USA, that have resulted in the development of new clinical entities for pharmaceutical research. Some of these companies have received strategic investments from big pharmaceutical companies wishing to exploit large data sets and AI for the development of novel therapeutic candidates that are developed internally, licensed, or sold to third parties for development. The directors of Algorae believe that they have recruited the best credentialed team and facilities available in Australia to commence the development of a globally competitive AI biopharmaceutical predictive platform.

AlgoraeOS will be used to develop an AI-generated or AI-enhanced drug development pipeline for the Company. Ongoingly, insights from the platform will be used to enhance the development of those candidates. Algorae also intends to seek licensing, development and commercialisation partnerships over AI-generated insights and drug targets over time.

About Associate Professor Fatemeh Vafaee

Associate Professor Fatemeh Vafaee is the Deputy Director of the UNSW Data Science Hub and a member of the UNSW AI Institute. She has established the Biomedical AI Laboratory (www.VafaeeLab.com) at the UNSW Faculty of Science and leads a multi-institute, industry-aligned next-generation graduate program, Med-Tech.AI on AI-enabled medical technologies, from diagnostics to therapeutics. Dr Vafaee is also the Founding Director of OmniOmics.AI Pty Ltd developing innovative AI solutions to accelerate personalised medicine and precision therapy. Her impact in the field has been recognised internationally and celebrated as the Winner of the prestigious Women in AI Asia-Pacific Award in Health (2023). Dr Vafaee received her PhD in Artificial Intelligence from the School of Computer Science at the University of Illinois at Chicago, USA, followed by 2

multidisciplinary postdoctoral fellowships on computational biomedicine at the University of Toronto and the University of Sydney. She is a renowned scientist in computational biomedicine with over a decade of experience in AI-integrated translational medicine and drug discovery through close partnerships with industry and governmental stakeholders.

Chairman of Algorae Pharmaceuticals Limited, Mr David Hainsworth said: "We are delighted to partner with the AI institute at UNSW to advance our AI-enabled drug discovery and development platform. As a distinguished institution ranked among the global top 20 universities, UNSW has the capability to deliver superior expertise and computational infrastructure to this exciting project. We are particularly pleased to collaborate with Associate Professor of Computational Biomedicine, Fatemeh Vafaee whose contribution to the field of artificial intelligence has received international recognition".

About AI in Drug Discovery and Development

The use of AI in drug discovery and development has the potential to revolutionise the pharmaceutical landscape. AI algorithms analyse complex data, such as clinical data, biological data, molecular structures, and genetic information, enabling rapid identification of drug targets with higher precision and efficiency. Machine learning, deep learning and neural network models predict drug interactions, assess toxicity, and optimize compound designs, guiding researchers towards more promising avenues of investigation while saving time and resources. AI applied to pharmaceuticals also has the potential to streamline research activities, such as preclinical and clinical study design, and facilitates the repurposing of existing drugs, either alone or in combinations, for new therapeutic uses.

This announcement has been approved by the Board of Directors of Algorae Pharmaceuticals Limited.

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For more information, please visit www.algoraepharma.com

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About Algorae Pharmaceuticals

Algorae is a pharmaceutical development company focused on discovering and developing novel treatments for medical conditions with under met medical needs. Algorae has a highly proficient internal scientific team and academic collaborations with esteemed universities that assist the Company to achieve its goals. Existing drug candidates include NTCELL for Parkinson's disease and the AI-116 combination drug candidate for dementia. Multiple other drug candidates are under investigation. Algorae will increasingly use artificial intelligence to assist in its scientific and commercial endeavours, including by using AI to generate drug targets. The Company is listed and publicly traded on the Australian Stock Exchange (ASX: 1AI) and in the United States (OTCQB: LVCLY).

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.