

Dyadic Announces Funding Award from CEPI to Use C1 to Accelerate Development of Protein-Based Vaccines

JUPITER, Fla., March 20, 2025 (GLOBE NEWSWIRE) — Dyadic International, Inc. (“Dyadic”, “we”, “us”, “our”, or the “Company”) (NASDAQ: DYAI), a biotechnology company focused on the efficient large-scale manufacture of proteins for use in human and animal vaccines and therapeutics and for use in non-pharmaceutical applications including food, nutrition, and wellness, today announced that it has received a funding award from CEPI to use C1 to accelerate the development of protein-based vaccines.

CEPI is providing US\$4.5 million to non-profit Fondazione Biotechnopolo di Siena (FBS) for proof-of-concept research that will explore whether producing antigens in C1 filamentous fungus-applying technology owned by Dyadic-is a faster and cost-effective alternative to the more established route of producing antigens in mammalian cells.

While producing protein antigens in mammalian cells is an effective way of developing protein-based vaccines, the process can take four to six months. This is because they require the creation of a stable cell line-cells engineered to consistently produce the target vaccine protein-which involves extensive testing. In contrast, a C1 fungus cell line could be used to rapidly produce a pool of cells that generate the same quality vaccine protein without the need for such time-consuming testing, enabling faster protein production. This project could slash the development time for vaccine production and release to just 35 days, helping vaccines to enter Phase 1 trials much sooner.

The researchers also hope that the C1 fungus technology will produce large quantities of proteins which can be easily scaled, with a reduced need for complex or expensive biopharmaceutical facilities compared to those required for mammalian cell cultures. This affordability means the technology would be suitable for transfer to regional manufacturing, where vaccine manufacturing infrastructure may be less established, helping to meet local needs in support of greater access.

The CEPI-FBS partnership supports the 100 Days Mission-a goal embraced by leaders of the G7 and G20 to reduce vaccine development timelines to a little over three months in response to a pandemic threat.

Dr Raafat Fahim, Interim Executive Director of Manufacturing and Supply Chain, CEPI, said, “Protein-based vaccines play a crucial role in combating emerging infectious diseases. However, the current manufacturing processes for producing these vaccines can be both costly and time-consuming. By leveraging the growth capabilities of fungi, we can potentially produce the necessary proteins up to four to six times faster than traditional methods. This would accelerate the transition of promising vaccine candidates into clinical trials and enable faster large-scale production during emergencies. The flexibility, speed, and

affordability of this fungal-based approach make it especially valuable in outbreak situations where time is of the essence.”

Prof. Rino Rappuoli , Scientific Director FBS, said, “There is a huge need for new technology platforms that can deliver vaccines that can be produced rapidly, that can be affordable for every person of the planet, that can easily be stored in refrigerators, and that can be rapidly scaled to billions of doses. The collaboration with CEPI allows the Fondazione Biotechnopolo di Siena to work on a technology that has the potential to deliver this type of vaccine. It is a great honour to be able to be part of a global network dedicated to the preparedness against future epidemics and pandemics. We will face many important health challenges, and thanks to this innovative technology, we will put all our effort into finding solutions to overcome them, including in low- and middle-income countries.”

Mark Emalfarb, Dyadic’s CEO, said, “We are grateful for CEPI’s funding and the support of Fondazione Biotechnopolo di Siena, led by Dr. Rino Rappuoli, in advancing Dyadic’s C1 platform for faster, more affordable vaccines and treatments. This funding accelerates C1’s development for pandemic preparedness through a One Health approach, reducing costs, increasing productivity, and improving global vaccine access. With CEPI’s support, we aim to prevent zoonotic outbreaks and strengthen global health security. But to fully realise these benefits, policymakers must act now, as CEPI urges, before the next pandemic strikes- proactive investment is critical to safeguarding human and animal health.”

Specifically, CEPI’s funding will seek to produce a SARS-CoV-2 spike protein-an antigen that trains the immune system to recognise and fight off the virus-using both the innovative C1 fungus and the more traditional mammalian cell approach. Researchers will then compare the two to see if the antigen produced by the C1 fungus is comparable in structure and immunogenicity to those produced in mammalian cells.

If successful, the next phase of the project will focus on selecting an antigen from a pathogen of interest to CEPI. This will be used for development and to demonstrate a reduced timeline for vaccine development.

To see the original press release issued by CEPI, please visit CEPI’s website at <https://cepi.net/exploiting-fungus-growth-rapid-and-affordable-vaccine-development>.

About Dyadic International, Inc.

Dyadic International, Inc. is a biotechnology company focused on the efficient large-scale manufacture of proteins for use in human and animal vaccines and therapeutics, as well as non-pharmaceutical applications including food, nutrition, and wellness.

Dyadic’s gene expression and protein production platforms are based on the highly productive and scalable fungus *Thermothelomyces heterothallica* (formerly *Myceliophthora*

thermophila). Our lead technology, C1-cell protein production platform, is based on an industrially proven microorganism (named C1), which is currently used to speed development, lower production costs, and improve performance of biologic vaccines and drugs at flexible commercial scales for the human and animal health markets. Dyadic has also developed the Dapibus™ filamentous fungal based microbial protein production platform to enable the rapid development and large-scale manufacture of low-cost proteins, metabolites, and other biologic products for use in non-pharmaceutical applications, such as food, nutrition, and wellness.

With a passion to enable our partners and collaborators to develop effective preventative and therapeutic treatments in both developed and emerging countries, Dyadic is building an active pipeline by advancing its proprietary microbial platform technologies, as well as other biologic vaccines, antibodies, and other biological products.

To learn more about Dyadic and our commitment to helping bring vaccines and other biologic products to market faster, in greater volumes and at lower cost, please visit <http://www.dyadic.com>.

About CEPI

CEPI is an innovative partnership between public, private, philanthropic, and civil organisations. Its mission is to accelerate the development of vaccines and other biologic countermeasures against epidemic and pandemic threats so they can be accessible to all people in need. CEPI has supported the development of more than 50 vaccine candidates or platform technologies against multiple known high-risk pathogens or a future Disease X. Central to CEPI's pandemic-beating five-year plan for 2022-2026 is the '100 Days Mission' to compress the time taken to develop safe, effective, globally accessible vaccines against new threats to just 100 days.

About FBS

Fondazione Biotechnopolo di Siena (FBS) is a nonprofit, private legal entity with registered office and operational headquarters in Siena. The founding members include the Ministry of Universities and Research, the Ministry of Health, the Ministry of Economy and Finance and the Ministry of Enterprise and Made in Italy. FBS is a strategic national project that aims to develop applied research and innovation in the field of biotechnologies and life sciences. The FBS mission is focused on the research, development and production of vaccines and monoclonal antibodies for the treatment of pandemics and emerging infectious diseases.

Safe Harbor Regarding Forward-Looking Statements

This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act, including those regarding Dyadic

International's expectations, intentions, strategies, and beliefs pertaining to future events or future financial performance, such as the success of our research projects and third-party collaborations and of our efforts to use C1 to accelerate the development of protein-based vaccines. Forward-looking statements generally can be identified by use of the words "could," "would," "hope," "aim," "expect," "should," "intend," "anticipate," "will," "project," "may," "might," "potential," or "continue" and other similar terms or variations of them or similar terminology. Forward-looking statements involve many risks, uncertainties or other factors beyond Dyadic's control. These factors include, but are not limited to, the following: (i) our history of net losses; (ii) market and regulatory acceptance of our microbial protein production platforms and other technologies; (iii) competition, including from alternative technologies; (iv) the results of nonclinical studies and clinical trials; (v) our capital needs; (vi) changes in global economic and financial conditions; (vii) our reliance on information technology; (viii) our dependence on third parties; (ix) government regulations and environmental, social and governance issues; and (x) intellectual property risks. For a more complete description of the risks that could cause our actual results to differ from our current expectations, please see the section entitled "Risk Factors" in Dyadic's annual reports on Form 10-K and quarterly reports on Form 10-Q filed with the SEC, as such factors may be updated from time to time in Dyadic's periodic filings with the SEC, which are accessible on the SEC's website and at www.dyadic.com. All forward-looking statements speak only as of the date made, and except as required by applicable law, Dyadic assumes no obligation to publicly update any such forward-looking statements for any reason after the date of this press release to conform these statements to actual results or to changes in our expectations.

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