Dyadic Updates Market on Recent Scientific Achievements

JUPITER, Fla., Sept. 13, 2022 (GLOBE NEWSWIRE) -- Dyadic International, Inc. ("Dyadic", or the "Company") (NASDAQ: DYAI), a global biotechnology company focused on building innovative microbial platforms to address the growing demand for global protein production and unmet clinical needs for effective and affordable biopharmaceutical products for human and animal health, today updates the market on recent scientific achievements.

Dyadic's C1 protein production platform continues to be optimized in terms of speed to the clinic and increasing productivity of antigens, antibodies, and other therapeutic proteins. Dyadic recently developed new transformational technology and techniques which demonstrate significant breakthroughs in higher levels of yield production across different classes and types of proteins. In certain instances, by applying these genetic elements, the C1 platform has generated up to 9-10x greater productivity when compared to previous C1 cell lines developed in both the animal and human health markets.

The following represents recent additional achievements with our C1 technology platform:

- In addition to the Company's DYAI-100 based Wuhan RBD vaccine, the Company has successfully expressed the following variants: Alfa, Beta, Gamma, Delta, and Omicron B.1.1.529 at 0.5-2.5 g/L levels, with Omicron BA.5 currently under development.
- A nine-fold (9x) improvement in the expression yield for Nivolumab, a potential monoclonal antibody for oncology expressed at 22.3 g/l in a seven-day fermentation.
- A recombinant animal health antigen has been expressed at up to 10 g/L in 7 days.
- A biologically active neuraminidase (NA), a potential antigen for influenza, has been expressed at 0.8 g/L in 7 days for potential use in combination with Hemagglutinin (HA) to play an important role in providing broader influenza vaccine-induced protection. Mice trials conducted by Oslo University for NA, like the previously reported HA produced from C1-cells, generate high neutralizing antibody levels.
- A non-human primate study completed dosing of a C1 produced COVID-19 monoclonal antibody (mAb) that has demonstrated broad neutralization and protection against Omicron (BA.1 & BA.2) and other variants of concern in hamsters. Full data readout is anticipated later this year, but to date data supports conducting a toxicology study and cGMP manufacturing for potential Phase 1 clinical trial to further demonstrate safety of C1 produced proteins in humans.
- Potential next generation pan coronavirus vaccine candidates: the Company expressed Wuhan and Omicron Ferritin S gRBD nanoparticle antigens; Wuhan S gRBD nanoparticle has been expressed at greater than 3 g/L in five days.

"We are excited to share these scientific breakthroughs and productivity advancements with you today and we look forward to presenting this data to the World Health Organization (WHO) on September 14th and at a number of other upcoming industry conferences where we will also share how our scientific team and our collaborators are making significant progress toward improving our C1 platform's effectiveness," said Mark Emalfarb, President and CEO of Dyadic. Mr. Emalfarb further stated, "These data and new technologies result from our focus on the advancement of our pipeline programs and our anticipated first in human Phase 1 clinical trial of our COVID-19 recombinant protein booster vaccine candidate." Mr. Emalfarb concluded, "We believe that our C1 protein production platform has demonstrated the potential to remarkably accelerate the development and lower the cost of manufacturing vaccines, monoclonal antibodies and other therapeutic proteins for infectious and other diseases."

Dr. Ronen Tchelet, Chief Scientific Officer of Dyadic added, "Our science continues to deliver great results and we and the global scientific community are encouraged by the growing amount of data coupled with peer reviewed publications where our C1 platform technology is already and potentially can be applied. We are at an initial stage of a first-in-human clinical trial for demonstrating the safety and preliminary efficacy of our patented C1 protein production platform

and many key productivity initiatives that we expect will provide us, our collaborators and partners with greater confidence in exploring C1 as a potential means of accelerating their own vaccine and drug development programs."

About Dyadic International, Inc.

Dyadic International, Inc. is a global biotechnology company committed to building disruptive microbial platforms to address the growing demand for global protein bioproduction and unmet clinical needs for effective, affordable, and accessible biopharmaceutical products for human and animal health.

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, including our lead asset DYAI-100 COVID-19 vaccine candidate, 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 https://www.dyadic.com.

Safe Harbor Regarding 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, 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 clinical trial application and our ability to secure commercial agreements and take advantage of other business opportunities. Actual events or results may differ materially from those in the forward-looking statements because of various important factors, including those described in the Company's most recent filings with the SEC. Dyadic assumes no obligation to update publicly any such forward-looking statements, whether because of new information, future events or otherwise. 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 https://www.dyadic.com.

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