Dyadic Announces First Quarter 2023 Financial Results and Highlights Recent Company Progress

- *New research collaboration with a Top 5 pharmaceutical company to develop C1 expressed vaccine antigen for human health*
- *Expanded licensing agreement with Rubic One Health ("Rubic") to develop, manufacture and commercialize affordable vaccines and biologics for human and animal health for African Continent*
- *Expanded collaboration with Phibro/Abic animal health to develop vaccines for animal diseases*
- *Fully funded co-development and marketing agreement with Fermbox to use Dapibus™ platform to develop and commercialize animal free alternative proteins and biomaterials*
- *No serious adverse events or local and systemic side effects reported after completion of dosing of DYAI-100 recombinant protein RBD booster vaccine. Preliminary safety assessment report is expected in June 2023*
- *Commercial product portfolio expanded for pharmaceutical and non-pharmaceutical applications*
- *Selected by BARDA and FDA as one of six companies to present at the FDA Recombinant Protein-Based COVID-19 Vaccines Workshop in April 2023*
- *Multiple grant applications submitted for Sudan Ebola virus, Marburg virus, RVFV, WNV, ZIKA, TBEV and second generation COVID-19 vaccine candidates*
- *Received notice of allowance from the U.S. Patent and Trademark Office for "Production of Flu Vaccine in Myceliophthora thermophila" patent application*
- *Received approximately $1.27 million from sale of minority equity interest in Alphazyme, LLC*
- *Received first milestone payment from collaboration with global food ingredient company in April 2023*
- *Revenue increased 50.9% YoY*
- *Cash and investment grade securities of $11.8 million as of March 31, 2023*
- *New corporate website to reflect our scientific development and expanded market focus*
- *Financial results and business update conference call scheduled for 5:00 pm ET today*

JUPITER, Fla., May 10, 2023 (GLOBE NEWSWIRE) — Dyadic International, Inc. ("Dyadic", "we", "us", "our", 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, affordable and accessible biopharmaceutical products and alternative proteins for human and animal health, today announced its financial results for the first quarter of 2023, and highlighted recent company developments.

“Dyadic is off to a great start in 2023, delivering multiple new research collaborations and strong revenue growth of 50.9% year over year,” said Mark Emalfarb, President and Chief Executive Officer of Dyadic. “The completion of dosing for our phase 1 clinical trial of DYAI-100 without any serious adverse events has established a safety record with regulatory agencies for proteins produced from our C1 protein production platform. We are also pleased to see our existing partnerships expanded in human and animal health areas, including our licensing agreements with Rubic One Health in Africa and Phibro/Abic animal vaccine program. We are appreciative of BARDA and the FDA’s support, we were the only platform technology company to present at the FDA’s April 27th Recombinant Protein-Based COVID-19 Vaccines Workshop, along with five other vaccine companies. We believe that our C1 platform is well-position to be an alternative platform in developing next generation vaccines for public health and future pandemics, and we are happy to see C1 is gaining more recognition globally within academia, government, and industry.”

“Consistent with our business strategy of focusing on near term commercialization opportunities that can create shareholder value, earlier this week we announced our fully funded co-development and marketing agreement with Fermbox Bio to further leverage our proprietary Dapibus™ platform toward developing and commercializing multiple end-market animal free protein products. Our agreement with Fermbox is singularly focused on commercializing projects for licensing opportunities and will serve to expand our portfolio of recombinant product offerings to address multiple market segments in addition to our internal efforts such as recombinant human and bovine albumin. With the technological advancements and recent business development success across our core markets, we are excited about our future prospects for growth creating shareholder value. We will continue the on-going long-term collaborations, with Janssen, Phibro/Abic, and Rubic, while working with new business partners to bring new products to the market sooner,” Mr. Emalfarb concluded.

Recent Company Progress

Human Health

DYAI-100, C1-SARS-CoV-2 RBD (Receptor Binding Domain) Booster Vaccine Candidate

- In February 2023, dosing of both low and high dose groups was completed. To date, no serious adverse events or local and systemic side effects have been observed. A preliminary safety assessment report is expected in June 2023.
- The Last Patient Last Visit (LPLV) is scheduled for August 2023 and the full clinical study report (CSR) is expected in the second half of 2023.

Vaccine Collaborations

- **Top 5 Pharma** – In April 2023, the Company entered a new research collaboration with a top 5 pharmaceutical company to express a vaccine antigen from C1 for human health. The agreement also grants an option for a future commercialization license in the designated field.
- **Rubic One Health** ("Rubic") – On April 12, 2023, the Company expanded the initial 2021 license agreement with Rubic to include vaccines and therapeutic proteins beyond COVID-19 vaccines for both human animal health markets. Under the 2021 agreement with Rubic, tech transfer of C1-cell protein production platform has been completed. The expanded license agreement will help Rubic prepare for the development of affordable vaccines and drugs for the African continent.
- **Epygen Biotech of India ("Epygen") –** In 2020, the Company entered into a non-exclusive technology agreement with Epygen Biotech of India, who has procured funding from the government of India to conduct Phase 1 and Phase 2 human clinical trials in India, using antigens that are manufactured from C1. Epygen has received the approval from the ethical committee in India and is working on pre-clinical development and continuing to improve the yield and optimizing the fermentation of the Omicron BA5 antigen.
- **Virovax** – Dyadic has been working with Virovax to develop next generation vaccine candidates, including COVID-19, that may provide durable and broader protection against COVID-19 variants as they emerge as well as other infectious diseases. More than a half dozen animal trials have been carried out by Virovax and additional animal studies are ongoing and/or scheduled with C1 produced ferritin nanoparticle antigens for influenza (H5N1/Bird Flu), second generation COVID-19 and other infectious diseases. Certain pre-clinical animal data related to intramuscular and intranasal routes of administration using the C1 produced ferritin RBD nanoparticle in combination with Virovax's adjuvants was highlighted during Dyadic's presentation at the FDA's April 27th Recombinant Protein-Based COVID-19 Vaccines Workshop. Dyadic's presentation entitled "*Next-Gen vaccines without the right platform limit pandemic effectiveness*" can be found on the Company's website at http://www.dyadic.com under the "Media/Presentation" tab.

Antibody Collaborations

- **NIIMBL** – We have met the objectives of the NIIMBL project and completed the research work in May 2023. Next steps are currently under evaluation. Related data and certain research results will be presented at the upcoming NIIMBL annual meeting in June 2023.
- **COVID-19 Antibody Collaboration** – Dr. Albert Osterhaus and the other authors, including Dyadic, are in the final stages of preparing a manuscript to be submitted to a peer-reviewed scientific journal titled "A human monoclonal antibody produced by filamentous fungi provides protection against SARS-CoV-2 in hamster and non-human primate models." The manuscript describes the safety and efficacy results with C1-produced antigens and antibodies obtained from studies in animals, including hamsters

and non-human primates.

- **UC Davis** – The Company continues its research and development projects with UC Davis related to expanding the potential applications of the C1-cell protein production platform including diagnostics and therapeutics. Successful production of the SARS-CoV-2 Spike S2 protein reaching ~1g/L and 97% purity which showed the same ACE2 binding affinity and other physicochemical properties similar to CHO produced spike S2 protein.

Pharmaceutical Enzymes Collaborations

- In the first quarter of 2023, the Company entered into a new research collaboration with a biotech company for a fully funded proof-of-concept project to express an enzyme for pharmaceutical applications.
- We have successfully expressed and are making progress on developing an endonuclease enzyme product candidate that cleaves DNA for potential human therapeutic, product development and/or diagnostic use and we expect to start sampling customers later this year.

Animal Health

- **Phibro/Abic Animal Health** – In the first quarter of 2023, the Company extended its research collaboration with Abic Biological Laboratories Ltd. ("Abic"), an affiliate of Phibro Animal Health Corporation ("Phibro") to apply newly developed techniques and methods to further increase the expression level of a recombinant livestock antigen using C1.
- **Rubic One Health** ("Rubic") – Rubic expanded the initial 2021 license agreement to include vaccines and therapeutic proteins for the animal health market in Africa.

Alternative Proteins

- **Fermbox Bio** ("Fermbox") – on May 7, 2023, the Company entered into a fully funded co-development and marketing agreement with Fermbox to help accelerate our ability to exploit the Dapibus™ platform and expand Dyadic's product offerings for non-pharmaceutical alternative proteins applications, such as food, nutrition, wellness and other bioproducts.
- **Dapibus™ platform** – the Company's thermophilic filamentous fungal based microbial gene expression and protein production platform is designed to enable the rapid development and large-scale manufacture of low-cost enzymes, proteins, metabolites, and other biologic products for use in non-pharmaceutical applications such as food, nutrition, and wellness. In January 2023, the Company entered into a new research collaboration for a food protein using Dapibus™.
- **Commercial Product Portfolio** – Since 2022, Dyadic began to develop products that

have shorter commercialization timelines in growing markets that transect our core verticals. Animal free recombinant serum albumin projects were initiated in using Dyadic pharmaceutical cell lines for use in potential therapeutic, product development, research, and/or diagnostic human and animal pharmaceutical applications. C1-cell lines have been developed, expressing high levels of both recombinant bovine and human albumins. We have started sampling potential customers who have expressed interest in Dyadic's C1 serum albumin products. In non-pharmaceutical applications, development has been initiated on several non-animal recombinant dairy proteins and enzymes for use in food and nutrition to support the Dapibus™ platform.

Other Events

- **Grant Application** – We have submitted multiple grant applications in collaboration with other US and EU scientists for Sudan Ebola virus, Marburg virus, RVFV, WNV, ZIKA, TBEV and second generation COVID-19 vaccine.
- **BARDA and FDA Workshop** – On April 27, 2023, the Company presented at Recombinant Protein-Based COVID-19 Vaccines Workshop, a virtual event hosted by the Biomedical Advanced Research and Development Authority (BARDA) and FDA. The goals of the workshop were to provide: 1) a forum for product sponsors to discuss progress and technical challenges in the manufacturing when changing strain composition to currently circulating variants of SARS-CoV-2; and 2) an open forum for collaborative discussions to facilitate advancement of recombinant protein-based COVID-19 vaccines. Dyadic's presentation entitled "*Next-Gen vaccines without the right platform limit pandemic effectiveness*" can be found on the Company's website at http://www.dyadic.com under the "Media/Presentation" tab.
- **Patent Updates** – On April 18, 2023, the Company announced the receipt of a notice of allowance from the U.S. Patent and Trademark Office for patent application 16/640,483, titled "Production of Flu Vaccine in *Myceliophthora thermophila*", which will cover claims for the development and manufacture of seasonal and pandemic influenza vaccines from the Company's C1 protein production platform.
- **Alphazyme Sale** – In January 2023, the Company received approximately $1.27 million in connection with the sale of its minority equity interest in Alphazyme, LLC ("Alphazyme") which was previously received as part of the consideration for the grant of a non-exclusive license to certain of Dyadic's technology. Additionally, under that arrangement Dyadic has the right to receive milestone and royalty payments based on sales of C1 expressed products by Alphazyme. Dyadic also has the potential to receive additional payments based on future sales of Alphazyme's existing products.
- **New Corporate Website** – In March 2023, the Company launched a new corporate website to better reflect the value proposition of our technology, scientific development, expanded market focus in alternative proteins, and revenue growth opportunities. The new look and user-friendly experience of Dyadic's website has been

designed to be more accessible to potential and current customers, investors, and researchers, while maintaining our commitment to science, quality, and education.

Financial Highlights

Cash Position: As of March 31, 2023, cash, cash equivalents, and the carrying value of investment grade securities, including accrued interest were approximately $11.8 million compared to $12.7 million as of December 31, 2022.

Revenue: Research and development revenue and license revenue for the quarter ended March 31, 2023, increased by 50.9% to approximately $978,000 compared to $648,000 for the quarter ended March 31, 2022.

Cost of Revenue: Cost of research and development revenue for the quarter ended March 31, 2023, increased to approximately $727,000 compared to $405,000 for the quarter ended March 31, 2022.

R&D Expenses: Research and development expenses for the quarter ended March 31, 2023, decreased by 39.6% to approximately $811,000 compared to $1,343,000 for the quarter ended March 31, 2022.

The decrease in research and development expenses was due to the winding down of activities of contract research organization and consultants to manage and support the pre-clinical and clinical development as well as a decrease in cGMP manufacturing costs as the Company completed the dosing of Phase 1 clinical trial of its DYAI-100 RBD COVID-19 booster vaccine candidate in February 2023.

G&A Expenses: General and administrative expenses for the quarter ended March 31, 2023, decreased by 10.6% to approximately $1,480,000 compared to $1,656,000 for the quarter ended March 31, 2022.

Other Income: Other income for the quarter ended March 31, 2023 was from the sale of the equity interest in Alphazyme, LLC.

Net Loss: Net loss for the quarter ended March 31, 2023, was approximately $956,000 or $(0.03) per share compared to $2,492,000 or $(0.09) per share for the quarter ended March 31, 2022.

Conference Call Information

Date: Wednesday May 10, 2023, 5:00 p.m. Eastern Time
Dial-in numbers: Toll Free: 1-877-407-0784 International: 1-201-689-8560 Conference ID: 13734863
Webcast Link: https://viavid.webcasts.com/starthere.jsp?ei=1588259&tp_key=9ecbb63ff2

An archive of the webcast will be available within 24 hours after completion of the live event

and will be accessible on the Investor Relations section of the Company's website at www.dyadic.com. To access the replay of the webcast, please follow the webcast link above.

About Dyadic International, Inc.

Dyadic International, Inc. is a global biotechnology company focused on building innovative microbial platforms to address the growing demand for global protein bioproduction and unmet clinical needs for effective, affordable, and accessible biopharmaceutical products and alternative proteins 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 http://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 and interest in our protein production platforms, our research projects and third-party collaborations, as well as the availability of necessary funding. 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 www.dyadic.com.

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DYADIC INTERNATIONAL, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS

	Three Months Ended March 31,	
	2023	**2022**
Revenues:		
Research and development revenue	$ 933,934	$ 533,721
License revenue	44,118	114,706
Total revenue	978,052	648,427
Costs and expenses:		
Costs of research and development revenue	726,918	404,746
Research and development	810,566	1,342,862
General and administrative	1,480,040	1,655,700
Foreign currency exchange loss (gain)	11,022	(10,248)
Total costs and expenses	3,028,546	3,393,060
Loss from operations	(2,050,494)	(2,744,633)
Other income:		
Interest income	104,731	2,968
Other income	989,319	250,000
Total other income	1,094,050	252,968
Net loss	$ (956,444)	$ (2,491,665)
Basic and diluted net loss per common share	$ (0.03)	$ (0.09)
Basic and diluted weighted-average common shares outstanding	28,761,469	28,251,324

See Notes to Consolidated Financial Statements in Item 1 of Dyadic’s Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 10, 2023.

DYADIC INTERNATIONAL, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

	March 31, 2023	**December 31, 2022**
	(Unaudited)	(Audited)

Assets		
Current assets:		
Cash and cash equivalents	$ 6,374,090	$ 5,794,272
Short-term investment securities	5,362,635	6,847,270
Interest receivable	30,078	58,285
Accounts receivable	754,098	330,001
Prepaid expenses and other current assets	284,597	392,236
Total current assets	12,805,498	13,422,064
Non-current assets:		
Investment in Alphazyme	–	284,709
Other assets	6,065	6,045
Total assets	$ 12,811,563	$ 13,712,818
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 770,371	$ 1,276,313
Accrued expenses	863,041	955,081
Deferred research and development obligations	65,207	40,743
Deferred license revenue, current portion	176,471	176,471
Total current liabilities	1,875,090	2,448,608
Deferred license revenue, net of current portion	132,353	176,471
Total liabilities	2,007,443	2,625,079
Commitments and contingencies (Note 4)		
Stockholders' equity:		
Preferred stock, $.0001 par value:		
Authorized shares – 5,000,000; none issued and outstanding	–	–
Common stock, $.001 par value:		
Authorized shares – 100,000,000; issued shares – 41,064,563 and 40,816,602, outstanding shares – 28,811,061 and 28,563,100 as of March 31, 2023, and December 31, 2022, respectively	41,065	40,817
Additional paid-in capital	104,131,274	103,458,697
Treasury stock, shares held at cost – 12,253,502	(18,929,915)	(18,929,915)
Accumulated deficit	(74,438,304)	(73,481,860)
Total stockholders' equity	10,804,120	11,087,739
Total liabilities and stockholders' equity	$ 12,811,563	$ 13,712,818

See Notes to Consolidated Financial Statements in Item 1 of Dyadic's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 10, 2023.