

Dyadic Reports 2022 Year End Results and Recent Company Progress

- *Received regulatory approval for the ongoing First-In-Human Phase 1 trial to demonstrate clinical safety and antibody response in humans for DYAI-100 COVID-19 recombinant protein receptor binding domain (RBD) booster vaccine candidate which has completed dosing of all patients in both the low and high dose testing groups*
- *Ongoing research and license agreements with Janssen, Hengrui, NIIMBL and others for the C1-expressed therapeutic proteins for human health*
- *Expanded collaboration with Phibro/Abic and others to develop vaccines and treatments for companion and livestock animal diseases*
- *Initiated multiple product candidates to support the newly launched Dapibus™ platform, a fungal-based microbial platform for use in non-pharmaceutical applications, such as food, nutrition, health, and wellness*
- *New license agreement with a Global Food Ingredient Company leveraging Dapibus™ to develop certain food proteins*
- *Five manuscripts published in peer reviewed scientific journals demonstrating safety and persistence of C1-cell produced COVID-19 and influenza antigens*
- *New corporate website to reflect our scientific development expanded market focus in alternative proteins and revenue growth opportunities*
- *2022 revenue increased 21.9% YOY*
- *Cash and investment grade securities of \$12.7 million at year-end 2022*
- *Sale of equity interest in Alphazyme LLC; received approximately \$1.27 million in January 2023*
- *Financial results and business update conference call scheduled for 5:00 pm ET today*

JUPITER, Fla., March 29, 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 bioproduction and unmet clinical needs for effective, affordable, and accessible biopharmaceutical products for human and animal health, and alternative proteins for food, nutrition and wellness, today announced its financial results for year end 2022 and highlighted recent Company progress.

“In 2022, we made significant advances in our technology and saw meaningful progress in each of our three core verticals,” said Mark Emalfarb, Dyadic’s President and Chief Executive Officer, “Receiving regulatory approval for our First-In-Human Phase 1 trial for our proprietary DYAI-100 COVID-19 recombinant protein receptor binding domain (RBD) booster vaccine candidate was a historical event for Dyadic. We have completed dosing of all patients in both the low and high dose testing groups and thus far, DYAI-100 has been well tolerated with no serious adverse events being reported. The Phase 1 trial is expected to accelerate the adoption of Dyadic’s C1-cell protein production platform for vaccines and therapeutic candidates, and I’m pleased to share that since we initiated the Phase 1 trial, we are seeing

an increased level of interest from academia, industry, and government agencies in our human biopharmaceuticals business, and we are continuing to make progress in our current collaborations with Janssen, Hengrui, NIIMBL and others.”

Exhibit 99.1

Mr. Emalfarb continued, “We have made additional advances in animal health by expanding our relationship with Phibro and initiating a fully funded companion animal proof of concept study with a top five animal health company. We have also seen increased interest from animal health companies in the C1 protein production platform for pandemic threat response and preparation due to C1’s highly efficient and economical approach to the rapid manufacture of large quantities of vaccines. In our rapidly expanding vertical of alternative proteins, we initiated a fully funded research collaboration with a Global Food Ingredient Company to develop certain food proteins where we recently reached the first milestone in this challenging project. We are continuing to develop the Dapibus™ platform, a fungal-based microbial platform for use in non-pharmaceutical applications, such as food, nutrition, health, and wellness, with the objective of generating near term revenues.”

Joe Hazelton Dyadic’s Chief Business Officer commented, “In 2023, we will focus on product commercialization and licensing opportunities that have less time, cost, and risk associated with development that can improve our revenue outlook in the near term, while we continue to drive broader pharmaceutical acceptance of the C1 platform.” Mr. Hazelton continued, “We have refined our business development focus and objectives in the core areas where our technologies can have the greatest impact in the shortest time transecting multiple core verticals simultaneously as we evaluate new opportunities aligned with our verticals in targeted markets of high potential return. One example from a product view is our recently announced non-animal serum albumin products which can be produced recombinantly using Dyadic microbial platforms and is used in both pharmaceutical and non-pharmaceutical applications across all three of our core verticals in a wide variety of human and animal uses such as therapeutic, product development, research, diagnostic, and food.”

“In addition to refining our product focus in 2023, our licensing strategy will focus on larger scope licensing agreements with pharmaceutical and non-pharmaceutical partners that will help drive greater long-term value. We will refine our approach to meet the changing pharmaceutical and non-pharmaceutical landscape as we evaluate, expand, and broaden existing partnerships and explore new broader scope agreements with flexible financial models,” concluded Mr. Hazelton.

Recent Company Progress

Human Health

- **C1 COVID-19 vaccine collaborations**

- **DYAI-100**

- The Phase 1 randomized, double blind, placebo-controlled trial is designed as a first-in-human trial to assess the clinical safety and antibody response of DYAI-100, a C1-SARS-CoV-2 recombinant protein RBD vaccine, produced using the C1 platform, administered as a booster vaccine at two single dose levels in healthy volunteers. Following the regulatory approval from the South African Health Products Regulatory Authority (SAHPRA) in late 2022, site preparations and patient recruitment began in South Africa for initiation of the Phase 1 clinical trial and dosing for eligible patients initiated during the week of January 9th.
- The trial includes healthy patients ages 18-55 in a randomization scheme of 4:1 with 15 subjects per cohort. Following the screening period there are 8 scheduled clinic visits with the first 6 visits occurring within the first 29 days and two follow up visits on Days 90 and 180. Safety data will be collected throughout the trial and immunogenicity assessments are scheduled on patient visits 1, 4, 5, 6 and the two follow up visits on Days 90 and 180.
- Dosing of both low and high dose groups was completed in February 2023, with no serious adverse events reported to date. A full study report is expected to be available in the second half of 2023.
- **Rubic One Health** -This is a collaboration to develop end-to-end solutions for vaccine discovery, development, and manufacture for the African market. Tech transfer of C1-cell protein production platform has been completed. Rubic has begun engineering and growing C1-cells to prepare for the development of affordable vaccines and drugs for the African continent.
- **Epygen** - In 2020, the Company entered into a non-exclusive technology usage agreement with Epygen Biotech of India, who plans to conduct clinical trials in India using one or more of the COVID-19 antigens that they are manufacturing using the Company's C1 protein production platform. Epygen reported that it has procured funding from the government of India, and they are progressing their vaccine development and production using antigens produced from the Company's C1-cell protein production platform across early-stage pre-clinical studies and to conduct Phase 1 and Phase 2 human clinical trials.
- **Research, License and Collaboration Agreement with Janssen** - During 2022, progress continues on the research, license and collaboration agreement with Janssen Biotech, Inc. ("Janssen"), one of the Janssen Pharmaceutical Companies of Johnson & Johnson. The agreement provides for an up-front payment of \$500,000 for non-exclusive rights to utilize the C1-cell protein production platform for a limited number of Janssen's therapeutic protein candidates. This is a fully funded collaboration which has the potential for Dyadic to receive multiple milestone and commercial payments of seven and nine figures, respectively, per protein.

- **NIIMBL Coronavirus Grant** – Dyadic received 1 of 32 project grants awarded by the National Institute for Innovation in Manufacturing Biopharmaceuticals (“NIIMB”) funded through the White House’s American Rescue Plan (“ARP”). Under the \$690,000 NIIMBL grant, in 2022 the Company has received approximately 75% of the funding to engineer the Company’s proprietary and patented C1-cell protein production platform to produce two different antibodies, one of which is a COVID-19 antibody.
- **Third Party C1 Produced COVID-19 Antibody** – A non-human primate challenge study completed dosing of a C1 produced COVID-19 monoclonal antibody (mAb) that had previously demonstrated broad neutralization and protection against Omicron (BA.1 and BA.2) and the other earlier variants of concern in hamsters. Preliminary results obtained from the challenge study with the SARS-CoV-2 Delta virus on non-human primates demonstrated potential high protection. This was the first time a C1 produced monoclonal antibody was used in a non-human primate study validating the safety and efficacy of a C1 produced antibody for infectious diseases.
- **Recombinant Serum Albumin** – Animal free recombinant serum albumin projects were initiated in late 2022 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 and Dyadic expects to start sampling potential customers who have expressed interest in Dyadic’s C1 serum albumin products.
- **University of Oslo** – During 2022, Dyadic expanded its influenza vaccine collaboration with the University of Oslo.
 - Mice vaccinated with C1 antigen combined with an adjuvant (AS03) challenged with a lethal dose of the homologous influenza A/H1N1 showed no clinical signs, no body weight loss, and were fully protected.
 - Other mice trials are ongoing with C1 produced hemagglutinin (HA) and neuraminidase (NA) antigens for influenza, including H1N1, H5N1 (Bird Flu), H7, NA alone and combined with one or more C1 produced SARS-CoV-2 antigens. The current and future data is expected to support the development of seasonal and pandemic influenza vaccine candidates alone or in combination with other infectious respiratory diseases such as coronaviruses.
- **Virovax** – Dyadic has been working with Virovax to develop the 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 and additional animal studies are ongoing and/or scheduled with C1 produced antigens for influenza (H5N1/Bird Flu), COVID-19 and other infectious diseases.
- **UC Davis**
 - Successful production of the SARS-CoV-2 Spike S2 protein reaching ~1g/L and

97% purity which showed the same ACE2 binding affinity as CHO produced spike S2 protein.

- UC Davis is carrying out additional research and development work related to expanding the potential applications of the C1-cell protein production platform including diagnostics.

Animal Health

• Phibro Animal Health

- On February 8, 2022, the Company entered into an exclusive sublicense agreement with Abic Biological Laboratories Ltd. (“Abic”), an affiliate of Phibro Animal Health Corporation (“Phibro”), based off an existing July 1, 2020, non-exclusive sublicense and development agreement (the “Phibro/Abic Agreement”), to provide services for a targeted disease.
- In July 2022, the Company expanded the Phibro/Abic Agreement to include an additional research project to develop an additional animal vaccine for livestock.

• Monoclonal Antibodies Collaboration

- The Company initiated a fully funded research and development collaboration with a top five animal health company to produce therapeutic monoclonal antibodies for use in treating diseases in companion animals. The project is currently underway and on target to meet development milestones per the research agreement.

Alternative Proteins

- The Company has developed the Dapibus™ thermophilic 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. The initial response from food and nutrition industry has been positive with a rising level of interest.
- The Company is making progress with a joint development agreement that was entered in May 2022, with a global food ingredient company, to develop and manufacture several animal free ingredient products using the Company’s technology. Dyadic has achieved the first milestone, for which payment is expected in Q2 of 2023.
- Animal free recombinant serum albumin projects were initiated for use in potential non-pharmaceutical applications such as a component of cell culture media in nutrition, health, and food. Dyadic expects to start sampling potential customers who have expressed interest in Dyadic’s serum albumin products.

Other Events

- **Alphazyme Sale** – In January 2023, the Company received approximately \$1.27 million in connection with the sale of its equity interest in Alphazyme LLC (“Alphazyme”). Dyadic previously received its equity as part of the consideration for the grant of a non-exclusive license to certain of Dyadic’s technology. Additionally, Dyadic has the right to receive milestone and royalty payments based on potential sales of C1 expressed products by Alphazyme. Dyadic also has the potential to receive additional payments based on the future sales of Alphazyme’s existing products.
- **Peer Reviewed Journals** – In 2022 and early 2023, the Company and its collaborators have published five scientific research studies and papers in leading peer-reviewed scientific journals regarding its proprietary C1-cell protein production platform and vaccine candidate by using C1-expressed antigens.
- **New Corporate Website** – In March 2023, the Company launched a new corporate website to reflect our 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 our potential and current customers, investors, and researchers, while maintaining our commitment to science, quality, and education.

Financial Highlights

Cash Position: As of December 31, 2022, cash, cash equivalents, and the carrying value of investment grade securities, including accrued interest, were approximately \$12.7 million compared to \$20.4 million on December 31, 2021. In January 2023, the Company received \$1.27 million in connection with the sale of Alphazyme LLC. Based on current plans, the Company expects that its existing cash, cash equivalents and investment securities will be sufficient to enable it to complete its Phase 1 clinical trial of DYAI-100 and fund its operations into 2024.

Revenue: Research and development revenue for the year ended December 31, 2022, increased to approximately \$2,930,000 compared to \$2,404,000 for the year ended December 31, 2021. The license revenue recorded in the year ended December 31, 2022 was related to the Phibro/Abic and Janssen license agreements.

Cost of Revenue: Cost of research and development revenue for the year ended December 31, 2022, increased to approximately \$2,123,000 compared to \$1,944,000 for the year ended December 31, 2021. The increase in revenue and cost of research and development revenue for the year ended December 31, 2022, was due to various larger research collaborations conducted in 2022.

R&D Expenses: Research and development expenses for the year ended December 31, 2022, decreased to approximately \$4,501,000 compared to \$8,392,000 for the year ended

December 31, 2021. The decrease primarily reflects the winding down of activities for contract research organizations and pharmaceutical quality and regulatory consultants to support the Phase 1 clinical trial of DYAI-100 COVID-19 vaccine candidate.

G&A Expenses: General and administrative expenses for the year ended December 31, 2022, decreased to approximately \$6,422,000 compared to \$6,698,000 for the year ended December 31, 2021. The decrease principally reflects a decrease in legal expenses of \$500,000, offset by increases in incentives of \$133,000, insurance premiums of \$56,000, business development and investor relations costs of \$16,000, and other increases of \$19,000.

Foreign Currency Exchange: Foreign currency exchange loss for the year ended December 31, 2022, was approximately \$50,000 compared to \$97,000 for the year ended December 31, 2021. The decrease reflects the currency fluctuation of the Euro in comparison to the U.S. dollar.

Interest Income: Interest income for the year ended December 31, 2022, increased to approximately \$180,000 compared to \$52,000 for the year ended December 31, 2021. The increase was primarily due to an increase in interest rates and yield on the Company's investment grade securities, which are classified as held-to-maturity.

Other Non-Operating Items: For the year ended December 31, 2022, the Company recorded \$250,000 related to a settlement payment we received from the termination of a proposed license and collaboration. For the year ended December 31, 2021, the Company recorded a gain from the sale of its investment in BDI in the amount of approximately \$1,606,000.

Net Loss: Net loss for the year ended December 31, 2022, was approximately \$9.7 million, or \$(0.34) per share, compared to a net loss of \$13.1 million, or \$(0.47) per share, for the year ended December 31, 2021.

Conference Call Information

Date: Wednesday, March 29, 2023

Time: 5:00 p.m. Eastern Time

Dial-in numbers: Toll Free: 877-407-0784

International: 201-689-8560

Conference ID: 13734862

Webcast Link: https://viaid.webcasts.com/starthere.jsp?ei=1588257&tp_key=7e701cd0d7

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

	Years Ended December 31,	
	2022	2021
Revenues:		
Research and development revenue	\$ 2,683,244	\$ 2,403,831
License revenue	247,059	-
Total revenue	2,930,303	2,403,831
Costs and expenses:		
Costs of research and development revenue	2,123,193	1,944,438
Research and development	4,501,365	8,392,370
General and administrative	6,421,505	6,697,617
Foreign currency exchange loss	49,918	96,893
Total costs and expenses	13,095,981	17,131,318
Loss from operations	(10,165,678)	(14,727,487)
Other income:		
Interest income	180,420	51,704
Other income	250,000	1,605,532
Total other income	430,420	1,657,236
Net loss	\$ (9,735,258)	\$ (13,070,251)
Basic and diluted net loss per common share	\$ (0.34)	\$ (0.47)
Basic and diluted weighted-average common shares outstanding	28,364,482	27,838,047

See Notes to Consolidated Financial Statements in Part I of Dyadic's Annual Report on Form 10-K filed with Securities and Exchange Commission on March 29, 2023.

DYADIC INTERNATIONAL, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

December 31,
2022 2021

Assets

Current assets:

Cash and cash equivalents	\$ 5,794,272	\$15,748,480
Short-term investment securities	6,847,270	4,511,780
Interest receivable	58,285	94,375
Accounts receivable	330,001	277,831
Prepaid expenses and other current assets	392,236	375,830
Total current assets	13,422,064	21,008,296

Non-current assets:

Investment in Alphazyme	284,709	284,709
Other assets	6,045	6,117
	\$13,712,818	\$21,299,122

Total assets**Liabilities and stockholders' equity**

Current liabilities:

Accounts payable	\$ 1,276,313	\$ 1,547,953
Accrued expenses	955,081	709,560
Deferred research and development obligations	40,743	151,147
Deferred license revenue, current portion	176,471	147,059
Total current liabilities	2,448,608	2,555,719
Deferred license revenue, net of current portion	176,471	352,941

Total liabilities

Commitments and contingencies (Note 5)

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 – 40,816,602 and 40,482,659, outstanding shares – 28,563,100 and 28,229,157 as of December 31, 2022 and 2021, respectively	40,817	40,483
	103,458,69	101,026,49
Additional paid-in capital	7	6
	(18,929,91	(18,929,91
Treasury stock, shares held at cost – 12,253,502	5)	5)
	(73,481,86	(63,746,60
Accumulated deficit	0)	2)
Total stockholders' equity	11,087,739	18,390,462
	\$13,712,818	\$21,299,122

Total liabilities and stockholders' equity

See Notes to Consolidated Financial Statements in Part I of Dyadic's Annual Report on Form 10-K filed with Securities and Exchange Commission on March 29, 2023.

