Dyadic Reports 2024 Year-End Financial Results and Business Updates

- *Strong revenue performance, including approximately $1.9 million milestone and license revenue recognized in 2024*
- *Up to $7.5 million in grants awarded from CEPI and Gates Foundation intended to accelerate the C1 platform development timeline to manufacture vaccines and antibodies faster at a lower cost*
- *Growth in commercial pipelines with multiple products nearing market launch, including Human Serum Albumin and DNASe1*
- *Expanded alternative protein portfolio with six additional life science products in development for research, nutritional, and cell culture media applications*
- *Continued advancements in animal and human health*
- *Cash and investment-grade securities of $9.3 million as of December 31, 2024*
- *Financial results and business update conference call scheduled for 5:00 pm ET today*

JUPITER, Fla., March 26, 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 its financial results for the full year 2024, highlighting significant progress in commercializing its proprietary Dapibus™ and C1 microbial protein production platforms and driving long-term growth opportunities.

“We believe our strong 2024 performance and achievements underscore Dyadic’s commitment to leveraging our advanced microbial protein production platforms to accelerate commercialization and drive sustained revenue in high-value alternative protein applications,” said Mark Emalfarb, Dyadic’s Chief Executive Officer. “Our strategic focus on developing products in profitable non-pharmaceutical market segments has resulted in key milestones, including $1.9 million in revenue from our cell culture media and non-animal dairy segments.

“We continue to expand our biopharmaceutical capabilities through collaborations with globally recognized organizations, including the Coalition for Epidemic Preparedness Innovations, Fondazione Biotecnopolo di Siena, and the Bill & Melinda Gates Foundation. We believe these partnerships will support the advancement and potential adoption of our C1 protein production platform and contribute to the development of biopharmaceutical pipelines. These efforts are expected to create additional growth opportunities in both human and animal health markets.

“As we move forward, Dyadic remains committed to expanding the reach of our C1 and Dapibus™ platforms across alternative proteins, and human and animal health. With a growing network of partnerships and increased funding support, we believe we are well-

positioned to drive innovation, enhance global accessibility, and reduce costs in manufacturing of recombinant proteins while delivering sustained value for our investors and stakeholders," Mr. Emalfarb concluded.

Recent Company Progress

Product Commercialization Targets

- Non-Animal Cell Culture Media
  - **Human Serum Albumin:** A vital cell culture media component that supports cell growth, survival and function for use in cell culture media, diagnostics, and as a stabilizing agent for vaccine production. In partnership with Proliant Health and Biologicals("Proliant"), Dyadic is progressing toward an expected commercial launch in Q2 2025 as a key component of cell culture media. Additionally, Dyadic anticipates achieving a third milestone payment in Q3 2025 related to productivity improvements.
  - **Transferrin:** Dyadic is actively engaging partners and providing samples of its recombinant transferrin, an animal-free alternative to serum-derived transferrin for use in cell culture media, diagnostic, research, and biopharmaceutical applications. In an initial cell proliferation study, Dyadic's recombinant transferrin demonstrated comparable performance to a recombinant reference standard, highlighting its potential as a high-quality, cost-effective non-animal alternative for research and commercial bioprocessing applications.
  - **Growth Factors:** Dyadic is advancing the development of recombinant Fibroblast Growth Factor ("FGF") products for cell culture media and biopharmaceutical applications. As a critical driver of cell growth and proliferation, recombinant FGF plays an essential role in biomanufacturing, regenerative medicine, and cell-based therapies, particularly in serum-free and chemically defined cell culture media. Initial cell proliferation studies have demonstrated that Dyadic's recombinant FGF products exhibit comparable performance to reference standard recombinant FGF. In addition to further characterization and validation efforts, sampling initiatives are expected to begin in Q2 2025.
- Non-animal Dairy Applications
  - **Alpha-Lactalbumin:** Dyadic has continued the development of a highly productive cell line to produce recombinant alpha-lactalbumin, a key whey protein, for use in non-pharmaceutical applications such as research-grade material and food. Discussions are ongoing with interested parties across the R&D and non- animal dairy products segment. Accordingly, Dyadic has increased sampling and further protein characterization efforts to accelerate collaboration and commercialization opportunities.
  - **Human lactoferrin:** Dyadic has successfully developed a cell line to produce stable human lactoferrin protein for use in research and pharmaceutical

applications as potential antimicrobial, anti-inflammatory, and immune-supportive products. Ongoing optimization and characterization efforts are underway, and the Company expects to begin sampling efforts in 2H 2025.
    - **Dairy Enzymes:** In addition to receiving a productivity milestone payment in 2024 for a recombinant dairy enzyme, commercialization efforts are ongoing with an anticipated launch in late 2025. Additional dairy enzymes are in development under the exclusive license agreement entered into in 2023 to commercialize certain non-animal derived dairy enzymes.
- Reagent Proteins & DNA/RNA Enzymes
    - **DNase1 (RNase-free):** Dyadic's DNASe-1 product designed for use in molecular diagnostics, biopharma, and other industries is progressing toward commercial availability. In addition to exploring licensing opportunities, Dyadic has partnered with an EU-based Contract Development and Manufacturing Organization ("CDMO") to validate the production process for DNase1 (RNase-Free) and the initial manufacture of research-grade material.
    - **Expanded Enzyme Portfolio:** Dyadic has developed and validated prototypes for four additional enzymes, including RNase Inhibitors and T7 RNA Polymerase, to support the growing demand for DNA/RNA manipulation tools. Development and optimization are ongoing with results expected by the end of 2025.
- Bio Industrial Products
    - In 2023, the Company entered into a development and commercialization agreement with Fermbox Bio ("Fermbox"), a synthetic biology research and manufacturing company. In May 2024, Fermbox announced the launch of EN3ZYME, an enzyme cocktail designed to enhance both the efficiency and cost-effectiveness of transforming pre-treated Agri-based residues into fermentable, cellulosic sugars produced using Dyadic's Dapibus™ expression platform.
    - Dyadic has continued the development of several enzymes with potential for use in multiple industries, such as nutrition, biogas, biofuels and biorefining. Sampling has been initiated with interested parties.

Grants and Funding

- **$4.5 Million Grant received from the Coalition for Epidemic Preparedness to Accelerate the C1 Platform for Rapid Vaccine Development**
  On March 20, 2025, the Company announced that Dyadic's C1 platform is being advanced through a $4.5 million CEPI grant to Fondazione Biotecnopolo di Siena ("FBS") to accelerate recombinant protein vaccine development and manufacturing. The funding will support antigen design, cell line development, optimization, characterization, and scale-up to cGMP manufacturing. If successful, the next phase will focus on selecting a CEPI-priority pathogen antigen. Dyadic, as a subcontractor, is expected to receive up to $2.4 million of the total grant.
- **$3 Million Gates Foundation Grant**

On November 21, 2024, the Company announced that it was awarded a $3 million grant from the Gates Foundation for the cell line development of monoclonal antibodies targeting respiratory syncytial virus (“RSV”) and malaria utilizing the Company’s proprietary C1 protein production platform to provide globally accessible treatment options for underserved populations.

Animal and Human Health

- C1 produced Ferritin Nanoparticle Vaccines
  - H5 Avian Influenza (“Bird Flu”) Vaccine Candidate (in collaboration with ViroVax, LLC):
    - A C1-produced, self-assembling ferritin nanoparticle antigen is under evaluation for diagnostics and vaccines across poultry, cattle, humans, and companion animals to help address the ongoing Bird Flu outbreak.
    - Pre-commercial research and validation efforts are actively underway to support potential strategic partnerships and licensing opportunities.
  - Mpox Vaccine Candidate (in collaboration with ViroVax): A C1-produced ferritin nanoparticle Mpox vaccine candidate is in the early stage of preclinical development. This project not only would expand our portfolio but also would reinforce the C1 platform’s proven ability to rapidly develop and produce cost-effective recombinant protein vaccine antigens.
- Diagnostics & Vaccines
  - On March 15, 2024, the Company expanded its collaboration with Phibro Animal Health/Abic Biological Laboratories Ltd to develop vaccines and treatments for companion and livestock animal diseases.
  - H5 Avian Influenza Cross-Protection: The C1-produced adjuvanted ferritin nanoparticle H5-2.3.4.4b A/Astrakhan vaccine candidate has demonstrated cross-protection against multiple H5 virus strains in early-stage research, indicating a broad protective potential.
  - Poultry & Cattle Applications:
    - Poultry: Early trials show that the C1-produced H5-2.3.4.4b A/Astrakhan antigen generates neutralizing antibodies, supporting its potential commercial viability for vaccines and diagnostic tools.
    - Cattle: Preliminary diagnostic and vaccine development data suggest promising cross-protection, highlighting a significant opportunity in a broader market segment.

Financial Highlights

Cash Position: As of December 31, 2024, cash, cash equivalents, and the carrying value of investment-grade securities, including accrued interest, was approximately $9,288,000 compared to $7,273,000 as of December 31, 2023.

Revenue: Total revenue for the year ended December 31, 2024, increased to approximately $3,495,000 compared to $2,899,000 for the year ended December 31, 2023. The increase in revenue was driven by the license revenue of $1,000,000 from Proliant and approximately $890,000 from Inzymes ApS, including success fees in 2024.

Cost of Revenue: Cost of research and development revenue for the year ended December 31, 2024, decreased to approximately $1,195,000 compared to $1,976,000 for the year ended December 31, 2023. The decrease in cost of revenue was due to higher individual contract amounts on certain research funding and related work performed during 2023.

R&D Expenses: Research and development expenses for the year ended December 31, 2024 decreased to approximately $2,044,000 compared to $3,297,000 for the year ended December 31, 2023. The decrease was due to the completion of the Company's Phase 1 clinical trial of DYAI-100 COVID-19 vaccine candidate.

G&A Expenses: General and administrative expenses for the year ended December 31, 2024, increased to approximately $6,135,000 compared to $5,817,000 for the year ended December 31, 2023. The increase reflected increases in business development and investor relations expenses of approximately $294,000, share-based compensation expenses of $109,000, professional service expenses of $82,000, and other increases of $84,000, partially offset by decreases in management incentive expenses of $124,000, legal expenses of $65,000 and insurance expenses of $64,000.

Loss from Operations: Loss from operations for the year ended December 31, 2024, was approximately $5,901,000, compared to $8,230,000, for the year ended December 31, 2023. The decrease was due to an increase in licensing revenue of $1,000,000 from Proliant and approximately $890,000 from Inzymes ApS including success fees, as well as a decrease in R&D expenses in 2024.

Other Income, Net: For the year ended December 31, 2024, the total other income, net, was approximately $92,000 compared to $1,434,000 for the year ended December 31, 2023. The decrease was due to an increase in interest expenses of $428,000 related to the convertible notes in 2024 and a gain on the sale of the Company's equity interest in Alphazyme, LLC of $1,018,000 in 2023.

Net Loss: Net loss for the year ended December 31, 2024, was approximately $5,809,000, or $(0.20) per share, compared to a net loss of $6,795,000, or $(0.24) per share, for the year ended December 31, 2023.

Conference Call Information

Date: Wednesday, March 26, 2025 Time: 5:00 p.m. Eastern Time
Dial-in numbers: Toll Free: 1-877-407-0784 International: 1-201-689-8560

Conference ID: 13751386

Webcast Link: https://viavid.webcasts.com/starthere.jsp?ei=1705988&tp_key=509eb4b293

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 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.

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 clinical trial and interest in our protein production platforms, our research projects and third-party collaborations, as well as the availability of necessary funding. Forward-looking statements generally can be identified by use of the words "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) failure to commercialize our microbial protein production platforms or our other technologies; (iv) competition, including from alternative technologies; (v) the results of nonclinical studies and clinical trials; (vi) our capital needs; (vii) changes in global economic and financial conditions; (viii) our reliance on information technology; (ix) our dependence on third parties; (x) government regulations and environmental, social and governance issues; and (xi) 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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DYADIC INTERNATIONAL, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS

	Years Ended December 31,	
	2024	**2023**
Revenues:		
Research and development revenue	$ 1,605,220	$ 2,545,865
License revenue	1,890,169	352,941
Total revenue	3,495,389	2,898,806
Costs and expenses:		
Costs of research and development revenue	1,194,624	1,975,849
Research and development	2,044,253	3,297,266
General and administrative	6,134,773	5,817,013
Foreign currency exchange loss	22,561	38,417
Total costs and expenses	9,396,211	11,128,545
Loss from operations	(5,900,822)	(8,229,739)
Other income (expense):		
Interest income	456,992	416,686

Gain on sale of Alphazyme			62,642	1,017,592
Interest expense			(288,142)	–
Interest expense – related party			(139,829)	–
Total other income (expense), net			91,663	1,434,278
Net loss		$	(5,809,159)	$ (6,795,461)
Basic and diluted net loss per common share		$	(0.20)	$ (0.24)
Basic and diluted weighted-average common shares outstanding			29,318,123	28,798,833

See Notes to Consolidated Financial Statements in Dyadic's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 26, 2025.

DYADIC INTERNATIONAL, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

		December 31,	
		2024	**2023**
Assets			
Current assets:			
Cash and cash equivalents	$	6,506,750	$ 6,515,028
Short-term investment securities		2,756,577	748,290
Interest receivable		24,248	10,083
Accounts receivable		237,027	466,159
Prepaid expenses and other current assets		303,066	327,775
Total current assets		9,827,668	8,067,335
Non-current assets:			
Operating lease right-of-use asset, net		92,211	141,439
Other assets		10,396	10,462
Total assets	$	9,930,275	$ 8,219,236
Liabilities and stockholders' equity			
Current liabilities:			
Accounts payable	$	482,320	$ 656,445
Accrued expenses		970,462	1,057,164
Deferred research and development obligations		833,813	490,113
Operating lease liability, current portion		54,249	48,059
Accrued interest		80,000	–
Accrued interest – related party		27,173	–
Total current liabilities		2,448,017	2,251,781
Non-current liabilities:			
Convertible notes, net of issuance costs		3,911,471	–
Convertible notes, net of issuance costs – related party		1,065,876	–
Operating lease liability, net of current portion		34,621	88,870
Total liabilities		7,459,985	2,340,651
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 – 42,089,301 and 41,064,563, outstanding shares – 29,835,799 and 28,811,061 as of December 31, 2024 and 2023, respectively	42,090	41,065
Additional paid-in capital	107,444,595	105,044,756
Treasury stock, shares held at cost – 12,253,502	(18,929,915)	(18,929,915)
Accumulated deficit	(86,086,480)	(80,277,321)
Total stockholders' equity	2,470,290	5,878,585
Total liabilities and stockholders' equity	$ 9,930,275	$ 8,219,236

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