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bioAffinity Technologies Increases Efficiency of CyPath® Lung Test by Boosting Data Acquisition Throughput by 50% and Reducing Unit Cost

Process optimization enhances data acquisition and processing speed, lowers reagent costs, and maintains test performance for early lung cancer detection.

SAN ANTONIO--(BUSINESS WIRE)-- **bioAffinity Technologies, Inc. (Nasdaq: BIAF; BIAFW),** a biotechnology company focused on the need for noninvasive, accurate tests for the detection of early-stage lung cancer, today announced implementation of key efficiency measures for its flagship product, CyPath® Lung, the Company's noninvasive test for detection of lung cancer. These improvements are projected to decrease the time required to acquire sample data for analysis by nearly 50% and reduce the cost of sample processing by approximately 60%.

The recent enhancements streamline lab processing and data acquisition workflows, reduce reagent usage, and cut laboratory supply costs—all without changing the test itself, how patient sputum samples are collected and processed, or the method by which data is acquired and analyzed. The improvements are expected to result in a greater than 10% increase in overall throughput and a greater than 25% decrease in unit cost.

"The improvements we are announcing today are a result of a year-long operational analysis of how we could improve CyPath® Lung without compromising the test's high performance and without modification to the test that has been validated by our clinical trial," bioAffinity Technologies President and CEO Maria Zannes said.

CyPath® Lung uses flow cytometry and artificial intelligence to identify cell populations in patient sputum that indicate malignancy. Clinical study results demonstrated that CyPath® Lung had 92% sensitivity, 87% specificity and 88% accuracy in detecting lung cancer in patients at high risk for the disease who had small lung nodules less than 20 millimeters.

"Optimization of CyPath® Lung is a key objective for our product development team. Alongside refining our branding, expanding our market and building sales, we evaluated operations to confirm to our shareholders that we are providing a cost-effective, accessible lung cancer diagnostic that meets a global need for earlier diagnosis to improve outcomes and increase patient survival while also reducing healthcare costs," Zannes said.

Zannes highlighted a recent economic impact study, authored by pulmonologists Michael Morris, MD, and Sheila Habib, MD, that showed economic benefit for patients and the

healthcare system if CyPath® Lung is added to the current standard of care. The study found that an average cost savings of $2,773 per patient would have been achieved in 2022 if CyPath® Lung had been part of the standard of care for Medicare patients with a positive lung cancer screening, for a total of $379 million. For privately insured patients, the savings could have reached an average of $6,460 per patient, or $895 million nationwide.

The study, "Economic Evaluation of a Novel Lung Cancer Diagnostic in a Population of Patients with a Positive Low-Dose Computed Tomography Result," attributes the savings to a reduction in follow-up diagnostic assessments, expensive follow-up procedures and procedure-related complications. "The study by Dr. Morris and Dr. Habib reinforces the broader economic and clinical value of CyPath® Lung within the healthcare landscape," Zannes said.

About CyPath® Lung

CyPath® Lung uses proprietary advanced flow cytometry and artificial intelligence (AI) to identify cell populations in patient sputum that indicate malignancy. Automated data analysis helps determine if cancer is present or if the patient is cancer-free. CyPath® Lung incorporates a fluorescent porphyrin that is preferentially taken up by cancer and cancer-related cells. Clinical study results demonstrated that CyPath® Lung had 92% sensitivity, 87% specificity and 88% accuracy in detecting lung cancer in patients at high risk for the disease who had small lung nodules less than 20 millimeters. Diagnosing and treating early-stage lung cancer can improve outcomes and increase patient survival. For more information, visit www.cypathlung.com.

About bioAffinity Technologies, Inc.

bioAffinity Technologies, Inc. addresses the need for noninvasive diagnosis of early-stage cancer and other diseases of the lung and broad-spectrum cancer treatments. The Company's first product, CyPath® Lung, is a noninvasive test that has shown high sensitivity, specificity and accuracy for the detection of early-stage lung cancer. CyPath® Lung is marketed as a Laboratory Developed Test (LDT) by Precision Pathology Laboratory Services, a subsidiary of bioAffinity Technologies. For more information, visit www.bioaffinitytech.com.

Forward-Looking Statements

Certain statements in this press release constitute "forward-looking statements" within the meaning of the federal securities laws. Words such as "may," "might," "will," "should," "believe," "expect," "anticipate," "estimate," "continue," "predict," "forecast," "project," "plan," "intend" or similar expressions, or statements regarding intent, belief, or current expectations, are forward-looking statements. These forward-looking statements are based upon current estimates and assumptions and include statements regarding efficiency measures projected to decrease the time required to acquire sample data for analysis by nearly 50% and reduce the cost of sample processing by approximately 60%; improvements resulting in a greater than 10% increase in overall throughput and a greater than 25% decrease in unit cost; and achieving significant savings per Medicare and private-payer patients if CyPath® Lung is added to the current standard of care for indeterminate pulmonary nodules. These forward-looking statements are subject to various risks and uncertainties, many of which are difficult to predict, that could cause actual results to differ

materially from current expectations and assumptions from those set forth or implied by any forward-looking statements. Important factors that could cause actual results to differ materially from current expectations include, among others, the Company's ability to make improvements to CyPath® Lung that decrease the time required to acquire sample data for analysis by nearly 50% and reduce the cost of sample processing by approximately 60%, and the other factors discussed in the Company's Annual Report on Form 10-K for the year ended December 31, 2024, and its subsequent filings with the SEC, including subsequent periodic reports on Forms 10-Q and 8-K. Such forward-looking statements are based on facts and conditions as they exist at the time such statements are made and predictions as to future facts and conditions. While the Company believes these forward-looking statements are reasonable, readers of this press release are cautioned not to place undue reliance on any forward-looking statements. The information in this release is provided only as of the date of this release, and the Company does not undertake any obligation to update any forward-looking statement relating to matters discussed in this press release, except as may be required by applicable securities laws.

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bioAffinity Technologies
Julie Anne Overton
Director of Communications
jao@bioaffinitytech.com

Investor Relations
Dave Gentry
RedChip Companies Inc.
1-800-RED-CHIP (733-2447) or 407-491-4498
BIAF@redchip.com

Source: bioAffinity Technologies, Inc.