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bioAffinity Technologies Expands Patent Portfolio with China Grant for siRNA-Based Cancer Therapy

Company research targets topical application for treatment of skin cancers

SAN ANTONIO, Texas--(BUSINESS WIRE)-- **bioAffinity Technologies, Inc. (Nasdaq: BIAF; BIAFW)**, a biotechnology company advancing early-stage diagnostics and targeted therapeutics for cancer, today announced that the China National Intellectual Property Administration (CNIPA) has issued a notification of patent grant for the company's novel composition and method for selectively killing cancer by targeting the CD320 and LRP2 receptors on the cell membrane.

The newly allowed Chinese patent – titled "Compositions and Methods for Treating Cancer" – adds important global protection for bioAffinity's innovative RNA-based therapeutic strategy and covers siRNAs and their use in cancer treatment, which is also protected by the Company's new U.S. Patent No. 12,305,171.

The invention uses small interfering RNAs (siRNAs) to suppress the expression of CD320 and LRP2 proteins. In vitro research demonstrates this siRNA-driven double knockdown effectively targets cancer cells from multiple tumor types, including lung, breast, prostate, brain, and skin, without harming normal cells, suggesting a universal mechanism of action.

bioAffinity is exploring the application of this technology as a topical treatment specifically designed for cutaneous malignancies and neoplasms of the skin. This development aligns closely with the Company's broader strategy of addressing cancer through both early-stage diagnostics, exemplified by CyPath® Lung, and innovative therapeutic approaches.

"This newly allowed patent expands our global intellectual property portfolio and strengthens our position in developing siRNA-based therapies that exploit a fundamental vulnerability in cancer cells," said William Bauta, PhD, Chief Science Officer at bioAffinity Technologies. "Our research has shown that silencing CD320 and LRP2 leads to cancer cell death without harming normal cells – a highly selective approach with potential for broad therapeutic application."

bioAffinity continues to advance its high-growth core diagnostic platform, CyPath® Lung, an accurate, noninvasive test for early-stage lung cancer detection, while simultaneously leveraging its scientific expertise toward novel therapeutic solutions that address critical unmet medical needs in oncology.

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 developing siRNA-based therapies that exploit a fundamental vulnerability in cancer cells, silencing CD320 and LRP2 leading to cancer cell death without harming normal cells, and the dual knockdown of CD320 and LRP2 using siRNA, suggesting a universal mechanism of action. 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 develop siRNA-based therapies across multiple cancer types and 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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