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# Leading Cell Biology Journal Publishes bioAffinity Technologies' Groundbreaking Research on Porphyrins

***Peer-Reviewed Paper Explains How Porphyrins Used in Company's Diagnostic and Therapeutic Platforms Enter Cancer Cells***

SAN ANTONIO--(BUSINESS WIRE)--

bioAffinity Technologies, a privately held company focused on early diagnostics and cancer therapeutics, announced that a scientific paper that explains how porphyrins are selectively incorporated into cancer cells has been published in the Journal of the Federation of Societies for the Study of Experimental Biology (FASEB Journal).

The paper, entitled *Identification of a novel mechanism for meso-tetra (4-carboxyphenyl) porphyrin (TCPP) uptake in cancer cells*, identified a novel mechanism by which the porphyrin TCPP, which is used in bioAffinity Technologies' non-invasive test for the early detection of lung cancer, is incorporated into cancer cells using the cellular receptor CD320, which is involved in the uptake of Vitamin B12. In addition to furthering the understanding of TCPP for use in diagnostics, bioAffinity's research led to four patent applications protecting multiple novel therapeutic platforms for treating cancer.

"The research described in the FASEB paper and led by bioAffinity Technologies' Vice President of Research, David Elzi, Ph.D., resulted in discoveries we have used to design new therapeutic approaches shown to kill cancer cells without harm to normal cells," Maria Zannes, bioAffinity President and CEO, said. "We continue to advance this research with a focus on developing therapies for breast, lung and brain cancers."

In addition to its therapeutic research, bioAffinity Technologies is developing CyPath®, a platform technology to diagnose cancers, including lung, prostate, bladder and cervical cancers, and diseases of the lung such as asthma and COPD. The Company's first product is CyPath® Lung, a non-invasive and cost-effective test for the early detection of lung cancer that allows patients to collect their sample at home.

bioAffinity Technologies recently completed a test validation trial of CyPath® Lung evaluating sputum from people at high risk for lung cancer, including patients with the disease and others who were cancer-free. The trial resulted in 92% sensitivity and 87% specificity in high-risk patients who had nodules smaller than 2 cm or no nodules in the lung.

CyPath® Lung uses flow cytometry, a method able to interrogate individual cells in a fraction of seconds, and automated analysis to identify parameters indicative of cancer. Unlike

genomic or other molecular markers used in liquid biopsies, bioAffinity's CyPath® technology does not collect genetic material for evaluation. CyPath® uses flow cytometry to investigate the micro-environment by identifying cell populations that are preferentially labeled by the porphyrin TCPP and other indices of cancer.

"The porphyrin TCPP is selectively taken up by cancer and cancer-associated cells and fluoresces. We use TCPP in CyPath® Lung as a cellular label to help diagnose cancer in people at high risk for the disease," said Vivienne Rebel, M.D., Ph.D., Executive Vice President and Science and Medical Officer of bioAffinity Technologies. "Dr. Elzi led a team that investigated how TCPP enters cancer cells with an initial goal of better understanding the biological basis for the phenomenon we witness in CyPath® Lung; that is, the labeling by TCPP of populations of cells in people with lung cancer. Dr. Elzi's research has opened wholly new, exciting avenues for cancer therapeutics and diagnostics."

**About bioAffinity Technologies, Inc.**

bioAffinity Technologies, Inc. (www.bioaffinitytech.com) is a privately held company addressing the significant unmet need for non-invasive, early-stage cancer diagnosis and treatment. The Company develops proprietary in-vitro diagnostic tests and targeted cancer therapeutics using breakthrough technology that preferentially targets cancer cells. Research and optimization of its platform technology are conducted in bioAffinity Technologies' laboratories at the University of Texas San Antonio. The Company's platform technology is being developed to diagnose, monitor and treat many cancers.

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