UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): **March 3, 2026**

bioAffinity Technologies, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**001-41463**	**46-5211056**
(State or other jurisdiction of incorporation)	(Commission File Number)	(I.R.S. Employer Identification Number)

3300 Nacogdoches Road, Suite 216
San Antonio, Texas 78217
(Address of principal executive offices, including zip code)

(210) 698-5334
(Registrant's telephone number, including area code)

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e- 4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Title of each class	Trading Symbols	Name of each exchange on which registered
Common Stock, par value $0.007 per share	BIAF	The Nasdaq Stock Market LLC (Nasdaq Capital Market)
Warrants to purchase Common Stock	BIAFW	The Nasdaq Stock Market LLC (Nasdaq Capital Market)

Indicate by check mark whether the registrant is an emerging growth company as defined in in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☒

If an emerging growth company, indicate by checkmark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 8.01. Other Events.

On March 3, 2026, bioAffinity Technologies, Inc., a Delaware corporation (the "Company"), issued a press release announcing that it presented a poster entitled *"Sputum as a Diagnostic Tool for the Treatment of Asthma"* (the "Poster") at the American Academy of Allergy, Asthma and Immunology (AAAAI) 2026 annual meeting in Philadelphia, PA, on March 1, 2026. The Poster reports on the Company's development of clinical diagnostics that may assist physicians in matching asthma and COPD patients with effective therapies and how monitoring inflammatory changes over time can improve outcomes and lower the cost of healthcare.

Copies of the press release and Poster are attached hereto as Exhibit 99.1 and Exhibit 99.2, respectively and are incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit Number	Description
99.1	Press Release issued by bioAffinity Technologies, Inc., dated March 3, 2026
99.2	Poster entitled "*Sputum as a Diagnostic Tool for the Treatment of Asthma*"
104	Cover Page Interactive Data File (embedded within the XBRL document)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this Current Report on Form 8-K to be signed on its behalf by the undersigned hereunto duly authorized.

Date: March 3, 2026

BIOAFFINITY TECHNOLOGIES, INC.

By: */s/ Maria Zannes*
Name: Maria Zannes
Title: President and Chief Executive Officer

Exhibit 99.1

News Release

bioAffinity Technologies Presents Positive Research Findings for its Novel Diagnostic Platform Technology to Identify Optimal Therapies for Asthma Patients

Poster presented to medical and drug industry conferees at prestigious American Academy of Allergy, Asthma & Immunology (AAAI) Annual Meeting

Research demonstrates the technology's ability to identify drug antibody receptors in sputum for two leading asthma therapies

SAN ANTONIO, TX – March 3, 2026 – bioAffinity Technologies, Inc. (Nasdaq: BIAF; BIAFW), a biotechnology company focused on noninvasive diagnostics and early cancer detection, today announced the presentation of a new scientific poster reporting on the ability of the Company's innovative diagnostic approach to identify antibody drug receptors in sputum, including receptors for dupilumab, a leading therapy for asthma and chronic obstructive pulmonary disease (COPD), and benralizumab, another asthma therapy. The research advances the Company's pipeline tests aimed at guiding personalized treatment decisions and improving disease monitoring for asthma and COPD sufferers.

The poster, "*Sputum as a Diagnostic Tool for the Treatment of Asthma*," was presented at the American Academy of Allergy, Asthma and Immunology (AAAAI) 2026 annual meeting in Philadelphia on March 1 by William Bauta, PhD, Chief Science Officer of bioAffinity Technologies. The research reports on the Company's development of clinical diagnostics that may assist physicians in matching asthma and COPD patients with the most effective therapies and monitoring inflammatory changes over time to improve outcomes and lower the cost of healthcare.

"Asthma and COPD impact approximately 650 million children and adults globally. The good news is that there are very effective treatments for asthma and COPD that work well for some sufferers. However, many patients must try a series of different types of treatments before finding an effective therapy," Dr. Bauta said. "We are leveraging our expertise in using our proprietary flow cytometry platform equipped with automated AI analysis to develop tests that match asthma and COPD patients with the most appropriate biologic therapies and monitor their ongoing conditions."

bioAffinity's technology platform is successfully used with its commercial test, CyPath® Lung, a noninvasive diagnostic test for lung cancer that has demonstrated high sensitivity and specificity for patients with small pulmonary nodules in detecting lung cancer as early as curative Stage 1A.

About CyPath® Lung

CyPath® Lung by bioAffinity Technologies is a noninvasive test designed to improve the early detection of lung cancer in patients at high risk for the disease. CyPath® Lung uses advanced flow cytometry and proprietary artificial intelligence (AI) to identify cell populations in patient sputum that indicate malignancy. CyPath® Lung incorporates a fluorescent porphyrin that is preferentially taken up by cancer and cancer-related cells. Clinical study results demonstrated 92% sensitivity, 87% specificity and 88% accuracy in detecting lung cancer in patients at high risk for the disease who had small indeterminate lung nodules less than 20 millimeters.

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 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, risks and uncertainties related to scientific research and development; the Company's ability to develop, validate, obtain regulatory or other required clearances or approvals for, commercialize and achieve market acceptance of its diagnostic tests and related technologies; variability in clinical and real-world performance; the availability of sufficient data and sample sizes; changes in standards of care, competitive products and technologies; intellectual property protection; reliance on third parties; manufacturing and supply matters; reimbursement and coverage; and general economic, market and industry conditions; 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.

Contact

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

Sputum as a Diagnostic Tool for the Treatment of Asthma

R. Titone, D. A. Porraz, C.W. Putnam, R. P. Jacob, W. E. Bauta and D. J. Elzi

bioAffinity Technologies, San Antonio Texas

Background

Asthma is a heterogeneous disease with multiple clinical phenotypes and endotypes,[1] each with inflammatory etiology, triggers, and increasingly diverse treatment options.[2,3] It is increasingly accepted that a biomarker-based stratification is needed to match patients with targeted therapies for personalized treatment.[4,5] In this regard it is advantageous to have data from the lung itself rather than a surrogate tissue.[6]

Sputum provides a non-invasive and economical sampling of inflammatory cells with which to interrogate the inflammatory state of the lung.

Using flow cytometry we analyzed sputum cells from asthma and COPD patients and smokers to determine inflammatory cells and the expression levels of select biologic drug targets.

References

(1) Kuruvilla, M. E.; Lee, F. E.-H.; Lee, G. B. Understanding Asthma Phenotypes, Endotypes, and Mechanisms of Disease. Clin Rev Allergy Immunol 2019, 56 (2), 219–233. https://doi.org/10.1007/s12016-018-8712-1.

(2) Kyriakopoulos, C.; Gogali, A.; Markozannes, G.; Kostikas, K. Biologic Agents Licensed for Severe Asthma: A Systematic Review and Meta-Analysis of Randomised Controlled Trials. Eur Respir Rev 2024, 33 (172), 230238. https://doi.org/10.1183/16000617.0238-2023.

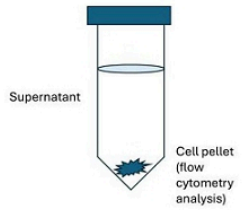
(3) Politis, J.; Bardin, P. G.; Leong, P. Contemporary Concise Review 2023: Asthma. Respirology 2024, 29 (8), 674–684. https://doi.org/10.1111/resp.14782.

(4) Quek, E.; Horn, N.; Siddiqui, S. Precision Medicine in Asthma: The Role of Biomarkers. Immunotargets Ther 2025, 14, 1479–1513. https://doi.org/10.2147/ITT.S532291.

(5) Agache, I.; Rogozea, L. Asthma Biomarkers: Do They Bring Precision Medicine Closer to the Clinic? Allergy Asthma Immunol Res 2017, 9 (6), 466. https://doi.org/10.4168/aair.2017.9.6.466.

(6) Porsbjerg, C. M.; Townend, J.; Bergeron, C.et al. Association between Pre-Biologic T2-Biomarker Combinations and Response to Biologics in Patients with Severe Asthma. Front Immunol 2024, 15, 1361891. https://doi.org/10.3389/fimmu.2024.1361891.

Sample processing



Sputum is dissociated to a single cell suspension and the cellular component stained with fluorescence labeled antibodies and analyzed using flow cytometry. Drug antibodies (dupilumab and benralizumab) were fluorescence labeled to interrogate their drug receptors.

Cellular Analysis
Flow Cytometry

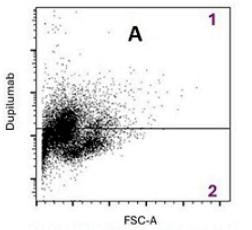
Antibody *	Feature or biomarker
Anti-CD45	Leucocytes (all)
Anti-CD206	Alveolar macrophages
Anti-CD3	T-cells (mature)
Anti-CD66b	granulocytes
Anti-CD19	B-cells
Anti-CD52	Eosinophils
Anti-CD123	Activated eosinophils
Anti-CD16	neutrophils
Dupilumab (Anti-CD124)	lymphocytes and granulocytes
Benralizumab (Anti-CD125)	lymphocytes and granulocytes

* Cells which strongly express the biomarker

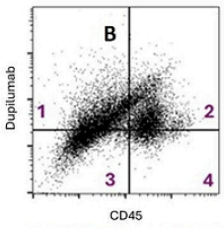
Results in select cases

We examined the expression of drug receptors (CD124 and CD125) in cells from the sputum of patients with asthma, COPD and smokers not diagnosed with asthma or COPD by flow cytometry. Dead cells were excluded using a viability stain. The antibody panel allowed differentiation of cell types and expression of drug receptors for dupilumab (Dup) and benralizumab (Ben). (**A**) In an asthma patient 25.5% of leukocytes expressed CD124. (**B**) In a COPD patient 25.5% of leukocytes expressed CD124. (**C**) In a COPD patient 16.5% of leukocytes expressed CD125. (**D**) In a smoker 31.5% of leukocytes expressed CD124. (**E**) In an asthma patient 11.2% of non-leukocytes expressed CD124. (**F**) In a smoker 41.5% of leukocytes expressed CD125.

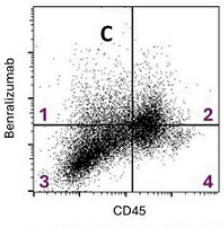
Flow cytometry



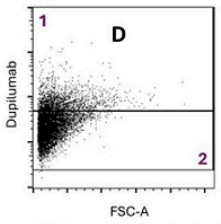
Dupilumab (Dup) receptor (CD124) expression in live leukocytes (CD45+) in sputum from an asthma patient. 1. Dup+. 2. Dup-. FSC = forward scatter. (FIG 8b)



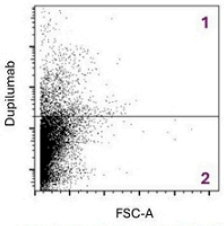
Dupilumab (Dup) receptor (CD124) expression in live cells in leukocytes (CD45) in sputum from a COPD patient. 1. Dup+ CD45-. 2. Dup+ CD45+. 3. Dup- CD45-. 4. Dup- CD45+. (FIG 9)



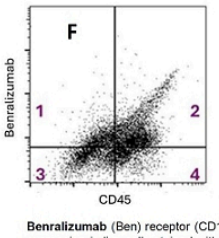
Benralizumab (Ben) receptor (CD125) expression in live cells stained with pan leukocyte (CD45) antibody in sputum from a COPD patient. 1. Ben+ CD45-. 2. Ben + CD45+, 3. Ben - CD45-, 4. Ben - CD45+ (FIG 11).



Dupilumab (Dup) receptor (CD124) expression in live leukocytes (CD45+) in sputum from a smoker. 1. Dup+. 2. Dup-. FSC = forward scatter. . (FIG 10)



Dupilumab (Dup) receptor (CD124) expression in live non-leukocytes (CD45-) in sputum from a smoker. 1. Dup+. 2. Dup-. FSC = forward scatter. . (FIG 10)



Benralizumab (Ben) receptor (CD125) expression in live cells stained with pan leukocyte (CD45) antibody in sputum from a smoker. 1. Ben+ CD45-. 2. Ben + CD45+, 3. Ben - CD45-, 4. Ben - CD45+ (FIG 11).

Conclusions

We analyzed sputum samples from patients with asthma and COPD by flow cytometry using fluorescence labeled antibodies targeting cell membrane biomarkers including those that are drug targets for dupilumab and benralizumab. We used drugs labeled with fluorescent antibodies to interrogate cells for the expression of the drug receptors. The expression of drug receptors (CD124 and CD125) was measured in asthma, COPD and smokers (not diagnosed with asthma or COPD). As expected leukocytes expressed the drug receptors more than non-leukocytes in a small sample set.

Further work

Further work will use machine learning to identify cell populations including those expressing select drug receptors in a larger group of patient samples.