



NEWS RELEASE

# Prospective Validation Study in JAAD Demonstrates Castle Biosciences' AdvanceAD-Tx™ Test Identifies Patients More Likely to Achieve Faster and Deeper Responses with JAK Inhibitor Therapy in Moderate-to-Severe Atopic Dermatitis

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Study data show that AdvanceAD-Tx can stratify patients by molecular profile identifying those more likely to achieve near-clear skin (EASI-90), faster time to response and meaningful patient-reported benefits when treated with JAK inhibitor therapy compared to a Th2-targeted therapy

FRIENDSWOOD, Texas, Feb. 19, 2026 (GLOBE NEWSWIRE) -- Castle Biosciences, Inc. (Nasdaq: CSTL), a company improving health through innovative tests that guide patient care, today announced the publication of a prospective, multicenter clinical validation study in the Journal of the American Academy of Dermatology (JAAD) demonstrating that its AdvanceAD-Tx test can identify patients with moderate-to-severe atopic dermatitis (AD) who are significantly more likely to achieve greater and faster clinical responses when treated with a Janus kinase inhibitor (JAKi) compared to T helper type 2 (Th2)-targeted therapies.<sup>1</sup>

"Atopic dermatitis can look similar on the surface, but the biology driving the disease can differ meaningfully from patient to patient," said Mark G. Lebwohl, M.D., senior study author, dean for clinical therapeutics and professor and chairman emeritus of the Kimberly and Eric J. Waldman Department of Dermatology at the Icahn School of Medicine at Mount Sinai in New York. "This study shows that AdvanceAD-Tx can provide objective molecular insight to help clinicians better align systemic therapy choices with an individual patient's disease biology earlier in the treatment journey and improve outcomes that matter to patients."



AdvanceAD-Tx is a non-invasive gene expression profile test designed to provide objective molecular insight to help guide systemic treatment decision making for patients 12 years of age and older with moderate-to-severe AD who are considering systemic therapy. Using simple lesional skin scrapings, no biopsy required, the test evaluates the expression of 487 genes across 12 inflammatory and cutaneous biology pathways and reports one of two actionable molecular profiles — a JAK Inhibitor Responder Profile or a Th2 Molecular Profile — to help clinicians better understand the underlying immune biology of an individual patient’s disease.

Results from the independent validation cohort demonstrated that approximately 30 percent of patients studied were identified by the AdvanceAD-Tx test as having a JAK Inhibitor Responder Profile. Among these patients, those treated with a JAKi were 5.5 times more likely to achieve at least 90 percent improvement in Eczema Area and Severity Index (EASI-90) by three months compared to those treated with Th2-targeted therapies (45.5% vs. 8.3%,  $p=0.021$ ), and they achieved a response nearly four times faster ( $p=0.049$ ). Patients with a JAK Inhibitor Responder Profile who were treated with a JAKi were also significantly more likely to:

- Achieve near-complete or complete skin clearance, as reflected by a Validated Investigator Global Assessment score of clear (vIGA-AD 0, 36.4% vs 0%,  $p=0.006$ )
- Report higher rates of “no itch” (45.5% vs. 8.3%,  $p=0.021$ )
- Remain flare-free by three months (54.5% vs. 16.7%,  $p=0.041$ )
- Report improved quality of life, including achievement of a Dermatology Life Quality Index (DLQI) score of 0, indicating no impact of disease on quality of life (45.5% vs. 8.3%,  $p=0.021$ )

In contrast, patients identified with a Th2 Molecular Profile showed no statistically significant differences in clinical or patient-reported outcomes when taking a JAKi or Th2-targeted therapy, supporting shared decision making between clinicians and patients regarding treatment selection based on patient preference, clinician experience and other clinical considerations.

“Together, these results highlight how aligning systemic therapy selection with an individual patient’s molecular profile may help streamline care by reducing unnecessary treatment changes and accelerating meaningful clinical improvement,” said Rebecca Critchley-Thorne, Ph.D., vice president, research and development, at Castle Biosciences. “By better understanding the biology driving each patient’s disease, AdvancedAD-Tx can help clinicians move beyond non-molecularly guided prescribing and enable more confident, evidence-based decisions earlier in the treatment journey.”

The new publication follows Castle’s recent limited access commercial launch of AdvanceAD-Tx in late 2025. The full paper is available **online**.

About AdvanceAD-Tx

AdvanceAD-Tx is a non-invasive gene expression profile (GEP) test designed to guide systemic treatment decisions for patients aged 12 years and older with moderate-to-severe atopic dermatitis (AD). Using RNA expression data from lesional skin scraping samples—no biopsy required—the test evaluates 487 genes across 12 inflammatory and cutaneous biology pathways to reveal the underlying immune biology driving an individual patient’s disease. Results classify patients into one of two molecular profiles: Janus Kinase (JAK) Inhibitor Responder Profile or T helper 2 (Th2) Molecular Profile.

The prospective, clinical validation study showed that the test identifies a subset of patients with a JAK Inhibitor Responder Profile who experience significantly greater clinical benefit—including improved and faster skin clearance (EASI-90), reduced itch, fewer flares and better quality of life by three months—when treated with a JAK inhibitor therapy compared to those treated with a Th2-targeted therapy. AdvanceAD-Tx provides clinicians with objective, molecular-based insights to help personalize systemic treatment decisions and improve care for patients. Learn more at <https://castlebiosciences.com/tests/therapy-guidance/advancead-tx/overview>.

#### About Castle Biosciences

Castle Biosciences (Nasdaq: CSTL) is a leading diagnostics company improving health through innovative tests that guide patient care. With a primary focus in dermatologic and gastroenterological disease, we develop personalized, clinically actionable solutions that help improve disease management and patient outcomes.

We put people first—empowering patients and clinicians and informing care decisions through rigorous science and advanced molecular tests that support more confident treatment planning. To learn more, visit [www.CastleBiosciences.com](http://www.CastleBiosciences.com) and connect with us on [LinkedIn](#), [Instagram](#), [Facebook](#) and [X](#).

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#### Forward-Looking Statements

This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which are subject to the “safe harbor” created by those sections. These forward-looking statements include, but are not limited to, statements concerning: the ability of AdvanceAD-Tx to (i) provide objective molecular insight, (ii) help clinicians better align systemic therapy choices with an individual patient’s disease biology earlier in the treatment journey, (iii) improve outcomes that matter to patients, and (iv) help streamline care by reducing unnecessary treatment changes and accelerating meaningful clinical improvement; and the accuracy of the 487-GEP tests. The words “designed,” “may”, “can”, and similar expressions are intended to identify forward intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking

statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements that we make. These forward looking statements involve risks and uncertainties that could cause actual results to differ materially from those in the forward-looking statements, including, without limitation: subsequent study or trial results and findings may contradict earlier study or trial results and findings or may not support the results obtained in these studies, including with respect to the discussion of our tests in this press release; actual application of our tests may not provide the aforementioned benefits to certain patients; and the risks set forth under the heading “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2024, and our subsequent Quarterly Reports on Form 10-Q, each as filed or to be filed with the SEC, and in our other filings with the SEC. The forward-looking statements are applicable only as of the date on which they are made, and we do not assume any obligation to update any forward-looking statements, except as may be required by law.

1. Silverberg JI, Eichenfield LF, Armstrong AW, Bagel J, Lockshin B, Boh E, Koo J, Farberg AS, Goldberg MS, Quick AP, Lebwohl MG, The 487-gene expression profile test guides systemic therapy selection to improve outcomes for patients with atopic dermatitis: Results from a prospective trial, *Journal of the American Academy of Dermatology* (2026), doi: <https://doi.org/10.1016/j.jaad.2026.02.034>.

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