June 1, 2026

Xenetic Biosciences Showcases Compelling ASCO 2026 Data Demonstrating DNase I Significantly Enhances CAR-T Cell Persistence, Tumor Control, and Survival

New preclinical and translational findings position DNase I as a potentially transformative adjunct therapy for CAR-T treatment in aggressive B cell malignancies

Data highlight potential of DNase I to improve CAR-T cell expansion, reduce exhaustion and enhance tumor control across hematologic cancer models

Findings support continued clinical development of DNase I as a combinatorial strategy to augment CAR-T cell therapies in difficult-to-treat cancers

Data to be presented today as a poster presentation at the ASCO 2026 annual meeting

FRAMINGHAM, MA / ACCESS Newswire / June 1, 2026 / Xenetic Biosciences, Inc. (NASDAQ:XBIO) ("Xenetic" or the "Company"), a biopharmaceutical company focused on advancing innovative immuno-oncology technologies addressing difficult to treat cancers, today announced positive preclinical data will be presented at the 2026 American Society of Clinical Oncology (ASCO) Annual Meeting demonstrating that DNase I significantly enhances CAR-T cell expansion, persistence, and antitumor efficacy in aggressive hematologic cancer models.

Presentation Details:

- Session Title: Hematologic Malignancies - Plasma Cell Dyscrasia (Poster Session)
- Abstract Title: *Targeting cfDNA and NETs with DNase I to augment CAR-T cell function and antitumor efficacy*
- Poster Board: 410
- Presentation Date & Time: June 1, 2026, 9:00 AM - 12:00 PM CDT
- Presenter: Alexey V. Stepanov, PhD

The poster presentation, titled *"Targeting cfDNA and NETs with DNase I Augments CAR T-Cell Function and Antitumor Efficacy,"* highlights evidence that extracellular DNA and neutrophil extracellular traps (NETs) act as key drivers of CAR-T cell exhaustion and persistence, leading to therapeutic failure. The findings demonstrate that DNase I degrades these immunosuppressive barriers and restores CAR-T functionality.

In preclinical studies, DNase I efficiently degraded extracellular DNA, preserved CAR-T cell effector function, improved CD8-positive T cell ratios and reduced expression of exhaustion markers including PD-1, LAG-3 and TIM-3 across multiple rounds of tumor rechallenge *in vitro*.

In vivo, DNase I significantly enhanced CAR-T cell expansion and persistence following infusion in both NALM-6 B cell leukemia and Raji Burkitt lymphoma xenograft models. Combination therapy with DNase I resulted in improved tumor control, delayed relapse upon rechallenge and prolonged survival compared to CAR T-cell therapy alone.

The poster also includes translational observations from a pediatric patient with highly refractory Burkitt lymphoma, where DNase I co-administration was associated with marked CAR-T cell expansion and progressive reduction in tumor burden following prior CAR-T cell failure.

"These findings continue to strengthen the growing body of evidence implicating extracellular DNA and NETs as important contributors to immune suppression and therapeutic resistance in cancer," said James Parslow, Interim Chief Executive Officer and Chief Financial Officer of Xenetic Biosciences. "We believe these data highlight the potential for DNase I to serve as a differentiated adjunctive immuno-oncology strategy capable of improving CAR T-cell persistence and durability across difficult-to-treat hematologic malignancies."

The findings further support Xenetic's broader DNase-based immuno-oncology platform designed to improve outcomes of existing cancer therapies, including immunotherapies and cell therapies, through targeting NET-driven immune suppression within the tumor microenvironment.

For more information about the ASCO Annual Meeting 2026, please visitwww.asco.org.

About Xenetic Biosciences

Xenetic Biosciences, Inc. is a biopharmaceutical company focused on advancing innovative immuno-oncology technologies addressing difficult to treat cancers. The Company's proprietary DNase technology is designed to improve outcomes of existing treatments,

including immunotherapies, by targeting neutrophil extracellular traps (NETs), which are involved in cancer progression. Xenetic is currently focused on advancing its systemic DNase program into the clinic as an adjunctive therapy for pancreatic carcinoma and locally advanced or metastatic solid tumors.

For more information, please visit the Company's website atwww.xeneticbio.com and connect on X, LinkedIn, and Facebook.

Forward-Looking Statements

This press release contains forward-looking statements that we intend to be subject to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. All statements contained in this press release other than statements of historical facts may constitute forward-looking statements within the meaning of the federal securities laws. These statements can be identified by words such as "expects," "plans," "projects," "will," "may," "anticipates," "believes," "should," "intends," "estimates," "remain," "focus", "confidence in", "potential", "continues", "warrants", and other words of similar meaning, including, but not limited to, all statements regarding our focus on advancing innovative immuno-oncology technologies addressing difficult to treat cancers, the DNase platform improving outcomes of existing treatments, including immunotherapies, by targeting neutrophil extracellular traps (NETs), which are involved in cancer progression, our focus on advancing DNase into the clinic as an adjunctive therapy for pancreatic carcinoma and locally advanced or metastatic solid tumors, the potential of DNase I as a transformative adjunct therapy for CAR-T treatment and to improve CAR-T cell expansion, reduce exhaustion and enhance tumor control across hematologic cancer models and new findings supporting continued clinical development of DNase I as a combinatorial strategy to augment CAR-T cell therapies in difficult-to-treat cancers and continuing to strengthen the body of evidence implicating extracellular DNA and NETs as important contributors to immune suppression and therapeutic resistance in cancer. Any forward-looking statements contained herein are based on current expectations and are subject to a number of risks and uncertainties. Many factors could cause our actual activities, performance, achievements, or results to differ materially from the activities and results anticipated in forward-looking statements. Important factors that could cause actual activities, performance, achievements, or results to differ materially from such plans, estimates or expectations include, among others, (1) unexpected costs, charges or expenses resulting from our manufacturing and collaboration agreements; (2) unexpected costs, charges or expenses resulting from the licensing of the DNase platform; (3) uncertainty of the expected financial performance of the Company following the licensing of the DNase platform; (4) failure to realize the anticipated potential of the DNase or PolyXen technologies; (5) the ability of the Company to obtain funding and implement its business strategy; (6) risks and uncertainties as to the outcome and timing of the strategic review process being conducted by the Board and a special independent committee thereof, including the possibility that the Board may decide not to undertake a strategic alternative following the evaluation process, the Company's inability to consummate any proposed strategic alternative resulting from the review due to, among other things, market, regulatory and other factors, the potential for disruption to our business resulting from the review process, and potential adverse effects on the Company's stock price from the announcement, suspension or consummation of the evaluation process and the results thereof, as well as risks and uncertainties related to the potential impacts of consummation of a strategic transaction on the Company's current business operations, anticipated

business strategy and product development plans; and (7) other risk factors as detailed from time to time in the Company's reports filed with the SEC, including its annual report on Form 10-K, periodic quarterly reports on Form 10-Q, current reports on Form 8-K and other documents filed with the SEC. The foregoing list of important factors is not exclusive. In addition, forward-looking statements may also be adversely affected by general market factors, general economic and business conditions, including potential adverse effects of public health issues, and geopolitical events, such as the conflicts in Ukraine and in the Middle East, on economic activity, competitive product development, product availability, federal and state regulations and legislation, the regulatory process for new product candidates and indications, manufacturing issues that may arise, patent positions, litigation, and shareholder activism, among other factors. The forward-looking statements contained in this press release speak only as of the date the statements were made, and the Company does not undertake any obligation to update forward-looking statements, except as required by law.

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SOURCE: Xenetic Biosciences, Inc.