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Xenetic Biosciences, Inc. Extends Research Agreement with the University of Virginia for the Advancement of its DNase-Based Oncology Platform

Company continuing to advance DNase-based oncology program towards clinical proof-of-concept studies in multiple indications

FRAMINGHAM, MA / ACCESSWIRE / December 16, 2024 /Xenetic Biosciences, Inc. (NASDAQ:XBIO) ("Xenetic" or the "Company"), a biopharmaceutical company focused on advancing innovative immuno-oncology technologies addressing hard to treat cancers, today announced it has extended its previously announced Research Funding Agreement (the "Agreement") with the University of Virginia ("UVA") to advance the development of its systemic DNase program through 2025.

Xenetic's DNase-based oncology platform is designed to target neutrophil extracellular traps (NETs), which are weblike structures composed of extracellular chromatin coated with histones and other proteins. In cancer, NETs are expelled by activated neutrophils into the tumor microenvironment (TME) and blood, thereby promoting cancer spread, local and systemic immunosuppression, as well as cancer-associated thrombosis. Reduction of NETs burden via application of Xenetic's proprietary recombinant human DNase I has been shown to improve efficacy of immunotherapy, adoptive cell therapy and chemotherapy in preclinical animal models.

"Allan Tsung, MD, and the team at UVA continue to be valued partners and we are pleased with the progress under the Agreement in evaluating the potential addition of DNase to available treatment options in areas of significant unmet need. The preclinical and translational data that UVA has accumulated under the initial Scope of Work to the Agreement further strengthens the scientific rationale for investigating combinations of DNase I with immunotherapies and chemotherapies. In the next phase of this partnership, UVA will continue to investigate combinations of DNase I with immunotherapies in models of primary and metastatic colorectal cancer. As a surgical oncologist and scientist, Dr. Tsung is internationally recognized for leading substantial research on the role of NETs in tumor

growth, metastasis, and resistance to existing cancer therapies and we look forward to leveraging that expertise as we advance our technology toward the clinic," commented Reid P. Bissonnette, Ph.D., Executive Consultant for Translational Research and Development of Xenetic.

Under the terms of the Agreement, in addition to advancing Xenetic's existing intellectual property, Xenetic has an option to acquire an exclusive license to any new intellectual property arising from the DNase research program. Allan Tsung, MD, a member of the Company's Scientific Advisory Board and Chair of the Department of Surgery at the UVA School of Medicine, will continue to oversee the research conducted under the Agreement. Xenetic is working toward its planned first-in-human study to evaluate DNase combined with immune checkpoint inhibitors or chemotherapy.

About Xenetic Biosciences

Xenetic Biosciences, Inc. is a biopharmaceutical company focused on advancing innovative immune-oncology technologies addressing hard to treat cancers. The Company's DNase I platform 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, colorectal cancer 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", "making", and other words of similar meaning, including, but not limited to: all statements regarding the collaboration agreement with UVA, including regarding the next phase of the partnership with UVA where UVA will continue to investigate combinations of DNase I with immunotherapies in models of primary and metastatic colorectal cancer and our plans to continue to leverage the knowledge and expertise of the team at UVA to potentially expand and broaden the utility of our proprietary platform technology; and expectations regarding our DNase-based oncology platform, including statements regarding: advancing DNase-based oncology program towards clinical proof-of-concept studies in multiple indications; focusing on advancing innovative immuno-oncology technologies addressing hard to treat oncology indications; advancing the development of the Company's program on the combination of systemic DNase and CAR T-cell therapies; the DNase platform improving outcomes of existing treatments, including immunotherapies, by targeting neutrophil extracellular traps (NETs), which are involved in cancer progression; and our focus on advancing our systemic DNase program into the clinic as an adjunctive therapy for pancreatic carcinoma, colorectal cancer and locally advanced or metastatic solid tumors. All 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) failure to achieve the expected outcomes and realize the anticipated benefits from our collaboration agreements, including the agreement with UVA; (2) unexpected costs, charges or expenses resulting from our manufacturing and collaboration agreements, including the agreement with UVA; (3) unexpected costs, charges or expenses resulting from the licensing of the DNase platform; (4) uncertainty of the expected financial performance of the Company following the licensing of the DNase platform; (5) failure to realize the anticipated potential of the DNase or PolyXen technologies; (6) the ability of the Company to obtain funding and implement its business strategy; 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, such as the COVID-19 outbreak, 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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