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 22, 2024

Xenetic Biosciences, Inc.

(Commission

File Number)

(Exact name of registrant as specified in charter) 001-37937

Nevada (State or other jurisdiction of incorporation)

> 945 Concord Street Framingham, Massachusetts (Address of principal executive offices)

45-2952962 (IRS Employer Identification No.)

01701 (Zip Code)

(781) 778-7720

(Registrant's telephone number, including area code)

Not Applicable

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

Check the appropriate box below if the Form 8-K is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions <u>kee</u> 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))

Securities registered pursuant to Section 12(b) of the Act:

| Title of each class | Trading Symbol(s) | Name of each exchange on which registered |
|---|-------------------|---|
| Common Stock, \$0.001 par value per share | XBIO | The Nasdaq Stock Market |
| Purchase Warrants | XBIOW | The Nasdag Stock Market |

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (17 CFR §230.405) or Rule 12b-2 of the Securities Exchange Act of 1934 (17 CFR §240.12b-2).

Emerging growth company \Box

If an emerging growth company, indicate by check mark 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 2.02. Results of Operations and Financial Condition.

On March 22, 2024, Xenetic Biosciences, Inc. (the "Company") issued a press release announcing results for the year ended December 31, 2023 and providing a corporate update.

The full text of the press release is furnished as Exhibit 99.1 to this Current Report on Form 8-K and hereby incorporated in this Item 2.02 by reference. The information in this Item 2.02, including Exhibit 99.1 attached hereto, shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference in such filing.

FORWARD-LOOKING STATEMENTS

This Form 8-K, including the 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 Form 8-K, including the 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," and other words of similar meaning. 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. These risks and uncertainties include those described in the "Risk Factors" section as detailed from time to time in the Company's reports filed with the Securities and Exchange Commission ("SEC"), including the Company's 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. 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 Russian invasion of Ukraine and conflict in the Middle East, on economic activity, competitive product development, product availability, federal and legislation, the regulatory process for new product candidates and indications, manufacturing issues that may arise, patent positions and litigation, among other factors. The forward-looking statements contained in this Form 8-K, including the press release, speak only as of the date the statements were made, and the Company does not undertake ang

obligation to update forward-looking statements, except as required by law.

| Item 9.01. | Financial Statements and Exhibits. |
|--------------|---|
| (d) Exhibits | |
| Exhibit No. | Description |
| 99.1 | Press Release dated March 22, 2024 pertaining to the financial results of the Company for the year ended December 31, 2023. |
| 104 | Cover Page Interactive Data File (embedded within the Inline XBRL document). |
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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

XENETIC BIOSCIENCES, INC.

Date: March 22, 2024

By: <u>/s/ James Parslow</u> Name: James Parslow Title: Chief Financial Officer

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Xenetic Biosciences, Inc. Reports Full Year 2023 Financial Results

Continued advancement of DNase-based oncology program towards Phase 1 clinical study for the treatment of pancreatic carcinoma and other locally advanced or metastatic solid tumors

Ended the year with \$9.0 million of cash to fund operations

FRAMINGHAM, MA – (March 22, 2024) – Xenetic Biosciences, Inc. (NASDAQ: XBIO) ("Xenetic" or the "Company"), a biopharmaceutical company focused on advancing innovative immune-oncology technologies addressing hard to treat cancers, today reported its financial results for the year ended December 31, 2023.

Recent Highlights

- Entered into a Research Funding Agreement and a Material Transfer Agreement with the University of Virginia ("UVA") to advance the development of the DNase program.
- · Generated growing body of encouraging preclinical data guiding the approach to a first in human trial for systemic DNase-based oncology platform.

"We continued to make steady progress over the course of 2023 and are well positioned to continue on that pathway in 2024. With the encouraging preclinical data we continue to see with our DNase-based oncology platform, we are making noteworthy strides toward our first in human trial. We believe that our DNase platform, comprising multiple treatment modalities, has the potential to generate much needed therapies for pancreatic carcinoma and other locally advanced or metastatic solid tumors, and we are excited to unlock the full potential of our assets," commented Jeffrey Eisenberg, Chief Executive Officer of Xenetic.

Summary of Financial Results for Fiscal Year 2023

Net loss for the year ended December 31, 2023 was approximately \$4.1 million. Research and development expenses for the year ended December 31, 2023 decreased by \$1.3 million, or 26.7%, to \$3.5 million from \$4.8 million in the prior year period. This decrease was primarily due to in-process research and development expense of \$1.8 million in 2022 associated with our licensing of the DNase platform for which there was no similar expense in 2023. Royalty payments of approximately \$2.5 million were received from our sublicense with Takeda Pharmaceuticals Co. Ltd in the year ended December 31, 2023, representing an approximate 48.8% increase over the same period in 2022. General and administrative expenses for the year ended December 31, 2023 were \$3.6 million, decreasing by approximately \$0.1 million, or 2.5%, compared to the prior year. The decrease was primarily due to a decrease in employee related costs, substantially offset by increases in consulting and legal costs during the year ended December 31, 2023 compared to the prior year.

The Company ended the year with approximately \$9.0 million of cash.

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 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 and locally advanced or metastatic solid tumors.

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

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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," and other words of similar meaning, including, but not limited to, statements regarding: all statements regarding expectations for our DNase-base oncology platform, including statements regarding: our continued advancement of DNase-based oncology program towards Phase 1 clinical study for the treatment of pancreatic carcinoma and other locally advanced or metastatic solid tumors, our belief that we are well positioned to continue on a similar pathway in 2024, encouraging preclinical data and making noteworthy strides toward our first in human trial, our belief that our DNase platform, comprising multiple treatment modalities, has the potential to generate much needed therapies for pancreatic carcinoma and other locally advanced or metastatic solid tumors, our excitement to unlock the full potential of our assets, 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 and locally advanced or metastatic solid tumors. 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; and (6) 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 Russian invasion of Ukraine and conflict 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 and litigation, 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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