

**SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

**SCHEDULE 14A INFORMATION
(Rule 14a-101)**

**INFORMATION REQUIRED IN PROXY STATEMENT
SCHEDULE 14A INFORMATION
Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934
(Amendment No. __)**

Filed by the Registrant ☒
Filed by a Party other than the Registrant ☐

Check the appropriate box:

- ☐ Preliminary Proxy Statement
- ☐ Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- ☒ Definitive Proxy Statement
- ☐ Definitive Additional Materials
- ☐ Soliciting Material Pursuant to § 240.14a-12

XENETIC BIOSCIENCES, INC.

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box)

- ☒ No fee required.
- ☐ Fee paid previously with preliminary materials.
- ☐ Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1) and 0-11.

XENETIC BIOSCIENCES, INC.
945 Concord Street
Framingham, Massachusetts 01701

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

To Be Held On December 11, 2025

Dear Stockholder:

You are cordially invited to attend the Annual Meeting of Stockholders of **XENETIC BIOSCIENCES, INC.**, a Nevada corporation (the “Company” or “Xenetic”). The meeting will be held on Thursday, December 11, 2025 at 10:00 a.m. Eastern Time by means of a live virtual-only on-line webcast for the following purposes:

1. To elect the director nominees, Grigory Borisenko, Firdaus Jal Dastoor, Dmitry Genkin, Roger Kornberg, Moshe Mizrahy and Alexey Vinogradov, to the Board of Directors of the Company to serve until the next annual meeting and their successors are duly elected and qualified.
2. To ratify the selection by the Audit Committee of CBIZ CPAs P.C. as the independent registered public accounting firm of the Company for its fiscal year ending December 31, 2025.
3. To approve, by non-binding advisory vote, the resolution approving the named executive officer compensation (“Say on Pay”).
4. To conduct any other business properly brought before the meeting.

These items of business are more fully described in the Proxy Statement accompanying this Notice.

The record date for the Annual Meeting of Stockholders is October 15, 2025. Only stockholders of record at the close of business on that date may vote at the meeting or any adjournment thereof.

**Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of Stockholders
to Be Held on Thursday, December 11, 2025 at 10:00 a.m. local time
by means of a live virtual-only on-line webcast.**

The Proxy Statement, the Notice of the Annual Meeting and our Annual Report on Form 10-K
for the fiscal year ended December 31, 2024, as amended, are available at www.xeneticbio.com.

By Order of the Board of Directors

James Parslow
Secretary

Framingham, Massachusetts
October 31, 2025

You are cordially invited to attend the virtual-only Annual Meeting via the Internet by means of a live webcast. Whether or not you expect to participate in the virtual-only Annual Meeting, please complete, date, sign and return the enclosed proxy, or vote over the telephone or the internet as instructed in these proxy materials, as promptly as possible in order to ensure your representation at the virtual-only Annual Meeting. A return envelope (which is postage prepaid if mailed in the United States) has been provided for your convenience. Even if you have voted by proxy, you may still participate and vote at the virtual-only Annual Meeting by visiting <http://www.virtualshareholdermeeting.com/XBIO2025> and using your control number assigned to you on your enclosed proxy card. Please note, however, that if your shares are held of record by a broker, bank or other nominee and you wish to vote at the meeting, you must obtain a proxy issued in your name from that record holder. To register and receive access to the virtual meeting, registered stockholders and beneficial stockholders will need to follow the instructions applicable to them provided in the enclosed proxy statement. We hope that you will be able to participate. Your feedback and your vote are very important to us.

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XENETIC BIOSCIENCES, INC.
945 Concord Street
Framingham, Massachusetts 01701

PROXY STATEMENT
FOR THE 2025 ANNUAL MEETING OF STOCKHOLDERS

To Be Held On December 11, 2025

QUESTIONS AND ANSWERS ABOUT THESE PROXY MATERIALS AND VOTING

This proxy statement and the enclosed form of proxy are being sent to you because the Board of Directors of Xenetic Biosciences, Inc. (the “Company” or “Xenetic”) is soliciting your proxy to vote at the 2025 Annual Meeting of Stockholders, including at any adjournments or postponements thereof (the “Annual Meeting”). We intend to mail these proxy materials on or about October 31, 2025 to all stockholders of record entitled to vote at the Annual Meeting.

You are invited to attend the virtual Annual Meeting to vote on the proposals described in this proxy statement. However, you do not need to attend the virtual Annual Meeting to vote your shares. Instead, you may simply complete, sign and return the enclosed proxy card, or follow the instructions below to submit your proxy over the telephone or through the internet.

The information provided in the “question and answer” format below is for your convenience only and is merely a summary of the information contained in this proxy statement. You should read this entire proxy statement carefully. Information contained on, or that can be accessed through, our website is not intended to be incorporated by reference into this proxy statement and references to our website address in this proxy statement are inactive textual references only.

How do I register and attend the virtual-only Annual Meeting?

The meeting will be held on Thursday, December 11, 2025 at 10:00 a.m. eastern time. All stockholders are invited to participate in the Annual Meeting. We have once again decided to forego the opportunity to meet with our stockholders in person this year to conduct the required annual business of the Company. Instead, the meeting will be held virtually over the Internet by means of a live audio webcast.

Only stockholders who owned common stock as of the close of business on October 15, 2025 will be entitled to attend the virtual meeting. Any stockholder wishing to attend the virtual-only Annual Meeting via the Internet can do so by following the instructions as applicable to the nature of your ownership of our common stock:

Stockholder of Record: Shares Registered in Your Name

If your shares are registered in your name with the Company’s transfer agent and you wish to attend the online-only virtual meeting, go to <http://www.virtualshareholdermeeting.com/XBIO2025>, enter the control number you received on your proxy card or notice of the meeting and follow the instructions.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

Beneficial stockholders who wish to attend the online-only virtual meeting must obtain a legal proxy by contacting their account representative at the bank, broker, or other nominee that holds their shares and request your 16 digit control number. Beneficial shareholders who have a valid control number will be allowed to register to attend and participate in the online-only meeting at <http://www.virtualshareholdermeeting.com/XBIO2025>.

Stockholders participating in the virtual meeting will be in a listen-only mode and will not be able to speak during the webcast; however, in order to maintain the interactive nature of the virtual meeting, virtual attendees are able to:

- Vote using the online meeting website; and
- Submit questions or comments to the Company's officers during the meeting via the virtual meeting webcast.

You will not be able to vote or submit questions unless you register for and log in to the virtual meeting website as described above.

Who can vote at the Annual Meeting?

Only stockholders of record at the close of business on October 15, 2025 will be entitled to vote at the Annual Meeting. On this record date, there were 2,277,139 shares of common stock outstanding and entitled to vote.

Stockholder of Record: Shares Registered in Your Name

If on October 15, 2025 your shares were registered directly in your name with the Company's transfer agent, Empire Stock Transfer, then you are a stockholder of record. As a stockholder of record, you may vote using the online meeting website at the virtual meeting or vote by proxy, as described below. Whether or not you plan to attend the virtual meeting, we urge you to fill out and return the enclosed proxy card or vote by proxy over the telephone or on the internet as instructed below to ensure your vote is counted.

Beneficial Owner: Shares Registered in the Name of a Broker or Bank

If on October 15, 2025 your shares were held, not in your name, but rather in an account at a brokerage firm, bank, dealer or other similar organization, then you are the beneficial owner of shares held in "street name" and these proxy materials are being forwarded to you by that organization. The organization holding your account is considered to be the stockholder of record for purposes of voting at the Annual Meeting. As a beneficial owner, you have the right to direct your broker or other agent regarding how to vote the shares in your account. You are also invited to attend the virtual Annual Meeting via the virtual meeting webcast, however, since you are not the stockholder of record, you may not vote your shares at or participate in the virtual meeting unless you request and obtain a valid proxy from your broker or other agent, as described below.

What am I voting on?

There are three matters scheduled for a vote:

- Election of six directors;
- Ratification of the selection by the Audit Committee of CBIZ CPAs P.C. as the independent registered public accounting firm of the Company for its fiscal year ending December 31, 2025; and
- Approval, on an advisory, non-binding basis, of the compensation of our named executive officers.

What if another matter is properly brought before the meeting?

The Board of Directors knows of no other matters that will be presented for consideration at the Annual Meeting. If any other matters are properly brought before the Annual Meeting, it is the intention of the persons named in the accompanying proxy to vote on those matters in accordance with their best judgment.

How do I vote?

You may either vote “FOR” all the nominees to the Board of Directors or you may “WITHHOLD” your vote for any nominee you specify. For Proposal 2 and Proposal 3, you may vote “FOR” or “AGAINST” or abstain from voting.

The procedures for voting are fairly simple:

Stockholder of Record: Shares Registered in Your Name

If you are a stockholder of record, you may vote using the online meeting website during the Annual Meeting (as noted above), vote by proxy using the enclosed proxy card, vote by proxy over the telephone, or vote by proxy through the internet. Whether or not you plan to attend the virtual meeting, we urge you to vote by proxy to ensure your vote is counted. You may still attend the virtual meeting and vote using our online meeting website even if you have already voted by proxy.

- To vote during the virtual Annual Meeting, register for and log in to <http://www.virtualshareholdermeeting.com/XBIO2025> as described above using your control number from the enclosed proxy card.
- To vote using the proxy card, simply mark, sign and date the enclosed proxy card and return it promptly in the envelope provided. If we receive your signed proxy card before the Annual Meeting, we will vote your shares as you direct.
- To vote over the telephone, dial 1-800-690-6903 using a touch-tone phone and follow the recorded instructions. You will be asked to provide the control number from the enclosed proxy card. Your telephone vote must be received by 11:59 p.m. Eastern Time on December 10, 2025 to be counted.
- To vote through the internet, go to www.proxyvote.com to complete an electronic proxy card. You will be asked to provide the control number from the enclosed proxy card. Your internet vote must be received by 11:59 p.m. Eastern Time on December 10, 2025 to be counted.

Internet proxy voting may be provided to allow you to vote your shares online, with procedures designed to ensure the authenticity and correctness of your proxy vote instructions. However, please be aware that you must bear any costs associated with your internet access, such as usage charges from internet access providers and telephone companies.
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Beneficial Owner: Shares Registered in the Name of Broker or Bank

If you are a beneficial owner of shares registered in the name of your broker, bank, or other agent, you should have received a voting instruction form with these proxy materials from that organization rather than from us. Simply complete and mail the voting instruction form to ensure that your vote is counted. Alternatively, you may vote by telephone or over the internet as instructed by your broker or bank. To vote using the online meeting website during the virtual Annual Meeting, you must obtain a valid control number from your broker, bank or other agent, as described above. Follow the instructions from your broker or bank included with these proxy materials, or contact your broker or bank to request a proxy form.

How many votes do I have?

On each matter to be voted upon, you have one vote for each share of common stock you own as of October 15, 2025.

What happens if I do not vote?

Stockholder of Record: Shares Registered in Your Name

If you are a stockholder of record and do not vote by completing your proxy card, by telephone, through the internet or by using the online meeting website during the virtual Annual Meeting, your shares will not be voted.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If you are a beneficial owner and do not instruct your broker, bank, or other agent how to vote your shares, the question of whether your broker or nominee will still be able to vote your shares depends on whether the particular proposal is deemed by applicable laws to be a “routine” matter. Brokers and nominees can use their discretion to vote “uninstructed” shares with respect to matters that are considered to be “routine,” but not with respect to “non-routine” matters. Under applicable rules, “non-routine” matters are matters that may substantially affect the rights or privileges of stockholders, such as mergers, stockholder proposals, elections of directors (even if not contested), executive compensation (including any advisory stockholder votes on executive compensation and on the frequency of stockholder votes on executive compensation), and certain corporate governance proposals, even if management-supported. Accordingly, your broker or nominee may not vote your shares on Proposal 1 and Proposal 3 without your instructions, but may vote your shares on Proposal 2 even in the absence of your instruction.

What if I return a proxy card or otherwise vote but do not make specific choices?

If you return a signed and dated proxy card or otherwise vote without marking voting selections, your shares will be voted, as applicable, “FOR” the election of all six nominees for director; “FOR” the ratification of CBIZ CPAs P.C. as the independent registered public accounting firm of the Company for its fiscal year ending December 31, 2025; and “FOR” the approval, on an advisory, non-binding basis, of the compensation of our named executive officers. If any other matter is properly presented at the meeting, your proxyholder (one of the individuals named on your proxy card) will vote your shares using his best judgment.

Who is paying for this proxy solicitation?

We will pay for the entire cost of soliciting proxies. In addition to these proxy materials, our directors and employees may also solicit proxies in person, by telephone, or by other means of communication. Directors and employees will not be paid any additional compensation for soliciting proxies. We may also reimburse brokerage firms, banks and other agents for the cost of forwarding proxy materials to beneficial owners.

What does it mean if I receive more than one set of proxy materials?

If you receive more than one set of proxy materials, your shares may be registered in more than one name or in different accounts. Please follow the voting instructions on the proxy cards in the proxy materials to ensure that all of your shares are voted.

Can I change my vote after submitting my proxy?*Stockholder of Record: Shares Registered in Your Name*

Yes. You can revoke your proxy by any of the following methods:

- You may submit another properly completed proxy card with a later date.
- You may grant a subsequent proxy by telephone or through the internet.
- You may send a timely written notice that you are revoking your proxy to our Corporate Secretary at 945 Concord Street, Framingham, Massachusetts 01701.
- You may attend the virtual Annual Meeting and vote using the online meeting website, as discussed above. Simply attending the virtual meeting will not, by itself, revoke your proxy.

Your most current proxy card or telephone or internet proxy is the one that is counted.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If your shares are held by your broker or bank as a nominee or agent, you should follow the instructions provided by your broker or bank.

When are stockholder proposals and director nominations due for next year's Annual Meeting?

To be considered for inclusion in next year's proxy materials, your proposal (including a director nomination) must be submitted in writing by July 3, 2026 to our Corporate Secretary at 945 Concord Street, Framingham, Massachusetts 01701. However, if the date of the 2026 Annual Meeting of Stockholders ("2026 Annual Meeting") is changed by more than 30 days from the date of the Annual Meeting, then the deadline will be a reasonable time before the Company begins to print and mail its proxy materials for the 2026 Annual Meeting. Upon determination by the Company that the date of the 2026 Annual Meeting will be advanced or delayed by more than 30 days from the date of the Annual Meeting, the Company will disclose that change in the earliest possible Quarterly Report on Form 10-Q, or if impracticable, any means reasonably calculated to inform stockholders. If you wish to submit a proposal (including a director nomination) at the meeting that is not to be included in next year's proxy materials, you must do so by giving timely notice in writing to our Corporate Secretary and otherwise comply with the provisions of our Amended and Restated Bylaws. To be timely, our Amended and Restated Bylaws provide that we must have received the notice not less than 90 days or more than 120 days prior to the one-year anniversary of the date of the previous year's annual meeting of stockholders (the "Anniversary"); provided, however, that in the event that the date of next year's annual meeting is more than 30 days before or more than 30 days after the Anniversary, notice must be delivered not earlier than the close of business on the 120th day prior to next year's annual meeting and not later than the close of business on the later of (i) the 90th day prior to next year's annual meeting or (ii) the close of business on the 10th day following the day on which public announcement of the date of next year's annual meeting is first made by us. You are advised to review our Amended and Restated Bylaws, which contain additional requirements about advance notice of stockholder proposals and director nominations. In addition to satisfying the foregoing advance notice requirements under our Amended and Restated Bylaws, to comply with the universal proxy rules under the Exchange Act, stockholders who intend to solicit proxies in support of director nominees other than the Company's nominees in connection with the 2026 Annual Meeting must also provide notice that sets forth the information required by Rule 14a-19 under the Exchange Act no later than October 12, 2026.

How are votes counted?

Votes will be counted by the inspector of election appointed for the meeting, who will separately count, for the proposal to elect directors, votes "FOR," "WITHHOLD" and broker non-votes and, with respect to other proposals, votes "FOR" and "AGAINST," abstentions and, if applicable, broker non-votes. Broker non-votes have no effect and will not be counted towards the vote total for any proposal.

What are "broker non-votes"?

If you are the beneficial owner of shares held in "street name," your shares may constitute "broker non-votes." Broker non-votes occur when a beneficial owner of shares held in "street name" does not give instructions to the broker, bank or other nominee holding the shares as to how to vote. Generally, if shares are held in street name, the beneficial owner of the shares is entitled to give voting instructions to the broker, bank or other nominee holding the shares. If the beneficial owner does not provide voting instructions, the broker, bank or other nominee can still vote the shares with respect to matters that are considered to be "routine," but cannot vote the shares with respect to "non-routine" matters. Under applicable rules that generally apply to all brokers, bank or other nominees, on voting matters characterized as "routine," firms have the discretionary authority to vote shares for which their customers do not provide voting instructions. On non-routine proposals, such as "uninstructed shares" may not be voted by such firms. Only Proposal 2 is considered a "routine" matter for this purpose and brokers, banks or other nominees generally have discretionary voting power with respect to such proposal. Proposal 1 and Proposal 3 are not considered a routine matter, and without your instructions, your broker cannot vote your shares for the proposal.

How many votes are needed to approve each proposal?

For the election of directors, the six nominees receiving the most “FOR” votes from the holders of shares present in person or represented by proxy and entitled to vote on the election of directors will be elected. Only votes “FOR” will affect the outcome. Broker non-votes will have no effect.

For Proposal 2, an affirmative “FOR” vote of a majority of the shares cast affirmatively or negatively for this proposal is required to ratify the selection of CBIZ CPAs P.C. as the Company’s independent registered public accounting firm for fiscal year ending December 31, 2025. If you mark your proxy to “ABSTAIN” from voting, it will have no effect. Broker non-votes will also have no effect.

For Proposal 3, an affirmative “FOR” vote of a majority of the shares cast affirmatively or negatively for this proposal is required to approve, on an advisory, non-binding basis, the compensation of our named executive officers. If you mark your proxy to “ABSTAIN” from voting, it will have no effect. Broker non-votes will also have no effect. Because the vote on the Say on Pay proposal is advisory, it will not be binding on the Board of Directors or the Company. However, the Compensation Committee will take into account the outcome of the Say on Pay vote when considering future executive compensation arrangements.

What is the quorum requirement?

A quorum of stockholders is necessary to hold a valid meeting. A quorum will be present if stockholders holding at least fifty percent (50%) of the outstanding shares entitled to vote are present at the Annual Meeting in person or represented by proxy. On the record date, there were 2,277,139 shares outstanding and entitled to vote. **Thus, the holders of 1,138,570 shares must be present in person or represented by proxy at the meeting to have a quorum.**

Your shares will be counted towards the quorum only if you submit a valid proxy (or one is submitted on your behalf by your broker, bank or other nominee) or if you vote in person at the meeting. Abstentions and broker non-votes will be counted towards the quorum requirement. If there is no quorum, the chairman of the meeting may adjourn the meeting to another date.

How can I find out the results of the voting at the Annual Meeting?

Preliminary voting results will be announced at the Annual Meeting. In addition, final voting results will be published in a Current Report on Form 8-K that we expect to file within four business days after the Annual Meeting. If final voting results are not available to us in time to file a Form 8-K within four business days after the meeting, we intend to file a Form 8-K to publish preliminary results and, within four business days after the final results are known to us, file an additional Form 8-K to publish the final results.

What proxy materials are available on the internet?

The proxy statement, the Notice of the Annual Meeting and our Annual Report on Form 10-K for the fiscal year ended December 31, 2024, as amended (the “Annual Report to Stockholders”), are available at www.xeneticbio.com. The information on our website is not incorporated by reference into, or a part of, this proxy statement.

NOTICE OF INTERNET AVAILABILITY OF PROXY MATERIALS

In accordance with the rules of the SEC, we are furnishing our proxy materials, including this proxy statement and the Annual Report to Stockholders to our stockholders, via the Internet. During the week of October 27, 2025, we will commence mailing to our stockholders a Notice of Internet Availability of Proxy Materials (the “Notice of Internet Availability”) that contains instructions on how to access our proxy materials on the Internet and how to vote. Other stockholders, in accordance with their prior requests, will receive an email with instructions on how to access our proxy materials and vote, or will be mailed paper copies of our proxy materials and a proxy card or voting form. Stockholders may request to receive all future proxy materials in printed form by mail or electronically by email by following the instructions contained in the Notice of Internet Availability.

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE STOCKHOLDER MEETING TO BE HELD ON DECEMBER 11, 2025

The 2025 Proxy Statement and 2024 Annual Report to Stockholders are available online at:

- <http://www.virtualshareholdermeeting.com/XBIO2025>; and
- www.xeneticbio.com.

PROPOSAL 1

ELECTION OF DIRECTORS

Our Board of Directors (“Board”) currently consists of six directors. Each of the nominees listed below is currently a director of the Company who was previously elected by the stockholders. Each director to be elected and qualified will hold office until the next annual meeting of stockholders and until his or her successor is elected, or, if sooner, until the director’s death, resignation or removal.

Directors are elected by a plurality of the votes of the holders of shares present in person or represented by proxy and entitled to vote on the election of directors. Accordingly, the six nominees receiving the highest number of affirmative votes will be elected. Shares represented by executed proxies will be voted, if authority to do so is not withheld, for the election of the six nominees named below. If any nominee becomes unavailable for election as a result of an unexpected occurrence, your shares will be voted for the election of a substitute nominee proposed by us. Each person nominated for election has agreed to serve if elected. Our management has no reason to believe that any nominee will be unable to serve.

It is our policy to encourage nominees for directors to attend the Annual Meeting. At the Company’s last annual meeting of stockholders, which was held in December of 2024, five of our Board members attended the meeting and were available to be heard by those present at the meeting.

Nominees

The following is a brief biography of each nominee for director and a discussion of the specific experience, qualifications, attributes or skills of each nominee that led the Nominating and Corporate Governance Committee to recommend that person as a nominee for director, as of the date of this proxy statement.

Name	Age	Position
Dr. Grigory Borisenko	56	Director ⁽¹⁾
Mr. Firdaus Jal Dastoor, FCS	72	Director ^{(1), (2), (3)}
Dr. Dmitry Genkin	56	Director
Dr. Roger Kornberg	78	Director ⁽³⁾
Mr. Moshe Mizrahy	72	Director
Dr. Alexey Vinogradov	55	Director ^{(1), (2)}

(1) Member of the Audit Committee

(2) Member of the Compensation Committee

(3) Member of the Nominating and Corporate Governance Committee

Grigory Borisenko, PhD has served as a member of our Board since 2019. Dr. Borisenko has over 25 years of scientific, management and strategic experience in the life science field. Since April 2022, Dr. Borisenko has been an independent consultant for a number of companies. Prior to that time, Dr. Borisenko served as an Investment Director of an eastern European venture capital and private equity management fund, and has specialized in investment projects in life sciences for over ten years. Dr. Borisenko served on the board of directors of multiple biotechnology companies including Atea Pharmaceuticals, Inc. and Adastral Pharmaceuticals, Inc. Currently, Dr. Borisenko provides consulting and investment advising services in the biotech area. Prior to his investment career, Dr. Borisenko held academic appointments with the University of Pittsburgh and co-authored over fifty peer-reviewed publications in leading biochemistry and cell biology journals. Dr. Borisenko received his M.S. and Ph.D. from the Pirogov State Medical University, accomplished postdoctoral training at the University of Pittsburgh and is a recipient of Fogarty International and International Fellowship Awards from NIH and WHO. We believe Dr. Borisenko's extensive background in the life sciences and biotechnology industries provide him with the appropriate set of skills to serve as a member of our Board.

Firdaus Jal Dastoor, FCS has served as a member of our Board since January 2014 pursuant to terms of the agreement of our acquisition of Xenetic U.K. He has been employed by the Cyrus Poonawalla Group, a conglomerate in India with interests in horse breeding, biotech and life sciences, and financial services, in business development strategies and operational roles since October 1981. Mr. Dastoor is currently a Group Director in charge of Finance and Corporate Affairs and Company Secretary of the Serum Institute of India Private Limited at the Cyrus Poonawalla Group. He has been a Fellow Member of The Institute of Company Secretaries of India since 1990. Mr. Dastoor is on the board of several private companies operating in the fields of life sciences and biotech, international trade, financial services and quality standards certifications. Mr. Dastoor received a B.A. in Commerce from the University of Poona. We believe Mr. Dastoor's knowledge of investments in the life sciences and biotechnology industries, and his finance and business development background provide him with the appropriate set of skills to serve as a member of our Board.

Dmitry Genkin, MD has served as a current member of our Board since December 2023. Dr. Genkin previously served on the Company's Board of Directors from 2017-2021. He studied drug delivery under Professor Gregory Gregoriadis at The School of Pharmacy, University of London, as well as at the Department of Clinical Pharmacology at Karolinska Hospital, Stockholm. Since 2005, Dr. Genkin has served as Executive Chairman of PJSC Pharmsynthez, a stockholder of Xenetic. Dr. Genkin is founder and board member of Santerus AG – a Swiss private therapeutic medical device company developing novel apheresis therapies for extracorporeal removal of NETs. Dr. Genkin is on the board of CLS Therapeutics Inc. and Peri-Ness Ltd. – private biotechnology companies developing anti-NETosis therapies. Dr. Genkin is the inventor of more than 20 patents and patent applications in the field of therapeutics targeting of NETosis and cell free DNA. We believe Dr. Genkin's significant life sciences, biotechnology and international background provide him with the appropriate set of skills to serve as a member of our Board.

Roger Kornberg, PhD has served as a member of our Board since February 2016. Dr. Kornberg is a member of the U.S. National Academy of Sciences and the Winzer Professor of Medicine in the Department of Structural Biology at Stanford University. He earned his B.S. in chemistry from Harvard University in 1967 and his Ph.D. in chemical physics from Stanford in 1972. He became a postdoctoral fellow at the Laboratory of Molecular Biology in Cambridge, England and then an assistant professor of biological chemistry at Harvard Medical School in 1976, before moving to his present position as professor of structural biology at Stanford Medical School in 1978. In 2006, Dr. Kornberg was awarded the Nobel Prize in Chemistry in recognition for his studies of the molecular basis of Eukaryotic Transcription, the process by which DNA is copied to RNA. Dr. Kornberg is also the recipient of several awards, including the 2001 Welch Prize, the highest award granted in the field of chemistry in the United States, and the 2002 Leopold Mayer Prize, the highest award granted in the field of biomedical sciences from the French Academy of Sciences. Dr. Kornberg has served as a director of Cocrystal Pharma, Inc. (NasdaqCM: COCP) since April 2020. We believe Dr. Kornberg's prior experience serving on the boards of directors of large organizations as well as his scientific background provides him with the appropriate set of skills to serve as a member of our Board.

Moshe Mizrahy has served as a member of our Board since December 2023. Mr. Mizrahy is co-founder of InMode Ltd. (NASDAQ: INMD) and has served as its Chief Executive Officer and Chairman of its board of directors since its inception in 2008. Prior to that, Mr. Mizrahy was co-founder and chief executive officer of Syneron Medical Ltd. Mr. Mizrahy was also the former chief executive officer of Home Skinovations Ltd., and is currently chairman of its board. In addition to Home Skinovations Ltd., Mr. Mizrahy currently sits on the board of directors of SipNose Ltd., Pet Novations Ltd., Peri-Ness Technologies Ltd., Santerus AG, Easy-Lap Ltd., O.B.-Tools Ltd., Urifer Ltd., Easy Notes Ltd., Escape Rescue Systems Ltd., M.N. Business Strategy Ltd., Silk'n Cure Ltd., Himalaya Family Office Advising Ltd. and Polimer Logistics (Israel) Ltd. Mr. Mizrahy is co-founder and general partner of Nitzanim AVX Kyocera Venture Capital Fund and First Israel Mezzeine Investors Fund. Mr. Mizrahy has expertise in value creation for medical technologies, fundraising, public offerings, marketing and regulatory affairs. Mr. Mizrahy has a B.S. in Engineering from the Tel Aviv University and an MBA from Pace University, New York. We believe Dr. Mizrahy's executive leadership background provide him with the appropriate set of skills to serve as a member of our Board.

Alexey Vinogradov has served as a member of our Board since July 2019. Dr. Vinogradov currently works as Business Development Manager at Mag. Peter G. Wahl's Law Firm in Vienna, Austria, which focuses on corporate, property and commercial law. Dr. Vinogradov has extensive experience in business development. From 2017 to 2022 he worked as a Business Development Director and Operations Director at Cantreva LLC, providing services in the field of renewable energy sources (solar, wind, hydropower). Previously, from 2015 to 2017, Dr. Vinogradov held the executive position at Togas Middle East LLC in Dubai, UAE. Dr. Vinogradov is a member of the board of PJSC Pharmsynthez a shareholder of Xenetic. We believe Mr. Vinogradov's experience in business communication, international business development and financial analytics provides him with the appropriate set of skills to serve as a member of our Board.

There are no family relationships among any of our directors and executive officers and, to the best of our knowledge, none of our directors or executive officers has, during the past ten years, been involved in any legal proceedings which are required to be disclosed pursuant to the rules and regulations of the SEC.

**THE BOARD OF DIRECTORS RECOMMENDS
A VOTE IN FAVOR OF EACH NAMED NOMINEE.**

INFORMATION REGARDING THE BOARD OF DIRECTORS AND CORPORATE GOVERNANCE

During fiscal year 2024, the following served as a member of the Company's Board of Directors: Jeffrey Eisenberg, Dr. Grigory Borisenko, Dr. James Callaway, Firdaus Jal Dastoor, Dr. Dmitry Genkin, Dr. Roger Kornberg, Adam Logal, Mr. Moshe Mizrahy and Alexey Vinogradov. On May 16, 2024, Mr. Eisenberg resigned as a member of the Board. On October 29, 2024, the Directors voted to set the size of the Board to six members. On December 11, 2024, Dr. Callaway and Mr. Logal were not re-elected to the Board of Directors at the Company's annual shareholder meeting.

Directors shall hold office for a one-year term or until their successors have been duly elected and qualified. Vacancies on the Board resulting from death, resignation, disqualification, removal, or other causes can be filled by the affirmative vote of a majority of the directors then in office. Any director so elected, shall hold office for the remainder of the full term of the director for which the vacancy was created or occurred and until such director's successor shall have been duly elected and qualified. Each of the six current directors was previously elected at the Company's last annual meeting of stockholders to hold office until the next annual meeting of stockholders and until his or her successor is elected, or, if sooner, until the director's death, resignation or removal.

Independence of The Board of Directors

As required under the Nasdaq Stock Market LLC ("Nasdaq") listing standards, a majority of the members of a listed company's board of directors must qualify as "independent," as affirmatively determined by the Board of Directors. The Board consults with advisors to ensure that the Board's determinations are consistent with relevant securities and other laws and regulations regarding the definition of "independent," including those set forth in pertinent listing standards of Nasdaq, as in effect from time to time.

Consistent with these considerations, after review of all relevant identified transactions or relationships between each director, or any of his or her family members, and the Company, its senior management and its independent auditors, the Board affirmatively determined that the following directors are independent directors within the meaning of the applicable Nasdaq listing standards (and were for the period during which they served as a member of the Board during fiscal year 2024): Dr. Callaway, Mr. Dastoor, Dr. Kornberg, Mr. Logal, Mr. Mizrahy (until October 2024 in connection with the approval of a proposed transaction with Peri-Ness, as described in the "[Certain Related Person Transactions](#)" section of this proxy statement), Dr. Vinogradov and Dr. Borisenko. In making these determinations, the Board considered the current and prior relationships that each non-employee director had with the Company and all other facts and circumstances our Board deemed relevant in determining independence, including those transactions set forth in the "[Certain Related Person Transactions](#)" section of this proxy statement, as previously disclosed with the SEC.

All members of our Audit Committee, Nominating and Corporate Governance Committee, and Compensation Committee are independent (as independence is currently defined in Rule 5605 of the Nasdaq listing standards), and were for the period during which they served as a member of such Board committees during fiscal year 2024.

Board Leadership Structure

We separate the roles of Chief Executive Officer and Board Chair in recognition of the differences between the two roles. The Board of Directors is currently chaired by director, Dmitry Genkin, and our Interim Chief Executive Officer, James Parslow, is not a member of our Board of Directors. Prior to December 11, 2024 the Board of Directors was chaired by independent director, Adam Logal, and, prior to May 17, 2024, our Chief Executive Officer was Jeffrey Eisenberg, our only employee-director. The Chief Executive Officer is responsible for setting the strategic direction for the Company and the day to day leadership and performance of the Company, while the Board Chair is responsible for leading the Board in the execution of its fiduciary duties. The Board Chair presides over meetings of the full Board. While we recognize that different board leadership structures may be appropriate for companies in different situations, we believe our current leadership structure is the optimal structure for the Company at this time.

Role of the Board in Risk Oversight

Our management is principally responsible for defining the various risks facing the Company, formulating risk management policies and procedures, and managing our risk exposures on a day-to-day basis. The Board's principal responsibility in this area is to ensure that sufficient resources, with appropriate technical and managerial skills, are provided throughout the Company to identify, assess and facilitate processes and practices to address material risk and to monitor our risk management processes by informing itself concerning our material risks and evaluating whether management has reasonable controls in place to address the material risks. The involvement of the Board in reviewing our business strategy is an integral aspect of the Board's assessment of management's tolerance for risk and its determination of what constitutes an appropriate level of risk for the Company.

Meetings of The Board of Directors

The Board of Directors met eight times during the last fiscal year. Each of the current Board members attended 75% or more of the aggregate number of meetings of the Board and of the committees on which she or he served that were held during the portion of the last fiscal year for which she or he was a director or committee member, except Dr. Kornberg who attended 52% of said meetings.

Anti-Hedging and Pledging Policy

We have adopted a policy prohibiting the hedging and pledging of our securities, which applies to all officers, directors, and certain designated employees and consultants of the Company and provides that, unless approved in advance by the Audit Committee, such individuals are prohibited from (i) engaging in any hedging transactions (including buying or selling puts, calls or other derivative securities, as well as derivatives such as swaps, forwards, and futures transactions) with respect to securities of the Company, and (ii) using the Company's securities in a margin account or pledging Company securities as collateral for a loan. As of the date of this proxy statement, all of our directors and executive officers are in compliance with this policy. In addition, no securities beneficially owned by our officers and directors are pledged.

INFORMATION REGARDING COMMITTEES OF THE BOARD OF DIRECTORS

The Board has three standing committees: an Audit Committee, a Compensation Committee, and a Nominating and Corporate Governance Committee. The Board also has two special committees: the Special Committee, which was formed on January 16, 2024, and the Financing Committee, which was formed in August 2020. The Company has adopted charters to govern the conduct, authority and responsibilities of each of the Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee.

The following table provides membership and meeting information for each of the standing Board committees during 2024:

Name	Audit	Compensation	Nominating and Corporate Governance
Grigory Borisenko ⁽¹⁾	X		
James Callaway ⁽⁴⁾	X	X*	X*
Dmitry Genkin			
Firdaus Jal Dastoor ⁽²⁾	X*	X*	X
Roger Kornberg ⁽³⁾			X*
Adam Logal ⁽⁴⁾	X*	X	X
Moshe Mizrahy			
Alexey Vinogradov ⁽¹⁾	X	X	
Total meetings in 2024 fiscal year	7	5	4

* Committee Chairperson

(1) Effective December 11, 2024

(2) Became Chairman of the Audit and Compensation Committees and a member of the Nominating and Corporate Governance Committee effective December 11, 2024.

(3) Became Chairman of the Nominating and Corporate Governance Committee effective December 11, 2024.

(4) On December 11, 2024, Dr. Callaway and Mr. Logal were not re-elected to the Board of Directors at the Company's annual shareholder meeting.

Below is a description of each standing committee of the Board of Directors. Each of the committees has authority to engage legal counsel or other experts or consultants, as it deems appropriate, to carry out its responsibilities. The Board of Directors has determined that each member, during the portion of the relevant fiscal year for which such member has served, of each committee met or meets, as applicable, the applicable Nasdaq rules and regulations regarding "independence" and each member was or is, as applicable, free of any relationship that would impair his or her individual exercise of independent judgment with regard to the Company.

Audit Committee

The Audit Committee of the Board of Directors was established by the Board in accordance with Section 3(a)(58)(A) of the Exchange Act to oversee the Company's corporate accounting and financial reporting processes and audits of its financial statements. For this purpose, the Audit Committee performs several functions. The Audit Committee evaluates the performance of and assesses the qualifications of the independent auditors; determines and approves the engagement of the independent auditors; determines whether to retain or terminate the existing independent auditors or to appoint and engage new independent auditors; reviews and approves the retention of the independent auditors to perform any proposed permissible non-audit services; monitors the rotation of partners of the independent auditors on the Company's audit engagement team as required by law; reviews and approves or rejects transactions between the Company and any related persons; confers with management and the independent auditors regarding the effectiveness of internal control over financial reporting; establishes procedures, as required under applicable law, for the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters and the confidential and anonymous submission by employees of concerns regarding questionable accounting or auditing matters; and meets to review the Company's annual audited financial statements and quarterly financial statements with management and the independent auditor, including a review of the Company's disclosures under the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section of the Company's Annual Report to Stockholders on Form 10-K.

For the fiscal year 2024, the Audit Committee was composed of three directors. Prior to December 11, 2024, the Audit Committee was composed of Mr. Dastoor, Dr. Callaway, and Mr. Logal (chair). Subsequent to December 11, 2024, the Audit Committee was composed of Mr. Dastoor (chair), Dr. Borisenko and Dr. Vinogradov. The Audit Committee met seven times during fiscal year 2024. The Board has adopted a written Audit Committee charter that is available to stockholders on the Company's website at <http://ir.xeneticbio.com/>. The information on our website is not incorporated by reference into, or a part of, this proxy statement.

The Board of Directors reviews the Nasdaq Stock Market LLC ("Nasdaq") listing standards definition of independence for Audit Committee members on an annual basis and has determined that all current members of our Audit Committee are independent (as independence is currently defined in Rule 5605(c)(2)(A)(i) and (ii) of the Nasdaq listing standards).

The Board of Directors determined that Mr. Dastoor qualifies as an "audit committee financial expert," as defined in applicable SEC rules. The Board made a qualitative assessment of Mr. Dastoor's level of knowledge and experience based on a number of factors, including his formal education and experience as group director-finance.

Report of the Audit Committee of the Board of Directors

The Audit Committee has reviewed and discussed the audited financial statements for the fiscal year ended December 31, 2024 with management of the Company. The Audit Committee has discussed with the independent registered public accounting firm the matters required to be discussed by Auditing Standard No. 1301, *Communications with Audit Committees*, as adopted by the Public Company Accounting Oversight Board ("PCAOB"). The Audit Committee has also received the written disclosures and the letter from the independent registered public accounting firm required by applicable requirements of the PCAOB regarding the independent accountants' communications with the audit committee concerning independence, and has discussed with the independent registered public accounting firm the accounting firm's independence. Based on the foregoing, the Audit Committee has recommended to the Board of Directors that the audited financial statements be included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2024.

Mr. Firdaus Jal Dastoor, FCS, Chairman
Dr. Grigory Borisenko
Dr. Alexey Vinogradov

Compensation Committee

The Compensation Committee is currently composed of two directors: Mr. Dastoor (chair) and Dr. Vinogradov. All current members of our Compensation Committee are independent (as independence is currently defined in Rule 5605(d)(2) of the Nasdaq listing standards). Prior to December 11, 2024, the Compensation Committee was composed of three directors: Dr. Callaway (chair), Mr. Dastoor and Mr. Logal. The Compensation Committee met five times during 2024. The Board has adopted a written Compensation Committee charter that is available to stockholders on the Company's website at <http://ir.xeneticbio.com/>. The information on our website is not incorporated by reference into, or a part of, this proxy statement.

The Compensation Committee of the Board acts on behalf of the Board to review, recommend for adoption and oversee our compensation strategy, policies, plans and programs, including:

- establishment of corporate and individual performance objectives relevant to the compensation of our executive officers and directors and evaluation of performance in light of these stated objectives;
- review and approval of the compensation and other terms of employment or service of our Chief Executive Officer; and
- administration of our equity compensation plans, pension and profit-sharing plans, deferred compensation plans and other similar plan and programs.

The Compensation Committee determines salaries, incentives and other forms of compensation for the Chief Executive Officer and our executive officers and reviews and makes recommendations to the Board with respect to director compensation. The Compensation Committee meets without the presence of executive officers when approving or deliberating on executive officer compensation, but may invite the Chief Executive Officer to be present during the approval of, or deliberations with respect to, other executive officer compensation. The Compensation Committee reviews and approves the terms of offer letters, employment agreements, severance agreements, change-in-control agreements, indemnification agreements and other material agreements between us and our executive officers. In addition, the Compensation Committee administers our stock incentive compensation and equity-based plans.

Compensation Committee Interlocks and Insider Participation

None of the individuals serving on the Compensation Committee during fiscal year 2024 were at any time during fiscal year 2024, an officer or employee of the Company and none have served as a former officer of the Company. See "[*Certain Related-Person Transactions*](#)" below for related party transactions involving certain members of the Compensation Committee. None of our current executive officers has served as a member of the board of directors, or as a member of the compensation or similar committee, of any entity that has one or more executive officers who served on our board of directors or compensation committee during the year ended December 31, 2024.

Nominating and Corporate Governance Committee

The Nominating and Corporate Governance Committee of the Board is responsible for identifying, reviewing and evaluating candidates to serve as directors of the Company (consistent with criteria approved by the Board), reviewing and evaluating incumbent directors, recommending to the Board for selection candidates for election to the Board of Directors, making recommendations to the Board regarding the membership of the committees of the Board, and developing a set of corporate governance principles for the Company.

The Nominating and Corporate Governance Committee is currently composed of two directors: Dr. Kornberg (chair) and Mr. Dastoor. Prior to December 11, 2024, the Nominating and Corporate Governance Committee was composed of three directors: Dr. Callaway (chair), Mr. Logal and Dr. Kornberg. All members of the Nominating and Corporate Governance Committee are independent (as independence is currently defined in Rule 5605(a)(2) of the Nasdaq listing standards). The Nominating and Corporate Governance Committee met four times during 2024. The Board has adopted a written Nominating and Corporate Governance Committee charter that is available to stockholders on the Company's website at <http://ir.xeneticbio.com/>. The information on our website is not incorporated by reference into, or a part of, this proxy statement.

The Nominating and Corporate Governance Committee believes that candidates for director should have certain minimum qualifications, including the ability to read and understand basic financial statements, being over 21 years of age and having the highest personal integrity and ethics. The Nominating and Corporate Governance Committee also intends to consider such factors as possessing relevant expertise upon which to be able to offer advice and guidance to management, having sufficient time to devote to the affairs of the Company, demonstrated excellence in his or her field, having the ability to exercise sound business judgment and having the commitment to rigorously represent the long-term interests of the Company's stockholders. However, the Nominating and Corporate Governance Committee retains the right to modify these qualifications from time to time. Candidates for director nominees are reviewed in the context of the current composition of the Board, the operating requirements of the Company and the long-term interests of stockholders. In conducting this assessment, the Nominating and Corporate Governance Committee typically considers diversity, age, skills and such other factors as it deems appropriate, given the current needs of the Board and the Company, to maintain a balance of knowledge, experience and capability.

While we do not have a formal diversity policy with respect to Board composition, the Board believes it is important for the Board to have diversity of knowledge, professional experience and skills, and the Nominating and Corporate Governance Committee takes these qualities into account when considering director nominees for recommendation to the Board.

The Nominating and Corporate Governance Committee will consider director candidates recommended by stockholders. A stockholder who wishes to suggest a prospective nominee for the Board of Directors should notify the Company's Secretary or any member of the Nominating and Corporate Governance Committee in writing and include any supporting material the stockholder considers appropriate. In addition, the Company's Amended and Restated Bylaws contain provisions addressing the process by which a stockholder may nominate an individual to stand for election to the Board of Directors at its annual meeting of stockholders. In order to nominate a candidate for director, a stockholder must give timely notice in writing to the Company's Secretary and otherwise comply with the provisions of our Amended and Restated Bylaws. To be timely, our Amended and Restated Bylaws provide that we must have received the notice by the Anniversary; provided, however, that in the event that the date of next year's Annual Meeting is more than 30 days before or more than 30 days after the Anniversary, notice must be delivered not earlier than the close of business on the 120th day prior to next year's annual meeting and not later than the close of business on the later of (i) the 90th day prior next year's annual meeting or (ii) the close of business on the 10th day following the day on which public announcement of the date of next year's annual meeting is first made by us. Information required by our Amended and Restated Bylaws to be in the notice includes: (A) all information relating to such person that is required to be disclosed in solicitations of proxies for election of directors, or is otherwise required, in each case, pursuant to Regulation 14A under the Exchange Act, as amended (including such person's written consent to being named in the proxy statement as a nominee and to serving as a director, if elected); (B) a description of all direct and indirect compensation and other material monetary agreements, arrangements and understandings during the past three (3) years, and any other material relationships, between or among such stockholder, the beneficial owner, if any, on whose behalf any such proposal or nomination is being made, and their respective affiliates and associates, on the one hand, and each proposed nominee, and his or her respective affiliates and associates, on the other hand, including, without limitation, all information that would be required to be disclosed pursuant to Item 404 of Regulation S-K promulgated under the Securities Act of 1933, as amended, if such stockholder, such beneficial owner, or any affiliate or associate thereof, were the "registrant" for purposes of such rule and the nominee were a director or executive officer of such registrant; (C) to the extent known by the stockholder, the name and address of any other security holder of the Company who owns, beneficially or of record, any securities of the Company and who supports any nominee proposed by such stockholder; and (D) a questionnaire and a representation and agreement, completed and signed by such person, as required by our Amended and Restated Bylaws.

Stockholder nominations must be made in accordance with the procedures outlined in, and include the information required by, our Amended and Restated Bylaws and must be addressed to our Corporate Secretary, c/o Xenetic Biosciences, Inc., 945 Concord Street, Framingham, Massachusetts 01701. You can obtain a copy of our Amended and Restated Bylaws by writing to the Corporate Secretary at this address.

Our Nominating and Corporate Governance Committee recommended to the Board that it nominate each of Grigory Borisenko, Firdaus Jal Dastoor, Dmitry Genkin, Roger Kornberg, Moshe Mizrahy and Alexey Vinogradov for election at the Annual Meeting.

Stockholder Communications With The Board Of Directors

All communications to our Board, our Board committees or any individual director, must be in writing and addressed to our Corporate Secretary, c/o Xenetic Biosciences, Inc., 945 Concord Street, Framingham, Massachusetts 01701. All communications will be reviewed by the Secretary and, unless otherwise indicated in such communication, submitted to the Board or an individual director, as appropriate.

Code of Business Conduct and Ethics

We have adopted the Xenetic Biosciences, Inc. Code of Business Conduct and Ethics that applies to all of our employees, officers and directors, including our principal executive officer, principal financial officer and principal accounting officer. The Code of Business Conduct and Ethics is available on our website, www.xeneticbio.com, under “Investors” at “Corporate Governance.” If we make any substantive amendments to the Code of Business Conduct and Ethics or grant any waiver from a provision of the Code of Business Conduct and Ethics to any executive officer or director, we intend to promptly disclose the nature of the amendment or waiver on our website, to the extent required by the applicable rules and exchange requirements. The information on our website is not incorporated by reference into, or a part of, this proxy statement.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table and footnotes set forth certain information known to us regarding beneficial ownership of our capital stock as of October 15, 2025 (unless otherwise indicated below) for:

- each person known by us to be the beneficial owner of more than 5% of our capital stock;
- our named executive officers;
- each of our directors; and
- all current executive officers and directors as a group.

The number of shares beneficially owned by each entity, person, director or executive officer is determined in accordance with the rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under such rules, beneficial ownership includes any shares over which the individual has sole or shared voting power or investment power as well as any shares that the individual has the right to acquire within 60 days through the exercise of any stock option, warrants or other rights. Except as otherwise indicated, and subject to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all shares of common stock held by that person or entity.

The percentage of shares beneficially owned is computed on the basis of 2,277,139 shares of our common stock outstanding as of October 15, 2025, on an as-converted basis. Shares of our common stock that a person has the right to acquire within 60 days after October 15, 2025 are deemed outstanding for purposes of computing the percentage ownership of the person or entity holding such rights, but are not deemed outstanding for purposes of computing the percentage ownership of any other person, except with respect to the percentage ownership of all directors and executive officers as a group. Unless otherwise indicated below, the address for each beneficial owner listed is c/o Xenetic Biosciences, Inc., at 945 Concord Street, Framingham, Massachusetts 01701.

Name of Beneficial Owner	Number of Shares Beneficially Owned ⁽¹⁾	Percentage Beneficially Owned
<u>Fiscal Year 2024 Named Executive Officers and Current Directors</u>		
James Parslow	36,126 ⁽²⁾	1.6%
Jeffrey Eisenberg	—	*
Dr. Curtis Lockshin	—	*
Dr. Grigory Borisenko ⁽³⁾	7,500 ⁽⁴⁾	*
Firdaus Jal Dastoor	15,417 ⁽⁵⁾	*
Dr. Dmitry Genkin ⁽³⁾	215,964 ⁽⁶⁾	9.5%
Dr. Roger Kornberg	15,626 ⁽⁷⁾	*
Moshe Mizrahy	2,500 ⁽⁸⁾	*
Alexey Vinogradov	33,679 ⁽⁹⁾	1.5%
All current executive officers and directors as a group (7 persons)	179,312 ⁽¹⁰⁾	7.6%
<u>5% Current Stockholders</u>		
CLS Therapeutics, Ltd.	147,500 ⁽⁶⁾	6.5%

* Represents beneficial ownership of less than one percent (1%).

- (1) Unless otherwise indicated below, this table is based upon corporate records, information supplied by officers, directors and, in the case of principal stockholders, information provided by our transfer agent.
- (2) The total beneficial ownership consists of 36,126 shares issuable upon exercise of options that are exercisable within 60 days of October 15, 2025.
- (3) Dr. Borisenko was employed by Rusnano LLC, an entity affiliated with Pharmsynthez, through March 31, 2022. Dr. Dmitry Genkin is the Executive Chairman of the board of directors of Pharmsynthez. Refer to the [“Transactions with Related Persons”](#) section below for additional information with respect to certain related party transactions involving Dr. Genkin and Pharmsynthez (including its wholly owned subsidiaries).
- (4) The total beneficial ownership consists of 7,500 shares issuable upon exercise of options that are exercisable within 60 days of October 15, 2025.
- (5) The total beneficial ownership consists of 15,417 shares issuable upon exercise of options that are exercisable within 60 days of October 15, 2025.
- (6) Based on the Schedule 13D/A filed with the SEC on March 18, 2024 by CLS Therapeutics Ltd., a limited company organized under the laws of Guernsey, United Kingdom (“CLS”), CLS Therapeutics, LLC, a Delaware limited liability company and subsidiary of CLS (“CLS LLC”), Dmitry Genkin (“Genkin”), Victor Tets (“VT”), Georgy Tets (“GT”) and M. Scott Maguire (“Maguire”) (the “CLS 13D”): CLS has sole voting and dispositive power as to 147,500 shares of common stock, which includes 85,000 shares of common stock owned by CLS LLC; CLS LLC has sole voting and dispositive power as to 85,000 shares of common stock; Genkin has sole voting and dispositive power as to 68,464 shares of common stock and shared voting and dispositive power as to 147,500 shares of common stock; VT and GT each have shared voting and dispositive power as to 147,500 shares of common stock; and Maguire has sole voting and dispositive power as to 3,800 shares of common stock, and shared voting and dispositive power as to 2,202 shares of common stock. CLS, as the ultimate parent of CLS LLC, may exercise voting and dispositive power over the shares owned by CLS LLC, and as such, may be deemed the beneficial owner of such shares. Genkin, VT and GT may exercise voting and dispositive power over the shares owned by CLS and CLS LLC, and as such, may be deemed to be the beneficial owner of such shares. According to the 13D, the address of Genkin is Pazzale Baracca 2, Milan, Italy; the address of CLS and CLS LLC is PO Box 175, Frances House, Sir William Place, St. Peter Port Guernsey, Channel Islands GY1 4HQ; and the address of VT and GT is 180 Varick Street, New York, NY 10014. Refer to the [“Transactions with Related Persons”](#) section below for additional information with respect to certain related party transactions involving CLS.
- (7) The total beneficial ownership consists of 15,626 shares issuable upon exercise of options that are exercisable within 60 days of October 15, 2025.
- (8) The total beneficial ownership consists of 2,500 shares issuable upon exercise of options that are exercisable within 60 days of October 15, 2025.
- (9) The total beneficial ownership consists of 18,679 shares of common stock owned directly and 15,000 shares issuable upon exercise of options that are exercisable within 60 days of October 15, 2025.
- (10) The total beneficial ownership consists of 87,143 shares of common stock owned directly and 92,169 shares issuable upon exercise of options that are exercisable within 60 days of October 15, 2025.

SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act requires our directors and executive officers, and persons who own more than ten percent of a registered class of our equity securities, to file with the SEC initial reports of ownership and reports of changes in ownership of our ordinary shares and other equity securities. Such persons are required by SEC regulations to furnish us with copies of all Section 16(a) forms they file.

To our knowledge, based solely on a review of the copies of such reports furnished to us and written representations that no other reports were required, during the fiscal year ended December 31, 2024, we believe that all Section 16(a) filing requirements applicable to our executive officers, directors and greater than 10% beneficial owners were complied with, except for the following: Dr. Genkin has not yet filed the initial Form 3 since his election to the Board.

Insider Trading Policy

We have adopted an insider trading policy and procedures governing the purchase, sale and other dispositions of the Company's securities that applies to all of the Company's directors, officers, employees and certain designated consultants. We believe our insider trading policy is reasonably designed to promote compliance with insider trading laws, rules and regulations, and listing standards applicable to the Company. A copy of Xenetic's insider trading policy and procedures was filed as Exhibit 19.1 to our Annual Report to Stockholders filed with the SEC on March 18, 2025 as amended on April 29, 2025 and May 13, 2025.

PROPOSAL 2

RATIFICATION OF SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Audit Committee of the Board has selected CBIZ CPAs P.C. (“CBIZ”) as our independent registered public accounting firm for the fiscal year ending December 31, 2025 and has further directed that management submit the selection of its independent registered public accounting firm for ratification by the stockholders at the Annual Meeting. Representatives of CBIZ are expected to be present at the Annual Meeting. They will have an opportunity to make a statement if they so desire and will be available to respond to appropriate questions.

Neither the Company’s Amended and Restated Bylaws nor other governing documents or law require stockholder ratification of the selection of CBIZ as the Company’s independent registered public accounting firm. However, the Audit Committee of the Board is submitting the selection of CBIZ to the stockholders for ratification as a matter of good corporate practice. If the stockholders fail to ratify the selection, the Audit Committee of the Board will reconsider whether or not to retain that firm. Even if the selection is ratified, the Audit Committee of the Board in its discretion may direct the appointment of different independent auditors at any time during the year if they determine that such a change would be in the best interests of the Company and its stockholders.

Change in Certifying Accountant

On November 1, 2024, CBIZ acquired the attest business of Marcum LLP (“Marcum”). On April 8, 2025, the Company was notified by Marcum that Marcum resigned as the Company’s independent registered public accounting firm as a result of such acquisition, and the Company’s Audit Committee approved the resignation of Marcum. Concurrent with Marcum’s resignation, on April 8, 2025, with the approval of the Company’s Audit Committee, CBIZ was engaged as the Company’s new independent registered public accounting firm for the fiscal year ending December 31, 2025. Marcum had audited our financial statements since 2015.

The audit report of Marcum on the Company’s consolidated financial statements as of and for the fiscal years ended December 31, 2024 and 2023 did not contain an adverse opinion or a disclaimer of opinion, and was not qualified or modified as to uncertainty, audit scope, or accounting principles. During the fiscal years ended December 31, 2024 and 2023 and through April 8, 2025 (the date the Company was notified of Marcum’s resignation), there were no (1) “disagreements” (as defined in Item 304(a)(1)(iv) of Regulation S-K and the related instructions) between the Company and Marcum on any matter of accounting principles or practices, financial statement disclosure or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of Marcum, would have caused Marcum to make reference to the subject matter of the disagreement in their reports on the financial statements for such years, or (2) “reportable events” (as described in Item 304(a)(1)(v) of Regulation S-K). We provided Marcum with a copy of the above disclosures and requested that Marcum furnish us with a letter addressed to the SEC stating whether it agrees with the statements made above. A copy of Marcum’s letter, dated April 8, 2025, was attached as Exhibit 16.1 to our Current Report on Form 8-K filed with the SEC on April 10, 2025.

During the fiscal years ended December 31, 2024 and 2023 and through April 9, 2025, neither the Company nor anyone on its behalf consulted with CBIZ regarding (1) the application of accounting principles to a specified transaction, completed or proposed, or the type of audit opinion that might be rendered on the Company’s financial statements, and neither a written report nor oral advice was provided to the Company that CBIZ concluded was an important factor considered by the Company in reaching a decision as to any accounting, auditing or financial reporting issue, or (2) any matter that was either the subject of a disagreement (as defined in Item 304(a)(1)(iv) of Regulation S-K and the related instructions) or a reportable event (as described in Item 304(a)(1)(v) of Regulation S-K).

Principal Accountant Fees and Services

The following table represents aggregate fees billed to the Company for the fiscal years ended December 31, 2024 and December 31, 2023, by Marcum, the Company's principal accountant for such fiscal years.

	2024	2023
Audit Fees	\$ 160,000	\$ 168,228
Audit-Related Fees	5,000	20,342
Tax Fees	—	—
All Other Fees	—	—
	<u>\$ 165,000</u>	<u>\$ 188,570</u>

Audit Fees

Audit fees include the total fees incurred in connection with the audit of our annual consolidated financial statements for each of the years ended December 31, 2024 and 2023.

Audit-Related Fees

Audit related fees during the year ended December 31, 2024 include fees incurred in connection with our S-3 registration statement. Audit related fees during the year ended December 31, 2023 include fees incurred in connection with comfort letters issued in connection with our At-The-Market program under our S-3 registration statement.

Audit and Non-Audit Services Pre-Approval Policy

The Audit Committee pre-approves all audit and non-audit accounting services provided by our independent, registered accounting firm. All audit and non-audit fee services described above were pre-approved by the Audit Committee.

Pursuant to the Board of Directors' policy, to help ensure the independence of our independent registered public accounting firm, all auditing services and permitted non-audit services (including the terms thereof) to be performed for us by our independent registered public accounting firm must be pre-approved by the Audit Committee, subject to the de-minimis exceptions for non-audit services described in Section 10A(i)(1)(B) of the Exchange Act, which are approved by the Audit Committee prior to the commencement of services.

Our Audit Committee approved and retained Marcum to audit our consolidated financial statements for 2024. Our Audit Committee reviewed all services provided by Marcum in 2024 and concluded that the services provided were compatible with maintaining its independence.

Required Vote

The affirmative vote of the holders of a majority of the shares present in person or represented by proxy and entitled to vote on the matter at the Annual Meeting will be required to ratify the selection of CBIZ.

**THE BOARD OF DIRECTORS RECOMMENDS
A VOTE IN FAVOR OF PROPOSAL 2.**

EXECUTIVE OFFICERS

The following table sets forth information concerning our executive officers as of the date of this proxy statement.

Name	Age	Position
James Parslow	60	Interim Chief Executive Officer, Chief Financial Officer and Corporate Secretary

James Parslow was appointed our interim Chief Executive Officer on May 16, 2024, and has served as our Chief Financial Officer since April 3, 2017. Mr. Parslow most recently served as Chief Financial Officer, Treasurer and Secretary of World Energy Solutions, Inc., a publicly-traded business-to-business e-commerce company brokering energy and environmental commodities, from 2006 until its acquisition by EnerNOC, Inc. in 2015. From 2015 until 2017, he served as an independent consultant providing interim chief financial officer services to multiple emerging technology companies. Mr. Parslow is a Certified Public Accountant with over 35 years of experience serving private and public companies in the biotech, clean tech, e-commerce, and high-tech manufacturing industries. He holds an A.B. in Economics and Accounting from the College of the Holy Cross and an M.B.A. with a concentration in Finance from Bentley University.

EXECUTIVE COMPENSATION

Summary Compensation Table

The following table sets forth, for the years ended December 31, 2024 and 2023, the compensation information for James Parslow, our Interim Chief Executive Officer and Chief Financial Officer, Jeffrey Eisenberg, our former Chief Executive Officer and Dr. Curtis Lockshin, our former Chief Scientific Officer. We refer to Messrs. Parslow, Eisenberg, and Lockshin herein, collectively, as our “named executive officers.”

Name and Principal Position	Year	Salary (\$)	Option Awards ⁽¹⁾ (\$)	Non-Equity Incentive Plan Compensation ⁽²⁾ (\$)	All Other Compensation (\$)	Total (\$)
James Parslow, <i>Interim Chief Executive Officer & Chief Financial Officer</i>	2024	\$ 378,378	\$ 67,280	\$ —	\$ 35,510 ⁽³⁾	\$ 481,168
	2023	\$ 329,175	\$ 33,932	\$ 33,411	\$ 37,214	\$ 433,732
Jeffrey F. Eisenberg, <i>Former Chief Executive Officer</i>	2024	\$ 201,843	\$ —	\$ —	\$ 471,300 ⁽⁴⁾	\$ 673,143
	2023	\$ 404,250	\$ 67,863	\$ 58,617	\$ 32,764	\$ 563,494
Dr. Curtis Lockshin, <i>Former Chief Scientific Officer</i>	2024	\$ 166,992	\$ —	\$ —	\$ 387,091 ⁽⁵⁾	\$ 554,083
	2023	\$ 329,175	\$ 33,932	\$ 33,411	\$ 39,298	\$ 435,816

(1) The amounts represent the aggregate grant date fair value of stock options granted in the applicable fiscal year, computed in accordance with Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) Topic 718, excluding the effect of estimated forfeitures. Assumptions used in the calculation of this amount are set forth in Note 10 to our audited consolidated financial statements included in Item 8 of the Annual Report. Mr. Parslow was granted options to purchase 20,000 shares during 2024.

(2) Represents incentive compensation payments earned.

(3) Includes \$21,710 for health and welfare plans and \$13,800 employer matching 401(k) contribution. Does not include a retention bonus earned in 2025 as further described within [“Employment Agreements with our Named Executive Officers”](#) below.

(4) Includes \$454,559 of severance related to salary and benefit continuation as further described within [“Employment Agreements with our Named Executive Officers”](#) below, \$8,090 for health and welfare plans and \$8,651 employer matching 401(k) contribution.

(5) Includes \$369,994 of severance related to salary and benefit continuation as further described within [“Employment Agreements with our Named Executive Officers”](#) below, \$10,625 for health and welfare plans and \$6,472 employer matching 401(k) contribution.

401(k) Plan

The Company provides all full-time employees, including our named executive officers, with the opportunity to participate in a defined contribution 401(k) plan. Our 401(k) plan is intended to qualify under Section 401 of the Internal Revenue Code so that employee pre-tax contributions and income earned on such contributions are not taxable to employees until withdrawn. Employees may elect to defer up to 80 percent of their eligible compensation (not to exceed the statutorily prescribed annual limit) in the form of elective deferral contributions to our 401(k) plan. Our 401(k) plan also has a “catch-up contribution” feature for employees aged 50 or older (including those who qualify as “highly compensated” employees) who can defer amounts over the statutory limit that applies to all other employees. The 401(k) plan matches 100% of employee contributions up to a maximum of 4% of employees’ salary. Matching contributions are fully vested at the time of contribution.

Outstanding Equity Awards at Fiscal Year-End – 2024

The following table sets forth certain information with respect to outstanding equity awards held by our named executive officers at December 31, 2024.

Name	Option Awards				Stock Awards	
	Number of Securities Underlying Unexercised Options, Exercisable	Number of Securities Underlying Unexercised Options, Unexercisable	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested	Market Value of Shares or Units of Stock That Have Not Vested (\$)
James Parslow	1,459 ⁽¹⁾	—	548.40	4/3/2027	—	—
	8,000 ⁽²⁾	—	13.10	12/4/2029	—	—
	5,000 ⁽³⁾	—	26.00	3/18/2031	—	—
	4,583 ⁽⁴⁾	417 ⁽⁴⁾	11.20	3/24/2032	—	—
	3,333 ⁽⁵⁾	6,667 ⁽⁵⁾	3.88	12/11/2033	—	—
	5,000 ⁽⁶⁾	15,000 ⁽⁶⁾	3.99	6/18/2034	—	—
Jeffrey F. Eisenberg	1,042 ⁽⁷⁾	—	253.20	5/16/2025	—	—
	23,000 ⁽⁸⁾	—	13.10	5/16/2025	—	—
	10,000 ⁽⁹⁾	—	26.00	5/16/2025	—	—
	10,000 ⁽¹⁰⁾	—	11.20	5/16/2025	—	—
	20,000 ⁽¹¹⁾	—	3.88	5/16/2025	—	—
Curtis Lockshin	127 ⁽¹²⁾	—	550.80	9/6/2025	—	—

- (1) Vested one-third upon the first anniversary of the grant date, one-third upon the second anniversary of the grant date and one-third upon the third anniversary of the grant date.
- (2) Vested one-third upon the first anniversary of the grant date, one-third upon the second anniversary of the grant date and one-third upon the third anniversary of the grant date.
- (3) Vested one-third upon the first anniversary of the grant date and the remaining two-thirds over eight equal quarterly installments commencing June 18, 2022 and ending on March 18, 2024.
- (4) Vests one-third upon the first anniversary of the grant date and the remaining two-thirds over eight equal quarterly installments commencing June 24, 2023 and ending on March 24, 2025.
- (5) Vests one-third upon the first anniversary of the grant date and the remaining two-thirds over eight equal quarterly installments commencing March 11, 2025 and ending on December 11, 2026.
- (6) Vests one-fourth upon grant date, one-fourth on the first anniversary of the grant date, one-fourth upon the second anniversary of the grant date and one-fourth upon the third anniversary of the grant date.
- (7) Vested one-third upon the first anniversary of the grant date, one-third upon the second anniversary of the grant date and one-third upon the third anniversary of the grant date.
- (8) Vested one-third upon the first anniversary of the grant date, one-third upon the second anniversary of the grant date and one-third upon the third anniversary of the grant date.
- (9) Vested one-third upon the first anniversary of the grant date and the remaining two-thirds over eight equal quarterly installments commencing June 18, 2022 and ending on March 18, 2024.
- (10) Fully vested upon termination of employment.
- (11) Fully vested upon termination of employment.
- (12) Vested one-third upon the first anniversary of the grant date, one-third upon the second anniversary of the grant date and one-third upon the third anniversary of the grant date.

Pay Versus Performance Disclosure

The following tables and related disclosures provide information about (i) the “total compensation” of our CEO, and our other named executive officers (the “Other NEOs” or the “Non-CEO NEOs”) as presented in the Summary Compensation Table within this proxy statement, (ii) the “compensation actually paid” to our CEO and our Other NEOs, as calculated pursuant to the SEC’s pay-versus-performance rules, (iii) certain financial performance measures, and (iv) the relationship of the “compensation actually paid” to those financial performance measures.

This disclosure has been prepared in accordance with Item 402(v) of Regulation S-K under the Securities Exchange Act of 1934, as amended, and does not necessarily reflect value actually realized by the executives or how our compensation committee evaluates compensation decisions in light of company or individual performance.

Year	Summary Compensation Table Total for CEO ⁽¹⁾ (\$)	Compensation Actually Paid to CEO ⁽¹⁾⁽²⁾⁽³⁾ (\$)	Summary Compensation Table Total for Former CEO ⁽¹⁾ (\$)	Compensation Actually Paid to Former CEO ⁽¹⁾⁽²⁾⁽³⁾ (\$)	Value of Initial Fixed \$100 Investment Based on Total Shareholder Return ⁽⁴⁾ (\$)	Net Loss (\$)
2024	\$ 481,168	\$ 469,659	\$ 673,144	\$ 622,644	\$ 30.93	\$ (3,960,275)
2023	\$ –	\$ –	\$ 563,494	\$ 560,385	\$ 16.91	\$ (4,134,578)
2022	\$ –	\$ –	\$ 632,827	\$ 425,619	\$ 13.98	\$ (6,552,353)

Year	Average Summary Compensation Table for Non-CEO NEOs ⁽¹⁾ (\$)	Average Compensation Actually Paid to Non-CEO NEOs ⁽¹⁾⁽²⁾⁽³⁾ (\$)	Value of Initial Fixed \$100 Investment Based on Total Shareholder Return ⁽⁴⁾ (\$)	Net Loss (\$)
2024	\$ 554,083	\$ 521,224	\$ 30.93	\$ (3,960,275)
2023	\$ 434,774	\$ 433,219	\$ 16.91	\$ (4,134,578)
2022	\$ 472,180	\$ 377,162	\$ 13.98	\$ (6,552,353)

(1) Effective May 16, 2024, James Parslow was appointed Interim CEO. Prior to that time, Jeffrey Eisenberg was the CEO for 2024, 2023 and 2022. The Non-CEO NEOs for whom average compensation is presented in this table for 2024 is Dr. Curtis Lockshin. The Non-CEO NEOs for whom average compensation is presented in this table for 2023 and 2022 are James Parslow and Dr. Curtis Lockshin.

(2) The amounts shown as Compensation Actually Paid have been calculated in accordance with Item 402(v) of Regulation S-K and do not reflect compensation actually realized or received by the Company’s NEOs. These amounts reflect total compensation as set forth in the Summary Compensation Table for each year, adjusted as described in footnote 3 below.

(3) Compensation Actually Paid reflects the exclusions and inclusions for the CEO and the Non-CEO NEOs set forth below. Amounts excluded, which are set forth in the table below in the “Minus Stock and Option Awards from Summ. Comp. Table” columns below, represent the Stock Awards and Option Awards reported in the Stock Awards and Option Awards columns of the Summary Compensation Table for each applicable year. Amounts added back to determine Compensation Actually Paid are made up of the following components as applicable: (i) the fair value as of the end of the fiscal year of outstanding and unvested equity awards granted in that year; (ii) the change in fair value during the year of equity awards granted in prior years that remained outstanding and unvested at the end of the year; (iii) the fair value as of the vesting date of equity awards that were granted and vested in that year, if any and (iv) the change in fair value during the year through the vesting date of equity awards granted in prior years that vested during that year. The fair value at the end of the prior year of awards granted in any prior year that failed to meet applicable vesting conditions during the covered year are subtracted in 2024. There were no such awards that failed to meet applicable vesting conditions for the CEOs or the Non-CEO NEOs in 2022 or 2023. Equity values are calculated in accordance with ASC Topic 718.

Year	Summary Comp. Table Total for CEO	Minus Stock and Option Awards from Summ. Comp. Table	Plus Year-End Equity Value of Unvested Awards Granted During Year	Plus Change in Value of Unvested Awards Granted in Prior Years	Plus Change in Value of Current Year Awards Vested During Year	Plus Change in Value of Prior Years' Awards Vested During Year	Comp. Actually Paid to CEO
2024	\$ 481,168	\$ 67,280	\$ 49,007	\$ (1,622)	\$ 16,193	\$ (7,807)	\$ 469,659

Year	Summary Comp. Table Total for Former CEO	Minus Stock and Option Awards from Summ. Comp. Table	Plus Year-End Equity Value of Unvested Awards Granted During Year	Plus Change in Value of Unvested Awards Granted in Prior Years	Plus Change in Value of Prior Years' Awards Vested During Year	Comp. Actually Paid to Former CEO
2024	\$ 673,144	\$ —	\$ —	\$ (64,967)	\$ 14,467	\$ 622,644
2023	\$ 563,494	\$ 67,863	\$ 59,661	\$ 1,103	\$ 3,990	\$ 560,385
2022	\$ 632,827	\$ 98,882	\$ 20,922	\$ (37,387)	\$ (91,861)	\$ 425,619

Year	Avg. Summary Comp. Table Total for Other NEOs	Minus Avg. Stock and Option Awards from Summ. Comp. Table	Plus Avg. Year- End Equity Value of Unvested Awards Granted During Year	Plus Avg. Change in Value of Unvested Awards Granted in Prior Years	Plus Avg. Change in Value of Prior Year's Awards Vested During Year	Average Comp. Actually Paid to Other NEOs
2024	\$ 554,083	\$ —	\$ —	\$ (33,544)	\$ 685	\$ 521,224
2023	\$ 434,774	\$ 33,932	\$ 29,830	\$ 552	\$ 1,995	\$ 433,219
2022	\$ 472,180	\$ 49,441	\$ 10,461	\$ (18,693)	\$ (37,345)	\$ 377,162

For the equity values included in the above tables, the valuation assumptions used to calculate fair values of stock options were materially different from those disclosed at the time of the grant of the stock options. The assumptions used in determining fair value of the stock options that vested during 2022, 2023 and 2024, or that were outstanding as of December 31, 2022, December 31, 2023 or December 31, 2024, as applicable, are as follows:

	Options Vested During Year or Outstanding on December 31 of:		
	2024	2023	2022
Expected Volatility	74.42% - 112.22%	105.80% - 121.52%	123.60% - 135.86%
Risk-Free Interest Rate	3.45% - 5.41%	3.54% - 4.80%	2.15% - 4.05%
Expected Dividend Yield	0%	0%	0%
Expected Term (in years)	0.5 - 5.46	3.63 - 5.82	3.5 - 5.12

(4) Total Shareholder Return illustrates the value, as of the last day of the indicated fiscal year of an investment of \$100 in Xenetic common stock on December 31, 2021.

Description of Relationship Between NEO Compensation Actually Paid and Company Total Shareholder Return (“TSR”) and Net Loss

The Compensation Actually Paid to our CEO and the average of Compensation Actually Paid to our Non-CEO NEOs increased in 2024, which corresponded to the increase in the Company’s TSR and decrease in Net Loss in 2024. The Compensation Actually Paid for both our former CEO and Non-CEO NEOs in 2024 increased primarily due to severance commitments incurred in 2024. The CEO and Non-CEO NEOs Non-Equity Incentive Plan Compensation is determined based on our strategic, financial and operating performance objectives that have been established by the Compensation Committee. While not directly tied to stock price performance and/or net loss, these performance objectives have been established as core drivers of TSR.

Employment Agreements with our Named Executive Officers

Employment Agreement with Mr. Parslow

We entered into an employment agreement with Mr. Parslow effective as of April 3, 2017 (the “Parslow Employment Agreement”). The Parslow Employment Agreement does not provide for a specified term of employment and Mr. Parslow’s employment will be on an at-will basis. Mr. Parslow received an initial annual base salary of \$265,000 and is eligible to earn an annual cash incentive bonus, which is set at a target aggregate bonus amount of 35% of Mr. Parslow’s base salary, upon achievement of certain individual and/or Company performance goals set by the Compensation Committee. Mr. Parslow is also eligible to participate in the Company’s employee benefit, welfare and other plans, as may be maintained by the Company from time to time, on a basis no less favorable than those provided to other similarly-situated executives of the Company. Mr. Parslow is also subject to certain customary confidentiality, non-solicitation and non-competition provisions.

If Mr. Parslow’s employment is terminated by the Company without “cause” (as defined in the Parslow Employment Agreement) or Mr. Parslow resigns for “good reason” (as defined in the Parslow Employment Agreement), he will be entitled to receive (i) one year of his then current base salary, paid over time in accordance with the Company’s payroll practices then in effect and (ii) payment of premiums for continued health benefits under COBRA for up to one year.

On May 16, 2024, the Board appointed Mr. Parslow to the position of Interim Chief Executive Officer, in addition to his role as the Company’s Chief Financial Officer. In connection with the foregoing, on June 18, 2024, the Company and Mr. Parslow entered into an amendment (the “Parslow Employment Amendment”) to the Parslow Employment Agreement, to provide for, effective as of May 16, 2024: (i) certain changes to Mr. Parslow’s title and responsibilities; (ii) an increase in Mr. Parslow’s base salary to \$400,000; (iii) a \$100,000 cash retention bonus if Mr. Parslow remains employed with the Company for a ten month period; and (iv) a stock option grant to Mr. Parslow to purchase 20,000 shares of common stock of the Company with an exercise price equal to the fair market value of the Company’s common stock on the effective date of the Parslow Employment Amendment. Such option grant shall be issued pursuant to the terms and conditions of the Company’s Amended and Restated Equity Incentive Plan, and shall vest one-fourth on the grant date and one-fourth upon the first, second and third anniversaries of the grant date, provided Mr. Parslow remains employed with the Company on the applicable vesting date. All other terms of the Parslow Employment Agreement remain in full force and effect.

Employment Agreement with Mr. Eisenberg

The Company entered into an employment agreement with Mr. Eisenberg effective as of December 1, 2016, which agreement was amended and restated on October 26, 2017 (as amended, the “Amended Agreement”) pursuant to which Mr. Eisenberg was previously employed as the Chief Executive Officer of the Company. The Amended Agreement was for an initial term of one year, and automatically renewed for successive one year periods unless either party gave notice to the other no later than 90 days prior to the expiration of the then-applicable term; provided, however, that we could terminate the Amended Agreement at any time. Mr. Eisenberg’s annual salary under the Amended Agreement was \$300,000, and was subject to annual review and upward adjustment only by the Compensation Committee of the Board. Mr. Eisenberg was eligible to receive a bonus equal to 50% of his annual salary based on the attainment of certain individual and/or Company goals established by the Board or a committee thereto, and if Mr. Eisenberg’s employment was terminated by us without “Cause” (as defined in the Amended Agreement) or if he resigned for “Good Reason” (as defined in the Amended Agreement), he would be entitled to receive (i) within thirty days following the date of termination, an amount equal to one times his then current base salary, (ii) a pro-rated annual bonus and (iii) payment of premiums for continued health benefits under COBRA for up to twelve months. Mr. Eisenberg was also eligible to participate in our employee benefit, welfare and other plans, as may be maintained by us from time to time, on a basis no less favorable than those provided to other similarly situated executives of the Company. Mr. Eisenberg was also subject to certain customary confidentiality, non-solicitation and non-competition provisions.

The Company entered into a confidential separation agreement and release with Mr. Eisenberg on June 19, 2024 in connection with his separation of employment from the Company that was effective as of May 16, 2024 pursuant to which Mr. Eisenberg became eligible to receive the payments and benefits described above in connection with a termination without “Cause” and also received full vesting of all outstanding unvested options to purchase shares of common stock of the Company.

Employment Agreement with Dr. Lockshin

The Company previously entered into an employment agreement with Dr. Lockshin effective as of January 1, 2017 (the “Lockshin Employment Agreement”) pursuant to which Dr. Lockshin was previously employed as the Chief Scientific Officer of the Company. The Lockshin Employment Agreement did not provide for a specified term of employment and Dr. Lockshin’s employment was on an at-will basis. Dr. Lockshin received an initial annual base salary of \$250,000 and was eligible to earn an annual performance-based cash incentive bonus, which was set at a target aggregate bonus amount of 35% of Dr. Lockshin’s base salary, upon achievement of certain individual and/or Company performance goals established by the Board or a committee thereto. Dr. Lockshin was also eligible to participate in the Company’s employee benefit, welfare and other plans, as may be maintained by the Company from time to time, on a basis no less favorable than those provided to other similarly-situated executives of the Company. Dr. Lockshin was also subject to certain customary confidentiality, non-solicitation and non-competition provisions.

If Dr. Lockshin’s employment was terminated by the Company without “Cause” (as defined in the Lockshin Employment Agreement) or Dr. Lockshin terminated his employment for “Good Reason” (as defined in the Lockshin Employment Agreement) and Dr. Lockshin executed and did not revoke a general release of claims against the Company, then he would be entitled to receive (i) one year of his then current base salary, paid over time in accordance with the Company’s payroll practices then in effect and (ii) payment of premiums for continued health benefits under COBRA for up to twelve months.

The Company entered into a confidential separation agreement and release with Dr. Lockshin on June 19, 2024 in connection with his separation of employment from the Company that was effective as of May 16, 2024 pursuant to which Dr. Lockshin became eligible to receive the payments and benefits described above in connection with a termination without “Cause”.

Potential Payments Upon Termination or Change of Control

Our named executive officers may be entitled to payments upon termination or change of control. The details of such payments are included in the description of their employment agreements above.

Clawback Policy

We adopted a clawback policy, effective as of October 2, 2023, that complies with Nasdaq listing requirements and the clawback provisions of Section 304 of the Sarbanes-Oxley Act.

Equity Award Grant Practices

We do not currently have any policies or procedures that require us to grant equity awards, including stock options, to executive officers on specified dates. Equity awards to executive officers are granted at such times as determined in the discretion of the Compensation Committee. Neither the Compensation Committee nor the Board of Directors takes material nonpublic information into account when determining the timing and terms of equity awards, including stock options, and we do not time the disclosure of material nonpublic information for the purpose of affecting the value of executive compensation. During 2024, we did not grant any equity awards to any of our NEOs within four business days prior to or one business day after making any filing on Forms 10-K, 10-Q or 8-K (other than a current report on Form 8-K disclosing a new material option award grant under Item 5.02(e) of that form) that disclosed any material non-public information.

EQUITY COMPENSATION PLAN INFORMATION

Equity Compensation Plan Information

The following table sets forth information as of December 31, 2024 with respect to compensation plans under which equity securities are authorized for issuance:

Plan Category	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	197,647 ⁽¹⁾	\$ 24.24	54,503
Equity compensation plans not approved by security holders	1,459 ⁽²⁾	548.40	—
Total	199,106	\$ 28.08	54,503

(1) Consists of 197,647 shares of our common stock to be issued upon the exercise of outstanding stock options under the Xenetic Biosciences, Inc. Amended and Restated Equity Incentive Plan (“Equity Plan.”)

(2) Represents inducement award granted to Mr. Parslow in 2017 in connection with his employment with the Company that was not covered under the Equity Plan in accordance with Nasdaq Listing Rule 5635(c)(4). The option has a ten-year term and is fully vested.

DIRECTOR COMPENSATION

Each of our non-employee, independent directors is currently entitled to receive an annual retainer of \$43,000, payable in equal quarterly installments, an option to acquire 2,500 shares of the Company's common stock upon initial appointment to the Board, and an additional option to acquire 2,500 shares each year thereafter on the date of the Company's annual meeting of stockholders. All members of our Board are reimbursed for their usual and customary expenses incurred in connection with their service on the Board, including out-of-pocket expenses, transportation, and airfare on the Company's business.

Director Compensation Table

As an employee director during fiscal year 2024, Mr. Eisenberg did not receive any compensation for his Board service during the last completed year. The following table sets forth information for the year ended December 31, 2024 regarding the compensation awarded to, earned by or paid to our non-employee directors:

Name	Fees Earned or Paid in Cash (\$)	Stock Awards (\$)	Option Awards ⁽¹⁾⁽²⁾ (\$)	All Other Compensation (\$)	Total (\$)
Dr. Grigory Borisenko	43,000	—	8,721	—	51,721
Firdaus Jal Dastoor	43,000	—	8,721	—	51,721
Dr. Dmitry Genkin ⁽³⁾	—	—	—	—	—
Dr. Roger Kornberg	43,000	—	8,721	—	51,721
Mr. Moshe Mizrahy ⁽³⁾	—	—	—	—	—
Dr. Alexey Vinogradov	43,000	—	8,721	—	51,721

(1) The amounts represent the aggregate grant date fair value of stock options granted during 2024, computed in accordance with FASB ASC Topic 718. For a discussion of the assumptions and methodology used to calculate the value of our stock options, see Note 10 to our audited financial statements included in Item 8 of the Annual Report.

(2) The table below shows the aggregate number of option awards outstanding for each of our non-employee directors as of December 31, 2024:

Name	Option Awards (#)
Dr. Grigory Borisenko	7,500
Firdaus Jal Dastoor	15,796
Dr. Dmitry Genkin	—
Dr. Roger Kornberg	15,626
Mr. Moshe Mizrahy	2,500
Dr. Alexey Vinogradov	15,000

(3) The Board determined that Dr. Genkin and Mr. Mizrahy are not independent directors, and as such, neither were eligible for compensation during fiscal year 2024.

See "[Certain Related-Person Transactions](#)" below for compensation arrangements involving specific members of the Board.

PROPOSAL 3

APPROVAL BY NON-BINDING ADVISORY VOTE OF THE RESOLUTION APPROVING NAMED EXECUTIVE OFFICER COMPENSATION

We have determined that our stockholders should vote on the compensation of our named executive officers each year, consistent with the preference expressed by our stockholders at the 2024 Annual Meeting of Stockholders. The Dodd-Frank Wall Street Reform and Consumer Protection Act (the “Dodd-Frank Act”) requires all public companies to hold a separate non-binding advisory stockholder vote to approve the compensation of named executive officers as reported in this proxy statement (commonly known as the “Say On Pay” vote).

Pursuant to Section 14A of the Exchange Act, as amended, and as a matter of good corporate governance, the Company is asking stockholders to approve the following Say on Pay advisory resolution at the Annual Meeting:

RESOLVED, that the stockholders of Xenetic Biosciences, Inc. hereby approve, on an advisory basis, the compensation paid to the Company’s named executive officers as disclosed in this proxy statement pursuant to the SEC’s disclosure rules, including the narrative discussion in the section entitled “Executive Compensation”, the Summary Compensation Table and the related compensation tables, notes and narrative in the Proxy Statement for the Company’s 2025 Annual Meeting of Stockholders.

This advisory resolution is not binding on the Company. Although non-binding, the Board and the Compensation Committee value the opinions of our stockholders and will carefully review and consider the voting results when evaluating our named executive officer compensation.

**THE BOARD OF DIRECTORS RECOMMENDS A VOTE
“FOR” THE SAY ON PAY PROPOSAL**

TRANSACTIONS WITH RELATED PERSONS

During the fiscal years ended December 31, 2024 and December 31, 2023, there was not, nor is there any currently proposed transaction or series of similar transactions to which Xenetic was or is to be a party in which the amount involved exceeded or exceeds the lesser of \$120,000 or 1% of the average of our total assets at year end for the last two completed fiscal years and in which any executive officer, director or holder of more than 5% of any class of voting securities of Xenetic and members of that person's immediate family had, has or will have a direct or indirect material interest, other than as set forth in "Executive Compensation" and "Director Compensation Table" above and as disclosed below.

Policy Regarding Related Party Transactions

Our Board adopted an amended written related party transaction policy on August 27, 2020 to set forth the policies and procedures for the review and approval or ratification of related party transactions by our audit committee, which replaced the policy previously adopted in November 1, 2016. Any transaction between the Company and its officers, directors, principal stockholders or affiliates is required to be on terms no less favorable to us than could be reasonably obtained in arms-length transactions with independent third-parties. Transactions described in this section that occurred prior to November 1, 2016 were not covered by the Company's related party transaction policy.

Certain Related Person Transactions

PJSC Pharmsynthez

Pharmsynthez directly, and indirectly through its wholly-owned subsidiary SynBio LLC ("SynBio"), had a share ownership in the Company of approximately 3% of the total outstanding common stock at March 31, 2025. In addition to its common stock ownership, Pharmsynthez holds approximately 1.5 million shares of our outstanding Series B Preferred Stock at March 31, 2025. In addition, two of our current directors, Dr. Dmitry Genkin and Dr. Alexey Vinogradov serve on the board of directors of Pharmsynthez, with Dr. Genkin serving as Executive Chairman, and, prior to March 31, 2022, Dr. Grigory Borisenko, one of our current directors, was employed as the Investment Director of Rusnano LLC, an entity affiliated with Pharmsynthez.

In November 2009, the Company entered into a collaborative research and development license agreement with Pharmsynthez (the "Pharmsynthez Arrangement") pursuant to which the Company granted an exclusive license to Pharmsynthez to develop, commercialize and market six product candidates based on the Company's PolyXen and ImuXen technology in certain territories. In exchange, Pharmsynthez granted an exclusive license to the Company to use any preclinical and clinical data developed by Pharmsynthez, within the scope of the Pharmsynthez Arrangement, and to engage in further research, development and commercialization of drug candidates outside of certain territories at the Company's own expense.

In August 2011, SynBio and the Company entered into a stock subscription and collaborative development agreement (the "Co-Development Agreement"). The Company granted an exclusive license to SynBio to develop, market and commercialize certain drug candidates utilizing molecules based on SynBio's technology and the Company's proprietary technologies (PolyXen, OncoHist and ImuXen) in Russia and Commonwealth of Independent States ("CIS"), collectively referred to herein as the SynBio Market. In return, SynBio granted an exclusive license to the Company to use the preclinical and clinical data generated by SynBio in certain agreed products and to engage in the development of commercial candidates in any territory outside of the SynBio Market.

SynBio is solely responsible for funding and conducting their own research and clinical development activities. There are no milestone or other research-related payments provided for under the Co-Development Agreement other than fees for the supply of each company's respective research supplies based on their technology, which, when provided, are due to mutual convenience and not representative of an ongoing or recurring obligation to supply research supplies. Upon successful commercialization of any resultant products, the Company is entitled to receive a 10% royalty on sales in certain territories and pay royalties to SynBio for sales outside those certain territories, subject to the terms of the Co-Development Agreement. Effective December 20, 2021, SynBio assigned the Co-Development Agreement to Pharmsynthez.

Through December 31, 2024, Pharmsynthez informed the Company that it continued to engage in research and development activities with no resultant commercial products. In December 2020, Pharmsynthez reported positive data from its Phase 3 clinical study of Epolong, a treatment for anemia in patients with chronic kidney disease leveraging the Company's PolyXen technology. Pharmsynthez filed a registration dossier to obtain approval in Russia and informed the Company that it has received a response letter indicating certain deficiencies in the dossier. Pharmsynthez further informed the Company that it developed a gap mitigation strategy and is currently determining next steps. The Company did not recognize revenue in connection with the Co-Development Agreement during the years ended December 31, 2024 and 2023.

During the fourth quarter of 2019, the Company entered into a loan agreement with Pharmsynthez (the "Pharmsynthez Loan"), pursuant to which the Company advanced Pharmsynthez an aggregate principal amount of up to \$500,000 to be used for the development of a specific product under the Company's Co-Development Agreement with Pharmsynthez. The Pharmsynthez Loan had an initial term of 15-months and accrued interest at a rate of 10% per annum. The Pharmsynthez Loan was guaranteed by all of the operating subsidiaries of Pharmsynthez, including SynBio and AS Kevelt, and was secured by all of the common and preferred stock of the Company owned by Pharmsynthez and SynBio.

Pharmsynthez paid all obligations due under the Pharmsynthez Loan in May 2023, and no further amounts are due under the Pharmsynthez Loan. As a result, no amounts were outstanding as of December 31, 2024 and December 31, 2023. The Company did not recognize any interest income related to the Pharmsynthez Loan during the year ended December 31, 2024. The Company recognized approximately \$65,000 of income related to interest and fees associated with the Pharmsynthez Loan including approximately \$40,000 related to interest income during the twelve months ended December 31, 2023.

Peri-Ness Technologies Ltd.

During the fourth quarter of 2024, the Company entered into a clinical trial services agreement with PeriNess Ltd. ("PeriNess") to advance the Company's development program for its systemic DNase I technology in Israeli medical centers. One of our directors, Dr. Dmitry Genkin, is a significant shareholder of PeriNess and another of our directors, Mr. Moshe Mizrahy, is a majority shareholder and director of PeriNess. The services to be provided under this agreement are estimated to be approximately \$0.3 million.

Consulting Services Agreement with Dr. Dmitry Genkin

During the first quarter of 2025, the Company entered into a Consulting Agreement with Dr. Genkin, Chairman of our Board Directors, to provide consulting services to the Company's DNase-based oncology program. The agreement was effective January 1, 2025 and the Company paid Dr. Genkin approximately \$0.3 million during the nine months ended September 30, 2025, of which approximately \$30,000 was reflected in current liabilities as of September 30, 2025. Dr. Genkin does not receive any fees for his service as a member of the Board of Directors.

HOUSEHOLDING OF PROXY MATERIALS

The SEC has adopted rules that permit companies and intermediaries (e.g., brokers) to satisfy the delivery requirements for Annual Meeting materials with respect to two or more stockholders sharing the same address by delivering a single set of Annual Meeting materials addressed to those stockholders. This process, which is commonly referred to as “householding,” potentially means extra convenience for stockholders and cost savings for companies.

This year, a number of brokers with account holders who are the Company’s stockholders will be “householding” our proxy materials. A single set of Annual Meeting materials will be delivered to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that they will be “householding” communications to your address, “householding” will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in “householding” and would prefer to receive a separate set of Annual Meeting materials, please notify your broker or the Company. Direct your written request to Xenetic Biosciences, Inc., to the attention of our Corporate Secretary, 945 Concord Street, Framingham, Massachusetts 01701 or contact our Corporate Secretary at 781-778-7720. Stockholders who currently receive multiple copies of these materials at their addresses and would like to request “householding” of their communications should contact their brokers.

OTHER MATTERS

The Board knows of no other matters that will be presented for consideration at the Annual Meeting. If any other matters are properly brought before the meeting, it is the intention of the persons named in the accompanying proxy to vote on such matters in accordance with their best judgment.

By Order of the Board of Directors

/s/ James Parslow
James Parslow
Secretary

October 31, 2025

A copy of the Company’s Annual Report to the Securities and Exchange Commission on Form 10-K for the fiscal year ended December 31, 2024, as amended, is available without charge upon written request to: Corporate Secretary, Xenetic Biosciences, Inc., 945 Concord Street, Framingham, Massachusetts 01701.

XENETIC BIOSCIENCES, INC.
945 CONCORD STREET
FRAMINGHAM, MA 01701



SCAN TO
VIEW MATERIALS & VOTE



VOTE BY INTERNET

Before The Meeting - Go to www.proxyvote.com or scan the QR Barcode above

Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 p.m. Eastern Time on December 10, 2025. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

During The Meeting - Go to www.virtualshareholdermeeting.com/XBIO2025

You may attend the meeting via the Internet and vote during the meeting. Have the information that is printed in the box marked by the arrow available and follow the instructions.

VOTE BY PHONE - 1-800-690-6903

Use any touch-tone telephone to transmit your voting instructions up until 11:59 p.m. Eastern Time on December 10, 2025. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL

Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:

V80706-P39473

KEEP THIS PORTION FOR YOUR RECORDS
DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

XENETIC BIOSCIENCES, INC.

The Board of Directors recommends you vote FOR the following:

1. Election of Directors

Nominees:

01) Grigory Borisenko 04) Roger Kornberg
02) Rirdaus Jal Dastoor 05) Moshe Mizrahy
03) Dmitry Genkin 06) Alexey Vinogradov

For All ☐ Withhold All ☐ For All Except ☐

To withhold authority to vote for any individual nominee(s), mark "For All Except" and write the number(s) of the nominee(s) on the line below.

The Board of Directors recommends you vote FOR proposals 2 and 3.

2. To ratify the selection by the Audit Committee of CBIZ CPAs P.C. as the independent registered public accounting firm of the Company for its fiscal year ending December 31, 2025.
3. Non-binding advisory vote to approve the Company's named executive officer compensation.

For Against Abstain

☐ ☐ ☐
☐ ☐ ☐

In his discretion, the proxy is authorized to vote upon such other business as may properly come before the meeting or any postponement or adjournment thereof.

Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name by authorized officer.

Signature (PLEASE SIGN WITHIN BOX) _____ Date _____

Signature (Joint Owners) _____ Date _____

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:
The Proxy Statement, Form 10-K and Form 10-K/A are available at www.proxyvote.com.

V80707-P39473

**XENETIC BIOSCIENCES, INC.
Annual Meeting of Stockholders
December 11, 2025 10:00 AM EST
This proxy is solicited by the Board of Directors**

The undersigned, revoking all prior proxies, hereby appoints James Parslow, as proxy of the undersigned (with full power to appoint his substitute) to attend and represent the undersigned at the virtual-only Annual Meeting of the Stockholders of Xenetic Biosciences, Inc. (the "Company") to be held by means of a live on-line webcast at www.virtualshareholdermeeting.com/XBIO2025 on December 11, 2025 at 10:00 a.m. EST, and at any adjournments or postponements thereof, and to act and vote as indicated, upon all matters referred to on the previous page and described in the proxy statement relating to the annual meeting, all shares of common stock of the Company which the undersigned would be entitled to vote or act upon, with all powers the undersigned would possess, if personally present at the meeting and at any adjournments or postponements thereof.

This proxy, when properly executed and returned in a timely manner, will be voted as indicated herein. If no indication is made, then this proxy will be voted in accordance with the recommendation of the Board of Directors in favor of electing all six director nominees, and in favor of Proposals 2 and 3. THE PROXY IS AUTHORIZED TO VOTE IN HIS DISCRETION ON ANY OTHER BUSINESS AS PROPERLY MAY COME BEFORE THE MEETING, OR ANY ADJOURNMENT OR POSTPONEMENT THEREOF.

Attendance of the undersigned at the meeting or at any adjournment or postponement thereof will not be deemed to revoke this proxy unless the undersigned shall affirmatively indicate thereof the intention of the undersigned to vote said shares in person. If the undersigned hold(s) any of the shares of the Company in a fiduciary, custodial or joint capacity or capacities, this proxy is signed by the undersigned in every such capacity as well as individually.

Continued and to be signed on reverse side